

## FIDUCIARY

First and always.

2013 Comprehensive Annual Financial Report for the fiscal year ended June 30, 2013

## Our Mission

KPERS, in its fiduciary capacity, exists to deliver retirement, disability and survivor benefits
to its members and their beneficiaries.
fi•du•cia•ry noun $\backslash$ fi-du'-she, er-ē
: a person in a position of authority whom the law obligates to act solely on behalf of the person he or she represents

# 2013 Comprehensive Annual Financial Report 

Kansas Public Employees Retirement System<br>A component unit of the State of Kansas<br>Fiscal year ended June 30, 2013<br>Prepared by KPERS staff<br>611 S. Kansas Ave., Ste 100<br>Topeka, KS 66603-3869<br>Alan D. Conroy, Executive Director<br>Diana Komarek, Chief Fiscal Officer

## Table of Contents

## INTRODUCTORY SECTION

Transmittal Letter 8
Board of Trustees 12
Our Organization 12
KPERS Staff 13
Consultants and Advisors 14
GFOA Certificate of Achievement 15

FINANCIAL SECTION
Independent Auditor's Report 18
Management's Discussion \& Analysis 20

## Basic Financial Statements

Statement of Fiduciary Net Position 24
Statement of Changes in Fiduciary Net Position 25
Note 1: Plan Description 26
Note 2: Summary of Significant Accounting Policies 27
Note 3: Funding Policy 37
Note 4: Other Post Employment Benefit Plan — KPERS Death and Disability Plan 40

Note 5: Commitments and Contingencies 41
Note 6: Subsequent Events 42

Required Supplementary Information Retirement Plan

Schedule of Employer Contributions 42
Schedules of Funding Progress 42
Required Supplementary Information Death and Disability Plan
Schedule of Employer Contributions 43
Schedule of Funding Progress 43

## Other Supplementary Information

Schedule of Contributions 44
Schedule of Administrative Expenses 45
Schedule of Investment Income by Asset Class 46
Schedule of Investment Management Fees and Expenses 47

## INVESTMENTS SECTION

Chief Investment Officer's Review 50
Public Equity Investments 53
Fixed Income Investments 55
Yield Driven Investments 55
Real Return Investments 56
Real Estate Investments 57
Alternative Investments 59
Alternative Investments Initiated On or After July 1, 199160
Largest Equity Holdings 62
Largest Fixed Income Holdings 62
Changes in Fair Value of Investments 62
U.S. Equity Commissions 63

## ACTUARIAL SECTION

## Retirement System

Actuary's Certification Letter 66
Actuarial Overview 68
Experience - All Systems Combined 70
Projected Employer Contribution Rates 74
Employer Contribution Rates 74
Summary of Change in Unfunded Actuarial Liability by System 78

Summary of Changes in Employer Actuarial Contribution Rate by System 78

Summary of Historical Changes in Total System UAL 79
Summary of Principal Results

- KPERS State 80
- KPERS School 80
- KPERS State/School 81
- KPERS Local 81
- Kansas Police \& Firemen's Retirement System 82
- Retirement System for Judges 82
- All Systems Combined 83

Actuarial Assumptions - KPERS 84

Actuarial Assumptions - KP\&F 88
Actuarial Assumptions - Judges 89
Actuarial Methods 90
Summary of Provisions-KPERS (State, School and Local) 90
Summary of Provisions- KP\&F 92
Summary of Provisions-Judges 94
Short Term Solvency Test 96
Schedule of Active Member Valuation Data 96
Membership Profile 97
Retirants, Beneficiaries - Changes in Rolls - All Systems 97
Summary of Membership Data 98
Employer Contribution Rates, Including Death and Disability Contribution 99

## Death and Disability Plan

Actuary's Certification Letter - Death and Disability Plan 100
Actuarial Overview - Death and Disability 102
Actuarial Assumptions - Death and Disability 106
Experience - Death and Disability 111
Actuarial Methods 114
Plan Provisions Overview 114
Key Provisions of Long-Term Disability Benefits 114
Key Provisions of the Group Life Waiver of Premium Benefits 115
Short Term Solvency Test-Death and Disability Plan 116

## STATISTICAL SECTION

Revenues by Source 118
Benefits by Type 119
Expenses by Type 119
Changes in Net Position 120
Changes in Net Position - Death and Disability Plan 121
Benefit and Refund Deductions from Net Assets by Type 121
Highlight of Operations - 10-Year Summary 122-123
Number of Retired Members and Survivors by Type of Benefit 124

Number of Retired Members and Survivors by Monthly Benefit Amount 124

Number of Retired Members and Survivors by Type of Payment Option 125

Average Benefit by Years of Service - Five-Year Summary of New Retirees 126

Principal Participating Employers 127-128
Principal Participating Employers-Death and Disability Plan 129

## Introductory Section

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## Transmittal Letter



KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

October 21, 2013

We are pleased to present the Kansas Public Employees Retirement System's Comprehensive Annual Financial Report (CAFR) for fiscal year 2013. In addition to informing the Board of Trustees, members and employers, our annual report fulfills KPERS' reporting responsibilities as defined in Kansas statute. Printed copies are readily available to the public and a full version is posted on our web site, kpers.org.

As the first item in the CAFR, this transmittal letter provides a high-level overview of the Retirement System. The Management's Discussion and Analysis section provides a narrative introduction and analysis of our financial activities over the last two fiscal years. This letter is intended to complement the Management's Discussion and Analysis and they should be read together.

## ENSURING ACCURACY

Responsibility for the preparation, accuracy and completeness of this report, including all disclosures, rests firmly with KPERS management. Information is presented in accordance with generally accepted accounting principles. To the best of our knowledge, the enclosed data is accurate in all material respects and fairly presents our financial position and operating results.

The Retirement System maintains a framework of internal controls to establish reasonable assurance that assets are safeguarded, transactions are completed accurately and financial statements are fair and reliable. We also have an internal audit program that reports to the Board of Trustees. There are
inherent limitations to internal controls, and risk cannot always be foreseen or completely eliminated. KPERS' objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements, since the cost of internal control should not exceed the benefits obtained. In addition to internal controls, the independent certified public accounting firm Cochran Head Vick \& Co., P.A. conducted an independent audit of the Retirement System's financial statements for 2013.

## OUR PROFILE

The Kansas Legislature created the Kansas Public Employees Retirement System in 1962 to secure a financial foundation for those spending their careers in Kansas public service. The Retirement System provides disability and death benefits while employees are still working, and a dependable pension benefit when they retire.

We are a state-wide defined benefit retirement plan containing three different groups:

1. Kansas Public Employees Retirement System
2. Kansas Police and Firemen's Retirement System
3. Kansas Retirement System for Judges

Retirement System benefits are offered by about 1,500 state and local employers. KPERS has over 286,000 members, including active, inactive and retired members. The Retirement System paid about $\$ 1.4$ billion in all benefit payments for fiscal year 2013. Approximately 85 to 90 percent of those benefits remained in Kansas.

Along with the defined benefit plan, KPERS also oversees the State's Deferred Compensation Plan, or Tandem. Tandem is a voluntary 457(b) savings program for State of Kansas employees. In addition, 250 local public employers also participate. The plan has over 24,500 total participants and about 13,800 actively contributing. Total plan assets equaled $\$ 873$ million at the end of fiscal year 2013.

A nine-member Board of Trustees oversees the Retirement System: four are appointed by the Governor, one is appointed by the President of the Senate, one is appointed by the Speaker of the House of Representatives, two are elected by Retirement System members, and one is the elected State Treasurer. The Board appoints an executive director who manages a staff to carry out daily operations.

The Board approves the System's annual operating budget. As a component unit of the State of Kansas, the budget is also approved by the Kansas Legislature and Governor as part of the regular legislative budgetary process.

## INVESTMENTS

KPERS assets are invested according to the "prudent expert standard of care" for the sole purpose of providing benefits to our members. Solid investment performance over the longterm is vital to sound funding. KPERS' investment strategy is designed to withstand short-term market volatility and economic downturns, as well as to benefit from strong market and economic environments.

Our actuarial projections assume an average, long-term investment return of 8 percent. In some years, returns will be below that rate, and in others, returns will exceed it. KPERS' 25 -year investment return average is 8.6 percent, exceeding the 8 percent target.

KPERS Total Returns Over Time (fiscal year)

```
25-yr 8.6%
10-yr 7.9%
```

5-yr 5.5\%
3-yr 12.2\%
1 -yr 14.0\% FY13

KPERS has experienced a fairly steady recovery since the economic crisis in 2008. This year is the final year of the five-year actuarial smoothing process for the System to absorb 2008 investment losses. KPERS' well-diversified portfolio performed
well in fiscal year 2013 for a total investment return of 14.0 percent. The 14.0 percent return outperformed the KPERS Policy Index by 1.2 percent for the fiscal year. Six of seven asset classes outperformed their policy benchmarks. Annual return information is not yet available for the newly created yield-driven asset class. Equity assets were the strongest contributors to the total return with both domestic and international equity portfolio returns in the double digits.

The Retirement System's investment portfolio ended the fiscal year at $\$ 14.3$ billion in assets, continuing its climb from the $\$ 8.8$ billion recession low in 2009.

For more information about KPERS diversified and disciplined approach to executing our investment strategy and policies, please refer to the investment section in this report, beginning on page 49. This section also provides details about our asset allocation and a general overview of each asset class.

## FINANCIAL POSITION AND FUNDING OUTLOOK

As expected, the Retirement System's most recent actuarial valuation reflects our continuing effort to absorb losses from the 2008 recession and 18 years of underfunding in the KPERS plan.

According to the December 31, 2012, actuarial valuation, the System's unfunded actuarial liability (UAL) increased by \$1,025 million to $\$ 10.3$ billion. The UAL was previously $\$ 9.2$ billion as of December 31, 2011. This UAL amount is the gap between the actuarial value of assets and the actuarial liability for service already earned by public employees. The UAL increased this year for a combination of reasons.

- KPERS continues to recognize investments losses from the 2008 recession. This year will be the final actuarial smoothing year.
- Employer contributions are capped by statute, meaning they are not paying the full actuarial cost of benefits.
- The amortization methodology puts more of the UAL costs toward the end of the amortization period.

The valuation also showed the System's new funded ratio was 56 percent, down from 59 percent the previous year. The funded ratio is the ratio of assets to future liabilities. For public pension plans like KPERS, funding over 80 percent and rising is good. Funding below 60 percent is poor and needs prompt attention. While the System does not have an immediate crisis, long-term funding continues to be a concern.

Even with a yearly 8 percent investment return, the unfunded liability will continue to increase in the coming years until
employer statutory contribution rates catch up with the actuarially required rates.

In answer to KPERS' long-term funding shortfall, the 2012 Legislature passed Substitute House Bill 2333, affecting new hires, current members and employers. These changes are a meaningful step toward making the Retirement System more sustainable and helping to pay promised benefits long-term.

Sub House Bill 2333:

- Increases employer contributions, the most significant part of the legislation.
- Increases current member contributions or decreases benefits.
- Creates a new Tier 3 cash balance retirement plan for new hires beginning January 2015.
- Directs some of the money from state gaming revenue toward KPERS' unfunded liability.
- Provides some of the revenue from the sale of state surplus real estate for KPERS' unfunded liability.

While the shortfall will continue to grow in the near-term, with continued strong investment returns and the positive effects of last year's benefit change legislation, KPERS is on a clear path to financial soundness. Projections show the unfunded actuarial liability will be paid off by 2033. While the Retirement System's unfunded liability will increase somewhat until we see the results of KPERS employer contribution rates catching up with the actuarially required rates, we are solid and headed in the right direction.

It is important to remember that to meet these projections, long-term investment returns are crucial. Over the next decade, the System will be especially vulnerable to future economic downturns that could cause investment returns to decline.

For detailed information on the System's funding projections by plan and group, please see the actuarial section beginning on page 65.

## MAJOR INITIATIVES AND ACCOMPLISHMENTS

## FUSION Project Planning and Early Implementation

KPERS staff began a three-year implementation plan for 2012 legislation House Bill 2333. FUSION will have a significant
effect on KPERS' information system, our business processes and on KPERS staff. FUSION has three main projects- The KPERS Tier 1 member rate change and possible benefit election, adding a new Tier 3 cash balance plan and moving employers to pay period reporting from the current annual reporting process.

Much of the fiscal year was spent in research and planning. Major Information Technology focus was on building a benefit election module and making changes to the information system to accommodate the Tier 1 member contribution rate change in January 2014, from 4 percent of pay to 5 percent of pay, along with the effects of the new 1.85 percent multiplier for both Tier 1 and Tier 2. Staff also began member and employer education about the benefit and contribution changes.

## New Yield-Driven Asset Class

The Board of Trustees established a new "yield driven" asset class during the most recent asset allocation review, and it was implemented in the third quarter of the fiscal year. The primary role of the assets in the yield driven allocation is to provide current income, while also providing a degree of diversification from equity risk. Yield driven assets currently comprise 5.0 percent of the System's investment portfolio, and have a long term target allocation of 8.0 percent. The current investment strategies in the yield driven class include strategic fixed income portfolios, real estate investment trust (REIT) portfolios, and a master limited partnership portfolio (MLP).

## Board of Trustees Online Election

Every four years KPERS membership elects one school and one non-school member to represent them on the KPERS Board of Trustees.

Benefits and Member Services worked along with Communications and Information Technology to hold the quadrennial election in April 2013. This was the first year KPERS utilized a newly developed secure online voting function through KPERS' member web portal.

## Deferred Compensation Plan Rebranding

In 2008, KPERS began oversight for the State employee 457 deferred compensation savings plan. Since then we have continued a slow migration of plan identity to KPERS. This
fiscal year we developed and launched a new brand for the plan, renaming it to Tandem and communicating it as a KPERS savings plan. Tandem's new logo coordinates with KPERS' own organizational identity, reinforcing the complementary nature of the 457 plan.

## SHARP (State Payroll System) Upload Project

Fiscal Services and Information Technology staff completed a two-year initiative with the Kansas Department of Administration to implement a biweekly upload of the State of Kansas employee transactional data by payroll cycle. The resulting files are used to create the State contribution reporting for all State agencies and State Board of Regent employers. This has been done previously on an annual basis.

## BY THE NUMBERS - IN FY 2013:

- About 1,000,000 retirement benefit payments totaling more than $\$ 1.2$ billion
- 5,474 pension inceptions
- 42,200 beneficiary designations
- $\$ 9.5$ million in active member death benefits
- 27,400 member enrollments and transfers
- 9,500 withdrawals totaling $\$ 48$ million
- $\$ 24$ million in benefits to 3,000 disabled employees
- 92,000 incoming calls with an average wait time of 10 seconds
- 13,300 e-mail requests


## AWARDS \& ACKNOWLEDGMENTS

KPERS participated in a benchmarking survey conducted by CEM Benchmarking, Inc. When compared with other public pensions in the 2012 survey, KPERS earned an overall service score of 82 versus a peer median of 83 . In addition, we measure very favorably with regard to cost. KPERS' administrative cost per member is $\$ 44$, less than half the peer median cost of $\$ 92$. Benchmarking results continue to show KPERS is delivering good customer service for a low, economical cost.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Retirement System for the 2012 CAFR. The Certificate of Achievement is a prestigious national award, recognizing conformance with the
highest standards for preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, the contents of which must conform to program standards. The comprehensive annual financial report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. The Retirement System has received the Certificate of Achievement for each of the last 19 consecutive fiscal years. We believe our current report again conforms to the program requirements, and we will submit it to the GFOA to determine its eligibility for another certificate.

This CAFR is the synthesis of work from KPERS staff and advisors under the Board's leadership. The report is an asset to our organization, providing reliable, accurate information on which we base important decisions. We thank those who contributed to this project. And more generally, we thank our dedicated staff whose work this report represents. We look forward to working in partnership with the Board and staff to continue to honor our fiduciary commitment and to provide members with the service they need to get the most from their benefits.

Sincerely,
Alan A Coma
Alan D. Conroy, Executive Director


Diana Komarek
Chief Fiscal Officer

## Board of Trustees

## KELLY ARNOLD

Wichita, County Clerk, Sedgwick County,
Appointed by the Governor

## ERNIE CLAUDEL

Olathe, Retired teacher,
Elected member - school

## LOIS COX, CFA, CFP

Manhattan, Director of Investments, Kansas State University
Foundation, Appointed by the Governor

## RON ESTES,

Wichita, Kansas State Treasurer, Statutory member

## TODD HART

Olathe, Deputy Chief, Olathe Fire Department
Elected member - non-school

CHRISTOPHER LONG<br>Mission Hills, President, Palmer Square Capital, Appointed by the Governor<br>TERRY MATLACK, VICE-CHAIRPERSON<br>Shawnee, Managing Director, Tortoise Capital Advisors, LLC, Appointed by the Governor<br>\section*{DOUG MAYS, CHAIRPERSON}<br>Topeka, Doug Mays \& Associates, LLC, Kansas Govt Affairs, Appointed by the Speaker of the House<br>\section*{SURESH RAMAMURTHI}<br>Topeka, Chairman, CBW Bank,<br>Appointed by the President of the Senate

## FISCAL SERVICES

Chief Fiscal Officer, Diana Komarek
Corporate Accounting
Employer Reporting
Investment Accounting

## BENEFITS AND MEMBER SERVICES

Member Services Officer, Mary Beth Green
Post-Retirement
Benefits
Withdrawals

## INFORMATION TECHNOLOGY

Chief Information Officer, Mike Branam
Data Control
Operations

## KPERS Staff

| Mel Abbott | Alec Hawley | Cathy Rafferty |
| :---: | :---: | :---: |
| Crystie Amaro | Lisa Hernandez | Kimberley Raines |
| Michael Arvidson | Robert Hiebert | Stacey Randles |
| Julie Baker | Denise Hilmes | Alberta Rea |
| Yohonna Barraud | John Hooker | Norm Remp |
| Kristen Basso | Ellen Hurless | Dean Roney |
| Julia Baughman | Emily Hurt | Jamie Rose |
| Dianna Berry | Reshma Jacob | Rika Rowe |
| Kathleen Billings | Melva Janke | Teresa Ryan |
| Jenna Blood | Clark Jennebelle | MaryAnn Sachs |
| Anita Bradley | Teresa Jurgens | Alan Schuler |
| Michael Branam | Melissa Keller | Rhonda Shumway |
| Jeanette Branam | Casey Kidder | Julie Smith |
| Terry Brookhouser | Brenda Kindle | Zachary Smith |
| Geri Brubaker | Diana Komarek | Terry Snook |
| Craig Callahan | Shannon Kuehler | Marsha Stafford |
| George Clark | Annette Kuti | Jaime Sturgeon |
| Alan Conroy | Donald Lennard | Amber Tarrant |
| Tammy Cruz | Debra Lewis | Carmen Torres |
| Andrea Davenport | Faith Loretto | Jackie VandeVelde |
| Don Deseck | Joyce Mark | Christina VanWinkle |
| Yolanda Dickinson | Heather McHardie | Daniel Wadsworth |
| Amy Dunton | Laurie McKinnon | Jarod Waltner |
| Joyce Edington | Jason McKinzie | Michaela Watson |
| Jill Emme | Judy McNeal | Jessica Wendt |
| Yarlenis Ensley | Elizabeth Miller | Christine Whitlow |
| Dan Fairbank | Stephanie Moore | Amy Whitmer |
| Mitchell Fick | Roger Moore | Alice Wietharn |
| Renae Forque | Noble Morrell | Eric Wigginton |
| Jeffrey Franczak | Lisa Ngole | Max Williams |
| Elaine Gaer | Shawn Nix | Carol Wilson |
| Yong (Sue) Gamblian | Michael Ogle | Deanna Winters |
| Connie Gardner | Carrie Pare |  |
| Nick Gawdun | Diana Peters |  |
| Billie-Jo Gerisch | Alissa Powell |  |
| Michael Gilliland | Jeeva Purushothama |  |
| Kay Gleason | Sarah Putman |  |
| Lisa Gonzales | Teresa Quick |  |
| Mary Beth Green | Justin Quick |  |
| Todd Haug | Jami Quiett |  |

## Consultants and Advisors

Auditors: Cochran Head Vick \& Co., P.A., Kansas City, KS
Actuary: Cavanaugh Macdonald, Englewood, CO

## Investment Consultants

LP Capital Advisors, Sacramento, CA
Pension Consulting Alliance, Inc., Encino, CA
The Townsend Group, Cleveland, OH

## Investment Managers

AEW Capital Management, LP, Boston, MA
Baillie Gifford Overseas Limited, Edinburgh, Scotland Barings Asset Management Limited, London, UK
Blackrock Institutional Trust Company, San Francisco, CA
Brookfield Asset Management, Coral Gables, FL
Fiduciary Asset Management Company, St. Louis, MO
Franklin Templeton Institutional, San Mateo, CA
Guggenheim Investments, Topeka, KS
ING Investment Management Company, Hartford, CT
JP Morgan Investment Management Inc., New York, NY
Lazard Asset Management, LLC, New York, NY
Loomis Sayles \& Company, LP, Boston, MA

MacKay Shields LLC, New York, NY<br>Mellon Capital Management Corporation, San Francisco, CA<br>Morgan Stanley Asset Management, Inc., New York, NY<br>Pacific Investment Management Company, Newport Beach, CA<br>Pareto Partners, New York, NY<br>Payden \& Rygel Investment Counsel, Los Angeles, CA<br>Russell Investment Group, Tacoma, WA<br>State Street Global Advisors, Boston, MA<br>Systematic Financial Management LP, Teaneck, NJ<br>T Rowe Price Associates, Inc., Baltimore, MD<br>Urdang Securities Management, Inc., Plymouth Meeting, PA<br>Western Asset Management Company, Pasadena, CA

Investment Custodian: Bank of New York Mellon, Everett, MA
Life Insurance: Minnesota Life Insurance Company, St. Paul, MN
Long-Term Disability: Self Insured, UnitedHealthcare Specialty Benefits, LLC, South Portland, ME

## GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Certificate of Achievement for Excellence in Financial Reporting to KPERS for the 2012 annual report. KPERS has received the award for each of the last 19 consecutive fiscal years.

Government Finance Officers Association

# Certificate of <br> Achievement for Excellence in Financial Reporting 

# Presented to <br> Kansas Public Employees Retirement System 

For its Comprehensive Annual
Financial Report for the Fiscal Year Ended

June 30, 2012

Executive Director/CEO

Financial Section

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# $\mathrm{C}_{\mathbf{H}_{\mathbf{V}}}$ cochran head Vick \& co., P.A. <br> Certified Public Accountants 

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Merriam, KS 66204
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(913) 378-1177 FAX

## Independent Auditor's Report

Board of Trustees
Kansas Public Employees Retirement System:

## Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of the Kansas Public Employees Retirement System (the system), a component unit of the State of Kansas, as of June 30,2013 , and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise KPERS' basic financial statements as listed in the table of contents. The summarized comparative financial information has been derived from the System's 2012 financial statements and, in our report dated October 15, 2012 we expressed an unqualified opinion on the respective financial statements.

## Management's Responsibility for the Financial Statements

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

## Auditor's Responsibility

Ourresponsibility 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 from material misstatement.

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

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

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Kansas Public Employees Retirement System as of June 30,

2013, and the changes in fiduciary net position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

## Other Matters

Asdescribedinnote2tothefinancialstatements,KPERSadoptedtheprovisionsofGovernmentalAccountingStandardsBoard Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position.

## Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis information, schedule of employer contributions, and schedule of funding progress, which appear as listed in the accompany table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise KPERS' basic financial statements. The schedule of contributions, schedule of administrative expenses, schedule of investment income by asset class, schedule of investment management fees and expenses, introductory section, investment section, actuarial section, andstatistical section, are presented for purposes of additional analysis and are notarequired partofthe basicfinancial statements.
The schedule of contributions, schedule of administrative expenses, schedule of investment income by asset class, and schedule of investment management fees and expenses, are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of contributions, schedule of administrative expenses, schedule of investment income by asset class, and schedule of investment management fees and expenses are fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subject to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

## Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 15, 2013, on our consideration of the System's internal control over financial reporting and on our test of its compliance with certain provisions of laws, regulations, contracts and grant agreements, andothermatters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the System's internal control over financial reporting and compliance.

October 15,2013 Cochran Head Vickitlo; PC.

## Management's Discussion \& Analysis

This section presents management's discussion and analysis of the Kansas Public Employees Retirement System's financial performance during the fiscal year that ended June 30, 2013. It is presented as a narrative overview and analysis in conjunction with the Executive Director's letter of transmittal.

The Kansas Public Employees Retirement System (KPERS, the Retirement System, or the System) is an umbrella organization administering the following three statewide pension groups under one plan, as provided by chapter 74, article 49 of the Kansas Statutes:

- Kansas Public Employees Retirement System (KPERS)
- Kansas Police and Firemen's Retirement System (KP\&F)
- Kansas Retirement System for Judges (Judges)

All three groups are part of a governmental, defined benefit, contributory plan covering substantially all Kansas public employees. The Kansas Public Employees Retirement System is a single trust, multi-employer, cost-sharing plan. The State of Kansas and Kansas school districts are required to participate. Participation by local political subdivisions is optional but irrevocable once elected.

## FINANCIAL HIGHLIGHTS

- The System's net assets increased by $\$ 1.3$ billion or approximately 10.0 percent, from $\$ 13.1$ billion to $\$ 14.4$ billion.
- As of December 31, 2012, the date of the most recent actuarial valuation, the Retirement System's funded ratio was 56.4 percent compared with a funded ratio of 59.2 percent for the prior year.
- The unfunded actuarial liability increased from $\$ 9.2$ billion at December 31, 2011, to $\$ 10.3$ billion at December 31, 2012.
- On a market value basis, this year's investment rate of return was a positive 14.0 percent, compared with last year's return of a positive 1.0 percent
- Retirement benefits paid to retirees and beneficiaries increased 4.2 percent from $\$ 1.24$ billion in fiscal year 2012 to \$1.29 billion in fiscal year 2013.


## OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is an introduction to the System's basic financial statements, which comprise the following components

1. Basic financial statements
2. Notes to the basic financial statements
3. Required supplementary information
4. Other supplementary schedules

The information available in each of these sections is summarized as follows.

## BASIC FINANCIAL STATEMENTS

A Statement of Fiduciary Net Position as of June 30, 2013, and a Statement of Changes in Fiduciary Net Position for the fiscal year ended June 30, 2013, are presented with the previous year's comparative information. These financial statements reflect the resources available to pay benefits to retirees and other beneficiaries as of year end, as well as the changes in those resources during the year.

## NOTES TO THE BASIC FINANCIAL STATEMENTS

The financial statement notes provide additional information that is essential to a full understanding of the data provided in the financial statements. Information available in the notes to the financial statements is described in the paragraphs that follow.

Note 1 provides a general description of the Retirement System, as well as a description of the plan benefits and overview of the contributions that are paid by employers and members. Information regarding a breakdown of the number of participating employers and members is also provided.

Note 2 provides a summary of significant accounting policies, including the basis of accounting, investments (including investing authority), investment risk categorizations, the method used to value investments, and additional information about cash, securities lending and derivatives. Note 2 also contains information regarding the Retirement System's required reserves. The various reserves include the Members Accumulated Contribution Reserve, Retirement Benefit Accumulation Reserve, Retirement Benefit Payment Reserve, Group Insurance Reserve, the Expense Reserve and the Optional Term Life Insurance Reserve.

Note 3 provides information about System funding policies and employer contributions made to the System by the three different funding groups.

Note 4 provides information about other post employment benefits that the System administers. The Governmental Accounting Standards Board issued GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, which was effective for periods beginning after December 15, 2005. The KPERS Death and Disability Plan covers current active members of the System and terminates at retirement. As part of the reporting requirements declared by this statement, the financial status and activity of the KPERS Death and Disability Plan are displayed separately in the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position. Required supplemental schedules display the funded status and funding progress of the plan, and the significant methods and assumptions used. As noted in the funding status schedules, the KPERS Group Insurance Reserve Fund is 7.1 percent funded as of June 30,2012, the last date of the actuarial valuation of the Death and Disability Plan.

Note 5 describes System capital expenditure commitments to real estate and alternative investments. This section also generally describes potential System contingencies.

Note 6 provides the dates through which subsequent events have been evaluated and when the financial statements were available to be issued.

## REQUIRED SUPPLEMENTARY INFORMATION

The required supplementary information consists of schedules and related notes concerning the funded status of the pension plans administered by the Retirement System and other post employment benefits.

## OTHER SUPPLEMENTARY SCHEDULES

Other schedules include detailed information on contributions by employer coverage groups, administrative expenses, an investment income summary, and a schedule of investment fees and expenses.

## FINANCIAL ANALYSIS OF THE RETIREMENT SYSTEM

The System provides benefits to State of Kansas and other local and school employees. Benefits are funded by member and employer contributions and by investment earnings. Net assets held in trust for benefits at June 30, 2013, amounted to \$14.4 billion, an increase of $\$ 1.3$ billion, or 10.0 percent, from $\$ 13.1$ billion at June 30, 2012. Following are two summary schedules, Fiduciary Net Position and Changes in Fiduciary Net Position, comparing information from fiscal years 2013 and 2012.

## Summary Comparative Statements of Fiduciary Net Position

As of June 30, 2013

## Assets

Cash and Deposits
Receivables
Investments at Fair Value
Invested Securities Lending Collateral
Capital Assets and Supplies Inventory
Total Assets
\$ 1,253,020
3,003,859,154
14,505,731,128
1,639,377,142
2,109,776
19,152,330,220

Liabilities

| Administrative Costs | $1,057,498$ | 975,198 |
| :--- | ---: | ---: |
| Benefits Payable | $5,337,106$ | $7,036,167$ |
| Investments Purchased | $3,082,762,464$ | $2,202,250,732$ |
| Securities Lending Collateral | $\underline{1,647,884,065}$ | $\underline{1,074,549,112}$ |
| Total Liabilities | $\underline{4,737,041,133}$ | $\underline{3,284,811,209}$ |
| Net Position | $\underline{\underline{\$ 14,415,289,087}}$ | $\underline{\underline{\$ 13,105,811,851}}$ |

## Summary Comparative Statements of Changes in Fiduciary Net Position

Year Ended June 30, 2013 Year Ended June 30, 2012

## Additions

Contributions
Net Investment Income
Net Investment Income from Securities Lending Activity
Total Net Investment Income
Other Miscellaneous Income

Total Additions

## Deductions

Monthly Retirement Benefits
Refunds
Death Benefits
Insurance Premiums and Disability Benefits
Administrative

Total Deductions

Net Increase (Decrease)
Net Position Beginning of Year
Net Position End of Year

Additions to the System's net assets held in trust for benefits include employer and member contributions, as well as investment income. Total contributions to the Retirement System increased from \$916 million in fiscal year 2012 to \$973 million in fiscal year 2013.

The System recognized a net investment income of \$1.7 billion for the 2013 fiscal year, compared with net income of \$89.1 million for the 2012 fiscal year. Total return for the portfolio was 14.0 percent, compared with the Retirement System benchmark return of 12.8 percent. System net investments amounted to $\$ 14.4$ billion at June 30, 2013, which was $\$ 1.3$ billion more than the $\$ 13.1$ billion in total System investments at June 30, 2012. The Retirement System's one-, three-, fiveand ten-year investment performance against the assumed rate of investment return are shown in the following table. The assumed rate of return is 8.0 percent.

| 1 Year | Last 3 Years | Last 5 Years | Last 10 Years |
| :--- | :--- | :--- | :--- |
| $14.0 \%$ | $12.2 \%$ | $5.5 \%$ | $7.9 \%$ |

At June 30, 2013, the System held $\$ 8.8$ billion in U.S. equity and international equity securities, which is $\$ 1.1$ billion greater than 2012 fiscal year end. U.S. equity and international equity securities earned returns of approximately 22.0 percent and 16.1 percent, respectively, for the 2013 fiscal year. These

| \$ 973,448,423 | \$ 915,741,287 |
| :---: | :---: |
| 1,741,282,941 | 84,238,967 |
| 5,968,509 | 4,817,667 |
| 1,747,251,450 | 89,056,634 |
| 537,741 | 129,622 |
| 2,721,237,614 | 1,004,927,543 |
| 1,288,986,517 | 1,237,559,898 |
| 53,899,831 | 55,896,826 |
| 9,458,321 | 9,414,234 |
| 48,557,812 | 55,169,430 |
| 10,857,897 | 9,928,110 |
| 1,411,760,378 | 1,367,968,498 |
| 1,309,477,236 | (363,040,955) |
| \$13,105,811,851 | \$13,468,852,806 |
| \$14,415,289,087 | \$13,105,811,851 |

compare with the Retirement System's benchmark returns of 21.5 and 13.6 percent, respectively.

The System held $\$ 3.7$ billion in U.S. debt and international debt securities, unchanged from the 2012 fiscal year. The performance of the System's fixed income securities during fiscal year 2013 was 2.7 percent, compared with the benchmark of 0.2 percent. Real estate investments increased $\$ 274.1$ million to $\$ 1.4$ billion by June 30, 2013. Real estate investments returned approximately 12.8 percent for the 2013 fiscal year, versus the benchmark real estate return of 12.8 percent. The System held $\$ 373.6$ million in alternative investments, which was a $\$ 13.6$ million decrease from June 30, 2012. Alternative investments earned a return of approximately 12.9 percent for the 2013 fiscal year, compared to the benchmark alternative investment return of 24.5 percent. At June 30, 2013, the System held $\$ 275.8$ million in short-term investments, which was an increase of $\$ 70.3$ million from June 30, 2012.

The Retirement System earns additional investment income by lending investment securities to brokers. The brokers provide collateral to the System and generally use the borrowed securities to cover short sales and failed trades. The Retirement System invests cash collateral received from the brokers in order to earn interest. For fiscal year 2013, net securities lending
income amounted to $\$ 6.0$ million, compared with income of \$4.8 million in fiscal year 2012. Additionally for fiscal year 2013, the System received $\$ 8.9$ million in gains from a collateral pool settlement.

Deductions from net assets held in trust for benefits include retirement, death and survivor benefits, and administrative expenses. Fiscal year 2013, retirement, death and insurance benefits amounted to $\$ 1.4$ billion, an increase of $\$ 42.9$ million, or 4.2 percent from fiscal year 2012. The increase in benefit payments was a result of an increase in the number of retirees. For 2013 fiscal year, System administrative expenses amounted to \$10.9 million compared with $\$ 10.0$ million in fiscal year 2012. The ratio of System administrative expenses to the number of members (approximately $\$ 45$ per member) continues to be very cost-efficient compared to other statewide retirement plans.

## RETIREMENT FUNDING STATUS

Current Funding Outlook and Projections: The Retirement System's most recent actuarial valuation shows a $\$ 1,025$ million increase in the unfunded actuarial liability (UAL), decreasing the funded ratio to 56.0 percent.

UAL (millions) Funded Ratio
KPERS

| State Group | $\$ 1,292$ | $68 \%$ |
| :--- | ---: | :--- |
| School Group | 6,366 | 49 |
| Local Group | 1,699 | 60 |
| KP\&F | 866 | 67 |
| Judges | 29 | 81 |
| Retirement System Total $^{1}$ | $\$ 10,253$ | 56 |

1 May not add due to rounding.

As of the latest valuation date, December 31, 2012, the State group continues to contribute at the full actuarial required contribution (ARC) rate. The State and School groups are combined for purposes of determining the statutory contribution rate applicable to their combined payroll. To the extent the statutory contribution rate is higher than the ARC rate for the State, the difference, applied to the State payroll, is contributed to the School group. Consequently, the two groups are linked for purposes of determining the ARC rate and date. Furthermore, legislation passed in 2012 provided for additional contributions by the State commencing in fiscal year 2014 and continuing until the combined State/School group is at least 80.0 percent funded. The statutory contribution rate for the State/School and Local groups is projected to converge with the ARC rate before the end of the amortization period (2033), if all actuarial
assumptions are met in future years. The ARC date for the State/ School group is FY 2021 and for the Local group is FY 2015. Although ARC is projected to be achieved if actuarial assumptions are met, the dates and rates of ARC for these groups are highly leveraged and will vary as experience unfolds year to year.

In spite of the funding shortfall, benefits for current retirees are safe. The Retirement System has in excess of $\$ 14$ billion in assets to pay benefits for decades.

In response to KPERS' long-term funding shortfall, the 2012 Legislature made changes to future benefits and contributions, affecting both current members and employers, to improve KPERS long term sustainability. The Governor signed Senate Substitute for HB 2333 into law on June 1, 2012. This legislation affects new hires, current members and employers. Beginning in 2014, the cap on employer contributions has been increased from 0.6 percent to 0.9 percent in fiscal year 2014, 1.0 percent in fiscal year 2015, 1.1 percent in fiscal year 2016 and 1.2 percent in fiscal year 2017 and beyond. Members (depending on tier and a possible benefit election), will have a contribution increase or a benefit decrease. The changes are expected to improve KPERS long-term funding and help all three groups reach full funding by 2033. The actual funding progress will be heavily dependent on the actual investment experience of the System in future years.

The legislature and the governor are ultimately responsible for benefits and funding. As a fiduciary devoted to the best financial interest of members, KPERS will continue to advocate for policies that promote the long-term financial health of the Retirement System.

## STATEMENT OF FIDUCIARY NET POSITION

As of June 30, 2013, with comparative figures for 2012

KPERS Fund |  |
| :---: |
| Disability Fund |$\quad 2013$ Totals 2012 Totals

## Assets

| Cash and Deposits |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash | \$1,208,291 | \$24,328 | \$1,232,619 | \$10,899,775 |
| Deposits with Insurance Carrier | = | 20,401 | 20,401 | = |
| Total Cash and Deposits | 1,208,291 | 44,729 | 1,253,020 | 10,899,775 |
| Receivables |  |  |  |  |
| Contributions | 96,385,499 | 8,160,998 | 104,546,497 | 98,163,596 |
| Investment Income | 32,074,983 | 1,184 | 32,076,167 | 34,404,394 |
| Sale of Investment Securities | 2,867,236,490 | - | 2,867,236,490 | 1,915,936,822 |
| Total Receivables | 2,995,696,972 | 8,162,182 | 3,003,859,154 | 2,048,504,812 |
| Investments at Fair Value |  |  |  |  |
| Domestic Equities | 5,057,826,892 | - | 5,057,826,892 | 4,693,536,025 |
| International Equities | 3,700,662,364 | - | 3,700,662,364 | 3,209,202,374 |
| Cash and Equivalents | 256,598,486 | 19,179,570 | 275,778,056 | 205,449,688 |
| Fixed Income | 3,747,412,909 | - | 3,747,412,909 | 3,705,502,848 |
| Alternative Investments | 373,638,697 | - | 373,638,697 | 387,198,726 |
| Real Estate | 1,350,412,210 | 二 | 1,350,412,210 | 1,076,257,138 |
| Total Investments at Fair Value | 14,486,551,558 | 19,179,570 | 14,505,731,128 | 13,277,146,799 |
| Invested Securities Lending Collateral | 1,639,377,142 | - | 1,639,377,142 | 1,051,425,908 |
| Capital Assets and Supplies Inventory | 2,109,776 | - - | 2,109,776 | 2,645,766 |
| Total Assets | 19,124,943,739 | 27,386,481 | 19,152,330,220 | 16,390,623,060 |
| Liabilities |  |  |  |  |
| Administrative Costs | 1,057,498 | - | 1,057,498 | 975,198 |
| Benefits Payable | 3,004,176 | 2,332,930 | 5,337,106 | 7,036,167 |
| Securities Purchased | 3,082,762,464 | - | 3,082,762,464 | 2,202,250,732 |
| Securities Lending Collateral | 1,647,884,065 | - - | 1,647,884,065 | 1,074,549,112 |
| Total Liabilities | 4,734,708,203 | 2,332,930 | 4,737,041,133 | 3,284,811,209 |
| Net Position restricted for Pensions and Other Post Employment Benefits | \$14,390,235,536 | \$25,053,551 | \$14,415,289,087 | \$13,105,811,851 |

The accompanying notes to the financial statements are an integral part of this statement.

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the fiscal year ended June 30, 2013, with comparative figures for 2012

|  | KPERS Fund | Group Death \& Disability Fund | 2013 Totals | 2012 Totals |
| :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |
| Contributions |  |  |  |  |
| Member Contributions | \$306,631,621 | \$ - | \$306,631,621 | \$298,105,053 |
| Employer Contributions | 617,925,370 | 48,891,432 | 666,816,802 | 617,636,234 |
| Total Contributions | $\underline{924,556,991}$ | 48,891,432 | 973,448,423 | 915,741,287 |
| Investments |  |  |  |  |
| Net Appreciation (Depreciation)in Fair Value of Investments | 1,490,141,704 | - | 1,490,141,704 | $(132,729,256)$ |
| Interest | 100,530,311 | 20,823 | 100,551,134 | 103,595,173 |
| Dividends | 153,201,135 | - | 153,201,135 | 110,902,858 |
| Real Estate Income, Net of Operating Expenses | 39,973,754 | - | 39,973,754 | 44,259,544 |
| Other Investment Income | - - | 二 | - - | 436,311 |
|  | 1,783,846,904 | 20,823 | 1,783,867,727 | 126,464,630 |
| Less Investment Expense | 42,584,786 | - | 42,584,786 | (42,225,663) |
| Net Investment Income | 1,741,262,118 | $\underline{20,823}$ | 1,741,282,941 | 84,238,967 |
| From Securities Lending Activities |  |  |  |  |
| Securities Lending Income | 4,827,054 | - - | 4,827,054 | 4,353,102 |
| Securities Lending Expenses |  |  |  |  |
| Borrower Rebates | $(2,450,894)$ | - | $(2,450,894)$ | $(1,769,773)$ |
| Management Fees | 1,309,439 | 二 | 1,309,439 | 1,305,208 |
| Total Securities Lending Activities Expense | $(1,141,455)$ | - | $(1,141,455)$ | $(464,565)$ |
| Net Income from Security Lending Activities | 5,968,509 | - | 5,968,509 | 4,817,667 |
| Total Net Investment Income | 1,747,230,627 | $\underline{20,823}$ | 1,747,251,450 | 89,056,634 |
| Other Miscellaneous Income | 534,268 | 3,473 | $\underline{537,741}$ | 129,622 |
| Total Additions | 2,672,321,886 | 48,915,728 | $\underline{2,721,237,614}$ | 1,004,927,543 |
| Deductions |  |  |  |  |
| Monthly Retirement Benefits Paid | $(1,288,986,517)$ | - | $(1,288,986,517)$ | $(1,237,559,898)$ |
| Refunds of Contributions | $(53,899,831)$ | - | $(53,899,831)$ | $(55,896,826)$ |
| Death Benefits | (9,458,321) | - | $(9,458,321)$ | $(9,414,234)$ |
| Insurance Premiums and Disability Benefits | $(6,058,253)$ | $(42,499,559)$ | $(48,557,812)$ | $(55,169,430)$ |
| Administrative Expenses | (10,426,813) | $(431,084)$ | (10,857,897) | (9,928,110) |
| Total Deductions | (1,368,829,735) | $(42,930,643)$ | (1,411,760,378) | (1,367,968,498) |
| Net Increase (Decrease) in Net Position | 1,303,492,151 | 5,985,085 | 1,309,477,236 | $(363,040,955)$ |
| Net Position Restricted for Pension Benefits and Other Post Employment Benefits |  |  |  |  |
| Beginning of Year | 13,086,743,385 | 19,068,466 | 13,105,811,851 | 13,468,852,806 |
| End of Year | \$14,390,235,536 | \$25,053,551 | \$14,415,289,087 | \$13,105,811,851 |

The accompanying notes to the financial statements are an integral part of this statement.

## Note 1: Plan Description

## PLAN MEMBERSHIP

The Kansas Public Employees Retirement System (the Retirement System or the System) is a body corporate and an instrumentality of the State of Kansas. The Retirement System is an umbrella organization administering the following three statewide pension groups under one plan, as provided by K.S.A. 74, article 49:

- Kansas Public Employees Retirement System (KPERS)
- Kansas Police and Firemen's Retirement System (KP\&F)
- Kansas Retirement System for Judges (Judges)

All three groups are part of a tax-exempt, defined benefit, contributory plan covering substantially all public employees in Kansas. The Kansas Public Employees Retirement System is a single trust, multi-employer, cost-sharing plan. The State of Kansas and Kansas schools are required to participate, while participation by local political subdivisions is optional but irrevocable once elected. Participating membership and employers are as follows:

## Membership by Retirement Groups ${ }^{1}$

\(\left.\begin{array}{lrrrr}KPERS \& KP\&F \& Judges \& \begin{array}{r}Total <br>
Retirees and <br>
beneficiaries currently <br>

receiving benefits\end{array} \& 79,545\end{array}\right) 4,545\) 228 | 84,318 |
| :---: |

1 Represents System membership at December 31,2012.
2 Number of retirement payees as of December 31,2012.

## Number of Participating Employers

|  | KPERS | KP\&F | Judges |
| :--- | ---: | ---: | ---: |
| State of Kansas | 1 | 1 | 1 |
| Counties | 105 | 31 | - |
| Cities | 363 | 62 | - |
| Townships | 57 | - | - |
| School Districts | 286 | - | - |
| Libraries | 122 | - | - |
| Conservation Districts | 82 | - | - |
| Extension Councils | 67 | - | - |
| Community Colleges | 20 | - | - |
| Educational Cooperatives | 23 | - | - |
| Recreation Commissions | 43 | 1 | - |
| Hospitals | 29 | - | - |
| Cemetery Districts | 13 | - | - |
| Other | $\underline{199}$ | $\underline{-}$ | $\underline{-}$ |
| Total | $\underline{\underline{1,410}}$ | $\underline{\underline{95}}$ | $\underline{1}$ |

## PLAN BENEFITS

Members (except KP\&F members) with ten or more years of credited service, may retire as early as age 55 (KP\&F members may be age 50 with 20 years of credited service), with an actuarially reduced monthly benefit. Normal retirement is at age 65 , age 62 with ten years of credited service, or whenever a member's combined age and years of credited service equal 85 "points" (KP\&F members' normal retirement ages are age 60 with 15 years of credited service, age 55 with 20 years, age 50 with 25 years, or any age with 32 years of service). Monthly retirement benefits are based on a statutory formula that includes final average salary and years of service. When ending employment, members may withdraw their contributions from their individual accounts, including interest. Members who withdraw their accumulated contributions lose all rights and privileges of membership. For all pension coverage groups, the accumulated contributions and interest are deposited into and disbursed from the membership accumulated contribution reserve as established by K.S.A. 74-4922.

Members choose one of seven payment options for their monthly retirement benefits. At retirement a member may receive a lump-sum payment of up to 50.0 percent of the actuarial present value of the member's lifetime benefit. His or her monthly retirement benefit is then permanently reduced based on the amount of the lump sum. Benefit increases, including ad hoc post-retirement benefit increases, must be passed into law by the Kansas Legislature. Benefit increases are under the authority of the Legislature and the Governor of the State of Kansas. For all pension coverage groups, the retirement benefits
are disbursed from the retirement benefit payment reserve as established by K.S.A. 74-4922.

Active members (except KP\&F members) are covered by basic group life insurance. The life insurance benefit is 150.0 percent of the annual compensation rate at the time of an active member's death. Generally, in cases of death as a result of an on-thejob accident, for KPERS members there is a $\$ 50,000$ lump-sum benefit and a monthly benefit payable to a spouse, minor children or dependent parents (in this order). Service-connected accidental death benefits are in addition to any life insurance benefit. There is a $\$ 4,000$ death benefit payable to beneficiaries when a retired member dies under any of the Systems.

Active members (except KP\&F and Judges' members) are also covered by the provisions of the disability income benefit plan. Since 2006, annual disability income benefits have been based on 60.0 percent of the annual rate of compensation at the time of disability, less primary social security benefits, one-half of worker's compensation, and any other employment-related disability benefit. Members who were approved for disability benefits before 2006 have an annual benefit based on 66 2/3 percent of the annual compensation at the time of disability. For both groups, the minimum monthly benefit is $\$ 100$. There is a waiting period of 180 continuous days from the date of disability before benefits can be paid. During the period of approved disability, the member continues to be eligible for group life insurance coverage and to accrue participating service credit.

## CONTRIBUTIONS

Member contributions (from 4.0 to 7.0 percent of gross compensation), employer contributions and net investment income fund Retirement System reserves. Member contribution rates are established by state law, and are paid by the employee according to the provisions of section 414(h) of the Internal Revenue Code. State law provides that the employer contribution rates be determined based on the results of each annual actuarial valuation. The contributions and assets of all three systems are deposited in the Kansas Public Employees Retirement Fund established by K.S.A. 74-4921. All of the retirement systems are funded on an actuarial reserve basis (see Note 3). For fiscal years beginning in 1995, Kansas legislation placed a statutory limit of 0.1 percent of payroll on increases in contribution rates for KPERS employers. During the 1995 legislative session, the statutory limits were increased to 0.2 percent of payroll over the prior year for fiscal years beginning in 1996 for state and school
employers. The statutory increase for local units of government was amended to limit increases to no more than 0.15 percent over the prior year for calendar years beginning in 1997. Annual increases in the employer contribution rates related to subsequent benefit enhancements are not subject to these limitations. Legislation passed in 2003 amended the annual increases in future years. The statutory cap for the State/School group increased to 0.4 percent in fiscal year 2006, with subsequent increases of 0.5 percent in fiscal year 2007 and 0.6 percent in fiscal year 2008 and beyond. Legislation passed in 2004 amended the annual increases in future years for local employers. The statutory cap for the Local group increased to 0.4 percent in calendar year 2006, with subsequent increases of 0.5 percent in fiscal year 2007 and 0.6 percent in fiscal year 2008 and beyond. Legislation passed in 2012 again amended the statutory cap on annual increases in contribution rates. Beginning in 2014, the cap on employer contributions has been increased to 0.9 percent in fiscal year 2014, 1.0 percent in fiscal year 2015, 1.1 percent in fiscal year 2016 and 1.2 percent in fiscal year 2017 and beyond. The amortization period for the unfunded liability of all three systems is 40 years from July 1, 1993.

## Note 2: Summary of Significant Accounting Policies

## REPORTING ENTITY

The Retirement System is a component unit of the State of Kansas. A nine-member board of trustees administers the Retirement System: four trustees are appointed by the Governor, one by the President of the Senate, one by the Speaker of the House of Representatives, two are elected by Retirement System members, and one is the elected State Treasurer. The Board of Trustees appoints the Executive Director, who is the Retirement System's managing officer.

## MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

The Retirement System's financial statements are reported using the economic resource measurement focus and the accrual basis of accounting. Contributions are due to KPERS when employee services have been performed and paid. Contributions are recognized as revenues when due pursuant to statutory requirements. Benefits and refunds are recognized when due and payable and expenses are recorded when the corresponding liabilities are incurred, regardless of when contributions are received or payment is made.

## USE OF ESTIMATES

The Retirement System's financial statement preparation conforms with accounting principles generally accepted in the United States. These principles require management to make estimates and assumptions that affect the reported amounts of assets and liabilities. This also includes disclosing 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.

## COMPARATIVE FINANCIAL INFORMATION

The basic financial statements include certain prior-year summarized comparative information in total but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2012, from which the summarized information was derived.

## CASH AND DEPOSITS

Custodial credit risk is when, in the event a financial institution or counterparty fails, the Retirement System would not be able to recover the value of deposits that are in the possession of an outside party. The System advances cash deposits to a disability administrator for monthly disability benefits and death benefits for members who are disabled. As of June 30, 2013, the System's deposits with its disability administrator was $\$ 20,401$. The Retirement System does not have a deposit policy for custodial credit risk associated with these deposits.

## METHOD USED TO VALUE INVESTMENTS

Investments are reported at fair value. Securities traded on a national or international securities exchange are valued at the last reported sale price at current exchange rates. The fair value of real estate investments is based on independent appraisals. Fair value of other securities is determined by the mean of the most recent bid and asked prices as obtained from dealers that make markets in such securities. Fair value of the limited partnership investments is based on valuations of the underlying companies of the limited partnerships as reported by the general partner. Fair value of the commingled funds is determined based on the underlying asset values.

## INVESTMENTS

Investments and the investment process are governed by K.S.A. 74-4921. The Board of Trustees maintains a formal Statement of

Investment Policy, which addresses the governing provisions of the law, as well as specifying additional guidelines for the investment process.

Statutory authority for the Retirement System's investment program is provided in K.S.A. 74-4901 et seq., effective July 1, 1993. The Retirement Act addresses the following areas:

- Establishes the structure of the Board of Trustees, defines the Trustees' responsibilities, imposing the prudent expert standard upon their actions with respect to managing the assets of the Retirement System.
- Requires that the assets be invested to preserve capital and solely to provide benefits to members and the members' beneficiaries.
- Limits the possible allocation of common stock to 60.0 percent of the total book value of the fund.
- The annual allowance for new alternative (non-publicly traded) investments is limited to 5.0 percent of the market value of the total investment assets of the fund as measured from the end of the preceding calendar year.
- Establishes limits on the structure of future investments in real estate or alternative investments.
- Requires that the Board develop investment policies and objectives to invest fund assets.
- Authorizes the Board to hire qualified professionals/firms to assist in investing the fund and requires that such professionals/firms obtain errors and omissions insurance coverage and fidelity bond insurance coverage.
- Authorizes the Board to pay for the services of retained professionals/firms at the rates fixed by the Board, excluding any reimbursement for expenses and subject to the provisions of the appropriations act.
- Provides for an annual audit and requires that the Board annually examine the investment program, specific investments, and its policies and practices.

In fulfilling its responsibilities, the Board of Trustees has contracted with 28 investment management firms and a master global custodian. The Retirement System has six permissible investment categories. 1) Equities 2) Fixed income securities 3) Cash equivalents 4) Derivative products 5) Alternative investments 6) Real estate.

Equities are considered to be common or preferred corporate stocks; warrants or rights; corporate bonds, debentures or preferred stock which are convertible into common stock; investment trusts; or participation in commingled (equity) funds managed by a bank, insurance company or other professional equity investment manager. These stocks are listed on well recognized or principal exchanges of the United States or foreign countries.

Fixed income securities are considered to be U.S. and foreign Treasury or Government agency obligations; U.S. or foreign corporate bonds; asset backed securities such as CMOs, mortgage backed securities and segments of these types of vehicles; or participation in commingled (fixed income) funds, managed by a bank, insurance company or other professional fixed income investment manager. Subject to the Board's limitations, these investments also include the debt of emerging markets. Emerging markets are considered to be those countries that are included in the JP Morgan Emerging Markets Index Global (EMBI Global).

Cash equivalent securities are U.S. dollar denominated securities with a duration of one year or less and an investment grade rating by Moody's and Standard \& Poor's. A security's duration is determined by a third-party pricing agency.

Derivative instruments are tools for use by the System's investment managers for the purposes of:

- Risk Management: Mitigating or managing portfolio risks through hedging or otherwise modifying specific risk exposure.
- Substitution: In substitution for "cash market" securities/positions, or for modifying portfolio positioning in lieu of cash market transactions.
- Derivative-based Strategies: As a structural part of an investment strategy.
- Efficiency/Cost Effectiveness: Efficiency and/or cost effectiveness in implementing: portfolio construction, trading, portfolio strategy or managing a portfolio's risk/return profile.

Alternative investments are those investments that do not trade publicly on an organized exchange. Examples include but are not limited to partnership funds that focus on private equity, venture capital, buyout, mezzanine financing or special situations, natural resources or hedge funds. Investment
in any alternative investments is subject to the following requirements:

- There are at least two other sophisticated investors.
- The System's portion of an investment will not be more than 20 percent of the total investment.
- Any individual investment (standing alone or within a pool) must not be more than 2.5 percent of the Fund's total alternative investment commitments.
- A favorable recommendation has been received from an independent expert.
- The investment is consistent with the Investment Policy Statement.
- The Board has received and considered the due diligence findings regarding the investment.
- Criteria have been established that will be used as a guideline to determine when no additional investments will be made and when the investment will be liquidated.

Real estate investments are investments in real property on a direct ownership basis, through a realty holding corporation, joint partnership, public or private real estate investment trusts (REITs) (contained within the real estate portfolio), participation in commingled real estate funds (managed by a bank, insurance company or other professional real estate investment manager) or through debt secured by real estate. Any real estate investment shall support the System's intent to hold a real estate portfolio which is diversified by geographic location, property type, stage of development and degree of leverage.

The Retirement System's Statement of Investment Policy authorizes participation in a securities lending program administered by the master global custodian, Bank of New York Mellon. The System receives income from the loan of the securities, in addition to the income which accrues to the System as owner of the securities. The securities loans are open contracts and therefore could be terminated at any time by either party. The type of securities lent include U.S. government securities, domestic and international equities, and domestic and international bonds. The borrower collateralizes the loan with either cash or government securities of 102.0 percent of fair value on domestic securities and 105.0 percent of fair value on international securities loaned. Cash collateral is invested in the Retirement System's name in a dedicated short-term investment fund consisting of
investment grade debt securities. The System does not have the ability to pledge or sell collateral securities without a borrower default. At June 30, 2013, the maturities of securities in this dedicated bond portfolio are as follows: 49.0 percent of the fair value of the securities mature within 30 days; 21.9 percent mature between 31 and 180 days; and 29.1 percent mature after 180 days. The custodian provides for full indemnification to the Retirement System for any losses that might occur in the event of borrower default. The Retirement System does incur credit risk as it relates to the credit quality of the securities in the collateral pool. The securities on loan are marked to market daily to ensure the adequacy of the collateral. The fair value of securities on loan as of June 30, 2013, and June 30, 2012, were $\$ 2,553,553,073$ and $\$ 1,673,130,416$, respectively. Collateral held by the Retirement System for June 30, 2013, and June 30, 2012, was $\$ 2,691,735,936$ and $\$ 1,750,761,499$, respectively. Net income produced from securities lending activities for fiscal year 2013 was $\$ 5,968,509$ and $\$ 4,817,667$ for fiscal year 2012.

## CUSTODIAL CREDIT RISK

Custodial credit risk is when, in the event a financial institution or counterparty fails, the Retirement System would not be able to recover value of deposits, investments, or collateral securities that are in the possession of an outside party. On occasion, cash is received by the custodial bank too late to be invested in any cash pool. Cash not invested in KPERS' name is subject to the custodian's creditors. With that exception, 100.0 percent of the Systems investments are held in the System's name and are not subject to creditors of the custodial bank. At June 30, 2013, the custodial bank held \$14.4 million overnight for the System.

## CONCENTRATION RISK

The System has investments in Federal National Mortgage Association issued securities that represent 2.1 percent of the total market value, other agencies sum to 1.8 percent of market value, and U.S. Treasury securities representing 8.5 percent of total market value. KPERS investment policy does not prohibit holdings above 5.0 percent in the debt securities of U.S. government issuers. Government sponsored enterprises (GSEs, such as FNMA) are considered government issuers for the purpose of implementing KPERS investment policy. No other single issuer represents 1.0 percent or more of System assets.

## CURRENCY RISK

Currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. KPERS investments at June 30, 2013, were distributed among currencies in the following list.

| USD Equivalent | Currency | Percent |
| ---: | :--- | ---: |
| $\$ 145,650,394$ | Australian Dollar | $0.90 \%$ |
| $38,959,388$ | Brazil Real | 0.24 |
| $744,533,996$ | British Pound | 4.62 |
| $225,381,291$ | Canadian Dollar | 1.40 |
| $3,998,364$ | Chilean Peso | 0.02 |
| $20,327,029$ | Chinese Yuan Renminbi | 0.13 |
| $2,156,203$ | Colombian Peso | 0.01 |
| $34,911,603$ | Danish Krone | 0.22 |
| $909,811,723$ | Euro Currency Unit | 5.63 |
| $189,733,829$ | Hong Kong Dollar | 1.18 |
| $24,569,795$ | Indian Rupee | 0.15 |
| $10,869,160$ | Indonesian Rupiah | 0.07 |
| $7,740,110$ | Israeli Shekel | 0.05 |
| $552,078,913$ | Japanese Yen | 3.42 |
| $15,043,325$ | Malaysian Ringgit | 0.09 |
| $51,046,257$ | Mexican New Peso | 0.32 |
| $2,998,595$ | New Zealand Dollar | 0.02 |
| $34,733,519$ | Norwegian Krone | 0.22 |
| $3,674,497$ | Other | 0.02 |
| $6,582,584$ | Philippines Peso | 0.04 |
| $6,049,505$ | Polish Zloty | 0.04 |
| $11,127,111$ | Russian Rubel (New) | 0.07 |
| $47,598,027$ | Singapore Dollar | 0.30 |
| $44,915,374$ | SAfrican Comm Rand | 0.28 |
| $89,766,749$ | South Korean Won | 0.56 |
| $125,281,854$ | Swedish Krona | 0.78 |
| $224,412,622$ | Swiss Franc | 1.39 |
| $61,354,398$ | Taiwan New Dollar | 0.38 |
| $11,340,618$ | Thailand Baht | 0.07 |
| $18,116,749$ | Turkish New Lira | 0.11 |
| $1,969,959$ | Uruguayan Peso | 0.01 |
| $\mathbf{1 2 , 4 5 9 , 1 9 5 , 1 5 9}$ | United States Dollar* | $\underline{77.26}$ |
| $\mathbf{1 6 , 1 2 5 , 9 2 8 , 7 0 0}$ |  | $\underline{100.00 \%}$ |

* Includes securities lending collateral of $\$ 1,639,377,142$. Of the $\$ 3.67$ billion in foreign currency exposure above, $\$ 0.16$ billion ( $4.4 \%$ ) is in fixed securities. The balance is in equities.

The System's asset allocation and investment policies include active and passive investments in international securities. KPERS' target allocation is to have 29.0 percent of assets (excluding securities lending collateral) in dedicated international equities. Core Plus bond managers are allowed to invest up to 20.0 percent of their portfolio in non-dollar securities. The System utilizes a currency overlay manager to reduce risk by hedging
up to 50.0 percent of the foreign currency for selected international equity portfolios. At June 30, 2013, the System's total foreign currency exposure was 42.9 percent hedged.

## CREDIT RISK

Credit risk is the risk that an issuer or other counterparty to a debt investment will not fulfill its obligations. The Retirement System's investment policies require Core and Core Plus managers to have at least 70.0 percent of holdings in investment grade securities. Each portfolio is required to maintain a reasonable risk level relative to its benchmark.

In the table below, cash equivalents include commercial paper, repurchase agreements and other short-term securities. Agency
securities are those implicitly guaranteed by the U.S. Government. U.S. Government securities are treasury securities and agencies explicitly guaranteed. Securities Lending Collateral are securities invested using cash collateral from the securities lending program, not pooled with any other institution's funds. Securities rated A1/P1 are included in AA in this table. The Securities Lending Collateral class has the following policy requirements, at the date of purchase: to be rated A1/A+ or better; Commercial paper must be A1/P1/F1; Asset-backed securities must be Aaa/AAA or better; Repurchase agreements must be 102.0 percent collateralized with U.S. Government or agency securities and held by the custodial bank or third-party custodian. Securities Lending Collateral NR (Not Rated) securities are repurchase agreements and certificates of deposit.

System assets (in thousands) as of June 30, 2013, subject to credit risk are shown with current credit ratings.

| Quality Rating | Cash Equivalents | Corporate | Agency | U.S. Govt. | Securities Lending | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  | Collateral |  |  |
| NR | 142,787 | $\$$ | 31,891 | $\$$ | - | - | - | $\$$ |

## INTEREST RATE RISK

Interest rate risk is the risk that changes in interest rates will, adversely affect the fair value of an investment. Investment policy requires Core and Core Plus managers to be within 20.0 percent of their benchmark duration, and all fixed portfolios to maintain a reasonable risk level relative to their benchmarks. The same System assets as above are also subject to interest rate risk. These are shown in the following (\$ in thousands) grouped by effective duration ranges.

| Effective Duration | Cash <br> Equivalents |  | Corporate |  | Agency |  | U.S. Govt. |  | Securities Lending Collateral |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-1 Yr | \$ | 179,217 | \$ | 449,081 | \$ | 140,977 | \$ | 113,804 | \$ | 1,502,794 | \$ | 2,385,873 |
| 1-3 Yrs |  | - |  | 201,457 |  | 93,544 |  | 165,534 |  | 136,583 |  | 597,118 |
| 3-5 Yrs |  | - |  | 336,552 |  | 192,304 |  | 114,254 |  | - |  | 643,110 |
| 5-10 Yrs |  | - |  | 559,179 |  | 144,272 |  | 952,209 |  | - |  | 1,655,660 |
| > 10 Yrs |  | 二 |  | 168,113 |  | 950 |  | 125,324 |  | - |  | 294,387 |
| Total | S | 179,217 | \$ | 1,714,382 | \$ | 572.047 |  | 1,471,125 | 5 | 1,639,377 | \$ | 5,576,148 |

Securities Lending Collateral Policy limits the maximum average portfolio maturity to 90 days. Only floating rate and fixed rate as-set-backed securities may mature beyond 13 months.

## INVESTMENT DERIVATIVES—FUTURES

Futures contracts are commitments for delayed delivery (liability) or receipt (asset) of securities in which the seller agrees to make delivery and the buyer agrees to take delivery at a specified future date, of a specified instrument, at a specified price. Market risk arises due to market price and interest rate fluctuations that may result in a decrease in the fair value of futures contracts. Futures contracts are traded on organized exchanges and require initial margin in the form of cash or marketable securities. Holders of futures contracts look to the exchange for performance under the contract. Accordingly, the credit risk due to nonperformance of counterparties to futures contracts is minimal. Daily, the net change in the futures contract value is settled in cash with the exchanges, making the fair values always equal to zero after the daily margin flow. At the close of business June 30, 2013, the System had total net margins payable the next day of $\$ 721,566$. Cash equivalents and short-term investments in amounts necessary to settle the economic value of the futures contracts were held in the portfolio so that no leverage was employed in accordance with the Statement of Investment Policy. The daily margin flows effect cash assets held at broker. Realized gains/losses are recognized at contract maturity and included with underlying security type returns. Total revenues of $\$ 39.7$ million were associated with futures for the year ending June 30, 2013.

## INVESTMENT DERIVATIVES—OPTIONS

The Retirement System also participates in option contracts. These contractual agreements give the purchaser the right, but not the obligation, to purchase or sell a financial instrument at a specified price within a specified time. The option buyer has some counterparty risk in the event the seller cannot deliver when exercised. This involves opportunity cost and possible loss of option fees. The option seller holds the securities and has minimal counterparty risk. Options strategies used by the Retirement System are designed to provide exposures to positive market moves and limit exposures to interest rate and currency volatility.
Investment Derivative Notional Values

|  | Asset Class' | June 30,2012 | June 30, 2013 |
| :--- | :--- | ---: | ---: |
| Domestic Equity Futures | Domestic Equities | $\$ 135,844,640$ | $\$ 160,888,960$ |
| International Equity Futures | International Equities | $103,933,505$ | $151,767,040$ |
| Fixed Futures | Fixed | $121,032,212$ | $396,847,947$ |
| Options Written | Fixed | 214,363 | 416,028 |
| Options Purchased | Fixed | - | 386,188 |
| Pay Fixed Interest Swaps | Fixed | $20,400,000$ | - |
| Receive Fixed Interest Swaps | Fixed | $154,400,000$ | $464,800,000$ |
| Credit Default Swaps | Fixed | $100,975,893$ | $48,077,399$ |
| TBA Agency Bonds ${ }^{2}$ | Fixed | $212,499,050$ | $83,653,906$ |

1 This asset class has Fair Values and Revenues that are included in other schedules. Futures and Options reflect the summed absolute values of the exposures.
2 TBA Agency Bond notional values are equal to their fair values. KPERS investment policy allows managers to carry short TBA values as long as they have offsetting long holdings in similar securities with similar characteristics.

## INVESTMENT DERIVATIVES—SWAPS

Interest rate swaps are agreements between two counterparties to exchange future cash flows. These are generally fixed vs. variable flows, and can be either received or paid. These swaps are used to adjust interest rate and yield curve exposure and substitute for physical securities. Long swap positions
(receive fixed) increase exposure to long-term interest rates; short positions (pay fixed) decrease exposure. Counterparty risk is limited to monthly exchanged or netted cash flows.

Credit default swaps are used to manage credit exposure without direct purchase or sale of securities. Written credit default swaps increase credit exposure (selling protection) obligating the seller to buy the bonds from the counterparty in the event of a default. This creates credit risk, but has very little counterparty risk. Purchased credit default swaps decrease exposure (buying protection), providing the right to "put" bonds to the counterparty in the event of a default. This decreases credit risk and has counterparty risk in the event the seller of protection fails to cover the defaulting security. Controls are established by the investment managers to monitor the creditworthiness of the counterparties.

## INVESTMENT DERIVATIVES-TBA (TO BE ANNOUNCED) AGENCY BONDS

A TBA is a contract for the purchase or sale of agency mortgage-backed securities to be delivered at a future agreed-upon date; however, the actual pool identities or the number of pools that will be delivered to fulfill the trade obligation or terms of the contract are unknown at the time of the trade. A common practice is to buy a TBA security thirty to sixty days in advance of the issue date with the issue date as the trade settle date, then selling the security four days before issue date, with the same settle date. This allows the trader to realize a gain or loss on the security based on changes in interest rates, without taking possession of, or paying for, the security. The only cash cost is the broker cost of the trades. These have minimal credit risk, while this scenario is designed specifically to increase interest rate exposure.
Investment Derivative Fair Values

|  | June 30, 2012 | Increases | Decreases | June 30, 2013 |
| :---: | :---: | :---: | :---: | :---: |
| Options Written | \$ 94,549 | \$ 45,539 | \$ $(556,117)$ | \$ (416,029) |
| Options Purchased | - | 386,188 | - | 386,188 |
| Pay Fixed Interest Swaps | $(167,636)$ | 1,145,482 | $(977,846)$ | - |
| Receive Fixed Int. Swaps | 446,474 | 4,370,213 | $(1,409,588)$ | 3,407,099 |
| Credit Default Swaps | $(489,094)$ | 4,371,503 | $(3,626,899)$ | 255,510 |
| TBA Agency Bonds ${ }^{1}$ | 212,499,050 | 2,621,410,214 | $(2,750,255,358)$ | 83,653,906 |
| Foreign Currency Forwards | 8,256,856 | 114,878,353 | (121,880,441) | 1,254,768 |
|  | \$220,640,199 | \$2,746,607,492 | \$(2,878,706,249) | \$88,541,442 |

1 TBA Agency Bond notional values are equal to their fair values.

## INVESTMENT DERIVATIVES—FOREIGN CURRENCY FORWARDS

The Retirement System's international investment managers use forward contracts to obtain currencies necessary for trade execution and manage the exposure of the international investments to fluctuations in foreign currency. Active international investment managers use forward contracts to enhance returns or to control volatility. Currency risk arises due to foreign exchange rate fluctuations. Forward foreign exchange contracts are negotiated between two counterparties. The Retirement System could incur a loss if its counterparties failed to perform pursuant to the terms of their contractual obligations. Since the System holds the offsetting currency in the contract, and controls are established by the investment managers to monitor the creditworthiness of the counterparties, risk of actual loss is minimized. The Retirement System also contracts with a currency overlay manager to hedge the currency exposure to the System's international equity portfolio.

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Investment Currency Forwards
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|  | June 30, 2012 |  |
| :--- | ---: | ---: |
|  | Notional $\$$ USD | Fair Values |
| Australian Dollar | $\$ 32,281,579$ | $\$(128,733)$ |
| Brazil Real | $7,544,316$ | 31,489 |
| British Pound | $67,419,737$ | 422,040 |
| Canadian Dollar | $37,667,318$ | $(344,799)$ |
| Chinese Yuan Ren | $7,680,592$ | $(31,865)$ |
| Danish Krone | $4,964,720$ | 216,497 |
| Euro Currency Unit | $232,856,452$ | $1,917,964$ |
| Hong Kong Dollar | $29,431,197$ | $(3,449)$ |
| Hungarian Forint | - | - |
| Indonesian Rupian | $6,622,148$ | $(56,549)$ |
| Indian Ruppee | - | - |
| Japanese Yen | $118,036,073$ | $(295,623)$ |
| Malaysian Ringgit | 600,000 | $(6,704)$ |
| Mexican New Peso | $45,525,952$ | $(1,447,349)$ |
| New Zealand Dollar | $1,314,263$ | 10,165 |
| Norwegian Krone | $1,634,005$ | 36,725 |
| Other Currencies | $3,729,366$ | $(32,609)$ |
| Philippines Peso | 505,131 | 18,617 |
| Russian Rubel | - | - |
| SAfrican Rand | $4,386,757$ | $(88,483)$ |
| Singapore Dollar | $11,057,213$ | $(97,701)$ |
| South Korean Won | $5,859,081$ | $(64,428)$ |
| Swedish Krona | $3,274,430$ | $(99,248)$ |
| Swiss Franc | $14,981,385$ | $(538,935)$ |
|  | $\$ 637,371,715$ | $\$(582,978)$ |


|  |  | June 30, 2013 |  |
| ---: | ---: | ---: | ---: |
| FV Increases | FV Decreases | Fair Values | Notional \$USD |
| $\$ 3,254,964$ | $\$(5,606,784)$ | $\$(2,480,553)$ | $\$ 100,906,916$ |
| 11,633 | $(427,491)$ | $(384,369)$ | $12,785,767$ |
| $9,193,887$ | $(9,139,906)$ | 476,021 | $173,823,620$ |
| $2,311,083$ | $(1,364,091)$ | 602,193 | $131,060,858$ |
| 37,576 | - | 5,711 | 787,328 |
| 535,268 | $(761,838)$ | $(10,073)$ | $4,010,788$ |
| $16,964,567$ | $(20,872,364)$ | $(1,989,833)$ | $288,509,866$ |
| 146,635 | $(367,342)$ | $(224,156)$ | $133,197,688$ |
| - | $(44,449)$ | $(44,449)$ | 965,435 |
| 142,099 | $(49,662)$ | 35,888 | $3,502,746$ |
| 218 | $(137,834)$ | $(137,616)$ | $6,670,322$ |
| $7,001,934$ | $(7,681,851)$ | $(975,540)$ | $201,583,292$ |
| 8,376 | $(14,544)$ | $(12,872)$ | $2,554,739$ |
| $2,880,410$ | $(1,469,745)$ | $(36,684)$ | $34,826,452$ |
| 85,970 | $(170,640)$ | $(74,505)$ | $3,072,012$ |
| 160,609 | $(136,250)$ | 61,084 | $4,154,288$ |
| 140,804 | $(159,885)$ | $(51,690)$ | $6,086,402$ |
| 218 | $(53,867)$ | $(35,032)$ | $2,066,668$ |
| 176,049 | $(10,916)$ | 165,133 | $10,622,480$ |
| 257,003 | $(6,328)$ | 162,192 | $4,937,997$ |
| 420,123 | $(870,191)$ | $(547,769)$ | $50,176,892$ |
| 70,744 | $(30,383)$ | $(24,067)$ | $2,718,603$ |
| 666,911 | $(286,622)$ | 281,041 | $19,742,564$ |
| $1,396,916$ | $(780,581)$ | $\underline{77,400}$ | $16,648,154$ |
| $\$ 45,863,997$ | $\$(50,443,564)$ | $\$(5,162,545)$ | $\$ 1,215,411,877$ |
|  |  |  |  |

## Hedging Currency Forwards

|  | June 30, 2012 |  |
| :--- | ---: | ---: |
|  | Notional \$USD | Fair Values |
|  | $\$ 122,470,396$ | $\$ 566,222$ |
| Australian Dollar | $81,960,799$ | 583,732 |
| Canadian Dollar | $109,025,837$ | $3,041,219$ |
| Swiss Franc | $256,120,592$ | $6,273,783$ |
| Euro Currency Unit | $263,994,679$ | $(243,000)$ |
| British Pound | $\underline{264,399,290}$ | $\underline{(1,382,122)}$ |
| Japanese Yen | $\$ 1,097,971,593$ | $\$ 8,839,834$ |
|  | $\underline{\underline{\$ 1,735,343,308}}$ | $\underline{\underline{\$ 8,256,856}}$ |
| Total Currency |  |  |


|  |  | June 30, 2013 |  |
| ---: | ---: | ---: | ---: |
|  |  | FV Increases |  |
| FV Decreases | Fair Values | Notional \$USD |  |
| $\$ 6,255,879$ | $\$(147,119)$ | $\$ 6,674,982$ | $\$ 185,507,150$ |
| $4,732,573$ | $(4,512,830)$ | 803,475 | $161,497,430$ |
| $4,539,565$ | $(8,143,057)$ | $(562,273)$ | $89,961,536$ |
| $13,136,213$ | $(19,612,175)$ | $(202,179)$ | $212,674,897$ |
| $16,385,580$ | $(20,939,376)$ | $(4,796,796)$ | $542,120,889$ |
| $\underline{23,964,546}$ | $\underline{(18,082,320)}$ | $\underline{4,500,104}$ | $\underline{379,817,714}$ |
| $\$ 69,014,356$ | $\$(71,436,877)$ | $\$ 6,417,313$ | $\$ 1,571,579,616$ |
| $\underline{\underline{\$ 114,878,353}}$ | $\underline{\underline{\$(121,880,441)}}$ | $\underline{\underline{\$ 1,254,768}}$ | $\underline{\underline{\$ 2,786,991,493}}$ |

## FOREIGN CURRENCY FORWARDS

The Retirement System utilizes a currency overlay manager to reduce, or partially hedge, the System's exposure to foreign currencies through the international equities portfolio. The overlay manager evaluates the System's international equities exposure to currencies, and (buys/sells) inverse currency forwards in relation to the overall currency exposures. The inverse relationship of these hedging forwards uses their exposure to currency risks to reduce overall System exposure. The Statement of Investment Policy stipulates that the overlay manager should: "Take forward currency exchange contract positions which will have the intent and effect of hedging the currency exposure of the underlying international equity assets." The Statement of Investment Policy further states the forward currency exchange contract positions be used to "Maintain an acceptable risk level by reducing the negative volatility of the currency component of return."

The Retirement System has ongoing foreign currency exposure through its international equities portfolio. At June 30, 2013, the market values of international equities was $\$ 3.70$ billion. The System's exposure to foreign currencies is converted into a proxy basket of seven liquid currencies that are highly correlated to the movements of the underlying currencies. The weights to be used are calculated with reference to the liquidity and risk of each currency. There is appropriate statistical evidence that the proxy basket does track the currency exposure closely (residual standard deviation of less than one percent). This proves the intent is to hedge and qualifies as a designated hedge under Generally Accepted Accounting Principles. The forward contracts are purchased as needs are determined by the hedge manager, and mature in the nearest September or March. Gains/losses are realized during those periods and the contracts are rolled over to the next period as appropriate. Through these processes, hedging contracts can adapt to any changes to portfolio currency exposures. Since the hedging currency forwards contacts to the overall exposure, and they reference the same foreign exchange rates as the underlying portfolio, this hedge is known to be effective through consistent critical terms.

A portfolio hedge such as this does not match the hedging forwards to any specific hedged security. The accessibility and liquidity of the currency forwards market allows these hedging forwards to roll forward and seamlessly hedge the ongoing foreign currency exposures. Counterparties to these forwards are carefully analyzed for credit risk. The System has control of one side of the exchange at all times, thereby reducing the costs of a counterparty default to possible lost gains, and inconvenience
costs required to re-establish the hedge on short notice with another counterparty.

| Counterparty Name | Notional \$USD | Fair Value | Worst Long Term Rating |
| :---: | :---: | :---: | :---: |
| Bank of America | \$ 12,025,742 | \$ $(191,309)$ | BBB |
| Bank of New York Mellon | 14,708,662 | $(323,412)$ | A |
| Barclays | 161,744,461 | 481,828 |  |
| BNP Paribas | 32,207,137 | 116,522 |  |
| Citigroup Inc | 56,721,688 | 163,336 | A |
| Credit Suisse Group | 97,021,029 | $(2,679,435)$ |  |
| Deutsche Bank | 128,913,295 | 64,055 | A |
| Goldman Sachs Group Inc | 6,009,475 | 83,414 |  |
| HSBC Holdings | 10,961,774 | 88,677 |  |
| JPMorgan Chase \& Co | 26,319,022 | $(568,054)$ |  |
| Morgan Stanley | 29,301,677 | 79,039 |  |
| National Australia Bank | 70,798,766 | $(2,611)$ | A |
| Non-Brokered Contracts | 105,979,444 | $(456,417)$ | NR |
| Northern Trust Corp | 23,993,447 | $(402,077)$ | A |
| Royal Bank of Canada | 131,576,715 | $(585,569)$ | AA |
| Royal Bank of Scotland | 30,358,899 | 94,655 | AA |
| State Street Corp | 59,803,345 | 104,880 | A |
| Toronto Dominion Bank | 1,137,205 | 6,175 | NR |
| UBS | 110,778,971 | $(1,408,141)$ |  |
| Westpac Banking Corp | 105,051,123 | 171,899 | AA |
|  | \$1,215,411,877 | \$(5,162,545) |  |

Hedging Forwards Counterparty Exposure at June 30, 2013

| Counterparty Name | Notional \$USD | Fair Value | Worst Long <br> Term Rating |
| :--- | ---: | ---: | ---: |
| Barclays | $\$ 117,418,560$ | $\$ 918,490$ | A |
| Citigroup Inc | $62,694,252$ | $(868,276)$ | A |
| Deutsche Bank | $405,959,446$ | $(4,569,598)$ | A |
| Goldman Sachs Group Inc | $58,112,445$ | $1,388,421$ | A |
| HSBC Holdings | $297,879,274$ | $2,904,225$ | A |
| JPMorgan Chase \& Co | $315,226,488$ | $(3,134,733)$ | A |
| Royal Bank of Canada | $162,135,682$ | $3,108,127$ | AA |
| Royal Bank of Scotland | $5,542,019$ | $(112,783)$ | AA |
| UBS | $\underline{146,611,450}$ | $\underline{6,783,440}$ | A |
|  | $\underline{\underline{\$ 1,571,579,616}}$ | $\underline{\underline{\$ 6,417,313}}$ |  |

## CAPITAL ASSETS AND SUPPLIES INVENTORY

Furniture, fixtures and equipment are reported on the Statement of Fiduciary Net Position at historical cost, net of accumulated depreciation. These assets are depreciated on a straightline basis over an average useful life of three to ten years with no salvage value. Accumulated depreciation on furniture, fixtures and equipment as of June 30, 2013, was \$15,270,553. Office supplies inventory in the amount of $\$ 28,419$ is included, assuming the first-in, first-out method. In fiscal year 1999, the Retirement System purchased an office building and garage
in Topeka, Kansas. Fifty percent of the floor space of the office building is used as the System's administrative headquarters and the remaining 50 percent is a real estate investment. The administrative portion of the building and garage are reported on the Statement of Fiduciary Net Position as a capital asset and are being depreciated. Accumulated depreciation on the administrative portion of the building and garage as of June 30,2013 was $\$ 2,678,910$. The office building and garage are being depreciated over a period of 33 years on an accelerated method. At June 30, 2013, the carrying value of the System's administrative headquarters was $\$ 939,247$.

## COMPENSATED ACCRUED ABSENCES

State employees accrue vacation leave based on the number of years employed up to a maximum rate of 6.5 hours per pay period, and may accumulate a maximum of 240 hours. Upon retirement or termination, employees are paid for accrued vacation leave up to their maximum accumulation. State employees earn sick leave at the rate of 3.7 hours per pay period. Employees who terminate are not paid for unused sick leave. Employees who retire are paid a portion of their unused sick leave based on years of service and hours accumulated. The State uses the vesting method to compute the sick leave liability. The compensated absences liability will be liquidated by the State's governmental and internal service funds.

## RESERVES

K.S.A. 74-4922, K.S.A. 74-4927 and K.S.A. 74-49, 110 define the title and use of the required Retirement System reserves. This law requires the actuary to:

- Make an annual valuation of the Retirement System's liabilities and reserves.
- Make a determination of the contributions required to discharge the Retirement System's liabilities.
- Recommend to the Board ofTrustees employer contribution rates required to maintain the System on an actuarial reserve basis.

The Members Accumulated Contribution Reserve represents the accumulation of member contributions, plus interest, credited to individual member accounts of non-retired members. At the date of retirement the individual member's account is transferred to the Retirement Benefit Payment Reserve. After ending employment and applying for withdrawal, employee contributions, plus accumulated interest, are charged to this
reserve. Interest is credited to active member accounts on June 30 each year, based on the balance in the account as of the previous December 31. The interest crediting rate, defined by statute as the actuarial interest assumption rate, is 8.0 percent for those who became members prior to July 1, 1993. For those who first became members after June 30, 1993, interest on employee contributions is credited at the rate of 4.0 percent per year. The balance at June 30, 2013, was $\$ 5,477,460,575$, and was fully funded.

The Retirement Benefit Accumulation Reserve represents the accumulation of employer contributions, net investment income not credited to any other reserve, and the actuarially computed prior service liability not yet funded. The balance at June 30,2013 , was $\$ 8,557,765,403$. The unfunded liability was $\$ 10,252,933,156$. The Retirement Benefit Payment Reserve represents the actuarially computed present value of future benefits for retired members plus interest credited for the current fiscal year, based upon information as of the preceding January 1. The balance at June 30, 2013, was $\$ 10,585,888,424$. The Expense Reserve represents investment income which is sufficient to maintain a year end account balance at two times the most recent fiscal year's administrative expense amount. The System's administrative expenses are financed from this reserve. The balance at June 30, 2013, was $\$ 22,031,554$, and was fully funded. The Optional Term Life Insurance Reserve accumulates employee contributions to pay premiums for optional life insurance coverage and is charged annually with the cost of administering the program. The balance at June 30, 2013, was \$22,736.

## BUDGET

The Retirement System's annual operating budget is developed by the staff and approved by the Board of Trustees. It is sent to the State Budget Division for analysis and policy decisions and is included in the Governor's budget message to the Legislature. The Legislature adopts appropriation and expenditure limitations. When that process is complete, the System has an approved budget.

## RETIREMENT SYSTEM EMPLOYEES' PENSION PLAN

As an employer, the Retirement System participates in KPERS, a cost sharing, multi-employer defined benefit pension plan. KPERS provides retirement, disability, withdrawal and death benefits to plan members and beneficiaries as authorized by Kansas law. Funding is accomplished through member and employer contributions and investment earnings, according to

Kansas law. Plan members contribute 4.0 or 6.0 percent of their annual salary. In fiscal year 2013, the regular employer contribution rate was 9.37 percent of covered payroll. In addition, KPERS contributed an additional 1.0 percent of covered payroll to the group insurance fund. Total payroll was $\$ 3,915,928$, $\$ 4,414,614$ and $\$ 4,616,494$ for 2011, 2012 and 2013 respectively. KPERS contributed \$359,518, \$379,168 and \$449,640 for 2011, 2012 and 2013 respectively, to the employee' pension plan and group insurance fund. All contributions required by law were made in fiscal years 2011, 2012 and 2013.

## NEW GOVERNMENTAL ACCOUNTING STANDARDS BOARD STATEMENTS

KPERS adopted GASB Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position for the fiscal year 2013. This statement supersedes several paragraphs in GASB Statements No. 25 and 27.

GASB Statement No. 64, Derivative Instruments: Application of Hedge Accounting Terminations Provisions-an amendment of GASB Statement No. 53, was issued in June 2011 and is effective for fiscal years beginning after June 15, 2011. Some governments have entered into interest rate swap agreements and commodity swap agreements in which a swap counterparty, or the swap counterparty's credit support provider, commits or experiences either an act of default or a termination event as both are described in the swap agreement. For fiscal years ending June 30, 2013, and 2012, the System did not have any swaps used as hedges.

GASB Statement No. 65, Items Previously Reported as Assets and Liabilities, was issued in March 2012 and is effective for fiscal years beginning after December 15, 2012. It establishes accounting and financial reporting standards that reclassify, as deferred inflows or outflows of resources, certain items that were previously reported as assets or liabilities. This statement will be effective for the System in fiscal year 2014.

Two new GASB Statements have been issued that will have major impact on how the System reports. These statements are the most significant changes to the way defined benefit pension assets and liabilities are reported since the original statements were issued in 1994. Statement No. 67, Financial Reporting for Pension Plans, is effective for fiscal years beginning after June 15, 2013. Statement No. 68, Accounting and Financial Reporting for Pensions, is effective for fiscal years beginning after June 15, 2014. The objective of these Statements is to improve financial reporting by state and local governmental
pension plans. It is the result of a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for pensions with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity, and creating additional transparency. The statements would amend the requirements of Statements No. 25, No. 27 and No. 50, (Pension Disclosures), as they relate to pension plans that are administered through trusts or equivalent arrangements, which meet certain criteria.

The GASB Board is issuing implementation guides. The implementation guide for Statement No. 67 was issued in June 2013. The implementation guide for Statement No. 68 will be issued in January 2014.

KPERS' management is currently evaluating the effect of these GASB statements on the Systems' financial statements.

## RECLASSIFICATION

Certain amounts reported in prior years have been reclassified to conform to the presentation at June 30, 2013.

## Note 3: Funding Policy

## FUNDING

The law governing the Retirement System requires an actuary to make an annual valuation of the System's liabilities and reserves and to determine the contributions required to discharge the System's liabilities. The actuary then recommends to the System's Board of Trustees the employer contribution rates required to maintain the Retirement System on the actuarial reserve basis. Every three years, the actuary makes a general investigation of the actuarial experience under the System including mortality, retirement and employment turnover. The actuary recommends actuarial tables for use in valuations and in calculating actuarial equivalent values based on such investigation. An actuarial experience study was conducted for the three years ending December 31, 2009. As a result of this study, the Board of Trustees adopted new assumptions in regard to retirement rates, mortality rates, termination rates and salary growth.

## PENSION OBLIGATION BONDS

In September 2003, the State of Kansas issued \$40,250,000 of Series 2003 H state pension funding bonds. Of the total amount of the bond issue, $\$ 15,350,000$ of the bond proceeds were used
for the purpose of financing the unfunded actuarial liability of certain Board of Regents members. In addition, the State of Kansas contributed an additional \$2,000,000 cash payment.

The remaining bond proceeds of $\$ 24,900,000$ were used for the purpose of financing the unfunded actuarial liability of those members who retired prior to July 2, 1987, and are entitled to a Retirement Dividend payment pursuant to K.S.A. 74-49,109. Beginning in fiscal year 2005 state employer contribution rates for the State KPERS, School, State KP\&F and Judges groups included an additional amount to finance the debt service payments for this portion of the bonds. In fiscal year 2013 KPERS transferred to the State of Kansas \$3,208,993 in additional contributions for the debt service payments.

In February, 2004, the State of Kansas issued $\$ 500$ million in pension obligation bonds, and KPERS received net proceeds of $\$ 440,200,000$ million in March 2004. The proceeds have been invested to assist with financing the State and School group's unfunded actuarial liability. The debt service on the bonds is paid by the State of Kansas in addition to the State's regular employer contributions.

## CHANGES IN UNFUNDED ACTUARIAL LIABILITY

The actuary has estimated the change in the unfunded actuarial liability between December 31, 2011, and December 31, 2012, can be attributed to the following (\$ millions):

Unfunded Actuarial Liability, December 31, 2011 \$9,228.1
Effect of contribution cap/time lag 303.4

Expected increase due to amortization method
Loss from investment return
Demographic experience
(119.8)
41.3

Change in actuarial assumptions
Change in benefit provisions

Final Unfunded Actuarial Liability, December 31, 2012¹
1 May not add due to rounding.

## CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

KPERS. The actuarially determined contribution rates are computed as a level percentage of payroll by the Retirement System's actuary. For the State/School and Correctional members, the results of December 31, 2008, and December 31, 2009, actuarial valuations provide the basis for Board certification of employer contribution rates for fiscal years 2012 and 2013. As explained in Note 1, legislation has limited the amounts that employers are required to contribute for State, School,
and Local employees, which has resulted in lower employer contribution rates as compared with the actuarially determined rates. The actuarially determined employer contribution rates (not including the 1.0 percent contribution rate for the Death and Disability Program) and the statutory contribution rates are as follows.

State/School

| Fiscal Year | Actuarial Rate | Statutory Rate |
| :--- | ---: | ---: |
| 2012 | $14.09 \%$ | $8.77 \%$ |
| 2013 | $13.46 \%$ | $9.37 \%$ |
| Correctional |  |  |
| 2012 | $12.92 \% / 9.24 \%$ | $11.86 \% / 9.10 \%$ |
| 2013 | $11.24 \% / 9.84 \%$ | $10.06 \% / 9.70 \%$ |

Included in the fiscal year 2012 and 2013 rates is the bond debt service rate of 0.8 percent collected by KPERS to transfer to the State General Fund for the debt service payments of the 13th Check Pension Obligation Bonds.

The results of December 31, 2009, and December 31, 2010, actuarial valuations provide the basis for Board certification of local employer contribution rates for fiscal years beginning in 2012 and 2013, respectively. The actuarially determined employer contribution rates and statutory contribution rates are as follows.

Local

| Fiscal Year | Actuarial Rate | Statutory Rate |
| :--- | ---: | ---: |
| 2012 | $9.44 \%$ | $7.34 \%$ |
| 2013 | $9.43 \%$ | $7.94 \%$ |

KP\&F. The uniform participating service rate for all KP\&F employers was 16.54 percent for the fiscal year beginning in 2012 and 17.26 percent for the fiscal year beginning in 2013. KP\&F employers also make contributions to amortize the liability for past service costs, if any, which are determined separately for each participating employer.

Judges. The total actuarially determined employer contribution rate was 21.28 percent of payroll for the fiscal year ended 2012 and 23.75 percent of payroll for the fiscal year ended 2013.

The law defines employee contributions such that each participating employer, beginning with the first payroll for services performed after the entry date, shall deduct from the compensation of each member an amount equal to 4.0 or 6.0 percent for KPERS members, 7.0 percent for KP\&F members, and 6.0 percent for Judges members as the member's employee contributions.

All required contributions have been made as follows (in thousands).

|  | Employer and Insurance Contributions | Member Contributions ${ }^{1}$ | Contributions as a Percent of Covered Payroll |
| :---: | :---: | :---: | :---: |
| KPERS- State | \$ 105,678 | \$45,028 | 12.6\% |
| KPERS-School | 338,856 | 148,318 | 13.6 |
| KPERS - Local | 135,812 | 73,988 | 11.6 |
| KP\&F | 79,664 | 31,673 | 26.1 |
| Judges | 6,807 | 1,465 | 29.8 |
| Subtotal | \$666,817 | \$300,472 | 13.7\% |

An estimated $\$ 587$ million of employer and employee contributions were made to cover normal cost. An estimated \$380 million was made to the amortization of the unfunded actuarial accrued liability.

1 Member contributions do not include Optional Life Insurance contributions of approximately $\$ 6.2$ million.

## Funding Status and Funding Progress

The funding status of the plan at December 31, 2012, the most recent actuarial valuation date (in thousands):

| Actuarial | Actuarial | Actuarial | Unfunded AAL | Funded | Covered | UAAL as a |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Valuation | Value of Assets | Accrued | $($ UAAL) | Ratio | Payroll | Percentage of |
| Date | (a) | Liability (AAL) | $(\mathrm{b}-\mathrm{a})$ | $(\mathrm{a} / \mathrm{b})$ | (c) | Covered Payroll |
| $12 / 31 / 12$ |  | (b) |  |  | ((b-a)/c) |  |
|  | $\$ 13,278,490$ | $\$ 23,531,423$ | $\$ 10,252,933$ | $56 \%$ | $\$ 6,498,962$ | $158 \%$ |

The schedule of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the Actuarial Accrued Liability for benefits. Additional information as of the latest actuarial valuation follows:

|  | KPERS | KP\&F | Judges |
| :---: | :---: | :---: | :---: |
| Valuation date | 12/31/2012 | 12/31/2012 | 12/31/2012 |
| Actuarial cost method | Entry Age Normal | Entry Age Normal | Entry Age Normal |
| Amortization method | Level Percent closed | Level Percent closed | Level Dollar closed |
| Remaining amortization period | 20 years | 20 years | 20 years |
| Asset valuation method | Difference between actual return and expected return on market value recognized evenly over five-year period. Value must be within corridor of 80.0 percent to 120.0 percent of market value. |  |  |
| Actuarial assumptions: |  |  |  |
| Investment rate of return' | 8.0\% | 8.0\% | 8.0\% |
| Projected salary increases ${ }^{1}$ | 4.0\%-12.0\% | 4.0\%-12.5\% | 4.5\% |
| Cost of living adjustment | none | none | none |

1 Salary increases and investment rate of return include an inflation component of 3.0 percent.

## Note 4: Other Post Employment Benefit Plan - KPERS Death and Disability Plan

The Kansas Public Employees Retirement System administers one post employment benefit plan, KPERS Death and Disability Plan. This multiple employer, cost sharing, defined benefit plan, authorized by K.S.A. 74-4927 provides death benefits for beneficiaries of plan participants and long-term disability benefits to all active members in the KPERS state, school and local coverage groups. In addition, the coverage is extended to other nonKPERS members employed at the Board of Regents institutions and other state officials. The plan provides death benefits to the Judges coverage group. In order to carry out legislative intent within the funds available, the KPERS Board of Trustees may modify plan benefits from time to time.

## SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting Policies. The KPERS Death and Disability Plan's financial statements are prepared on the accrual basis in accordance with accounting principles generally accepted in the United States of America. Employer contributions are recognized as revenue when due pursuant to statutory requirements. Benefits and refunds are recognized when payable and expenses are recorded when the corresponding liabilities are incurred, regardless of when contributions are received or payment is made.

Method Used to Value Investments. Investments are reported at fair market value. Securities traded on a national or international securities exchange are valued at the last reported sale price at current exchange rates.

## PLAN MEMBERSHIP AND BENEFITS

Members in the Death and Disability Plan consisted of the following at June 30, 2012, the date of the last actuarial valuation:

- Active plan members

159,430

- Number of participating employers, 1,410
- Open claims 2,781

The Death and Disability Plan provides two primary benefits to active members.

1. Group life insurance equal to 150.0 percent of annual compensation, which is provided through contract with an insurance carrier.
2. Self-insured long-term disability (LTD) benefits equal to 60.0 percent (before January 1, 2006, 662/3 percent) of annual compensation, offset by other benefits. Members receiving LTD benefits also receive service credit toward their retirement benefits under KPERS and have their group life insurance coverage continued under the waiver of premium provision. The group life insurance benefit is increased annually for inflation, at a rate equal to the consumer price index less one percent, beginning five years following the date of disability.

## CONTRIBUTIONS AND FUNDED STATUS

Prior to fiscal year 2000, employer contributions for group life insurance and long-term disability income benefits were set by statute at 0.6 percent of covered payroll for KPERS and Board of Regents Institutions and 0.4 percent for Judges. Legislation passed in 2000 and 2001 placed a moratorium on contributions related to the group life insurance and disability benefits effective for the period April 1, 2000, through December 31, 2001. Calendar year 2002 and 2003 legislation placed additional moratoriums on contributions. Moratoriums were in effect for the period July 1, 2002, through December 31, 2002, and the period of April 1, 2003, through June 30, 2004. Legislation passed in 2005 increased the insurance contribution rate to 0.8 percent of covered payroll effective July 1, 2005, and to 1.0 percent on July 1, 2006. The rate for Judges remained at 0.4 percent. Legislation passed in early 2009 placed a moratorium on contributions related to the group life insurance and disability benefits effective for the period March 1, 2009, through November 30, 2009. Subsequently, the Legislature passed moratoriums on contributions for each of the following periods, April 1, 2010, through June 30, 2010, April 1, 2011, through June 30, 2011, April 1, 2012 through June 30, 2012, and April 1, 2013, through June 30, 2013. For the period ending June 30, 2012, employers contributed over \$49.0 million to the Plan.

The death and disability plan assets are held in the Group Insurance Reserve fund. At June 30, 2013, this reserve held net assets totaling $\$ 25,053,551$. This reserve fund is funded from deposits from employer contributions and the respective investment income.

The funding status of the plan at June 30, 2012, the most recent actuarial valuation date: (in thousands)

| Actuarial | Actuarial Value | Actuarial Accrued | Unfunded AAL | Funded Ratio | Covered Payroll | UAAL as a \% of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | of Assets | Liability (AAL) | (UAAL) | (a/b) | (c) | Covered Payroll |
|  | (a) | (b) | (b-a) |  |  | $((b-a) / c)$ |
| 6/30/12 | \$19,068 | \$268,597 | \$249,528 | 7.1\% | \$6,618,909 | 3.8\% |

The actuarial valuation dated May 9, 2013, is the most recent actuarial valuation. Only the disability benefits and waiver of premium life insurance provision are included in the actuarial valuation.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions of future employment, mortality, and long term disability trends. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress for the Death and Disability Plan (on page 43) presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the long term disability benefits provided at the time of the valuation and the historical funding of the plan, which is funded exclusively by the employer. The projections of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations on the assumption of the total costs by the employer in the future.

The accompanying schedule of employer contributions (on page 43) presents the amount contributed to the plan by employers in comparison to the actuarial required contribution (ARC) as determined by the actuarial valuation dated June 30, 2012, using GASB 43 requirements. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs for each year and amortize any unfunded liabilities over 15 years.

The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities consistent with the longterm perspective of the calculations. Additional information as of the latest valuation follows.

Actuarial Valuation Information — Death and Disability Plan
Valuation Date June 30, 2012

| Actuarial cost method | Entry Age Normal <br> Level Percent, open |
| :--- | :--- |
| Amortization method | Market Value |
| Remaining amortization period | 15 years |
| Asset valuation method | Martial assumptions |

1 Salary increases and investment rate of return include a 3.25 percent inflation component.

Changes in the UAAL occur for various reasons. The net decrease in the UAAL from July 1, 2010, to July 1, 2012, was \$21.5 million. The components of this net change are shown in the following table (in millions).
Unfunded Actuarial Accrued Liability, July 1, 2010 \$271.0 Impact of new claim experience different from expected Impact of terminated claim experience different from expected (6.3) Impact of change in assumptions 0.1
Impact of new entrants (active) 3.4

Other liability experience and asset experience $\underline{7.1}$
Unfunded Actuarial Accrued Liability, July 1, $2012 \boldsymbol{\underline { \$ 2 4 9 . 5 }}$

## Note 5: Commitments and Contingencies

As of June 30, 2013, the Retirement System was committed to additional funding of $\$ 8,007,000$ in the form of capital expenditures on separate account real estate holdings in the portfolio; $\$ 461,717,000$ for commitments on private equity investments; and $\$ 296,141,000$ for capital calls on core and non-core real estate property trust investments.

The Retirement System is a defendant in legal proceedings and claims arising out of the ordinary course of business. The Retirement System believes it has adequate legal defenses and that the ultimate outcome of these actions will not have a material adverse effect on the Retirement System's financial position.

## Note 6: Subsequent Events

Subsequent events have been evaluated through October 15, 2013, which is the date the financial statements were available to be issued.

## Required Supplementary Information — Retirement Plan

## SCHEDULE OF EMPLOYER CONTRIBUTIONS¹

Last ten fiscal years

| Year | Annual Required <br> Contribution | Percentage <br> Contributed |
| :--- | ---: | :---: |
| 2004 | $\$ 338,879,960$ | $69 \%$ |
| 2005 | $381,791,085$ | 69 |
| 2006 | $471,424,006$ | 63 |
| 2007 | $531,292,151$ | 64 |
| 2008 | $607,662,300$ | 65 |
| 2009 | $660,833,664$ | 68 |
| 2010 | $682,062,413$ | 72 |
| 2011 | $709,964,322$ | 74 |
| 2012 | $843,361,835$ | 67 |
| 2013 | $825,196,972$ | 75 |

1 This schedule does not include Death \& Disability Insurance contributions as a component of required contributions.

## SCHEDULES OF FUNDING PROGRESS

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) <br> (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll | UAAL as a Percentage of Covered Payroll $((b-a) / c)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12/31/03 | \$10,853,462 | \$14,439,546 ${ }^{1}$ | \$3,586,084 | 75\% | \$4,978,132 | 72\% |
| 12/31/04 | 10,971,427 | 15,714,092 | 4,742,666 | 70 | 5,102,016 | 93 |
| 12/31/05 | 11,339,293 | 16,491,762 | 5,152,469 | 69 | 5,270,351 | 98 |
| 12/31/06 | 12,189,197 | 17,552,790 | 5,363,593 | 69 | 5,599,193 | 96 |
| 12/31/07 | 13,433,115 | 18,984,915 | 5,551,800 | 71 | 5,949,228 | 93 |
| 12/31/08 | 11,827,619 | 20,106,787 | 8,279,168 | 59 | 6,226,526 | 133 |
| 12/31/09 | 13,461,221 | 21,138,206 | 7,676,985 | 64 | 6,532,496 | 118 |
| 12/31/10 | 13,589,658 | 21,853,783 | 8,264,125 | 62 | 6,494,048 | 127 |
| 12/31/11 | 13,379,020 | 22,607,170 | 9,228,150 | 59 | 6,401,462 | 144 |
| 12/31/12 | 13,278,490 | 23,531,423 | 10,252,933 | 56 | 6,498,962 | 158 |

[^0]
# Required Supplementary Information Death and Disability Plan 

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last seven fiscal years

| Year | Annual Required <br> Contribution | Percentage <br> Contributed |
| :---: | ---: | :---: |
| 2007 | $\$ 71,763,879$ | $83 \%$ |
| 2008 | $76,128,451$ | 82 |
| 2009 | $75,414,841$ | 48 |
| 2010 | $62,705,453$ | 47 |
| 2011 | $57,868,502$ | 85 |
| 2012 | $57,030,698$ | 87 |
| 2013 | $57,369,452$ | 86 |

## SCHEDULE OF FUNDING PROGRESS

(In thousands)

| Actuarial | Actuarial Value <br> of Assets <br> Valuation Date | Actuarial Accrued <br> Liability (AAL) <br> (b) | Unfunded AAL <br> $($ UAAL) <br> $(\mathrm{b}-\mathrm{a})$ | Funded <br> Ratio <br> $(\mathrm{a} / \mathrm{b})$ | Covered <br> Payroll <br> (c) | UAAL as a \% of <br> Covered Payroll <br> $(\mathrm{cb}-\mathrm{a}) / \mathrm{c})$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $06 / 30 / 06$ | $\$ 18,724$ | $\$ 354,150$ | $\$ 335,426$ | $5.3 \%$ | $\$ 5,716,896$ | $5.9 \%$ |
| $06 / 30 / 07$ | 25,568 | 355,729 | 330,161 | 7.2 | $5,981,324$ | 5.5 |
| $06 / 30 / 08$ | 38,571 | 355,060 | 316,489 | 10.9 | $6,409,426$ | 4.9 |
| $06 / 30 / 10$ | 12,751 | 283,758 | 271,007 | 4.5 | $6,822,726$ | 4.0 |
| $06 / 30 / 12$ | 19,068 | 268,597 | 249,528 | 7.1 | $6,618,909$ | 3.8 |

The June 30, 2006 actuarial valuation date was the first valuation performed using actuarial requirements as required by GASB 43.
Actuarial Valuation assumes insurance premiums due for the Basic Life Insurance plan are paid by current contributions. The remaining contributions, cash, and investments are reserves for liabilities associated with the long term disability plan.

## Other Supplementary Information -

## SCHEDULE OF CONTRIBUTIONS

For fiscal year ended June 30, 2013


## SCHEDULE OF ADMINISTRATIVE EXPENSES

For fiscal year ended June 30, 2013

| Salaries and Wages |  | \$6,165,442 |
| :---: | :---: | :---: |
| Professional Services |  |  |
| Actuarial | \$375,302 |  |
| Audit | 62,400 |  |
| Data Processing | 148,190 |  |
| Legal | 125,126 |  |
| Other Professional Services | 895,462 | 1,606,480 |
| Total Professional Services |  |  |
| Communication |  |  |
| Postage | 265,400 |  |
| Printing | 52,811 |  |
| Telephone | 99,038 |  |
| Total Communication |  | 417,249 |
| Building Administration |  |  |
| Building Management | 72,658 |  |
| Janitorial Service | 28,872 |  |
| Real Estate Taxes | 61,522 |  |
| Utilities | 50,031 |  |
| Total Building Administration |  | 213,083 |
| Miscellaneous |  |  |
| Dues and Subscriptions | 20,454 |  |
| Repair and Maintenance | 924,586 |  |
| Office and Equipment Rent | 20,188 |  |
| Supplies | 96,341 |  |
| Temporary Services | 4,618 |  |
| Travel | 87,547 |  |
| Other Miscellaneous | 201,685 |  |
| Depreciation | 1,100,224 |  |
| Total Miscellaneous |  | 2,455,643 |
| Total Administrative Expenses |  | \$10,857,897 |

## SCHEDULE OF INVESTMENT INCOME BY ASSET CLASS

For fiscal year ending june 30, 2013

| Asset Classification | Interest, Dividends and Other Transactions | Gains and Losses | Total |
| :---: | :---: | :---: | :---: |
| Marketable Equity Securities |  |  |  |
| Domestic Equities | \$66,750,014 | \$938,580,634 | \$1,005,330,648 |
| International Equities | 66,794,590 | 479,013,156 | 545,807,746 |
| Subtotal Marketable Equities | 133,544,604 | 1,417,593,790 | 1,551,138,394 |
| Marketable Fixed Income Securities |  |  |  |
| Government | 33,654,118 | $(88,795,400)$ | $(55,141,282)$ |
| Corporate | 64,453,849 | 13,804,097 | 78,257,946 |
| Subtotal Marketable Fixed | 98,107,967 | $(74,991,303)$ | 23,116,664 |
| Temporary Investments | 2,443,167 | 14,651,013 | 17,094,180 |
| Total Marketable Securities | 234,095,738 | 1,357,253,500 | 1,591,349,238 |
| Real Estate | 39,973,754 | 100,015,037 | 139,988,791 |
| Alternative Investments | $\underline{19,656,531}$ | 23,924,450 | 43,580,981 |
| Total Real Estate and Alternative Investments | 59,630,285 | 123,939,487 | 183,569,772 |
| Other Investment Income |  |  |  |
| Securities Lending | 5,968,509 | 8,948,717 | 14,917,226 |
| Total Other Investment Income | 5,968,509 | 8,948,717 | $\underline{14,917,226}$ |
|  | \$299,694,532 | \$1,490,141,704 | \$1,789,836,236 |
|  | Manager and Custodian Fees and Expenses |  |  |
|  | Investment Manager Fees |  | \$ (28,241,869) |
|  | Custodian Fees \& Expenses |  | $(843,090)$ |
|  | Other Investment Expenses |  | $(1,845,667)$ |
|  | Partnership Mgmt Fees \& Expe | nses | $(11,654,160)$ |
|  | Total Investment Fees and Exp | nses | (42,584,786) |
|  | Net Investment Income |  | \$1,747,251,450 |

## SCHEDULE OF INVESTMENT MANAGEMENT FEES AND EXPENSES

For the fiscal year ended June 30, 2013

| Domestic Equity Managers |  |
| :---: | :---: |
| BlackRock | \$303,383 |
| Fiduciary Asset Management | 589,565 |
| ING | 1,343,164 |
| Loomis, Sayles \& Co. | 1,138,578 |
| Mellon CM LC Index | 169,986 |
| Security Global Investors | 1,003,016 |
| Systematic Financial Mgmnt. | 966,054 |
| Subtotal Domestic Equity Managers | 5,513,746 |
| International Equity Managers |  |
| Baillie Gifford Int'l | 2,372,976 |
| Barings Int'1 | 1,604,199 |
| JP Morgan Int'\| | 2,432,498 |
| Lazard Freres Asset Management | 1,466,654 |
| Morgan Stanley Asset Management | 1,067,180 |
| State Street Int'\| | 439,426 |
| Templeton Int'\| | 1,637,751 |
| Subtotal International Equity Managers | 11,020,684 |
| Fixed Income Managers |  |
| BlackRock | 287,086 |
| Loomis, Sayles \& Co. | 626,758 |
| MacKay Shields | 1,769,146 |
| Pacific Investment Management Co. | 2,641,466 |
| T. Rowe Price | 1,251,698 |
| Western Asset Management Co. | 374,646 |
| Subtotal Fixed Income Managers | 6,950,800 |
| Foreign Currency Overlay Manager |  |
| Pareto Partners | 1,320,000 |
| Russell Overlay | 221,042 |
| Subtotal Foreign Currency Overlay Manager | 1,541,042 |


| Real Estate \& Alternative Investment Managers |  |
| :---: | :---: |
| AEW Capital Management | 2,233,518 |
| Brookfield Redding | 441,616 |
| CenterSquare | 84,474 |
| Duff \& Phelps | 75,486 |
| Principal | 76,979 |
| Subtotal Real Estate \& Alternative Managers | 2,912,073 |
| Cash Equivalent Manager |  |
| Payden \& Rygel Investment Counsel | 303,524 |
| Subtotal Cash Management | 303,524 |
| Total Investment Management Fees | 28,241,869 |
| Other Fees and Expenses |  |
| Mellon Trust - Custodian Fees and Other Expenses | 843,090 |
| Consultant Fees | 1,654,320 |
| Legal Expenses | 191,347 |
| Partnership Management Expenses | 11,654,160 |
| Subtotal Other Fees and Expenses | 14,342,917 |
| Total | \$42,584,786 |

## Investment Section

FIDUCIARY
First and always.


## Chief Investment Officer's Review

The Kansas Public Employees Retirement System investment portfolio represents all contributions to the plan, from both members and their employers, as well as net earnings on these assets. Total assets at the end of fiscal year 2013 were $\$ 14.294$ billion. The System's investment portfolio is managed for the long term, in an effort to generate adequate returns to pay the benefits promised to members. In order to achieve that goal, the assets receive the benefit of a broadly diversified investment portfolio which includes domestic and non-US stocks, bonds, real estate, alternative investments, and cash equivalents.

## ASSET ALLOCATION

Portfolio investments are diversified among eight different asset classes for asset allocation and investment performance purposes, including: domestic equity; international (non-US) equity; fixed income; "yield driven" assets; "real return" assets; real estate; alternative investments; and cash equivalents.

NOTE: For financial reporting purposes, as reported in the Financial Section and the Investment Summary in the Investment Section, investments are categorized by the underlying security.


Long-Term Target


The allocation to equity investments (primarily publicly-traded stocks) constitutes the largest portion of the Retirement System's investment portfolio. This allocation reflects the System's long-term investment orientation and the expectation that equities will provide high relative returns over time. Equity investments allow the investment portfolio to participate in the investment returns produced by companies seeking to grow and profit from their business activities. Equity investments are made globally, sourcing investment return from both domestic and foreign companies, and diversifying the accompanying investment risk across a broad spectrum of economies, currencies and economic sectors.

Fixed income investments are also an important component of the System's asset mix. Due to its relatively low correlation with equities, the fixed income portfolio serves to diversify the risk of equity investing, and also provides a source of current income. The fixed income portfolios are constructed using broad
mandates, with global opportunities in mind. While these portfolios principally contain US-based and US-dollar denominated assets, the fixed income investment managers have significant latitude to seek out and capture fixed income returns globally, consistent with the System's belief in global sourcing of return and diversification of risk.

During fiscal year 2013, the System's Board, investment staff, and investment consultants completed an Asset Allocation Review process, in order to utilize the increased flexibility to invest in alternative investments resulting from 2012 legislation. The new long-term target asset mix has higher allocation targets for real return and private equity, and an allocation to a new asset class called the "yield driven" class. The yield driven asset class is designed to house those assets which derive a significant part of their expected return from income and have moderate exposure to growth risk, but also provide a degree of diversification. The yield driven asset class consists of the System's strategic
fixed income portfolios, as well as investments in domestic Real Estate Investment Trusts (REITs) and Master Limited Partnerships (MLPs).

The majority of the real return asset category is made up of Treasury Inflation Protected Securities (TIPS) and investments in timber and infrastructure assets. A new investment strategy was added to the real return asset class during fiscal year 2013—Global Inflation Linked Bonds (GILBs). This fixed income strategy provides global diversification to the TIPS portfolio. We continue to evaluate potential new investment strategies for the real return asset class, as we work to build a higher degree of inflation protection into the overall investment portfolio.

Real estate investments generate returns in a different manner than equities or fixed income investments, since real estate follows a different (and, typically, longer) market cycle. Because it moves in a different market cycle than publicly-traded stocks and bonds, real estate provides diversification advantages, as well as some inflation protection, to the investment portfolio.

The System's alternative investments, which consist primarily of investments in private partnerships that make venture capital investments, pursue leveraged buyout strategies or own private debt, represent the higher end of the investment risk/ return spectrum. Private equity managers pursue higher growth opportunities in pursuit of higher returns, with commensurate investment risk.

The System also holds cash equivalents investments, primarily to facilitate investment transactions and the cash flows needed to pay benefits.

## INVESTMENT POLICY

The board of trustees has adopted a Statement of Investment Policy, Objectives and Guidelines (the Statement), which serves as a guide to the implementation of the System's broad investment objectives. The Statement complements KPERS' statutes and documents the principles and standards that guide the management of the System's assets. It is binding upon all persons with authority over the assets, including investment managers, custodians, consultants, staff and the members of the board of trustees.

The Statement is the product of the board's careful and prudent study and is reviewed annually and updated as needed. It sets forth the investment policies, objectives, and guidelines which the board of trustees judge to be appropriate and prudent, in consideration of the needs of the System, and to comply with
K.S.A. 74-4901 et seq., to direct the System's assets. Although the System is not subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA), the board intends to abide by the provisions of ERISA to the greatest extent practicable. As such, this Statement is written to be consistent with ERISA.

Among other things, the Statement establishes the criteria against which the System's investment managers are to be measured. In addition, it serves as a review document to guide ongoing oversight of the investment of the Fund as a yardstick of compliance with K.S.A 74-4901 et seq.

Total Returns by Fiscal Year


FISCAL YEAR 2013 INVESTMENT PERFORMANCE
The Retirement System's total investment portfolio experienced a 14.0 percent total return for the one year ending June 30, 2013. The 14.0 percent return exceeded the KPERS Policy Index by 1.2 percent for the fiscal year. For the three years ending June 30, 2013, the System's total investment portfolio has produced an average annualized return of 12.2 percent, which lagged the Policy Index by 0.30 percent, but substantially exceeded the 8 percent actuarial assumption. The System's total return ranked in the 18th percentile of the Wilshire TUCS universe for all plans for the trailing one year, and in the 21st percentile for the trailing three years ending June 30, 2013.


## FINANCIAL MARKET AND PERFORMANCE OVERVIEW

Global macroeconomic issues and central bank policies dominated the financial markets for the entire fiscal year. Fiscal year 2013 overall, however, was a very positive one for broadly diversified institutional investors like the Retirement System.

Global equity markets were strong performers throughout fiscal year 2013. In the first quarter, international equity markets rebounded sharply, with the ACWI ex US Index producing a 7.5 percent total return and the Russell 3000 Index producing a 6.3 percent total return (returns not annualized). Equity market volatility declined from its previous high levels, despite continuing concerns about the pace of economic growth in the US, the impending "fiscal cliff", the European sovereign debt crisis, and the possibility of an economic "hard landing" in China. Global central bankers continued their programs of monetary easing at levels that encouraged risk taking in the global capital markets, led by the ECB's "Outright Monetary Transactions" (OMT) and the Federal Reserve's third quantitative easing program ("QE3"). The President of the ECB also unveiled a strong commitment to preservation of the Euro, pledging to do "whatever it takes to preserve the Euro." Fixed income markets were more volatile than equities during the first quarter of fiscal year 2013, as bond market sentiment swung between fears of financial contagion
in Europe (and the resulting "flight to quality") and improved investor confidence combined with thirst for yield.

The second quarter of fiscal year 2013 was also a productive one for global "risk" assets. International equities continued to outperform domestic equities, with the ACWI ex US Index turning in a 13.7 percent total return and the MSCI Emerging Markets Index producing a 13.9 percent total return, while the Russell 3000 Index produced a 6.5 percent total return (not annualized). Fixed income markets also produced positive returns, with the Barclays US Universal Index at 2.6 percent for the quarter, while the High Yield Index produced a robust 8.0 percent total return for the quarter. Credit spread sectors outperformed as interest rates rose slightly. In the US markets, the effects of Hurricane Sandy had an adverse impact on the East Coast, and the "fiscal cliff" negotiations continued to roil the financial markets. The housing sector of the domestic economy continued to improve, and many economic indicators were mildly positive. The ECB's OMT and other programs helped to stabilize the Eurozone markets, while political changes in Japan led to major changes in governmental policy, a dramatically weakening Japanese Yen, and a sharp rally in Japanese equities.

The third quarter of fiscal year 2013 continued the trend of strong performance for global risk assets. However, in this
quarter, the US equity markets produced the strongest results. The Russell 3000 Index provided a total return of 11.1 percent (not annualized). The MSCI ACWI Ex US Index lagged the US results, but produced a healthy 3.2 percent total return for the quarter. Emerging markets experienced weakness, largely driven by fears of slowing economic growth in China, and the MSCI Emerging Markets Index provided a -1.6 percent total return for the quarter. Rising interest rates in the US resulted in relatively flat performance for bond market investments, with the Barclays Aggregate Bond Index producing a -0.1 percent return and the Barclays US Universal Index producing a 0.1 percent return for the quarter. (This was the first negative quarterly return for the Barclays Aggregate Index since 2006.) The US stock market continued to climb its proverbial "wall of worry," despite some significant uncertainties around the world, as cash flows into domestic equities were strong and domestic stock market volatility remained at low levels. In Europe, the seemingly endless sovereign debt crisis continued, as Cyprus required a bailout package which resulted in a tax on uninsured deposits, and the imposition of capital controls. The ongoing recession in Europe was confirmed by the Eurozone Composite PMI, which came in at 46.5 percent for March. France, Spain, and Italy all recorded severe contractions in economic output. Fears of slowing economic growth in China led resource-heavy emerging market equities to post their worst quarterly return since 2008.

The final quarter of fiscal year 2013 was dominated by the reaction of the global financial markets to Federal Reserve Chairman Ben Bernanke's May 22nd announcement that a reduction in the pace of quantitative easing might begin in September. While domestic equity markets ended the quarter with positive returns, international equity markets experienced losses, with the worst performance coming from the emerging markets. Fixed income markets also sold off on the "tapering" news, producing negative returns for nearly all sectors of the global bond markets. This is a somewhat ironic result, as the Federal Reserve's move toward tapering is motivated by improving economic fundamentals in the US. Although signs grew that the US economy was recovering, questions remained about the economic health of both the Eurozone and the emerging markets, including China.

## INVESTMENT STAFF

The System employs a staff of eight investment professionals to provide oversight and management of the assets and external investment managers. Under the oversight of the

Chief Investment Officer (CIO), responsibility for the portfolio is assigned to the respective investment teams. The Deputy ClO has oversight responsibility for the publicly-traded asset classes, and oversees the System's active domestic and international equity investments. The Fixed Income Investment Officer is responsible for the management of the fixed income portfolios across asset classes, while the Assistant Investment Officer oversees the REIT, MLP, and passive domestic and international equity portfolios. The Investment Officer for Private Markets handles the real estate and private equity investments. The Chief Investment Officer and the four Investment Officers are supported by a team of three Investment Analysts who provide research support and assistance in managing the portfolios. Comments from the Investment Officers on their respective areas follow. Investment staff are focused on bringing a consistent, disciplined management process to all aspects of oversight of investment managers, compliance monitoring, and risk management.

## Public Equity Investments

Public equity investments represent the largest strategy allocation within the System's portfolio. As of June 30, 2013, the market value of the System's equity portfolio was $\$ 8.75$ billion. The strategy is executed through external managers investing domestically and internationally. Active strategies are utilized for 44.8 percent of the public equity portfolio, focusing on international equities and small and mid-cap U.S. companies. The balance of the portfolio is passively managed to replicate the return of

## PORTFOLIO STRUCTURE

The following chart describes the current and target allocations at June 30, 2013.


## DOMESTIC EQUITY

Domestic equities represent 53.7 percent of the total public equity portfolio and 32.9 percent of total assets. Domestic equity investments are benchmarked against the Russell 3000 index. It is the System's view that outperformance through active management is extremely difficult when investing in large cap U.S. equities. Therefore, 80 percent of the domestic equity portfolio is passively managed in an index strategy. This passive exposure is designed to replicate the return on U.S. large cap equities and is implemented through two managers.

The balance of the domestic equity portfolio is invested in the mid and small cap segments of the U.S. equity market. These investments are actively managed by four external managers.

## INTERNATIONAL EQUITY

International equities represent 46.3 percent of the total public equity portfolio and 28.3 percent of total assets. International equity investments are benchmarked against the MSCI All Country World - Ex US Index. Equity investments in companies domiciled outside of the United States offer the potential to add value through prudent active management. Therefore, 75 percent of this portfolio is actively managed. The System has hired six active managers to invest across developed markets outside of the U.S. who may, at times, also hold allocations to emerging markets. The balance of the international equity portfolio is invested to replicate the return on the MSCI All Country World - Ex US Index.

## PERFORMANCE

The System's domestic equity portfolio performed very well in fiscal year 2013 both in absolute terms and relative to the portfolio's benchmark. Domestically, value stocks generally outperformed growth stocks while smaller capitalization stocks outperformed their larger peers. Overall, the return on the domestic equity portfolio was in line with its benchmark, as one would expect given the large passive component, with active managers providing marginal outperformance.

The following chart reports the performance of the domestic equity portfolio.

## Time Weighted Total Return Domestic Equity



Over longer periods, the strategy has met or exceeded its benchmark.

The international equity portfolio also performed well on both an absolute and relative basis during fiscal year 2013. Active management in this strategy added considerable value during the year. Each of the System's six active international equity managers outperformed their respective benchmarks in fiscal year 2013.

The following chart reports the performance of the international equity portfolio.

> Time Weighted Total Return International Equity


The international equity portfolio has added considerable value versus the benchmark over the past three years. Over longer time periods, the strategy has met or exceeded its benchmark.

## Fixed Income Investments

As of June 30, 2013, KPERS' fixed income portfolio had a market value of $\$ 2.1$ billion, representing 14.9 percent of the total assets of the System. The strategy is executed through external managers investing domestically and internationally through an active core-plus mandate. The strategy is managed by three fixed income managers.

## PORTFOLIO STRUCTURE

The following chart provides details of the fixed income portfolio as of June 30, 2013.

## \% of Total Assets

16.0\%

## FIXED INCOME

The fixed income portfolio is invested in core plus strategies through three active managers. The portfolio's objective is to provide diversification to other assets in the System's portfolio and to preserve capital while providing current income. The core plus strategies are primarily invested in traditional investment grade securities and secondarily in non-investment grade securities. The fixed income portfolio utilizes the Barclays Capital Universal Index as the benchmark.

## PERFORMANCE

Despite a rising interest rate environment late in the fiscal year, the System's fixed income portfolio produced a positive total return and strong performance relative to the portfolio's benchmark. Overall, the fixed income portfolio's duration positioning and overweight in spread sectors such as high yield and emerging markets drove performance during fiscal year 2013.


The fixed income portfolio has outperformed the benchmark for all time periods shown.

## Yield Driven Investments

Yield driven investments represent one of the smaller strategy allocations within KPERS portfolio. As of June 30, 2013, the System's yield driven portfolio had a market value of $\$ 709.9$ million representing 5.0 percent of total assets. The strategy is actively managed by three strategic fixed income managers, two REIT managers, and one MLP manager. The yield driven asset class is designed to produce current income and an element of diversification, while also maintaining some degree of correlation with equities.

## PORTFOLIO STRUCTURE

The following chart describes the current and target allocations at June 30, 2013.

## \% of Total Assets

## 5.0\% 5.0\%

Yield Driven
Current Allocation Target Allocation

## STRATEGIC FIXED INCOME

The strategic fixed income strategy represents approximately 60 percent of the total yield driven portfolio and 3.1 percent of total assets. The strategy is measured against custom benchmarks which are weighted to reflect each manager's investment style. It is the System's view that active management in extended market sectors (such as high yield and emerging
markets) facilitates outperformance relative to the benchmark. While the strategic fixed income portfolio is invested in the traditional investment grade securities such as US Treasuries and investment grade corporate bonds, it will also have sizable allocations to high yield, emerging markets, currencies, and non-dollar securities.

The Systems' strategic fixed income portfolios performed very well in absolute terms and relative to the portfolios' benchmarks in fiscal year 2013. The strategic fixed income portfolios have also outperformed their benchmarks over the past three and five years.

## REAL ESTATE INVESTMENT TRUSTS (REIT)

REITs represent approximately 19 percent of the yield driven asset class and 1.0 percent of the System's total assets. This strategy is benchmarked against the MSCI US REIT Index. The publicly-traded real estate securities portfolio is implemented by managers who actively invest in domestic REITs, real estate operating companies (REOCs) and related investment vehicles. During fiscal year 2013, the System's Board of Trustees approved a plan to liquidate the international and preferred REIT portfolios and transition to a domestic REIT mandate. The domestic REIT strategy is actively managed by two managers.

Performance during the fiscal year was positive overall as the System's domestic REIT portfolio outperformed its benchmark.

## MASTER LIMITED PARTNERSHIPS (MLP)

MLPs represent approximately 19 percent of the yield driven asset class and 0.9 percent of the System's total assets. The strategy is benchmarked against the Alerian MLP Index. The MLP sector offers attractive yields relative to other asset classes as well as a positive correlation to inflation. The MLP portfolio is comprised of diversified energy sectors including companies focused on "midstream", gathering and processing, infrastructure, and natural gas pipelines and storage. These companies typically own the physical assets and contract with customers to transport or process natural gas or oil. The System currently has one active MLP manager.

The System's MLP portfolio returned 36.2 percent for fiscal year 2013 outpacing the benchmark Alerian MLP Index, which returned 28.4 percent.

## PERFORMANCE

Because the yield driven asset class was implemented on January 1,2013, fiscal year performance results for the asset class are not available.

## Real Return Investments

The real return portfolio is designed to provide the System with a hedge against future inflationary episodes. This strategy utilizes both public and private market investments. Public market exposure is global and achieved primarily through inflation-linked fixed income securities issued by governments and their agencies in the U.S. as well as in developed countries around the world. Exposure in the private markets is currently achieved through investments in timber and infrastructure. The real return portfolio represents 6.1 percent of the System's total assets, and had a market value of $\$ 865.9$ million as of June 30, 2013. The long term target for the real return asset class is 11 percent.

## PORTFOLIO STRUCTURE

The following chart describes the current and target allocations at June 30, 2013.

## \% of Total Assets



## US TREASURY INFLATION-PROTECTED BONDS (TIPS)

The TIPS portfolio represents 76.1 percent of the real return portfolio and is benchmarked against the Barclays US TIPS Index. This passively managed exposure is designed to replicate the return on domestic inflation linked bonds. It is the System's view that the minimal excess return available through active management of TIPS is not sufficient to compensate for the incremental costs of active management fees. The TIPS portfolio produced a negative total return during fiscal year 2013, as interest rates rose, producing a total return of -4.7 percent, slightly ahead of its benchmark.

## GLOBAL INFLATION-LINKED BONDS (GILB)

The GILB portfolio represents 11.0 percent of the real return portfolio and is benchmarked against the Barclays World ILB Index (USD Hedged). The GILB portfolio provides global diversification by broadening the opportunity set to capture unexpected inflation within investment grade sovereign bonds. ILBs' sources of excess return include the identification of mispricing due to the direction of global interest rates, the shape of each country's yield curve, global break-even inflation and relative value in global nominal bonds. The GILB portfolio
was implemented in January, so a fiscal year return result is not available.

## TIMBER

Timber investments are a component of the System's real return asset allocation due to their historically high correlation to inflation. The System is diversified within timber markets located in Texas, Louisiana and Idaho. The System continues to look for ways to diversify its timber portfolio in order to achieve the highest risk-adjusted returns while complying with the timber program's policy objectives and expected return targets. Like the housing industry, the timber market continues on its road to recovery. The National Council of Real Estate Investment Fiduciaries (NCREIF) Timberland Index finished fiscal year 2013 with its highest total return in five years. Over time, timber investments are expected to provide the System with current cash yields and modest capital appreciation. For fiscal year 2013, the System's timber investment produced a total return of 4.4 percent.

## INFRASTRUCTURE

Over the past year, the search for attractive yields in a low interest rate environment has increased competition and compressed returns in the infrastructure sector. Sellers looking to take advantage of a more liquid market have led to increased volumes. However, the success rate for closing transactions remains uneven. Although widely adopted in other parts of the world, public/private partnerships and related public sector deal flow has been sluggish to materialize in the U.S. The energy sector has been a noticeable exception, as private companies seek alternative sources of funding, and a significant amount of new capital is required to meet development needs. The System's infrastructure manager has been successful in operating its infrastructure investments. The portfolio produced an attractive total return of 10.0 percent for the fiscal year. The fund's infrastructure portfolio is well diversified, with investments in Australia, the United Kingdom, and throughout North and South America, and diversified across multiple sectors, including renewable power, toll roads, electric utilities, sea ports and energy.

## PERFORMANCE

The System's real return portfolio outperformed its benchmark in fiscal year 2013, producing a total return of -1.1 percent. The portfolio allocations to timber and infrastructure drove the relative outperformance.

## Time Weighted Total Return Real Return



The System's real return portfolio has outperformed its benchmark for all longer-term time periods shown.

## Real Estate Investments

For fiscal year 2013, the System's long-term target asset allocation for real estate was 11 percent. As of June 30, 2013, the real estate portfolio had a market value of approximately \$1.24 billion, representing 8.7 percent of the total fund. The real estate portfolio is primarily designed to provide diversification to the broader portfolio, while also serving as an inflation hedge. A secondary objective of the real estate portfolio is to pursue opportunities with a meaningful income component. Capital appreciation is a tertiary objective of current real estate investment activities.

## PORTFOLIO STRUCTURE

During fiscal year 2013, the Board approved the reclassification of the publicly-traded real estate securities (REITs) to the Yield Driven asset class. Therefore, the real estate portfolio is now divided into two segments, based on investment type.


## CORE REAL ESTATE

The largest segment of the real estate portfolio is "core" real estate. This portion of the portfolio is expected to produce steady current income in the form of investment yield while providing portfolio diversification and serving as an inflation hedge. KPERS' core portfolio currently consists of:

- A separate account containing nine directly-owned commercial properties in the U.S.
- Partial and full commitments to five commingled funds

The System is pursuing the gradual liquidation of the separate account real estate portfolio and will reinvest the proceeds into pooled real estate investment funds. This strategy is expected to result in improved liquidity, enhanced portfolio diversification, lower management fees and a reduction in the single event risk associated with owning individual real estate assets.

## NON-CORE REAL ESTATE

The "non-core" segment consists of investments that generally involve some element of property lifecycle risk (such as positioning, leasing and development) while also utilizing greater leverage (debt) than core strategies. While providing elements of inflation protection and a diversification benefit to the broader portfolio, the System expects non-core real estate investments to produce meaningful capital appreciation and higher overall long-term returns than core investments. The non-core portfolio consists of investment funds employing a diversity of strategies and property types, both domestically and internationally.

## MARKET OVERVIEW

Commercial property market fundamentals continued to improve, driven both by favorable capital market conditions and a fairly steady improvement in demand-side fundamentals. Total returns are above the historic average and have been relatively stable during the prior fiscal year, with both income growth and capitalization rate compression driving returns. Transaction levels remained steady over the prior period as the sustained improvement in leasing fundamentals, combined with highly accommodative monetary policy, continued to bolster strong investor demand for core real estate.

Valuations for core assets in developed markets continued to rise throughout the fiscal year. A widely-accepted index of core open-end funds in the United States delivered a 12.2 percent net return for the year ended June 30, 2013. Income returns have remained near historic levels of about 5.5 percent per year, while the remaining returns have resulted from appreciation.

Overall, property prices remain well below peak values and spreads between capitalization rates and 10-year Treasury yields are well above historical norms.

Credit for quality real estate assets continues to be widely available, despite increased interest rates, and debt terms remain generally favorable by historical standards. Investors have begun to take on more risk in the interest of achieving higher yields, either by assuming more leasing risk or by buying prime assets in more secondary markets.

Over the past twelve months, completion rates of new construction have remained below net absorption which has led to reduced vacancy levels across property types. Development activity is only now beginning to ramp up in the commercial sectors of the industrial and retail sectors, with the office sector lagging a bit.

## REAL ESTATE PERFORMANCE

The total real estate portfolio returned 12.9 percent for the fiscal year, outperforming its custom policy benchmark by 0.1 percent. For the year, core real estate total returns ranged from 8.6 percent to 21.7 percent, and generally exceeded the return for the broader real estate portfolio. The income portion of the total return for core was 6.2 percent. Non-core real estate delivered a total return of 11.2 percent, significantly underperforming its benchmark. Within the non-core portfolio, fiscal year total returns were widely dispersed with some funds exceeding 20 percent, while those funds hit hardest by the downturn continued to produce negative returns. The income portion of the total return for non-core was 6.1 percent. Overall, most of the real estate funds benefited from the modest improvements to the economic landscape, with the majority generating substantial positive returns.


Real estate investments typically span ten years or longer. Therefore, the longer term returns from this asset class are more relevant in assessing its success in adding value to the overall portfolio. Although the System's real estate portfolio has not met its performance objectives over the long-term, performance relative to the benchmark has improved over recent time periods.

## ALTERNATIVE INVESTMENTS

At June 30, 2013, the System's alternative investment portfolio had a fair market value of $\$ 373.7$ million, representing 2.6 percent of the total portfolio. The long-term allocation target is 8 percent for this asset class. Since the inception of the alternative investment program in 1997 through June 30 2013, the System has committed $\$ 1.9$ billion to 82 funds with 56 general partners.

## PORTFOLIO STRUCTURE

The alternative investment portfolio consists primarily of interest in private partnerships that provide equity and debt to companies. The portfolio contains two primary sub-portfolios based on investment period. Each portfolio has its own set of directives, guidelines, external fund managers and consultants who provide advice on investment strategy and investment selection during its investment period. The largest portfolio is the Private Equity Program (PEP), representing 80 percent of the market value of the asset class. The PEP portfolio actively seeks new commitments to private equity funds in three styles: buyout, venture capital/growth equity and special situations. Since the inception of PEP in 2007, the System has committed $\$ 839$ million to 28 funds with 20 general partners. Over the next several years, the market value of the PEP portfolio is expected to increase as the System continues to make commitments to new private equity funds each year.

The second portfolio is the Alternative Investment Portfolio (AIP) which represents 20 percent of the market value of the asset class. From 1997 to 2001, AlP made commitments to 54 funds with 35 general partners across five styles: buyout, venture capital, mezzanine, distressed debt and natural resources. As this is a mature portfolio, the remaining funds in the AIP portfolio are currently pursuing exit strategies for their existing holdings.

## MARKET OVERVIEW

Assessing conditions on a global basis across metrics such as fundraising, investment activity and exit environments provides insights on the health of the private equity industry as a whole.

With respect to fundraising, the past fiscal year was a particularly heavy re-up year for the industry as there was a tremendous bottleneck of 2005-2007 vintage funds that otherwise would have been back in the market sooner but took longer to right their portfolios coming out of the financial crisis. The general partners with a proven strategy and track record have the ability to raise their targeted amounts of capital in three to six months, while groups on the other end of the spectrum are experiencing protracted fundraising periods of twelve to eighteen months or longer.

Global buyout investment activity, dominated by activity in North America, was fairly robust during the fiscal year, with over 2,800 private equity-backed deals announced globally with an aggregate value of roughly $\$ 300$ billion, an increase of approximately $\$ 55$ billion over the prior twelve month period. The venture capital segment remained steady to the prior year, announcing roughly 5,500 deals during the fiscal year, primarily in North America.

Regarding exit activity, the past fiscal year saw the highest number of global buyout exits in seven years. Activity for the overall private equity backed IPO market through the first half of 2013 is on pace to be the most active year since 2007. The total value of global mergers and acquisition (M\&A) activity totaled $\$ 2.6$ trillion during the calendar year of 2012, a 2 percent increase from 2011 levels. Through the second quarter of 2013, U.S. targeted M\&A is up 34 percent from year-to-date 2012.

## ALTERNATIVE INVESTMENTS PERFORMANCE

Private equity investments typically span ten years or longer. Therefore, the longer term returns from this asset class are more relevant in assessing its success in adding value to the overall portfolio. The System's long-term performance objective for alternative investments is to exceed the return of the Russell 3000 plus 3 percent. As the following chart shows, the alternative investments portfolio has surpassed that objective over a ten year time period.

Time Weighted Total Return
Alternative Investments


As required by K.S.A 74-4904, a schedule of alternative investments initiated on or after July 1, 1991, is listed on the following two pages.

The top ten equities and fixed income holdings are shown on page 62. Another schedule, summarizing changes in fair value of investments, is also on page 62. A listing of domestic broker commissions paid for the fiscal year is shown on page 63.

## ALTERNATIVE INVESTMENTS INITIATED ON OR AFTER JULY 1, 1991¹

As of June 30, 2013

| Description | Cost | Market Value |
| :--- | ---: | ---: |
| Advanced Technology Ventures VI, L.P. | $\$ 9,234,267$ | 790,622 |
| Apax Europe IV, L.P. | $1,069,198$ | 514,394 |
| Apax Europe V, L.P. | $11,252,512$ | $3,332,487$ |
| Apollo Investment Fund VIII, L.P. | $13,247,760$ | $17,963,159$ |
| Ares Corporate Opportunities Fund III, L.P. | $13,178,189$ | $14,605,483$ |
| Ares Corporate Opportunities Fund IV, L.P. | 771,277 | 770,870 |
| Audax Mezzanine Fund III, L.P. | $7,653,817$ | $7,897,163$ |
| Battery Ventures V, L.P. | 642,041 | 14,879 |
| Battery Ventures VI, L.P. | $5,675,618$ | $1,738,839$ |
| Beacon Group Energy Fund II, L.P. | $1,857,390$ | 559,682 |
| Behrman Capital II, L.P. | $6,820,897$ | 48,152 |
| Capital Resource Partners IV, L.P. | $5,516,766$ | 997,305 |
| Centerbridge Capital Partners II, L.P. | $9,777,002$ | $12,120,087$ |
| Cinven Second Fund US, L.P. | 261,704 | 9,002 |
| Clayton Dublier \& Rice VI, L.P. | $3,087,970$ | 111,835 |
| Cypress Merchant Banking II, L.P. | $9,811,892$ | $1,543,036$ |
| Dominion Fund V, L.P. | 366,924 | 428,853 |
| El Dorado Ventures VI, L.P. | $6,935,852$ | $6,109,056$ |
| Encap Energy Capital VIII, L.P. | $11,140,584$ | $12,717,089$ |
| Encap Energy Capital IX, L.P. | $2,422,667$ | $2,587,252$ |
| First Reserve Fund XII, L.P. | $17,914,285$ | $20,320,466$ |
| GSO Capital Soulutions Fund, L.P. | $20,126,875$ | $23,357,505$ |
| GTCR Fund VII, L.P. | - | 121,521 |
| GTCR Fund VII/A, L.P. | 200,174 | 39,630 |

## ALTERNATIVE INVESTMENTS INITIATED ON OR AFTER JULY $1,1991^{1}$ (CONTINUED)

As of June 30, 2013

| Description | Cost | Market Value |
| :---: | :---: | :---: |
| Halpern Denny Fund III, L.P. | \$ 4,329,666 | \$ 196,775 |
| Hellman \& Friedman VII, L.P. | 3,680,015 | 3,737,578 |
| JMI Equity Fund VII, L.P. | 7,411,962 | 7,824,133 |
| Littlejohn Fund II, L.P. | 2,849,750 | 2,056,020 |
| McCown De Leeuw \& Company IV, L.P. | - | 1 |
| M.D. Sass Corporate Resurgence Partners, L.P. | - | 7,626 |
| M.D. Sass Corporate Resurgence Partners II, L.P. | 2,279,306 | 7,549 |
| Montagu IV, L.P. | 7,216,313 | 8,326,977 |
| New Enterprise Associates 13, L.P. | 7,846,330 | 10,562,633 |
| Oak Hill Capital Partners, L.P. | 1,365,795 | 282,466 |
| OCM Opportunities Fund II, L.P. | 969,215 | 1,302 |
| OCM Opportunities Fund III, L.P. | 1,224,744 | 220,912 |
| OCM Opportunities Fund VIIIb, L.P. | - | 7,260,197 |
| OneLiberty Fund IV, L.P. | 1,241,901 | 1,290,069 |
| OneLiberty Ventures 2000, L.P. | 16,581,399 | 8,828,783 |
| Pine Brook Capital Partners, L.P. | 13,029,802 | 14,267,865 |
| Pine Brook Capital Partners II, L.P. | 4,437,748 | 4,226,154 |
| Platinum Equity Capital Partners III, L.P. | 4,682,365 | 4,088,330 |
| Snow Phipps II, L.P. | 8,615,965 | 11,103,823 |
| TA IX, L.P. | 956,369 | 3,373,825 |
| TA Subordinated Debt Fund, L.P. | 102,366 | 190,749 |
| TCV IV, L.P. | 7,751,868 | 266,103 |
| Thomas H. Lee Equity Fund V, L.P. | - | 4,000,177 |
| TowerBrook Investors III, L.P. | 11,968,174 | 15,932,930 |
| TPG Growth II, L.P. | 4,082,246 | 4,202,167 |
| TPG Partners VI, L.P. | 16,434,647 | 18,878,432 |
| Trinity Ventures VI, L.P. | 373,519 | 22,210 |
| Trinity Ventures VII, L.P. | 7,059,087 | 158,397 |
| Trinity Ventures VIII, L.P. | 10,627,057 | 1,595,283 |
| VantagePoint Venture Partners III, L.P. | 7,533,543 | 1,501,058 |
| VantagePoint Venture Partners IV, L.P. | 19,357,585 | 12,881,877 |
| Vestar Capital Partners IV, L.P. | 4,503,553 | 3,836,387 |
| Vista Equity Partners Fund IV, L.P. | 12,860,203 | 14,050,951 |
| VS\&A Communications Partners III, L.P. | 7,452,267 | 1,771,628 |
| Warburg, Pincus Equity Partners, L.P. | - | 733,000 |
| Warburg Pincus Private Equity X, L.P. | 37,630,687 | 47,969,000 |
| Warburg Pincus Private Equity XI, L.P. | 9,250,000 | 9,730,000 |
| Wellspring Capital Partners V, L.P. | 4,231,807 | 4,408,614 |
| Welsh, Carson, Anderson \& Stowe VIII, L.P. | 2,403,142 | 73,390 |
| Welsh, Carson, Anderson \& Stowe IX, L.P. | 8,179,376 | 8,027,027 |
| Willis Stein \& Partners III, L.P. | 20,949,560 | 2,772,338 |
| Windjammer Mezzanine \& Equity Fund II, L.P. | 1,838,696 | 3,629,631 |
|  | \$442,273,690 | \$372,992,734 |

1 Investment values quoted without spin-offs or distributions.

## LARGEST EQUITIES HOLDINGS¹ LARGEST FIXED INCOME HOLDINGS¹

| Shares | Security | Fair Value | Par Value | Security | Description |
| ---: | :--- | ---: | :--- | ---: | ---: | Fair Value

1 A complete listing of the System's holdings is available at the Retirement System office. Does not include holdings of commingled funds.

## CHANGES IN FAIR VALUE OF INVESTMENTS

For the fiscal year ended June 30, 2013 (in thousands)

|  | June 30, 2012 Fair Value | Purchases and Other Increases | Sales and Other Decreases | June 30, 2013 Fair Value | Asset Mix Fair Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Marketable Securities |  |  |  |  |  |
| Domestic Equities ${ }^{3}$ | \$4,693,536 | \$1,606,027 | \$ $(1,241,736)$ | \$5,057,827 | 34.87\% |
| International Equities ${ }^{3}$ | 3,209,202 | 1,448,128 | $(956,668)$ | 3,700,662 | 25.51 |
| Total Fixed Income | 3,705,503 | 5,317,439 | $(5,275,529)$ | 3,747,413 | 25.83 |
| Temporary Investments ${ }^{2}$ | 205,450 | 12,283,540 | (12,213,212) | 275,778 | 1.90 |
| Total Marketable Securities | 11,813,691 | 20,655,134 | $(19,687,145)$ | 12,781,680 | 88.11 |
| Real Estate and Alternative Investments |  |  |  |  |  |
| Real Estate ${ }^{3}$ | 1,076,257 | 353,217 | $(79,062)$ | 1,350,412 | 9.31 |
| Alternatives | 387,199 | 137,857 | $(151,417)$ | 373,639 | 2.58 |
| Total Real Estate and Alternative Investments | 1,463,456 | 491,074 | $(230,479)$ | 1,724,051 | 11.89 |
| Total | \$13,277,147 | \$21,146,208 | \$(19,917,624) | \$14,505,731 | 100.00\% |

[^1]
## U.S. EQUITY COMMISSIONS

For the fiscal year ending June 30, 2013

| Broker Name | Commissions Paid | Shares | Commission Per Share | Percent of Total Commissions |
| :---: | :---: | :---: | :---: | :---: |
| Investment Technology Group, NY | \$137,218 | 9,716,694 | \$0.01 | 17.0\% |
| Liquidnet Inc, Brooklyn | \$43,823 | 3,269,499 | 0.01 | 5.4 |
| Credit Suisse, NY | \$37,408 | 3,873,865 | 0.01 | 4.6 |
| Goldman Sachs \& Co. | \$36,122 | 2,533,482 | 0.01 | 4.5 |
| BTIG LLC, Jersey City | \$34,954 | 1,370,685 | 0.03 | 4.3 |
| Jonestrading Instl Svcs LLC, Westlake | \$33,075 | 1,659,901 | 0.02 | 4.1 |
| Barclays Capital Inc, New Jersey | \$32,587 | 1,141,352 | 0.03 | 4.0 |
| UBS Securities LLC, Stamford | \$27,095 | 522,197 | 0.05 | 3.4 |
| Weeden \& Co, NY | \$23,849 | 1,167,663 | 0.02 | 3.0 |
| Citigroup Gbl Mkts Salomon, NY | \$21,630 | 1,068,561 | 0.02 | 2.4 |
| Instinet Corp, NY | \$19,659 | 3,955,264 | 0.00 | 2.7 |
| Raymond James \& Assoc Inc, St Petersburg | \$17,870 | 551,063 | 0.03 | 2.2 |
| Cantor Fitzgerald \& Co. Inc, NY | \$16,987 | 769,545 | 0.03 | 2.1 |
| Baird, Robert W \& Co. Inc, Milwaukee | \$15,864 | 540,062 | 0.02 | 2.0 |
| Jefferies \& Co. Inc, NY | \$15,604 | 610,685 | 0.03 | 1.9 |
| JP Morgan Clearing Group, New York | \$14,576 | 535,083 | 0.02 | 1.9 |
| Pulse Trading LLC, Boston | \$13,571 | 1,206,768 | 0.03 | 1.7 |
| Stifel Nicholaus | \$13,403 | 380,891 | 0.01 | 1.7 |
| Berstein Sanford C \& Co, NY | \$12,319 | 455,495 | 0.03 | 1.5 |
| Deutsche Bk Secs Inc, NY | \$9,869 | 731,859 | 0.02 | 1.2 |
| Wells Fargo Securities LLC, Charlotte, NC | \$9,697 | 314,807 | 0.01 | 1.3 |
| Sandler O'Neill \& Partners, New York | \$9,685 | 304,558 | 0.03 | 1.2 |
| Morgan Stanley \& Co. Inc, NY | \$8,927 | 265,719 | 0.03 | 1.1 |
| Janny Montgomery Scott, Philadelphia | \$8,870 | 465,896 | 0.02 | 1.1 |
| RBC Capital Markets LLC, NY | \$8,514 | 273,755 | 0.03 | 1.1 |
| Others | $\underline{\$ 184,422}$ | 7,234,557 | 0.03 | $\underline{22.8}$ |
| Total Broker Commissions | \$807,599 | 44,919,906 |  | 100.0\% |

## Actuarial Section

FIDUCIARY
First and always.


# Actuary's Certification Letter 

September 26, 2013

Board of Trustees
Kansas Public Employees Retirement System
611 S. Kansas Ave., Suite 100
Topeka, KS 66603

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2012 for purposes of determining contribution rates for fiscal year 2016 for the State and 2015 for Local employers. The major findings of the valuation are contained in this report, which reflects the benefit provisions in place on December 31, 2012, including House Bill 2213 (passed by the 2013 Legislature). There were no changes to the actuarial assumptions and methods from those used in the prior valuation. The specific impact of the legislation is discussed later in this section.

In preparing our report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.

We further certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually
reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System. Nevertheless, the emerging costs will vary from those presented in this valuation to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C of our valuation report.

Future actuarial measurements may differ significantly from the current measurements presented in the December 31, 2012 valuation report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Actuarial computations presented in this report under GASB Statements No. 25 and 27 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in the December 31, 2012 actuarial valuation report. The calculations have been made on a basis consistent with our understanding of the System's funding requirements and goals, and of GASB Statements No. 25 and 27. Determinations for purposes other than meeting these requirements may be significantly different
from the results shown in the December 31, 2012 valuation report. Accordingly, additional determinations may be needed for other purposes.

The actuary prepared the following supporting schedules for the Comprehensive Annual Financial Report:

- Actuarial Section
- Summary of Change in Unfunded Actuarial Liability
- Summary of Changes in Actuarial Contribution Rate
- Summary of Historical Changes to Total System UAL
- Summary of Principal Results
- Summary of Actuarial Assumptions and Methods
- Summary of Membership Data

We also provided the information used in the Schedule of Funding Progress and Changes in the Unfunded Actuarial Liability in the Financial Section, and the employer contribution rates shown in the Schedule of Employer Contributions in the Financial Section.

The consultants who worked on this assignment are pension actuaries. Cavanaugh Macdonald Consulting's (CMC) advice is not intended to be a substitute for qualified legal or accounting counsel.

We certify that, to the best of our knowledge and belief, the December 31, 2012 actuarial valuation report is complete and
accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Sincerely,

## Patrice Becker

Patrice A. Beckham, FSA, MAAA
Principal and Consulting Actuary

## Buntantot

Brent A. Banister, FSA, MAAA
Chief Pension Actuary

## Actuarial Overview

The Kansas Public Employees Retirement System is an umbrella organization which administers the following three statewide pension groups: the Kansas Public Employees Retirement System (KPERS), the Kansas Police and Firemen's Retirement System (KP\&F) and the Kansas Retirement System for Judges (Judges). This report presents the results of the December 31, 2012, actuarial valuation for each of the Systems.

The primary purposes of performing actuarial valuations are to:

- Determine the employer contribution rates required to fund each System on an actuarial basis.
- Determine the statutory employer contribution rates for each System.
- Disclose asset and liability measures as of the valuation date.
- Determine the experience of the System since the last valuation date.
- Analyze and report on trends in System contributions, assets, and liabilities over the past several years.


## Funding and Plan Design Legislation

The 2012 Legislature passed Sub House Bill 2333 (Sub HB 2333) which was signed into law by the Governor on June 1, 2012. Sub House Bill 2333 created a Tier 3 retirement plan for new members effective January 1, 2015, and included benefit changes for current Tier 1 and Tier 2 members. The bill also provided for increases in the statutory cap on the employer contribution rate. Sub HB 2333 was intended to improve KPERS' long term funding and increase KPERS' sustainability. The legislative changes, other than Tier 3, were reflected in the prior valuation and are also reflected in the current valuation. The second increase in the employee contribution rate for Tier 1 from 5.0 percent to 6.0 percent (effective January 1,2015 ) is reflected in the current valuation and resulted in a decrease in the employer normal cost rate.

In particular, Sub HB2333 increased the cap on employer contribution rate increases from 0.6 percent per year to:

FY $2014 \quad 0.9 \%$
FY 2015 1.0\%
FY $2016 \quad 1.1 \%$
FY 2017 and after 1.2\%

Sub HB 2333 also provided for the State to make additional contributions beginning in FY 2014 to fund the unfunded actuarial liability (UAL) of the State/School group until their funded ratio reaches at least 80.0 percent. The additional contribution stream, which comes from the Expanded Lottery Act Revenue Fund (ELARF), is determined as 50.0 percent of the money credited to the ELARF, after an annual reduction of $\$ 10.5$ million. Since the money credited to the ELARF will vary from year to year, the specific contribution amounts to KPERS are unknown at this time. For FY 2014 and 2015 the ELARF funds are being appropriated as a partial funding source to meet the statutory contribution requirements for the School group rather than being contributed in addition to the statutory contributions. Therefore, no additional funding of the UAL is anticipated until FY 2016, at which time the contributions are expected to be around $\$ 40$ million per year.

## Tier 1 Members

Sub HB 2333 created a 90 day election period for Tier 1 members of the system on July 1, 2013 to permit them to choose to (1) contribute 5.0 percent of compensation as employee contributions effective January 1, 2014 and 6.0 percent effective January 1, 2015 and receive a 1.85 percent multiplier for all years of future service or (2) continue to contribute 4.0 percent of compensation as employee contributions and receive a 1.40 percent multiplier for all years of future service. Changes in the benefit multiplier are effective January 1, 2014 and impact only future years of service. The election is subject to approval by the Internal Revenue Service, and if such approval is not granted, there will be no election and the default option (option 1 above) will apply. The provisions are summarized in the following table:

Tier 1 Provisions Summary

| Member Contribution Rate | Benefit Provisions |
| :--- | :--- |
|  <br> 6\% effective January 1,2015 <br> (default option) | Increase multiplier to 1.85\% for |
| $\quad$ future service only, effective |  |
| or | January 1, 2014 (default option) |
| 4\% contribution rate | Multiplier is reduced to 1.40\% <br> for future service only, effective <br> January 1, 2014 |

As of the date of this report, IRS approval has not yet been received, and therefore, the default option has been valued for all Tier 1 members.

## Tier 2 Members

Sub HB 2333 eliminated the cost of living adjustment (COLA) for Tier 2 members, effective July 1, 2012. However, Tier 2 member who retire after July 1, 2012, receive a higher multiplier of 1.85 percent for all years of service, not just future years of service (House Bill 2213 in the 2013 session changed the date from January 1, 2014 to July 1, 2012).
Current Tier 2 Revised Tier 2
6\% contribution
1.75\% multiplier

Includes cost of living increase starting January 1, 2014* Eliminate COLA if retiring after June 30, 2012 (no impact for members retiring before July 1 , 2012)
*Changed to July 1, 2012 in House Bill 2213 passed in the 2013 session.

Sub HB 2333 had no impact on current KPERS retirees or inactive members who do not return to covered employment.

## Tier 3 Members (effective January 1, 2015)

Sub House Bill 2333 creates a cash balance retirement plan (Tier 3) for new hires on or after January 1,2015. Correctional officers are not included in this new tier, but will remain in KPERS Tier 2. A cash balance plan is a defined benefit plan, so the KPERS defined benefit plan remains an open plan. The projected benefits for members of all three tiers will be included in the actuarial valuations in 2015 and beyond. A single employer contribution rate, which includes the UAL payment and applies to the covered payroll of all three tiers, will be developed in the valuation.

Given the effective date of Tier 3, there are no Tier 3 members included in the December 31, 2012 valuation, and therefore, there was no cost impact on the valuation results. However, the final increase in the employee contribution rate for Tier 1 members and the increase in the statutory cap on the employer contribution rate in Sub House Bill 2333, did have an impact on the December 31, 2012 valuation results. In addition, the impact of the plan design for Tier 3 members is reflected in the projection of employer contribution rates shown later in this section.

House Bill 2213 (HB 2213), the KPERS Omnibus bill, was passed by the 2013 legislature and signed by the Governor on June 14, 2013. This bill made several technical corrections to KPERS, KP\&F and Judges that did not impact the valuation results. However, HB 2213 also increased the cap on the maximum retirement benefit in KP\&F from 80 percent to 90 percent of final average salary and increased the employee contribution rate from 7.0
percent of pay until the member has 32 years of service to 7.15 percent of pay for all years of service. The benefit change increased the unfunded actuarial liability and normal cost rate for the KP\&F group, but the cost was offset by the increase in the employee contribution rate of 0.15 percent.

The valuation results provide a "snapshot" view of the System's financial condition on December 31, 2012. The unfunded actuarial liability (UAL), for the System as a whole, increased by $\$ 1,025$ million due to multiple factors.

In KPERS, the State, School and Local employers do not necessarily contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. The current statutory cap is 0.90 percent for fiscal year 2014, 1.0 percent for fiscal year 2015, 1.1 percent for fiscal year 2016 and 1.2 percent for fiscal year 2017 and later.

A summary of actuarial and statutory employer contribution rates for the Retirement System (excluding the statutory contribution for the Death and Disability Program) for the last two valuation dates follows.
December 31, 2012 Valuation

| System | Actuarial | Statutory | Difference |
| :--- | ---: | ---: | ---: |
| State $^{1}$ | $11.44 \%$ | $12.37 \%$ | $(0.93 \%)$ |
| School $^{1}$ | $16.00 \%$ | $12.37 \%$ | $3.63 \%$ |
| Local $^{1}$ | $9.48 \%$ | $9.48 \%$ | $0.00 \%$ |
| Police \& Fire - Uniform Rates $^{2}$ | $21.36 \%$ | $21.36 \%$ | $0.00 \%$ |
| Judges | $23.98 \%$ | $23.98 \%$ | $0.00 \%$ |
| December 31, 2011 Valuation |  |  |  |
| System | Actuarial | Statutory | Difference |
| State | $10.80 \%$ | $11.27 \%$ | $(0.47 \%)$ |
| School | $15.41 \%$ | $11.27 \%$ | $4.14 \%$ |
| Local | $9.77 \%$ | $8.84 \%$ | $0.93 \%$ |
| Police \& Fire - Uniform Rates | $19.92 \%$ | $19.92 \%$ | $0.00 \%$ |
| Judges | $22.59 \%$ | $22.59 \%$ | $0.00 \%$ |

1 By statute, rates are allowed to increase by a maximum of 0.9 percent for FY 2014, 1.0 percent in FY 2015, 1.1 percent in FY 2016 and 1.2 percent in FY 2017 plus the cost of any benefit enhancements.
2 For KP\&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 21.32 percent this year. The uniform rate does not include the payment required to amortize the unfunded past service liability determined separately for each employer.

The significant changes made to the benefits and contributions for members of Tiers 1 and 2 along with increases in the employer contribution rate in Sub House Bill 2333 and the creation of a new Tier 3, improved the long term funding outlook for KPERS. In addition, the rate of return on the market value of
assets in 2012 was over 14 percent, in excess of the assumed return of 8.0 percent. As a result, the State group continues to be at the actuarial required contribution rate and Local group reached the actuarial required contribution date in the current valuation (for FY 2015). In addition, the School group is in actuarial balance (the statutory contribution rate is projected to converge with the actuarial required contribution rate before the end of the amortization period (2033), if all actuarial assumptions are met in future years.

## Experience - All Systems Combined

December 31, 2011 - December 31, 2012
In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is December 31, 2012. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and employers in the future to balance the System assets and liabilities.

Changes in the Systems' assets and liabilities impacted the change in the actuarial contribution rates between the December 31, 2011 and December 31, 2012 actuarial valuations. On the following pages, each component is examined.

## MEMBERSHIP

The following table contains a summary of the changes in active members between the December 31, 2011 and December 31, 2012 actuarial valuations.

|  | State | School | Local |
| :--- | ---: | ---: | ---: |
| 12/31/2011 (Starting count) | 23,917 | 84,183 | 39,547 |
| New actives | 2,472 | 10,298 | 5,090 |
| Nonvested Terminations | 777 | 3,152 | 1,952 |
| Elected Refund | 572 | 1,254 | 1,250 |
| Vested Terminations | $\underline{695}$ | $\underline{2,255}$ | $\underline{1,196}$ |
| $\quad$ Total Withdrawals | 2,044 | 6,661 | 4,398 |
| Deaths | 45 | 95 | 79 |
| Disabilities | 46 | 107 | 67 |
| Retirements | 448 | 2,161 | 751 |
| Other/Transfer | 20 | -29 | 9 |
| 12/31/2012 (Ending count) | 23,826 | 85,428 | 39,351 |


|  | KP\&F | Judges | System Total |
| :--- | ---: | ---: | ---: |
| 12/31/2011 (Starting count) | 7,143 | 264 | 155,054 |
| New actives | 574 | 15 | 18,449 |
| Nonvested Terminations | 202 | - | 6,083 |
| Elected Refund | 90 | 1 | 3,167 |
| Vested Terminations | $\underline{84}$ | 1 | $\underline{4,231}$ |
| $\quad$ Total Withdrawals | 376 | 2 | 13,481 |
| Deaths | 9 | 4 | 232 |
| Disabilities | 19 | - | 239 |
| Retirements | 126 | 12 | 3,498 |
| Other/Transfer | - | - | - |
| 12/31/2012 (Ending count) | 7,187 | 261 | 156,053 |

The size of active membership was up very slightly overall, although some groups saw a slight decline in employment. In the current economic environment, this pattern of low (or negative) employee growth is not surprising. Coupled with low salary increases, the total payroll did not grow as much as expected.

## ASSETS

As of December 31, 2012, the System had total funds of $\$ 13.8$ billion on a market value basis, excluding assets held for the Group Insurance and Optional Life reserves. This was an increase of $\$ 1.3$ billion from the December 31, 2011 figure of $\$ 12.5$ billion.

The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The smoothing method calculates the difference between the actual return and the expected return (assumed rate of return) on the market value of assets each year. The difference is recognized equally over a five-year period.

The components of the change in the market value and actuarial value of assets for the Retirement System are as follows.

|  | Market <br> Value <br> (millions) | Actuarial <br> Value <br> (millions) |
| :--- | ---: | ---: |
| Assets, December 31, 2011 | $\$ 12,477$ | $\$ 13,379$ |
| •Employer and Member Contributions | 885 | 885 |
| -Benefit Payments and Expenses | $(1,307)$ | $(1,307)$ |
| - Investment Income | $\underline{1,762}$ | $\underline{321}$ |
| Assets, December 31, 2012 | $\$ 13,817$ | $\$ 13,278$ |

The actuarial value of assets as of December 31, 2012, was $\$ 13.278$ billion. The annualized dollar-weighted rate of return for 2012, measured on the actuarial value of assets, was approximately 2.4 percent and measured on the market value of assets, as reported by KPERS, was 14.5 percent, net of investment expenses.

Due to the use of an asset smoothing method, there is \$539 million of net deferred investment gain experience that has not yet been recognized, i.e. the market value of asset is higher than the actuarial value. This deferred investment gain will be reflected in the actuarial value of assets over the next four years, but may be offset by actual investment experience if it is less favorable than assumed.

The actuarial value of assets has been both above and below the market value during the period, which is to be expected when using an asset smoothing method.

## Total System Assets by Calendar Year Market Value Actuarial Value



The rate of return on the actuarial (smoothed) value of assets has been less volatile than the market value return. The deferred investment gains will be reflected in the actuarial value of assets in the next few years, absent unfavorable investment experience.

System Asset Rate of Return by Calendar Year
Market Value $\quad$ Actuarial Value


## LIABILITIES

The actuarial liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial liability (UAL). The unfunded actuarial liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial liability. Benefit improvements, experience gains and losses, and changes in actuarial assumptions and methods will also impact the total actuarial liability (AL) and the unfunded portion thereof.

The unfunded actuarial liability (in million) by group:

|  | State | School | Local | KP\&F | Judges Total* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Liability | \$4,016 | \$12,587 | \$4,190 | \$2,583 | \$156 \$23,531 |
| Actuarial Value of Assets | $\underline{2,724}$ | 6,220 | 2,491 | 1,716 | $127 \quad 13,278$ |
| Unfunded Actuarial Liability* | \$1,292 | \$6,366 | \$1,699 | \$866 | \$29 \$10,253 |

When the actuarial cost method was changed by the Legislature in 1993, the payment methodology for the unfunded actuarial liability (UAL) for all groups (except the Judges System) was set in statute as a level percentage of payroll over a 40 year
closed period. Under this approach, payments on the UAL increase four percent each year, the same as the payroll growth assumption, resulting in a payment pattern that is a level percentage of pay. For over half of the amortization period, the dollar amount of the amortization payment is less than the interest on the UAL. As a result, the dollar amount of the UAL is expected to increase for many years before it eventually begins to decline. In addition, with the planned difference in KPERS' statutory and actuarial contribution rates prior to the Actuarial required contribution date, the unfunded actuarial liability is expected to increase by an additional amount each year.

Other factors influencing the UAL from year to year include actual experience versus that expected based on the actuarial assumptions (on both assets and liabilities), changes in actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (calendar year 2012). All of the KPERS groups except KP\&F had a liability gain for the year, largely from lower salary increases than expected. Recognition of the remaining deferred investment loss from 2008 resulted in an experience loss on the actuarial value of assets for all groups. The large 2008 investment loss experience has now been fully recognized. The loss on actuarial assets was greater than the liability gain so there was a net actuarial loss for all groups combined.

Between December 31, 2011, and December 31, 2012, the change in the unfunded actuarial liabilities for the System as a whole was as follows.

|  | (\$ millions) |
| :--- | ---: |
| Unfunded Actuarial Liability, December 31, 2011 | $\$ 9,228$ |
| effect of contribution cap/time lag | 303 |
| expected increase due to amortization method | 49 |
| loss from investment return on actuarial assets | 732 |
| demographic experience | $(120)$ |
| all other experience | 41 |
| change in actuarial methods | - |
| change in actuarial assumptions | - |
| change in benefit provisions (KP\&F)² | $\underline{19}$ |
| Unfunded Actuarial Liability, December 31, 2012 | $\underline{\$ 10,253}$ |

1 Liability gain is about 0.6 percent of total actuarial liability.
2 HB 2213 increased the KP\&F maximum benefit from 8.0 percent to 9.0
percent of final average salary and the member contribution rate increased to
7.15 percent for all years of service.

3 May not add due to rounding.

An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial liability. The funded status information follows (in millions).

|  | $12 / 31 / 07$ | $12 / 31 / 08$ | $12 / 31 / 09$ | $12 / 31 / 10$ | $12 / 31 / 11$ | $12 / 31 / 12$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Using Actuarial Value of Assets: |  |  |  |  |  |  |
| Funded Ratio (AVA/AL) | $71 \%$ | $59 \%$ | $64 \%$ | $62 \%$ | $59 \%$ | $56 \%$ |
| Unfunded Actuarial Liability (AL-AVA) | $\$ 5,552$ | $\$ 8,279$ | $\$ 7,677$ | $\$ 8,264$ | $\$ 9,228$ | $\$ 10,253$ |
| Using Market Value of Assets: |  |  |  |  |  |  |
| Funded Ratio (MVA/AL) | $75 \%$ | $49 \%$ | $56 \%$ | $59 \%$ | $55 \%$ | $59 \%$ |
| Unfunded Actuarial Liability (AL-MVA) | $\$ 4,817$ | $\$ 10,250$ | $\$ 9,384$ | $\$ 8,936$ | $\$ 10,130$ | $\$ 9,714$ |

Due to strong investment returns, the funded status of the System generally improved in the latter part of the 1990s. Changes in actuarial assumptions and methods, coupled with investment returns below the assumed rate and contributions below the actuarial rate have significantly reduced the funded ratio.


Given the current funded status of the System, the amount of the deferred investment gain, the amortization method, the amortization period, and the scheduled increases in employer contribution rates, the dollar amount of the unfunded actuarial liability for the entire System is expected to grow for a few more years and then start to decline. The funded ratio is expected to remain relatively stable while the unfunded actuarial liability grows, and then gradually improve. The actual funded ratio in future years is heavily dependent on the actual investment returns.

## CONTRIBUTION RATES

The funding objective of the System is to establish contribution rates that over time will remain relatively level, as a percentage of payroll, and to pay off the unfunded actuarial liability by the 2033 valuation.

Generally, the actuarial contribution rates to the various Systems consist of:

- A"normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date,.
- An "unfunded actuarial liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

There is also a statutory contribution rate that is used to finance the Death and Disability Program. Contributions for the Death and Disability Program are deposited in a separate trust fund, from which benefits are paid. A separate actuarial analysis and
report is prepared for the Death and Disability Program on June 30 of each year. Therefore, the death and disability contribution rate is not reflected in this report.

The results of the December 31, 2012 valuation will set employer contribution rates for fiscal year 2016 for the State (July 1, 2015 to June 30, 2016) and 2015 for Local employers (calendar year 2015).

In KPERS, State, School and Local employers do not necessarily contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. The statutory cap, which has been changed periodically (most recently in 2012), is 0.9 percent for fiscal year 2014, 1.0 percent in 2015, 1.1 percent in 2016, and 1.2 percent in 2017 and beyond for all three groups.

A summary of the actuarial and statutory employer contribution rates for the System follows:
December 31, 2012 Valuation

| System | Actuarial | Statutory | Difference |
| :--- | ---: | ---: | ---: |
| State $^{1}$ | $11.44 \%$ | $12.37 \%$ | $(0.93 \%)$ |
| School $^{1}$ | $16.00 \%$ | $12.37 \%$ | $3.63 \%$ |
| Local1 | $9.48 \%$ | $9.48 \%$ | $0.00 \%$ |
| Police \& Fire - Uniform Rates |  |  |  |

1 By statute, rates are allowed to increase by a maximum of 0.9 percent for FY 2014, 1.0 percent in FY 2015, 1.1 percent in FY 2016 and 1.2 percent in FY 2017 plus the cost of any benefit enhancements.
2 For KP\&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 21.32 percent this year. The uniform rate does not include the payment required to amortize the unfunded past service liability determined separately for each employer.

Separate employer contribution rates are calculated for two subgroups of the State: Correctional Employee Groups with normal retirement age 55 (C55) and the other with normal retirement age 60 (C60). The contribution rates are calculated by increasing the state actuarial rate by the difference in the normal cost rate for the C55 and C60 groups over the normal cost rate for regular state members. The higher contribution rates finance the earlier normal retirement age. The actuarial contribution rates for the Correctional Employee Groups are as follows:

|  | Actuarial Rate | Statutory Rate |
| :--- | ---: | ---: |
| Retirement Age 55: | $12.21 \%$ | $12.76 \%$ |
| Retirement Age 60: | $12.27 \%$ | $12.50 \%$ |

Due to statutory caps, the full actuarial contribution rate is not contributed for all KPERS groups. The State reached the actuarial required contribution date (statutory contribution rate is equal
to or greater than the actuarial contribution rate) in the December 31, 2010 valuation and continues to be so in this valuation. The Local group reached the actuarial required contribution date in this valuation with an actuarial required contribution rate of 9.31 percent (effective FY 2015). Based on the current valuation, there is a difference (shortfall) between the actuarial and statutory contribution rates of 3.63 percent for the School group. Assuming an 8.0 percent return on the market value of assets for 2013 and beyond, all other actuarial assumptions are met in the future, and the current provision for statutory caps on the employer contribution rate, the estimated actuarial required contribution date for the combined State/School group is FY2019 at a rate of 15.85 percent. This is an improvement over last year's projections which showed a projected actuarial required contribution date of FY 2021 at a rate of 17.26 percent.

Based on preliminary modeling results, the actuarial required contribution date for the State/School group is projected to occur in 2019 with an actuarial required contribution rate of 15.85 percent, assuming all actuarial assumptions are met in future years. Last year's projected actuarial required contribution date was 2021 with a rate of 17.26 percent. Future experience, especially investment returns, will heavily influence the ultimate actuarial required contribution date and rate.

## Projected Employer Contribution Rates - State/School



The Local group reached the Actuarial required contribution date in this valuation (FY 2015) with an Actuarial required contribution rate of 9.48 percent. The projected contribution rate is expected to remain reasonably level, assuming all actuarial assumptions are met in future years. Actual experience in future years, particularly investment returns, will impact the future actuarial and statutory rates.

## Projected Employer Contribution Rates - Local fiscal year end



Historical contribution rates for each group are shown on the following pages. Please note that prior to the December 31, 2003 valuation, one contribution rate was developed for the State and School together as one group. Legislation passed in 2004 split the contribution rate calculations into two separate groups, although the statutory contributions are still determined on a combined basis. Significant changes in funding methods as well as a Pension Obligation Bond issue occurred in 2003 and actuarial assumptions were changed in the 2004, 2007 and 2011 valuations. These changes impact the comparability of contribution rates between various valuation dates.

The split of the State group into a separate group with the 2003 valuation, coupled with the bond issue, lowered the actuarial contribution rate. The State's actuarial contribution rate continues to be less than the statutory contribution rate in this valuation.

## Employer Contribution Rates - State

fiscal year end


Due to investment experience, changes in actuarial methods and assumptions, and the magnitude of the difference between the actuarial and statutory contribution rates, the funded status of the School group has declined and the actuarial contribution rate has generally increased over this period.

Employer Contribution Rates - School
fiscal year end


The Local contribution rate has also been impacted by changes in actuarial assumptions and methods as well as investment performance. With the significant changes in Sub House Bill 2333 and an investment return of over 1 percent in 2012, the statutory contribution rate is equal to the actuarial contribution rate in the current valuation (actuarial required contribution date occurs in FY 2015).


Investment experience, coupled with a change in actuarial methodology, dramatically increased the KP\&F contribution rates in the first half of the period. Investment experience in 2008 and 2011 resulted in higher contribution rates in the latter part of the period.


Significant changes in the actuarial assumptions in the 2004 valuation and investment experience over the last decade have resulted in higher contribution rates for the Retirement System for Judges.

Employer Contribution Rates - Judges
fiscal year end


Over the last decade the development of a comprehensive plan to address the long-term funding of KPERS has been a high priority and significant changes have been made. HB 2014, which was passed by the 2003 Legislature, increased the statutory cap on the State/School employer contribution rate from
0.20 percent to 0.40 percent in FY2006, 0.50 percent in FY2007 and 0.60 percent in FY 2008 and beyond. It also authorized the issuance of up to $\$ 500$ million in pension obligation bonds (POBs). The POBs were sold and proceeds of $\$ 440.2$ million were received on March 10, 2004. The debt service payments on the bonds are paid by the State in addition to the regular KPERS employer contribution rate.

The 2004 Legislature passed SB 520, which continued to address issues related to the long term funding of the System. It gave the KPERS Board of Trustees the authority to establish the actuarial cost method and amortization method/period. With this authority, the Board changed both the actuarial cost method and the asset valuation method with the December 31, 2003 actuarial valuation. SB 520 also increased the statutory cap for Local employers from 0.15 percent to 0.40 percent in FY2006, 0.50 percent in FY2007 and 0.60 percent in FY2008 and beyond.

The 2007 Legislature passed SB 362 which created a new benefit structure for members first employed on or after July 1 , 2009. The change was made partially due to long term funding considerations, but also in response to demographic changes in the membership.

The 2011 Legislature passed Senate Substitute for House Bill 2194 (Sub HB 2194). The intent of this law was to strengthen KPERS' long term funding and improve the sustainability of the system. The bill contained significant changes for both KPERS employers and current and future members. In addition, Sub HB 2194 established a 13 member KPERS Study Commission to study alternative plan designs during the last half of 2011 and make a recommendation for KPERS plan design that would provide for the long term sustainability of the System. The Commission report was due to the Legislature by January 6, 2012. Sub HB 2194 required that the report recommendations be voted on by the 2012 Legislature for the other provisions of Senate Substitute for HB 2194 to become effective. The 2012 Legislature did not move the Study Commission recommendation forward, but some of the other provisions were included in the bill that was ultimately passed in 2012, Senate Sub for House Bill 2333.

The 2012 Legislature passed Sub House Bill 2333, affecting new hires, current members and employers. The changes were made to improve KPERS' long term sustainability. The basic provisions of Sub House Bill 2333, as amended by House Bill 2213 in 2013, include:

- Increased the statutory cap on employer contribution rates to 0.9 percent in FY 2014, 1.0 percent in FY 2015, 1.1 percent in FY 2016 and 1.2 percent in FY 2017 and beyond.
- Provides for an election by Tier 1 members depending on IRS approval. Tier 1 members may elect to increase their employee contributions to 5 percent of compensation effective January 1, 2014 and 6 percent effective January 1, 2015, with an increase in the benefit multiplier to 1.85 percent for future years of service only, or remain at a 4 percent employee contribution rate and receive a benefit multiplier of 1.4 percent for future years of service. The multiplier changes are effective January 1, 2014. Without IRS approval of the election, contributions and the multiplier will automatically increase.
- For Tier 2 members retiring after July 1, 2012, the cost of living adjustment (COLA) is eliminated, but members will receive a 1.85 percent multiplier for all years of service.
- Creates a Cash Balance Plan for new hires beginning January 1,2015 . A cash balance plan is a type of defined benefit plan that includes some elements of a defined contribution plan and shares risk between the employer and employee. Each member has a hypothetical account that is credited with employee contributions, employer pay credits and interest credits. At retirement, the account balance is annuitized to create a guaranteed monthly benefit payable for the member's lifetime. Up to 30 percent of the account value at retirement may be paid as a lump sum.
- Beginning in FY 2014, provides for the state to make additional contributions to help pay down KPERS' unfunded actuarial liability until the State/School group reaches a funded ratio of at least 80 percent. The revenue will come from the Expanded Lottery Act Revenues Fund (ELARF). For FY 2014 and 2015 the ELARF funds are being used as a partial funding source to meet the statutory contribution requirements for the School group rather than being contributed in addition to the statutory contributions.

Therefore, no additional funding of the UAL is anticipated until FY 2016 at which time the contributions are expected to be around $\$ 40$ million

- If the State of Kansas sells surplus real estate, 80 percent of the proceeds will be used to pay down KPERS' unfunded actuarial liability until the System reaches an 80 percent funded ratio.

The changes in Sub House Bill 2333 are expected to improve KPERS long term funding and help all three groups reach a funded ratio of 100 percent by 2033. The actual funding progress will be heavily dependent on the actual investment experience of the System in future years.

## COMMENTS

Like most public retirement systems, KPERS uses an asset smoothing method to smooth out investment experience above and below the assumed rate of 8 percent per annum. Under the asset smoothing method, the difference between the actual and assumed investment experience is recognized equally over a five year period. As a result, the final recognition of the investment loss for the 2008 plan year is reflected in the current valuation. While the return on the market value of assets for 2012 was 14.5 percent, the return on the actuarial value of assets was about 2.5 percent. As of the valuation date, the actuarial value of assets was lower than the market value of assets, something which has not occurred since the 2007 valuation.

The deferred investment experience moved from a net deferred loss of $\$ 902$ million last year to a net deferred gain of $\$ 539$ million this year. This deferred experience will flow through the asset valuation method in the next four years and be recognized in the valuation process, absent investment experience below the 8 percent assumed rate of return. As the deferred investment experience is recognized, the funded ratio can be expected to hold steady in the short term and eventually increase over the long term.

While the use of an asset smoothing method is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred (unrecognized) investment experience. While this is particularly important when there are deferred investment losses, it is also useful to consider the impact on the key actuarial measurements if the deferred investment gains are recognized. To illustrate the impact of the
deferred investment experience, the key valuation results are shown below for the State/School and KPF groups using both the actuarial value of assets and the pure market value. The impact would be similar for the other groups.

|  | State/School |  | KP\&F |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Actuarial | Market | Actuarial |  | Market

The asset smoothing method impacts only the timing of when the actual experience on the market value of assets is recognized. A return of more than 14 percent in 2012 mitigated the impact of recognizing the last portion of the deferred investment loss from 2008, but the return on the actuarial value of assets was still below 8 percent. As a result, the unfunded actuarial liability increased by $\$ 1.025$ billion. Future investment experience will impact the extent to which the deferred investment experience (which is currently a net gain) will be recognized. The ultimate impact of the deferred experience on the employer contribution rate would be similar to the column shown above based on the market value of assets, if all actuarial assumptions are met including the 8 percent return in future years.

## SUMMARY OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY BY SYSTEM

December 31, 2012 Valuation (\$ millions)

|  | State | School | Local | KP\&F | Judges | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| UAL in 12/31/2011 Valuation Report | $\$ 1,122.8$ | $\$ 5,797.6$ | $\$ 1,542.4$ | $\$ 738.6$ | $\$ 26.8$ | $\$ 9,228.1^{1}$ |
| - Effect of contribution cap/timing | 22.2 | 223.4 | 46.0 | 12.5 | $(0.7)$ | 303.4 |
| - Expected increase due to method | 5.0 | 33.4 | 7.9 | 3.1 | $(0.6)$ | 48.8 |
| - Actual vs. expected experience |  |  |  |  |  |  |
| - Investment return | 160.5 | 355.4 | 119.8 | 90.2 | 6.2 | 732.1 |
| - Demographic experience | $(25.7)$ | $(74.2)$ | $(21.6)$ | 5.1 | $(3.4)$ | $(119.8)$ |
| - All other experience | 7.5 | 30.7 | 4.4 | $(2.0)$ | 0.7 | 41.3 |
| - Change in actuarial assumptions | - | - | - | - | - | - |
| - Change in benefit provisions | - | - | - | - | - | 18.9 |
| UAL in 12/31/2012 Valuation Report ${ }^{1}$ | $\underline{\$ 1,292.3}$ | $\underline{\$ 6.366 .3}$ | $\underline{\$ 1,698.9}$ | $\underline{\$ 866.4}$ | $\underline{\$ 29.0}$ | $\underline{\$ 10,252.9}$ |

1 May not add due to rounding.

## SUMMARY OF CHANGES IN EMPLOYER ACTUARIAL CONTRIBUTION RATE BY SYSTEM

As of December 31, 2012

| Percentage of Payroll | State | School | Local | KP\&F1 | Judges |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Contribution Rate in 12/31/2011 Valuation | 10.80\% | 15.41\% | 9.77\% | 19.92\% | 22.59\% |
| Change Due to Amortization of UAL |  |  |  |  |  |
| - effect of contribution cap/time lag | 0.16 | 0.48 | 0.20 | 0.20 | (0.24) |
| - amortization method | 0.00 | 0.00 | 0.00 | 0.00 | (0.36) |
| - investment experience | 1.17 | 0.76 | 0.53 | 1.46 | 2.16 |
| - liability experience | (0.19) | (0.16) | (0.10) | 0.08 | (1.19) |
| - all other experience | 0.05 | 0.09 | 0.04 | (0.32) | 0.88 |
| - change in assumptions | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - change in benefit provisions | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 |
| Change in Normal Cost Rate |  |  |  |  |  |
| - change in benefit provisions | (0.43) | (0.43) | (0.84) | (0.20) | 0.00 |
| - change in assumptions | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - all other experience | (0.12) | (0.15) | (0.12) | $\underline{0.01}$ | $0.14{ }^{2}$ |
| Actuarial Contribution Rate in 12/31/2012 Valuation | 11.44\% | 16.00\% | 9.48\% | 21.36\% | 23.98\% |

1 Contribution rate for Local employers only.
2 A new benefit structure was established for the Judges' System in July 1987. The normal cost rate is impacted by the change in membership as members hired before July 1, 1987, leave active employment and are replaced with new entrants, with benefits under the current benefit structure.

SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UNFUNDED ACTUARIAL LIABILITY
（\＄millions）
Actual Experience vs．Assumed
Investment
Other
Assumption Changes
Changes in Data／Procedures
Change in Cost Method
Effect of Contribution Cap／Lag
Amortization Method
Change in Benefit Provisions
Change in Actuarial Firm／Software
Bond Issue
Total

Actual Experience vs．Assumed
Investment
Other
Assumption Changes
Changes in Data／Procedures
Change in Cost Method
Effect of Contribution Cap／Lag
Amortization Method
Change in Benefit Provisions
Change in Actuarial Firm／Software
Bond Issue
Total

| 6／30／97 | 6／30／98 | 6／30／99 | 6／30／00 | 12／31／00 | 12／31／01 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \＄（323） | \＄（413） | \＄（369） | \＄（441） | \＄（23） | \＄350 |
| 157 | 104 | 46 | 99 | 84 | （9） |
| － | 350 | － | － | （206） | － |
| － | － | 21 | 71 | $145^{1}$ | 5 |
| － | － | － | － | － | － |
| 63 | 54 | 78 | 66 | 60 | 115 |
| 35 | 32 | 30 | 22 | 12 | 14 |
| － | 88 | － | 19 | － | － |
| － | － | － | － | － | － |
| 二 | － | 二 | 二 | － | 二 |
| \＄（68） | \＄215 | \＄（194） | \＄（164） | \＄72 | \＄475 |
| 12／31／02 | 12／31／03 | 12／31／04 | 12／31／05 | 12／31／06 | 12／31／07 |
| \＄644 | \＄140 | \＄456 | \＄167 | \＄（293） | \＄（626） |
| 68 | （32） | 16 | （84） | 140 | 99 |
| － | － | 437 | （5） | － | 384 |
| $177^{1}$ | $(286)^{2}$ | － | － | － | － |
| － | 1，147 | － | － | － | － |
| 143 | 178 | 179 | 247 | 258 | 251 |
| 21 | 47 | 68 | 84 | 83 | 78 |
| 37 | 3 | 1 | － | 24 | 2 |
| － | － | － | － | － | － |
| （41） | （440） | 二 | － | 二 | 二 |
| \＄1，049 | \＄757 | \＄1，157 | \＄409 | \＄212 | \＄188 |
| 12／31／08 | 12／31／09 | 12／31／10 | 12／31／11 | 12／31／12 | Total |
| \＄2，332 | \＄$(1,011)$ | \＄560 | \＄852 | 732 | \＄2，734 |
| 78 | （70） | （334） | （190） | （78） | 94 |
| － | － | － | （64） | － | 896 |
| － | － | － | － | － | 133 |
| － | － | － | － | － | 1，147 |
| 246 | 383 | 320 | 289 | 303 | 3，233 |
| 71 | 96 | 68 | 62 | 49 | 872 |
| － | － | － | 15 | 19 | 208 |
| － | － | （27） | － | － | （27） |
| － | 二 | 二 | － | － | （481） |
| \＄2，727 | \＄（602） | \＄587 | \＄964 | 1，025 | \＄8，809 |

Unfunded actuarial liability 6／30／96 \＄1，444 million
Unfunded actuarial liability 12／31／12 \＄10，253 million

[^2]
## SUMMARY OF PRINCIPAL RESULTS - KPERS STATE

|  | $\begin{gathered} \text { 12/31/2012 } \\ \text { Valuation } \end{gathered}$ |  | $\begin{array}{r} \text { 12/31/2011 } \\ \text { Valuation } \end{array}$ | \% Change |
| :---: | :---: | :---: | :---: | :---: |
| Participant Data |  |  |  |  |
| Number of: |  |  |  |  |
| Active Members | 23,826 |  | 23,917 | (0.4\%) |
| Retired Members and Beneficiaries | 18,098 |  | 17,801 | 1.7\% |
| Inactive Members | 6,935 |  | 6,668 | 4.0\% |
| Total Members | $\underline{48,859}$ |  | $\underline{48,386}$ | 1.0\% |
| Projected Annual Salaries of Active Members | \$ 999,272,591 | \$ | 995,715,217 | 0.4\% |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 234,215,221 | \$ | 226,681,537 | 3.3\% |
| Assets and Liabilities |  |  |  |  |
| a. Total Actuarial Liability | \$4,015,967,592 | \$ | 3,912,831,792 | 2.6\% |
| b. Assets for Valuation Purposes | 2,723,694,106 |  | 2,790,034,778 | (2.4\%) |
| c. Unfunded Actuarial Liability (a) - (b) | 1,292,273,486 |  | 1,122,797,014 | 15.1\% |
| d. Funded Ratio (b) / (a) | 67.8\% |  | 71.3\% | (4.9\%) |
| e. Market Value of Assets | 2,836,628,752 |  | 2,596,503,599 | 9.2\% |
| Employer Contribution Rates as a Percent of Payroll |  |  |  |  |
| Normal Cost |  |  |  |  |
| Total | 8.05\% |  | 8.17\% |  |
| Member | 6.00\% |  | 5.57\% |  |
| Employer | 2.05\% |  | 2.60\% |  |
| Amortization of Unfunded Actuarial Liability | 9.39\% |  | 8.20\% |  |
| Actuarial Contribution Rate | 11.44\% |  | 10.80\% |  |
| Statutory Employer Contribution Rate* | 12.37\% |  | 11.27\% |  |

the contribution rate for the Death and Disability Program. Any excess of the statutory over actuarial contribution rates applied to actual State payroll is deposited to the School assets.

## SUMMARY OF PRINCIPAL RESULTS - KPERS SCHOOL

| $2 / 31 / 2012$ | 12/31/2011 |
| ---: | ---: |
| Valuation | Valuation |$\quad$ \% Change

## Participant Data

Number of:

| Active Members | 85,428 | 84,183 | 1.5\% |
| :---: | :---: | :---: | :---: |
| Retired Members and Beneficiaries | 44,687 | 42,590 | 4.9\% |
| Inactive Members | $\underline{23,478}$ | 23,969 | (2.0\%) |
| Total Members | $\underline{\underline{153,593}}$ | $\underline{\underline{150,742}}$ | 1.9\% |
| Projected Annual Salaries of Active Members | \$ 3,383,104,891 | \$ 3,314,667,112 | 2.1\% |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 624,206,476 | \$ 585,039,317 | 6.7\% |
| Assets and Liabilities |  |  |  |
| a. Total Actuarial Liability | \$12,586,621,940 | \$12,114,415,410 | 3.9\% |
| b. Assets for Valuation Purposes | 6,220,280,310 | 6,316,797,407 | (1.5\%) |
| c. Unfunded Actuarial Liability (a) - (b) | 6,366,341,630 | 5,797,618,003 | 9.8\% |
| d. Funded Ratio (b) / (a) | 49.4\% | 52.1\% | (5.2\%) |
| e. Market Value of Assets | 6,475,974,488 | 5,884,431,008 | 10.1\% |

e. Market Value of Assets

Employer Contribution Rates as a Percent of Payroll

| Normal Cost |  |  |
| :--- | ---: | ---: |
| Total | $8.33 \%$ | $8.45 \%$ |
| Member | $\underline{6.00 \%}$ | $\underline{5.57 \%}$ |
| Employer | $\underline{2.33 \%}$ | $\underline{13.67 \%}$ |
| Amortization of Unfunded Actuarial Liability | $\underline{16.50 \%}$ | $\underline{15.50 \%}$ |
| Actuarial Contribution Rate | $\underline{12.37 \%}$ | $\underline{\underline{11.27 \%}}$ |

[^3]
## SUMMARY OF PRINCIPAL RESULTS - KPERS STATE/SCHOOL

|  | $12 / 31 / 2012$ | $12 / 31 / 2011$ | Valuation |
| :--- | ---: | ---: | ---: | \% Change

* The Statutory Employer Contribution Rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.10\% for FY 2016. This rate does not include the contribution rate for the Death and Disability Program.


## SUMMARY OF PRINCIPAL RESULTS - KPERS LOCAL

|  | $\begin{array}{r} 12 / 31 / 2012 \\ \text { Valuation } \end{array}$ | $\begin{array}{r} \text { 12/31/2011 } \\ \text { Valuation } \end{array}$ | \% Change |
| :---: | :---: | :---: | :---: |
| Participant Data |  |  |  |
| Number of: |  |  |  |
| Active Members | 39,351 | 39,547 | (0.5\%) |
| Retired Members and Beneficiaries | 16,605 | 15,606 | 6.4\% |
| Inactive Members | 14,153 | 13,629 | 3.8\% |
| Total Members | $\underline{\underline{70,109}}$ | $\underline{\underline{68,782}}$ | 1.9\% |
| Projected Annual Salaries of Active Members | \$1,639,398,292 | \$1,619,998,225 | 1.2\% |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 168,001,328 | \$ 152,644,779 | 10.1\% |
| Assets and Liabilities |  |  |  |
| a. Total Actuarial Liability | \$4,190,327,111 | \$3,978,621,325 | 5.3\% |
| b. Assets for Valuation Purposes | 2,491,443,027 | 2,436,265,719 | 2.3\% |
| c. Unfunded Actuarial Liability (a) - (b) | 1,698,884,084 | 1,542,355,606 | 10.1\% |
| d. Funded Ratio (b) / (a) | 59.5\% | 61.2\% | (2.9\%) |
| e. Market Value of Assets | 2,587,877,272 | 2,280,627,100 | 13.5\% |
| Employer Contribution Rates as a Percent of Payroll |  |  |  |
| Normal Cost |  |  |  |
| Total | 7.95\% | 8.07\% |  |
| Member | 6.00\% | 5.16\% |  |
| Employer | 1.95\% | 2.91\% |  |
| Amortization of Unfunded Actuarial Liability | 7.53\% | 6.86\% |  |
| Actuarial Contribution Rate | 9.48\% | 9.77\% |  |
| Statutory Employer Contribution Rate* | $\underline{\underline{9.48 \%}}$ | 8.84\% |  |

* Statutory Employer Contribution Rate exceeds last year's rate by the statutory rate increase limit of $1.00 \%$. This rate does not include the contribution rate for the Death and Disability Program.Disability Program.

| SUMMARY OF PRINCIPAL RESULTS - KANSAS POLICE \& FIREMEN'S RETIREMENT SYSTEM |  |  |
| :--- | ---: | :--- |
|  | $12 / 31 / 2012$ | $12 / 31 / 2011$ |
|  |  |  |
|  | Valuation | Valuation | \% Change

* The Statutory Employer Contribution Rate is equal to the Actuarial Rate. This is referred to as the "Uniform" rate, and varies for State and Local employers. The total contribution is equal to the appropriate uniform rate plus the payment required to amortize any unfunded past service liability, determined separately for each employer.

SUMMARY OF PRINCIPAL RESULTS - RETIREMENT SYSTEM FOR JUDGES

|  | $\begin{gathered} \text { 12/31/2012 } \\ \text { Valuation } \end{gathered}$ | $\begin{array}{r} \text { 12/31/2011 } \\ \text { Valuation } \end{array}$ | \% Change |
| :---: | :---: | :---: | :---: |
| Participant Data |  |  |  |
| Number of: |  |  |  |
| Active Members | 261 | 264 | (1.1\%) |
| Retired Members and Beneficiaries | 227 | 215 | 5.6\% |
| Inactive Members | $\underline{6}$ | 7 | (14.3\%) |
| Total Members | 494 | 486 | 1.6\% |
| Projected Annual Salaries of Active Members | \$ 28,079,426 | \$ 28,878,075 | (2.8\%) |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 8,685,283 | \$ 8,033,939 | 8.1\% |
| Assets and Liabilities |  |  |  |
| a. Total Actuarial Liability | \$155,920,773 | \$152,681,742 | 2.1\% |
| b. Assets for Valuation Purposes | 126,909,647 | 125,912,822 | 0.8\% |
| c. Unfunded Actuarial Liability (a) - (b) | 29,011,126 | 26,768,920 | 8.4\% |
| d. Funded Ratio (b) / (a) | 81.4\% | 82.5\% | (1.3\%) |
| e. Market Value of Assets | 131,943,611 | 117,969,801 | 11.8\% |
| Employer Contribution Rates as a Percent of Payroll |  |  |  |
| Normal Cost |  |  |  |
| Total | 19.61\% | 19.46\% |  |
| Member | 5.76\% | 5.77\% |  |
| Employer | 13.85\% | 13.69\% |  |
| Amortization of Unfunded Actuarial Liability | 10.13\% | 8.90\% |  |
| Actuarial Contribution Rate | 23.98\% | 22.59\% |  |
| Statutory Employer Contribution Rate* | 23.98\% | $\underline{\underline{22.59 \%}}$ |  |

* Statutory Employer Contribution Rate is equal to the Actuarial Rate. This rate excludes the contribution for the Death and Disability Program.


## SUMMARY OF PRINCIPAL RESULTS - ALL SYSTEMS COMBINED

|  | 12/31/2012 | 12/31/2011 |  |
| :---: | :---: | :---: | :---: |
|  | Valuation | Valuation | \% Change |
| Participant Data |  |  |  |
| Number of: |  |  |  |
| Active Members | 156,053 | 155,054 | 0.6\% |
| Retired Members and Beneficiaries | 84,142 | 80,527 | 4.5\% |
| Inactive Members | 45,969 | 45,678 | 0.6\% |
| Total Members | $\underline{\underline{286,164}}$ | $\underline{\underline{281,259}}$ | 1.7\% |
| Projected Annual Salaries of Active Members | \$ 6,498,961,722 | \$ 6,401,462,211 | 1.5\% |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 1,164,521,332 | \$ 1,091,909,722 | 6.6\% |
| Assets and Liabilities |  |  |  |
| a. Total Actuarial Liability | \$23,531,423,450 | \$22,607,170,032 | 4.1\% |
| b. Assets for Valuation Purposes | 13,278,490,294 | 13,379,020,161 | (0.8)\% |
| c. Unfunded Actuarial Liability (a) - (b) | 10,252,933,156 | 9,228,149,871 | 11.1\% |
| d. Funded Ratio (b) / (a) | 56.4\% | 59.2\% | (4.6)\% |
| e. Market Value of Assets | 13,817,320,603 | 12,476,623,704 | 10.7\% |

## Actuarial Assumptions - KPERS

Every three years, KPERS' consulting actuary makes a general investigation of the actuarial experience, including mortality, retirement and employer turnover. The actuary recommends actuarial assumptions and tables for us in the valuation and in calculating actuarial equivalent values based on such investigation. The current actuarial assumptions are based on an actuarial experience study conducted for three years ending December 31, 2009.

| Rate of Investment Ret | 8.0 percent |
| :---: | :---: |
| Implicit Inflation Rate | 3.0 percent |
| Marriage Assumption | 70 percent of all members are assumed married with male spouse assumed 3 years older than female. |
| Rates of Mortality: | The RP-2000 Healthy Annuitant table was first adjusted |
| Post-retirement | by an age setback or set forward. Rates were further |
|  | adjusted to fit actual experience. |
|  | Starting Table |
|  | School Males: RP-2000 M Healthy -2 |
|  | School Females: RP-2000 F Healthy -2 |
|  | State Males: RP-2000 M Healthy +2 |
|  | State Females: RP-2000 F Healthy +0 |
|  | Local Males: RP-2000 M Healthy +2 |
|  | Local Females: RP-2000 F Healthy -1 |


| Sample Rates | School |  |  | State |  | Local |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Age | Male | Female | Male | Female | Male | Female |
| 50 | $0.513 \%$ | $0.183 \%$ | $0.547 \%$ | $0.218 \%$ | $0.587 \%$ | $0.204 \%$ |  |
|  | 55 | $0.549 \%$ | $0.226 \%$ | $0.625 \%$ | $0.328 \%$ | $0.670 \%$ | $0.278 \%$ |
| 60 | $0.662 \%$ | $0.384 \%$ | $0.962 \%$ | $0.577 \%$ | $1.031 \%$ | $0.481 \%$ |  |
|  | 65 | $1.051 \%$ | $0.664 \%$ | $1.597 \%$ | $0.964 \%$ | $1.712 \%$ | $0.817 \%$ |
| 70 | $1.747 \%$ | $1.074 \%$ | $2.646 \%$ | $1.557 \%$ | $2.837 \%$ | $1.318 \%$ |  |
| 75 | $2.917 \%$ | $1.792 \%$ | $4.550 \%$ | $2.614 \%$ | $4.878 \%$ | $2.215 \%$ |  |
| 80 | $5.278 \%$ | $3.643 \%$ | $7.037 \%$ | $4.567 \%$ | $7.545 \%$ | $4.171 \%$ |  |
| 85 | $9.331 \%$ | $6.751 \%$ | $11.292 \%$ | $7.977 \%$ | $12.108 \%$ | $7.508 \%$ |  |
| 90 | $15.661 \%$ | $11.589 \%$ | $17.978 \%$ | $13.563 \%$ | $19.278 \%$ | $12.869 \%$ |  |
| 95 | $24.301 \%$ | $18.407 \%$ | $24.888 \%$ | $20.034 \%$ | $26.687 \%$ | $19.742 \%$ |  |
| 100 | $32.791 \%$ | $24.186 \%$ | $30.850 \%$ | $24.459 \%$ | $33.080 \%$ | $24.990 \%$ |  |

Pre-retirement School Males: 70\% of RP-2000 M Employees -2
School Females: 50\% of RP-2000 F Employees -2
State Males: 70\% of RP-2000 M Employees +2
State Females: $50 \%$ of RP-2000 F Employees +0
Local Males: $90 \%$ of RP-2000 M Employees +2
Local Females: 90\% of RP-2000 F Employees -1

| Disabled Life Mortality | RP-2000 Disabled Life Table with same age adjustments as used for Retiree Mortality. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rates of Salary Increase | Years of Service |  | Rate of Increase ${ }^{(1)}$ |  |  |  |  |
|  |  |  | School | State | ocal |  |  |
|  | 1 |  | 12.00\% | 10.50\% 10 | 50\% |  |  |
|  | 5 |  | 6.55\% | 5.60\% | 20\% |  |  |
|  | 10 |  | 5.10\% | 4.90\% | .20\% |  |  |
|  | 15 |  | 4.60\% | 4.40\% | 80\% |  |  |
|  | 20 |  | 4.10\% | 4.10\% | 60\% |  |  |
|  | 25 |  | 4.00\% | 4.00\% | 10\% |  |  |
|  | 30 |  | 4.00\% | 4.00\% | 00\% |  |  |
|  | 1) Includes gene percent inflati | wage increas and 1 percen | ase assumption of nt productivity) | 0 percent (composed |  |  |  |
| Rates of Termination |  |  | hool | Stat |  | Loc |  |
|  | Duration | Male | Female | Male | Female | Male | Female |
|  | 0 | 21.00\% | 23.00\% | 17.00\% | 19.00\% | 20.00\% | 23.00\% |
|  | 1 | 18.00\% | 18.00\% | 14.50\% | 15.00\% | 16.00\% | 20.00\% |
|  | 2 | 14.00\% | 13.00\% | 12.00\% | 11.00\% | 13.20\% | 17.00\% |
|  | 3 | 10.00\% | 11.00\% | 10.00\% | 10.00\% | 11.00\% | 14.00\% |
|  | 4 | 8.00\% | 9.00\% | 8.00\% | 9.00\% | 9.60\% | 11.50\% |
|  | 5 | 6.50\% | 7.25\% | 7.00\% | 8.00\% | 8.30\% | 9.00\% |
|  | 6 | 5.50\% | 6.25\% | 6.00\% | 7.00\% | 7.10\% | 7.50\% |
|  | 7 | 5.00\% | 5.50\% | 5.20\% | 6.00\% | 6.00\% | 6.50\% |
|  | 8 | 4.50\% | 4.90\% | 4.60\% | 5.00\% | 5.00\% | 5.75\% |
|  | 9 | 4.00\% | 4.30\% | 4.10\% | 4.60\% | 4.40\% | 5.00\% |
|  | 10 | 3.60\% | 3.90\% | 3.90\% | 4.30\% | 3.80\% | 4.25\% |
|  | 11 | 3.20\% | 3.50\% | 3.70\% | 4.00\% | 3.50\% | 3.75\% |
|  | 12 | 2.90\% | 3.10\% | 3.50\% | 3.70\% | 3.30\% | 3.40\% |
|  | 13 | 2.60\% | 2.80\% | 3.30\% | 3.50\% | 3.10\% | 3.20\% |
|  | 14 | 2.40\% | 2.50\% | 3.10\% | 3.30\% | 2.90\% | 3.00\% |
|  | 15 | 2.20\% | 2.30\% | 2.90\% | 3.10\% | 2.70\% | 2.80\% |
|  | 16 | 2.00\% | 2.10\% | 2.70\% | 2.90\% | 2.50\% | 2.60\% |
|  | 17 | 1.80\% | 1.90\% | 2.50\% | 2.70\% | 2.30\% | 2.40\% |
|  | 18 | 1.60\% | 1.70\% | 2.30\% | 2.50\% | 2.10\% | 2.20\% |
|  | 19 | 1.50\% | 1.50\% | 2.10\% | 2.30\% | 1.90\% | 2.00\% |
|  | 20 | 1.40\% | 1.30\% | 1.90\% | 2.10\% | 1.80\% | 1.80\% |
|  | 21 | 1.30\% | 1.20\% | 1.70\% | 1.90\% | 1.70\% | 1.60\% |
|  | 22 | 1.20\% | 1.10\% | 1.50\% | 1.70\% | 1.60\% | 1.40\% |
|  | 23 | 1.10\% | 1.00\% | 1.30\% | 1.50\% | 1.50\% | 1.20\% |
|  | 24 | 1.00\% | 0.90\% | 1.10\% | 1.40\% | 1.40\% | 1.00\% |
|  | 25 | 0.90\% | 0.80\% | 0.90\% | 1.30\% | 1.30\% | 0.90\% |
|  | 26 | 0.80\% | 0.70\% | 0.70\% | 1.20\% | 1.20\% | 0.70\% |
|  | 27 | 0.70\% | 0.60\% | 0.60\% | 1.10\% | 1.10\% | 0.60\% |
|  | 28 | 0.60\% | 0.50\% | 0.50\% | 1.00\% | 1.00\% | 0.50\% |
|  | 29 | 0.50\% | 0.50\% | 0.50\% | 0.50\% | 0.90\% | 0.50\% |
|  | 30 | 0.50\% | 0.50\% | 0.50\% | 0.50\% | 0.80\% | 0.50\% |
|  | 30+ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |

Retirement Rates

| School | 1st Year With 85 Points |  | After 1st Year With 85 Points |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Age | Rate | Age | Rate |
|  | 53 | 20\% | 53 | 18\% |
|  | 55 | 20\% | 55 | 18\% |
|  | 57 | 22\% | 57 | 18\% |
|  | 59 | 25\% | 59 | 23\% |
|  | 61 | 30\% | 61 | 30\% |
|  | Early Retirement |  | Normal Retirement |  |
|  | Age | Rate | Age | Rate |
|  | 55 | 5\% | 62 | 30\% |
|  | 56 | 5\% | 63 | 25\% |
|  | 57 | 8\% | 64 | 35\% |
|  | 58 | 10\% | 65 | 35\% |
|  | 59 | 12\% | 66-71 | 25\% |
|  | 60 | 15\% | 72-74 | 20\% |
|  | 61 | 24\% | 75 | 100\% |
| State | 1st Year With 85 Points |  | After 1st Year With 85 Points |  |
|  | Age | Rate | Age | Rate |
|  | 53 | 10\% | 53 | 10\% |
|  | 55 | 15\% | 55 | 12\% |
|  | 57 | 15\% | 57 | 12\% |
|  | 59 | 15\% | 59 | 12\% |
|  | 61 | 30\% | 61 | 25\% |
|  | Early Retirement |  | Normal Retirement |  |
|  | Age | Rate | Age | Rate |
|  | 55 | 5\% | 62 | 30\% |
|  | 56 | 5\% | 63 | 20\% |
|  | 57 | 5\% | 64 | 30\% |
|  | 58 | 6\% | 65 | 35\% |
|  | 59 | 10\% | 66-67 | 25\% |
|  | 60 | 10\% | 68-74 | 20\% |
|  | 61 | 20\% | 75 | 100\% |
| Local | 1st Year With 85 Points |  | After 1st Year With 85 Points |  |
|  | Age | Rate | Age | Rate |
|  | 53 | 11\% | 53 | 7\% |
|  | 55 | 13\% | 55 | 10\% |
|  | 57 | 13\% | 57 | 10\% |
|  | 59 | 15\% | 59 | 12\% |
|  | 61 | 25\% | 61 | 25\% |
|  | Early Retirement |  | Normal Retirement |  |
|  | Age | Rate | Age | Rate |
|  | 55 | 5\% | 62 | 25\% |
|  | 56 | 5\% | 63 | 20\% |
|  | 57 | 5\% | 64 | 30\% |
|  | 58 | 5\% | 65 | 35\% |
|  | 59 | 7\% | 66 | 25\% |
|  | 60 | 7\% | 67-74 | 20\% |
|  | 61 | 20\% | 75 | 100\% |


| Correctional | Normal Retirement at Age 55 |  | Normal Retirement at Ag |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Age | Rate |  |  |
|  | 55 | 10\% |  |  |
|  | 58 | 10\% |  |  |
|  | 60 | 15\% |  |  |
|  | 62 | 30\% |  |  |
|  | 65 | 100\% |  |  |
| Inactive vested members - Age 62. |  |  |  |  |
| TIAA employees - Age 66. |  |  |  |  |
| Rates of Disability | Age | School | State | Local |
|  | 25 | 0.025\% | 0.036\% | 0.030\% |
|  | 30 | 0.028\% | 0.102\% | 0.065\% |
|  | 35 | 0.034\% | 0.161\% | 0.097\% |
|  | 40 | 0.058\% | 0.244\% | 0.143\% |
|  | 45 | 0.110\% | 0.376\% | 0.209\% |
|  | 50 | 0.213\% | 0.511\% | 0.363\% |
|  | 55 | 0.362\% | 0.720\% | 0.600\% |
|  | 60 | 0.680\% | 0.920\% | 0.850\% |

Indexation of Final Average Salary for Disabled Members: 2.5 percent per year.

Probability of Vested Members Leaving Contributions with System

| Tier 1 | Age | School | State | Local |
| :---: | ---: | ---: | ---: | ---: |
|  | 25 | $80 \%$ | $65 \%$ | $60 \%$ |
|  | 30 | $80 \%$ | $65 \%$ | $60 \%$ |
|  | 35 | $80 \%$ | $65 \%$ | $60 \%$ |
|  | 40 | $80 \%$ | $65 \%$ | $60 \%$ |
|  | 45 | $82 \%$ | $75 \%$ | $64 \%$ |
|  | 50 | $87 \%$ | $85 \%$ | $74 \%$ |
|  | 55 | $100 \%$ | $100 \%$ | $100 \%$ |

Tier 2
Members are assumed to elect to take a refund if it is more valuable than the deferred annuity. The comparison is based on 8 percent interest and a $50 \%$ Male/50\%Female blend of the RP-2000 Combined Mortality Table, projected to 2045 (static).

Tier 1 Election
All Tier 1 members are assumed to elect the default option of the increased multiplier coupled with increased contributions.

## Actuarial Assumptions - KP\&F

| Rate of Investment Return | 8.0 percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Implicit Inflation Rate | 3.0 percent |  |  |  |
| Marriage Assumption | 80 percent of all members assumed married with male spouse assumed to be three years older than female. |  |  |  |
| Rates of Mortality: |  |  |  |  |
| Post-retirement | RP-2000 Healthy Annuitant Table |  |  |  |
| Pre-retirement | 90 percent of RP-2000 Employee Table ${ }^{(1)}$ <br> 1) 70 percent of preretirement deaths assumed to be service related. |  |  |  |
| Disabled Life Mortality | RP-2000 Disabled Life Table |  |  |  |
| Rates of Salary Increase | Years of Service |  | Rate ${ }^{(1)}$ |  |
|  | 1 |  | 12.5\% |  |
|  | 5 |  | 7.0\% |  |
|  | 10 |  | 4.9\% |  |
|  | 15 |  | 4.3\% |  |
|  | 20 |  | 4.0\% |  |
|  | 25 |  | 4.0\% |  |
|  | 2) Includes general wage increase assumption of 4.0 percent (composed of 3.0 percent inflation and 1.0 percent productivity). |  |  |  |
| Rates of Termination |  |  |  |  |
| Tier I | 3 percent for ages less than 41 and 0 percent thereafter |  |  |  |
| Tier II | Years of Service |  | Rate |  |
|  |  |  | 13.0\% |  |
|  |  |  | 6.0\% |  |
|  |  |  | 2.5\% |  |
|  |  |  | 1.0\% |  |
|  |  |  | 1.0\% |  |
|  | 25 |  | 0.0\% |  |
| Retirement Rates |  |  |  |  |
| Tier I | Early Retirement |  | Normal Retirement |  |
|  | Age | Rate | Age | Rate |
|  | 50 | 5\% | 55 | 40\% |
|  | 51 | 5\% | 56 | 40\% |
|  | 52 | 5\% | 57 | 40\% |
|  | 53 | 10\% | 58 | 35\% |
|  | 54 | 30\% | 59 | 45\% |
|  |  |  | 60 | 50\% |
|  |  |  | 61 | 20\% |
|  |  |  | 62 | 100\% |

## Retirement Rates (cont.)

Tier II:

| Early Retirement |  | Normal |  |
| ---: | ---: | ---: | ---: |
| Age | Ratirement |  |  |
| 50 | $10 \%$ | Age | Rate |
| 51 | $10 \%$ | 50 | $25 \%$ |
| 52 | $10 \%$ | 53 | $25 \%$ |
| 53 | $10 \%$ | 55 | $25 \%$ |
| 54 | $20 \%$ | 58 | $20 \%$ |
|  |  | 60 | $25 \%$ |
|  |  | 61 | $25 \%$ |
|  |  | 62 | $25 \%$ |
|  |  | 63 | $100 \%$ |

Inactive Vested - Assumed to retire at later of (i) eligibility for unreduced benefits or (ii) age 55.

| Rates of Disability | Age | Rate $^{(1)}$ |
| :--- | ---: | :--- |
| 22 | $0.06 \%$ |  |
| 27 | $0.07 \%$ |  |
| 32 | $0.15 \%$ |  |
| 37 | $0.35 \%$ |  |
| 42 | $0.56 \%$ |  |
| 47 | $0.76 \%$ |  |
| 52 | $0.96 \%$ |  |
| 57 | $1.00 \%$ |  |

1) 90 percent assumed to be service-connected under KP \& F Tier I.

## Actuarial Assumptions - Judges

| Rate of Investment Return | 8.0 percent |
| :--- | :--- |
| Implicit Inflation Assumption | 3.0 percent |
| Rates of Mortality: |  |
| Post-retirement | RP-2000 Healthy Annuitant Table, set back two years |
| Pre-retirement | 70 percent of RP-2000 Employee Table, set back two years |
| Rates of Salary Increase | 4.5 percent |
| Rates of Termination | None assumed |
| Disabled Life Mortality | RP-2000 Disabled Life Table, set back two years |
| Rates of Disability | None assumed |
| Retirement Rates | Age Rate |
|  | $60-61 \quad 10 \%$ |
|  | $62-65 \quad 20 \%$ |
|  | $66-69 \quad 30 \%$ |
|  | $70+\quad 100 \%$ |
|  |  |
| Marriage Assumption | 70 percent of all members are assumed married with male spouse |
|  |  |
|  |  |

## Actuarial Methods

## FUNDING METHOD

Under the entry age normal cost method, the actuarial present value of each member's projected benefits allocates on a level basis over the member's compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial liability. The unfunded actuarial liability represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. The unfunded actuarial liability is calculated each year and reflects experience gains/losses.

There are several components of the unfunded actuarial liability which are amortized over different periods. The increase in the unfunded actuarial liability resulting from the 1998 cost-of-living-increase is amortized over 15 years. The increase in the unfunded actuarial liability for Local employers resulting from 2003 legislation which made the 13th check for pre-July 2, 1987 retirees a permanent benefit is funded over a 10 year period beginning in 2005. The remainder of the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993.

The unfunded acturarial liability is amortized as a level percentage of payroll for all groups except Judges, who use a level dollar payment. The payroll growth assumption is 4 percent so the annual amortization payments will increase 4 percent each year. As a result, if total payroll grows 4 percent per year, as assumed, the amortization payment will remain level as a percentage of total current payroll.

## ASSET VALUATION METHOD

For actuarial purposes, assets are valued using an asset smoothing method. The difference between the actual return and the expected return (based on the actuarial assumed rate of return) on the market value of assets is calculated each year and recognized equally over a five year period.

## Summary of Plan Membership

The Kansas Public Employees Retirement System (the Retirement System, or, the System), is an umbrella organization administering three statewide retirement groups: the Kansas

Public Employees Retirement System (KPERS), the Kansas Police and Firemen's Retirement System (KP\&F), and the Kansas Retirement System for Judges. All three groups are part of a defined benefit, contributory plan that covers substantially all public employees in Kansas. The Kansas Public Employees Retirement System is a cost-sharing, multiple employer plan. Participation by the State of Kansas is mandatory, whereas participation by local political subdivisions is optional but irrevocable once elected. Benefit payments are also provided for a certain group of legislative employees.

## Summary of Provisions-KPERS

Note: Members who participate on or after July 1, 2009, are referred to as Tier 2 members.

This valuation reflects the benefit structure in place as of December 31, 2012, as amended by Senate Sub House Bill 2333, passed by the 2012 Legislature. Only changes that impact Tier 1 and Tier 2 members are included in this summary of provisions. Tier 3 benefits are not included as there were no such members in the valuation.

## Employee Membership

Membership is mandatory for all employees in covered positions, except elected officials. A covered position for non-school employees is one that is covered by Social Security, is not seasonal or temporary, and requires at least 1,000 hours of work per year. School employees who work at least 630 hours per year or 3.5 hours per day for at least 180 days are eligible for membership. Effective July 1, 2009, all employees become KPERS members on their date of employment. Prior to July 1, 2009 only School employees were covered immediately. There was a oneyear service requirement for the State and Local group. Those who retire under the provisions of the Retirement System may not become contributing members again.

## Normal Retirement

Eligibility - Tier 1: (a) Age 65, or (b) age 62 with ten years of credited service, or (c) any age when combined age and years of credited service equal 85 "points". Age is determined by the member's last birthday and is not rounded up.

Tier 2: (a) Age 65 with 5 years of credited service or (b) age 60 with 30 years of credited service.

Benefits - Benefits are based on the member's years of credited service, final average salary (FAS), and a statutory multiplier. For those who were hired prior to July 1, 1993, final average salary equals the greater of either: a four-year final average salary
including add-ons, such as sick and annual leave; or a threeyear final average salary, excluding add-ons, such as sick and annual leave. For those who are hired on or after July 1, 1993 and before July 1, 2009, final average salary equals the average of the three highest years of service, excluding add-ons, such as sick and annual leave. Effective July 1, 2009 (Tier 2), final average salary equals the average of the five highest years of salary, excluding additional compensation.

Prior Service Credit - Prior service credit is 0.75 percent or 1 percent of final average salary per year [School employees receive 0.75 percent final average salary for each year of prior service that is not credited under the former Kansas School Retirement System (KSRS)].

Participating Service Credit - Tier 1: Participating service credit is 1.75 percent of final average salary for years of service prior to January 1, 2014. For members who make employee contributions at 5 percent or 6 percent, participating service credit is 1.85 percent of final average salary for years of service after December 31, 2013.

Tier 2: For members retiring prior to January 1, 2014, participating service credit is 1.75 percent of final average salary for all years of service. For those retiring on or after January 1, 2014, participating service credit is 1.85 percent for all years of service.

## Early Retirement

Eligibility - Eligibility is age 55 and ten years of credited service.
Benefit - Tier 1: The normal retirement benefit is reduced 0.2 percent per month for each month between the ages of 60 and 62 , plus 0.6 percent for each month between the ages of 55 and 60 .

Tier 2: The normal retirement benefit is reduced actuarially for early commencement. The reduction factor is 35 percent at age 60 and 57.5 percent at age 55. If the member has 30 years of credited service, the early retirement reduction is less (50 percent of regular reduction).

## Vesting Requirements

Eligibility - Effective July 1, 2009, a member must have five years of credited service (ten years prior to July 1, 2009). Should the vested member terminate employment, the member must leave accumulated contributions on deposit with the Retirement System to be eligible for future benefits. If a vested member terminates employment and withdraws accumulated contributions, the member forfeits all rights and privileges under the Retirement System.

Benefit - Retirement benefits are payable when the vested member reaches normal retirement age, or reduced benefits are payable when the vested member reaches a specified early retirement age.

## Other Benefits

Withdrawal Benefit - Members who terminate employment may withdraw contributions with interest after the last day on the employer's payroll. Withdrawing contributions forfeits all membership rights and benefits, which a member may have accrued prior to withdrawing their contributions from the Retirement System. Former members, who return to covered employment within five years after terminating employment, will not have lost any membership rights or privileges if they haven't withdrawn contributions. The Retirement Act provides for withdrawal of contributions 31 days after employment terminates, but it does not allow members to borrow from contributions.

Disability Benefit - Members receiving disability benefits under the KPERS Death and Disability Benefits Program continue to receive service credit under KPERS. If a disabled member retires after receiving disability benefits for at least five years immediately preceding retirement, the member's final average salary is adjusted by the actuarial salary increase assumption rates in existence during the member's period of disability prior to July 1, 1993, 5 percent per year to July, 1998 and the change in CPI-U less 1 percent, not to exceed 4 percent after July, 1998.

Death Benefits - Pre-retirement death (non-service connected) - The member's accumulated contributions plus interest are paid in a lump sum to the designated beneficiary. In lieu of receiving the member's accumulated contributions, the surviving spouse of a member who is eligible to retire at death may elect to receive benefits under any survivor option. The spouse must be the member's sole designated beneficiary to exercise this option. If the member had at least 10 years of credited service, but had not reached retirement age, the spouse may elect to leave the member's contributions on deposit with the System and receive a monthly benefit to begin on the date the member would have been eligible to retire.

Service-Connected Accidental Death - The member's accumulated contributions plus interest, plus lump sum amount of $\$ 50,000$, plus annual benefit based on 50 percent of final average salary; reduced by Workers' Compensation benefits and subject to a minimum benefit of $\$ 100$ a month; are payable to a spouse, minor children, or dependent parents, for life, or until the youngest child reaches age 18 (or up to age 23 if they
are full-time students), in this order of preference. The monthly accidental death benefit is in lieu of any joint/survivor benefit for which the surviving spouse would have been eligible

Post-Retirement Death - A lump sum amount of $\$ 4,000$ is payable to the member's beneficiary. If the member has selected a retirement option, benefits are paid to the joint annuitant or the designated beneficiary. Under joint and survivor retirement options, if the joint annuitant predeceases the retired member, the reduced option benefit is increased to the amount the retired member would have received if no retirement option had been elected. Benefits payable to a joint annuitant cease at the joint annuitant's death. If a member does not select an option, the designated beneficiary receives the excess, if any, of the member's accumulated contributions plus interest over total benefits paid to date of death.

## Member Contributions

Prior to January 1, 2014, member contributions are 4 percent of compensation for Tier 1 . If the IRS approves an election for Tier 1 members, they will have a choice to elect to contribute: (1) 5 percent beginning January 1, 2014 and 6 percent effective January 1, 2015 and receive a 1.85 percent multiplier for future years of service or (2) remain at a contribution rate of 4 percent and receive a 1.40 percent multiplier for future years of service. The member contribution rate for Tier 2 is 6 percent of compensation. Interest is credited to members' contribution accounts on June 30 each year, based on the account balance as of the preceding December 31. Those who became members prior to July 1, 1993, have interest credited to their accounts at the rate of 8 percent per year. Those who become members on and after July 1, 1993, have interest credited to their accounts at the rate of 4 percent per year.

## Employer Contributions

Rates are certified by the Board of Trustees, based on the results of annual actuarial valuations.

## Board of Regents Plan Members (TIAA and equivalents)

Board of Regents plan members (TIAA and equivalents) do not make contributions to KPERS. They receive prior service benefits for service before 1962; the benefit is 1 percent of final average salary for each year of credited prior service. Service after 1961 is counted for purposes of determining eligibility for vesting.

## Correctional Members

Correctional employees, as certified to the Board of Trustees by the Secretary of Corrections, are defined in K.S.A. 74-4914a: (a) correctional officers, (b) certain directors and deputy directors
of correctional institutions, (c) correctional power plan operators, (d) correctional industries employees, (e) correctional food service employees, and (f) correctional maintenance employees.

For groups (a) and (b) with at least three consecutive years of credited service, in such positions immediately preceding retirement, normal retirement age is 55 or Rule of 85 and early retirement requirements are age 50 with ten years of credited service. For groups (c), (d), (e), and (f) with at least three consecutive years of service in such positions immediately preceding retirement, normal retirement age is 60 or Rule of 85 and early retirement requirements are 55 with ten years of credited service.

## Cost of Living Adjustments (COLAs)

Tier 2 Members Who Retired Prior to July 1, 2012: 2 percent cost-of-living adjustment (COLA) each year beginning at age 65 or the second July 1 after your retirement date, whichever is later. Other Tier 2 members will not receive a COLA.

## Summary of Provisions- KP\&F

## Normal Retirement

Tier I - age 55 and 20 years of service or 32 years of service (regardless of age).

Tier II - age 50 and 25 years of service, or age 55 and 20 years of service, or age 60 and 15 years of service.

Benefits - Benefits are based on the member's final average salary. For those who were hired prior to July 1, 1993, final average salary equals the average of the highest three of the last five years of credited participating service, including add-ons, such as sick and annual leave. For those who are hired on or after July 1, 1993, final average salary equals the average of the highest three of the last five years of participating service, excluding add-ons, such as sick and annual leave. Benefits are based on a member's years of credited service and a multiplier of 2.5 percent of final average salary for each year of credited service, to a maximum of 80 percent of final average salary.

Local Plan - For members covered by local plan provisions on the employer's entry date, normal retirement is at age 50 with 22 years of credited service.

## Early Retirement

Eligibility - Members must be at least age 50 and have 20 years of credited service.

Benefit - Normal retirement benefits are reduced 0.4 percent per month under age 55.

## Vesting Requirements

Eligibility - Tier I:The member must have 20 years of service credit; if terminating employment, the member must leave contributions on deposit with the Retirement System to be eligible for future benefits. Unreduced benefits are payable at age 55 or reduced benefits are payable as early as age 50 .

Eligibility - Tier II:The member must have 15 years of service credit to be considered vested. If terminating employment, the member must leave contributions on deposit with the Retirement System to be eligible for future benefits. A vested member may draw unreduced benefits as early as age 50 with 25 years of credited service, age 55 with 20 years of credited service, or age 60 with 15 years of credited service. A reduced benefit is available at age 50 with 20 years of credited service.

## Other Benefits

Withdrawal Benefits - Members who terminate employment before retirement may withdraw contributions with interest after the last day on the employer's payroll. Withdrawal of contributions forfeits all membership rights and benefits, which a member may have accrued prior to withdrawing accumulated contributions from the Retirement System. Former members, who return to covered employment within five years after terminating employment, will not have lost any membership rights or privileges if they haven't withdrawn contributions.

## Disability Benefits

Tier I: Service-Connected Disability - There are no age or service requirements to be eligible for this benefit. There is an annual benefit of 50 percent of final average salary, plus 10 percent of final average salary for each dependent child under age 18 (or up to age 23 for full-time students), to a maximum of 75 percent of final average salary. If dependent benefits aren't payable, the benefit is 50 percent of final average salary or 2.5 percent for each year of credited service up to a maximum of 80 percent of final average salary. Upon the death of a member after two years from the proximate cause of death which is the original service-connected disability, the same benefits are payable. Upon the death of a member after 2 years from a cause different than the disability for which the member is receiving service-connected disability benefits, the surviving spouse
receives a lump sum payment of 50 percent of final average salary. Additionally, a pension benefit of one-half the member's benefit is payable to either the spouse or to the dependent children.

Tier I: Non-Service-Connected Disability - An annual benefit of 2.5 percent times years of credited service times final average salary with a minimum of 25 percent of FAS and a maximum of 80 percent of FAS.

Tier II: There is no distinction between service-connected and non-service-connected disability benefits. The annual benefit is 50 percent of final average salary. Service Credit is granted during the period of disability. Disability benefits convert to age and service retirement at the earliest date the member is eligible for full retirement benefits. If the member is disabled for at least five years immediately preceding retirement, the member's final average salary is adjusted during the period of Disability.

## Death Benefits (Tier I and Tier II)

Active Member Service Connected Death - There is no age or service requirement. An annual benefit of 50 percent of final average salary is payable to the spouse, plus 10 percent of final average salary for each dependent child under age 18 (or up to age 23 for full-time students), to a maximum of 75 percent of final average salary for active member.

Active Member Non-Service Connected Death - A lump sum of 100 percent of final average salary is payable to the spouse and a pension of 2.5 percent of final average salary per year of credited service (to a maximum of 50 percent) is payable to the spouse. If there is no spouse, the monthly benefit is paid to the dependent children (age 18 or 23 if a full time student). If there is no surviving spouse or eligible children, the beneficiary will receive a lump sum payment of 100 percent of the member's current annual pay inclusive of the member's accumulated contributions.

Inactive Member Death - If an inactive member is eligible for retirement when death occurs, and the inactive member's spouse is the sole beneficiary, the spouse may elect to receive benefits as a joint annuitant under any option in lieu of a refund of the member's accumulated contributions.

Post-Retirement Death - There is a lump sum amount of $\$ 4,000$ payable, less any death benefit payable under local plan provisions. If the member has selected a retirement option, benefits are paid to the joint annuitant or the designated beneficiary.

Under joint and survivor options, if the joint annuitant predeceases the retired member, the benefit is increased to the amount the retired member would have received if no option had been selected. Benefits payable to the joint annuitant cease when the joint annuitant dies. If no option is selected, the designated beneficiary receives the excess, if any, of the member's accumulated contributions over total benefits paid to the date of death. The surviving spouse of a transfer member (who was covered by local plan on the employer's entry date, who dies after retirement, and who has not elected a retirement benefit option) receives a lump sum payment of 50 percent of final average salary. Additionally, a pension benefit of threefourths of the member's benefit is payable either to the spouse or dependent children.

## Classifications

Tier I - Members have Tier I coverage if they were employed prior to July 1, 1989, and they did not elect coverage under Tier II.

Tier II - Members have Tier II coverage if they were employed July 1, 1989, or later. This also includes members employed before July 1, 1989 who elected Tier II coverage.

Some KP\&F members are considered either Tier I or Tier II Transfer or Brazelton members.

Transfer Member - A member who is a former member of a local plan who elected to participate in KP\&F. Former Kansas Highway Patrol and former Kansas Bureau of Investigation members are included in this group.

Brazelton Member - A member who participated in a class action lawsuit, whose contribution is lower, and whose benefits are offset by Social Security.

## Member Contributions

Member contributions are 7.15 percent of compensation, effective July 1, 2013.

Brazelton members contribute .008 percent with a Social Security offset. Benefits payable to these members are reduced by one-half of original Social Security benefits accruing from employment with the participating employer.

## Employer Contributions

Individual rates are certified by the Board of Trustees for each participating employer based on the results of annual actuarial valuations.

## Summary of Provisions-Judges

## Normal Retirement

Eligibility - (a) Age 65, or (b) age 62 with ten years of credited service, or (c) any age when combined age and years of credited service equals 85 "points". Age is determined by the member's last birthday and is not rounded up.

Benefit - The benefit is based on the member's final average salary, which is the average of the three highest years of service under any retirement system administered by KPERS. The basic formula for those who were members prior to July 1,1987 , is 5 percent of final average salary for each year of service up to ten years, plus 3.5 percent for each year of service greater than ten, to a maximum of 70 percent of final average salary. For those who became members on or after July 1, 1987, the formula is 3.5 percent for each year, to a maximum benefit of 70 percent of final average salary.

## Early Retirement

Eligibility - A member must be age 55 and have ten years of credited service to take early retirement.

Benefit - The retirement benefit is reduced to 0.2 percent per month for each month between the ages of 60 and 62 , plus 0.6 percent per month for each month between the ages of 55 and 60.

## Vesting Requirements

Eligibility - There is no minimum service requirement; however, if terminating employment, the member must leave contributions on deposit with the Retirement System in order to be eligible for future benefits. Eligible judges who have service credited under KPERS have vested benefits under both KPERS and the Retirement System for Judges when the combined total credited service equals ten years.

Benefit - The normal benefit accrued at termination is payable at age 62 or in reduced amount at age 55 , provided the member has ten years of service credit. Otherwise, benefits are not payable until age 65.

## Other Benefits

Disability Benefits - These benefits are payable if a member is defined as totally and permanently disabled as certified by the Supreme Court. The disability benefit, payable until age 65 , is 3.5 percent of final average salary for each year of service (minimum of 25 percent and maximum of 70 percent of final average salary). Benefits are recalculated when the member reaches retirement age based on participating service credit for the period of disability. If a judge is disabled for at least five years immediately preceding retirement, the judge's final average salary is adjusted.

Withdrawal Benefit - Members who terminate employment may withdraw contributions with interest, but forfeit any right to a future benefit.

Pre-Retirement Death - A refund of the member's accumulated contributions is payable. In lieu of receiving the member's accumulated contributions, the surviving spouse of a member who is eligible to retire at death, may elect to receive benefits under any survivor benefit option. If the member had at least 10 years of credited service, but hadn't reached retirement age at the time of death, the spouse may elect a monthly benefit to begin on the date the member first would have been eligible to retire as long as the member's contributions aren't withdrawn.

Post-Retirement Death - A lump sum death benefit of $\$ 4,000$ is payable to the member's beneficiary. If the member had selected an option with survivor benefits, those benefits are paid to the joint annuitant or to the member's designated beneficiary. Under retirement options with survivor benefits, if the joint annuitant predeceases the retired member, the retirement benefit is increased to the amount the retired member would have received if no survivor benefits had been elected. Benefits payable to a joint annuitant cease when the joint annuitant dies. If no option was chosen by the retired member, the member's designated beneficiary receives the excess, if any, of the member's accumulated contributions over the total benefits paid to the date of the retired member's death.

## Member Contributions

Judges contributions are 6 percent of compensation. Upon reaching the maximum retirement benefit level of 70 percent of final average salary, the contribution rate is reduced to 2 percent.

## Employer Contributions

Rates are certified by the Board of Trustees, based on the results of annual actuarial valuations.

## SHORT TERM SOLVENCY TEST

Last ten years

| Valuation Date | Member <br> Contributions | Retirants and <br> Beneficiaries | Active Member Employer <br> Financed Portion | Actuarial Value of <br> Assets | Portions of Accrued Liabilities <br> Covered by Assets |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
|  | (A) | (B) | (C) | (A) | (B) | (C) |

A short-term solvency test, which is one means of determining a system's progress under its funding program, compares the plan's present assets with (A) member contributions on deposit, (B) the liability for future benefits to present retired lives and (C) the actuarial liability for service already rendered by active members. In a system that has been following the level percent of payroll financing discipline, the liability for active member contributions deposit (item A) and the liabilities for future benefits to present retired lives (item B) will be fully covered by present assets. The liability for service already rendered by active members (item C) will be fully or partially covered by the remainder of present assets. If the system has been using level cost financing, the funded portion of item C usually will increase over a period of time. Item C being fully funded is rare.

## SCHEDULE OF ACTIVE MEMBER VALUATION DATA ${ }^{1}$

Last ten years

| Valuation Date | Number <br> of Active <br> Members $^{2}$ | Percentage <br> Change in <br> Membership | Number of <br> Participating <br> Employers | Percentage <br> Increase in <br> Number of <br> Participating <br> Employers | Total Annual <br> Payroll ${ }^{2}$ <br> (millions) | Average <br> PayrollPercentage <br> Increase <br> in Average |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Payroll |  |  |  |  |  |  |

1 Data provided to actuary reflects active membership information as of January 1.
2 Excludes TIAA.

## MEMBERSHIP PROFILE

Last ten years
$\left.\begin{array}{lllrr}\text { Valuation } & \text { Active } & \text { Inactive } & \begin{array}{r}\text { Retirees \& } \\ \text { Beneficiaries }\end{array} & \begin{array}{r}\text { Total } \\ \text { Date }\end{array} \\ \text { Membership }\end{array}\right]$ 248,584

## RETIRANTS, BENEFICIARIES - CHANGES IN ROLLS - ALL SYSTEMS

Last ten fiscal years

|  | Number at Beginning | Additions |  | Deletions |  |  |  | \% Change in Additions | Average <br> Annual Allowance | Year-End Annual Allowances |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  | Number <br> Added | Annual Allowances | Number Removed | Annual <br> Allowances | Number at at End of Year | \% Change\% <br> in Number <br> of Retirants |  |  |  |
| 2004 | 57,538 | 3,612 | \$50,253,218 | 2,009 | \$11,940,793 | 59,141 | 2.60\% | 3.20\% | 10,897 | \$676,918,614 |
| 2005 | 59,141 | 4,141 | 59,096,917 | 2,017 | 12,333,238 | 61,265 | 3.60 | 17.60 | 11,126 | 737,563,276 |
| 2006 | 61,265 | 4,452 | 66,239,352 | 1,759 | 11,185,646 | 63,765 | 4.00 | 12.00 | 11,498 | 805,978,732 |
| 2007 | 63,765 | 4,423 | 67,181,677 | 2,125 | 15,218,444 | 66,063 | 3.60 | 1.40 | 13,142 | 868,179,029 |
| 2008 | 66,063 | 5,195 | 73,055,348 | 2,515 | 18,681,361 | 68,743 | 4.10 | 8.70 | 13,758 | 945,739,016 |
| 2009 | 68,743 | 5,330 | 81,815,349 | 2,467 | 20,966,802 | 71,606 | 4.20 | 12.00 | 13,964 | 999,939,615 |
| 2010 | 71,606 | 5,593 | 88,709,733 | 2,332 | 20,528,013 | 74,867 | 4.60 | 8.40 | 14,182 | 1,060,205,818 |
| 2011 | 74,867 | 6,245 | 99,091,348 | 2,698 | 23,230,288 | 78,414 | 4.70 | 11.70 | 14,630 | 1,147,209,272 |
| 2012 | 78,414 | 6,941 | 112,628,928 | 2,644 | 23,775,195 | 82,711 | 5.50 | 13.70 | 14,962 | 1,237,559,898 |
| 2013 | 82,711 | 6,071 | 97,203,958 | 2,707 | 24,577,721 | 86,075 | 4.10 | 13.70 | 14,975 | 1,288,986,517 |

## SUMMARY OF MEMBERSHIP DATA ${ }^{1}$

| Retiree and Beneficiary Member Valuation Data | $12 / 31 / 2012$ | $12 / 31 / 2011$ |
| :--- | ---: | ---: |
| KPERS |  |  |
| Number | 79,390 | 75,997 |
| Average Benefit | $\$ 12,929$ | $\$ 12,690$ |
| Average Age | 72.24 | 72.25 |

Police \& Fire

| Number | 4,525 | 4,315 |
| :--- | ---: | ---: |
| Average Benefit | $\$ 28,600$ | $\$ 27,696$ |
| Average Age | 65.16 | 65.32 |

Judges

| Number | 227 | 215 |
| :--- | ---: | ---: |
| Average Benefit | $\$ 38,261$ | $\$ 37,367$ |


| Average Age | 74.07 | 74.50 |
| :--- | :--- | :--- |

System Total
Number
Average Benefit

| 84,142 | 80,527 |
| ---: | ---: |
| $\$ 13,840$ | $\$ 13,560$ |
| 71.86 | 71.89 |

Active Member Valuation Data
12/31/12 12/31/2011

KPERS
Number
148,605 147,647
$\begin{array}{lll}\text { Average Current Age } & 45.51 & 45.58\end{array}$

| Average Service | 11.25 |
| :--- | :--- |
| 11.25 |  |

Average Pay
$\$ 40,522 \quad \$ 40,166$

Police \& Fire

| Number | 7,187 | 7,141 |
| :--- | ---: | ---: |
| Tier I | 329 | 373 |
| Tier II | 6,858 | 6,770 |
| Average Current Age | 39.52 | 39.56 |
| Average Service | 11.68 | 11.66 |
| Average Pay | $\$ 62,489$ | $\$ 61,907$ |

Judges

| Number | 261 | 264 |
| :--- | ---: | ---: |
| Average Current Age | 58.27 | 58.08 |
| Average Service | 12.26 | 12.57 |
| Average Pay | $\$ 107,584$ | $\$ 109,387$ |
|  |  |  |
| System Total |  |  |
| Number | 156,053 | 155,054 |
| Average Current Age | 45.26 | 45.32 |
| Average Service | 11.27 | 11.27 |
| Average Pay | $\$ 41,646$ | $\$ 41,285$ |

1 Data provided to actuary reflects active membership information as of January 1.

## EMPLOYER CONTRIBUTION RATES, INCLUDING DEATH AND DISABILTY CONTRIBUTION

Last ten fiscal years'

| KPERS State/School |  |  | KPERS Local |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Actuarial Rate | Actual Rate | Fiscal Year | Actuarial Rate | Actual Rate |
| 2004 | $7.05 \%$ | $4.58 \%^{3}$ | 2004 | $4.64 \%$ | $3.22 \%^{3}$ |
| 2005 | 8.29 | 5.47 | 2005 | 6.04 | 4.01 |
| 2006 | 9.94 | 6.07 | 2006 | 7.04 | 4.61 |
| 2007 | 9.75 | 6.77 | 2007 | 8.69 | 5.31 |
| 2008 | 11.37 | 7.37 | 2008 | 8.92 | 5.93 |
| 2009 | 11.86 | $7.97^{5}$ | 2009 | 9.12 | $6.54^{5}$ |
| 2010 | 11.98 | $8.57^{5}$ | 2010 | 9.52 | $7.14^{6}$ |
| 2011 | 12.30 | $9.17^{6}$ | 2011 | 11.42 | $7.74^{6}$ |
| 2012 | 15.09 | $9.77^{7}$ | 2012 | 10.44 | $8.34^{7}$ |
| 2013 | 14.46 | $10.37^{8}$ | 2013 | 10.43 | $8.94^{8}$ |


|  | TIAA |  |
| :--- | :---: | :---: |
| Fiscal Year | Actuarial Rate | Actual Rate <br> 1997 |
| $1.89 \%$ | $1.89 \%$ |  |
| 1998 | 1.66 | 1.66 |
| 1999 | 1.93 | 1.93 |
| 2000 | 1.82 | 1.82 |
| 2001 | 1.21 | $1.21^{2}$ |
| 2002 | 2.03 | 2.03 |
| 2003 | 2.27 | $2.27^{34}$ |
|  |  |  |
|  | Judges |  |
| Fiscal Year | Actuarial Rate | Actual Rate |
| 2004 | $16.67 \%$ | $16.67 \%^{3}$ |
| 2005 | 19.22 | 19.22 |
| 2006 | 22.37 | 22.37 |
| 2007 | 19.51 | 19.51 |
| 2008 | 22.78 | 22.78 |
| 2009 | 22.48 | $22.48^{5}$ |
| 2010 | 20.90 | $20.90^{6}$ |
| 2011 | 19.89 | $19.89^{6}$ |
| 2012 | 26.68 | $21.68^{7}$ |
| 2013 | 24.15 | $24.15^{8}$ |

## KP\&F Uniform Rate

| Fiscal Year | Actuarial Rate | Actual Rate |
| :--- | :---: | :---: |
| 2004 | $9.47 \%$ | $9.47 \%$ |
| 2005 | 11.69 | 11.69 |
| 2006 | 12.39 | 12.39 |
| 2007 | 13.32 | 13.32 |
| 2008 | 13.88 | 13.88 |
| 2009 | 13.51 | 13.51 |
| 2010 | 12.86 | 12.86 |
| 2011 | 17.88 | 14.57 |
| 2012 | 16.54 | 16.54 |
| 2013 | 17.26 | 17.26 |

1 Rates shown for KPERS State/School, TIAA and Judges represent the rates for the fiscal years ending June 30. KPERS Local and KP\&F rates are reported for the calendar years. Rates include Group Life and Disability insurance when applicable.

2 Per 2000 and 2001 legislation, employers were not required to remit the Group Life and Disability portion of Actual Rate from April 1, 2000 through December 31, 2001. 3 Per 2002 and 2003 legislation, employers were not required to remit the Group Life and Disability portion of Actual Rate from July 1, 2002 through December 31, 2002 or from April 1, 2003 through June 30, 2004.
4 Per 2003 legislation, members of the TIAA group were made special members of KPERS and no longer have a separate valuation or contribution rate.
5 Per 2009 legislation, employers were not required to remit the Group Life and Disability portion of Actual Rate from March 1, 2009 through November 30, 2009.
6 Per 2010 legislation, employers were not required to remit the Group Life and Disability portion of Actual Rate from April 1, 2010 through June 30, 2010 and April 1, 2011 through June 30, 2011.

7 Per 2012 legislation, employers were not required to remit the Group Life and Disability portion of Actual Rate from April 1, 2012 through June 30 , 2012.
8 Per 2013 legislation, employers were not required to remit the Group Life and Disability portion of Actual Rate from April 1 2013, through June 30, 2013.

# Actuary's Certification Letter — Death and Disability Plan 

## Milliman

May 9, 2013

Board of Trustees
Kansas Public Employees Retirement System
611 S. Kansas Ave., Suite 100
Topeka, KS 66603

Dear Members of the Board:

In accordance with your request, we have performed an actuarial valuation of KPERS Death and Disability Program as of June 30, 2012, for determining contributions beginning July 1, 2012. The major findings of the valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of June 30, 2012.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice

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promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest, and other factors used or provided in this report have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System.

Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in the valuation report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by economic or demographic assumptions
changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of analyzing the sufficiency of the statutory contribution rate. Actuarial computations under GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals, and of GASB Statement 43. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

The actuary prepared the following supporting schedules for the Comprehensive Annual Financial Report:

- Summary of Actuarial Assumptions - Death and Disability
- Summary of Experience - Death and Disability
- Schedule of Funding Progress - Death and Disability

We also provided the information used in the Actuarial Section - Death and Disability and the Solvency Test - Death and Disability.

Milliman's work product was prepared exclusively for KPERS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning KPERS operations, and uses KPERS data, which Milliman has not audited.

It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

We respectfully submit the following report, and we look forward to discussing it with you.

I, Daniel D. Skwire, F.S.A., am a consulting actuary for Milliman, Inc. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Allan L. Bittner, F.S.A., am a consulting actuary for Milliman, Inc. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

MILLIMAN, Inc.
Sincerely,


Daniel D. Skwire, FSA
Consulting Actuary


Allan L Bittner, FSA
Consulting Actuary

## Actuarial Overview Death and Disability

This report contains the June 30, 2012, actuarial valuation for the KPERS Death and Disability Program. This program provides two primary benefits to active members:

- Group life insurance equal to 150 percent of annual compensation, which is provided through an insurance contract with Minnesota Life.
- Self-insured long term disability (LTD) benefits equal to 60 percent (for claims incurred prior to January 1, 2006, 66 2/3 percent) of annual compensation, offset by other benefits. Members receiving LTD benefits also receive service credit toward their retirement benefits under KPERS (which does not affect calculations for the Death and Disability Program) and have their group life insurance coverage continued under the waiver of premium provision. For those employees covered under the waiver of premium provision, the group life insurance benefit is increased annually for inflation, at a rate equal to the consumer price index less one percent, beginning five years following the date of disability.

The scope of the annual actuarial valuation, on both the GASB 43 and illustrative historical basis, includes the LTD and waiver benefits described in item two above. They do not include the fully-insured group life insurance benefit, which is provided only during employment and is therefore not classified as an other post-employment benefit (OPEB) under GASB 43.

## ACTUARIAL VALUATION UNDER GASB 43

GASB Statement 43 contains requirements for the valuation of OPEBs by state and local government entities. These requirements, which are analogous to pension accounting practices, attribute the cost of OPEB to the time during which the employee is actively working for the employer.

The following table summarizes the calculation of the actuarial liability for active and disabled members. This liability includes the cost of projected LTD benefits, projected waiver benefits, and projected administrative expenses:

Actuarial Liability at 6/30/2012 ${ }^{1}$
Actives Disabled Total ${ }^{1}$
PV of Total \$318,982,099 \$169,561,173 \$488,543,272
Projected Benefits
PV of Future Normal Cost 219,946,549 —— 219,946,549
Actuarial Liability $\quad \underline{\underline{\$ 9,035,550}} \mathbf{\$ 1 6 9 , 5 6 1 , 1 7 3}$ \$268,596,723
1 Totals may not match due to rounding.
As of June 30, 2012, the KPERS Death and Disability Fund has an unfunded actuarial liability of $\$ 249,528,257$. KPERS has elected to amortize this unfunded actuarial liability over 15 years as a level percent of pay, assuming a 4 percent annual payroll increase.

The annual required contribution (ARC) for the KPERS Death and Disability Program equals the current year normal cost plus the amortization of the unfunded actuarial liability, all adjusted for interest to mid-year. The ARC for 2012-2013 is $\$ 40,871,331$, representing $0.62 \%$ of estimated annual compensation.

## HISTORIAL ANALYSIS

The historical analysis shows a decreasing pattern in LTD claims and LTD claim payments over the past six years. Waiver death benefits in 2010-2011 and 2011-2012 are consistent with historical patterns. These are trends that may result, at least in part, from an increasing focus on managing LTD claims and assisting claimants in rehabilitation and return to work. They may also be driven by the gradual impact on overall experience of the lower benefit percentage on new claims incurred 1/1/2006 and later. Generally, however, we expect to see a modestly increasing trend in LTD and waiver benefits due to the aging of the population and the increasing salaries of active members.

The total disabled life liability decreased from $\$ 171.6$ million to $\$ 165.8$ million from 6/30/2010 to 6/30/2011, and from $\$ 165.8$ million to $\$ 162.0$ million from 6/30/2011 to 6/30/2012, due primarily to a reduction in the number of open LTD claims.

Liability runoff tests performed on the illustrative liability balances for LTD and Waiver claims indicate that the 6/30/2011 balances were sufficient to fund the actual and projected future costs that emerged during the 2011-2012 fiscal year with respect to members disabled as of 6/30/2011.

## PROJECTED CASHFLOWS

The following table contains the projected cashflows for the KPERS Death and Disability Fund for the next five years:

Five-Year Cashflow Projection - Expected Benefits and Expenses vs. Expected Contributions (millions)

Excludes Group Life Insurance for Active Members

| Plan Year | Projected Benefits <br> and Expenses | Projected <br> Contributions |
| :--- | ---: | ---: |
| 2012-2013 | $\$ 32.1$ | $\$ 49.6$ |
| $2013-2014$ | $\$ 33.1$ | $\$ 51.1$ |
| $2014-2015$ | $\$ 34.4$ | $\$ 52.7$ |
| $2015-2016$ | $\$ 35.4$ | $\$ 54.2$ |
| $2016-2017$ | $\$ 36.3$ | $\$ 55.9$ |

This table indicates that the projected contributions are expected to exceed the projected benefits and expenses for each of the next five years, according to the assumptions used for the actuarial valuation, and assuming that the current contribution rate of 1.0 percent (which includes approximately 0.25 percent of payroll for group life insurance) remains unchanged. This pattern would result in an increase in plan assets over the five-year time horizon. Any future periodic contribution moratoriums implemented by the Legislature will have the impact of spending down any increase in the plan's assets.

The cashflow projections include self-insured benefits only. They do not include the cost of insurance premiums for the fully-insured group life benefit or the projected contributions intended to cover those premiums. Also, the projections are on a "best-estimate" basis consistent with the liability calculations, which means they do not include an explicit margin. To the extent that KPERS requires a more conservative benefit projection for the purpose of determining funding contributions, it may wish to consider adding a margin of 5 to 10 percent to the benefits and expenses projected.

## GASB 43

The Governmental Accounting Standards Board (GASB) issued Statement No. 43, Financial Reporting For Postemployment Benefit Plans Other Than Pension Plans, in order to establish uniform standards of financial reporting by state and local governmental entities for other postemployment benefit plans (OPEB plans). The term "other postemployment benefits (OPEB)" refers to postemployment benefits other than pension benefits and includes (a) postemployment healthcare benefits and (b) other types of postemployment benefits like life insurance, disability, and long term care, if provided separately from a pension plan.

The basis for GASB 43 is to attribute the cost of postemployment benefits to the time during which the employee is actively working for the employer. OPEB arises from an exchange of salaries and benefits for employee services and it is part of the compensation that employers offer for services received.

GASB Statement No. 43 establishes standards for measurement, recognition, and display of the assets, liabilities and where applicable, net assets and changes in net assets of such funds. In addition, the statement requires two schedules and accompanying notes disclosing information relative to the funded status of the Plan and employer contributions to the Plan.

The Schedule of Funding Progress provides historical information about the funded status of the plan and the progress being made in accumulating sufficient assets to pay benefits when due.

The Schedule of Employer Contributions provides historical information about actual contributions made to the plan by participating employers in comparison to annual required contributions (ARC).

GASB 43 was first effective for KPERS Death and Disability Program for the fiscal year ending June 30, 2007. This valuation addresses the ARC for the fiscal year ending June 30, 2013. Only the disability benefits and waiver of premium life insurance benefits provided by KPERS Death and Disability Program are subject to GASB 43. The group and optional life insurance programs for active members are not OPEBs under GASB 43.

A number of assumptions have been made in developing the liabilities reported in this report. These assumptions, as well as the actuarial methodology, are described in this report. The projections in this report are estimates, and as such, KPERS' actual liability will vary from these estimates. The projections and assumptions should be updated as actual costs under this program develop.

## ACTUARIAL PRESENT VALUE OF TOTAL PROJECTED BENEFITS

The actuarial present value of total projected benefits reflects all expected payments in the future discounted to the date of the valuation. The present value is an amount of money that, if it were set aside now and all assumptions met, would be exhausted with the ultimate payment to the last plan member's final expense.

## Actuarial Present Value of Total Projected Benefits at 6/30/2012 ${ }^{1}$

|  | Actives | Disabled | Total |
| :--- | ---: | ---: | ---: |
| Disability Income | $\$ 240,664,328$ | $\$ 135,738,044$ | $\$ 376,402,372$ |
| Waiver of Premium | $64,144,176$ | $26,288,877$ | $90,433,053$ |
| Administrative Expenses | $\underline{14,173,595}$ | $\underline{7,534,252}$ | $\underline{21,707,847}$ |
| Total | $\underline{\underline{\$ 318,982,099}}$ | $\underline{\underline{\$ 169,561,173}}$ | $\underline{\underline{\$ 488,543,272}}$ |

1 Totals may not match due to rounding.
The Entry Age Normal Actuarial Cost Method was used to allocate the cost of benefits to years of active service. The objective under this method is to expense each participant's benefit as a level percent of pay over their active working lifetime. At the time the funding method is introduced, there will be a liability which represents the contributions which would have been accumulated if this method of funding had always been used (called the "Actuarial Liability"). The difference between this actuarial liability and the assets (if any) is the unfunded actuarial liability, which is typically amortized over a period of years. The maximum permissible years under GASB 43 is 30 . KPERS has chosen to amortize the unfunded actuarial liability over 15 years, as a level percent of pay.

| Actuarial Liability at 6/30/2012 ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Actives | Disabled | Total |
| Present Value of Total |  |  |  |
| Projected Benefits | \$318,982,099 | \$169,561,173 | \$488,543,272 |
| Present Value of Future |  |  |  |
| Normal Cost | 219,946,549 | 二 | 219,946,549 |
| Actuarial Liability | \$99,035,550 | \$169,561,173 | \$268,596,723 |

[^4]
## ACTUARIAL BALANCE SHEET

The actuarial balance sheet is a demonstration of the basic actuarial equation that the actuarial present value of future benefits to be paid to the active and retired members must equal the current assets plus the actuarial present value of future contributions to be received. Accordingly, the status of the plan in balance sheet form as of June 30, 2012 is shown in the following table:

\section*{Actuarial Present Value of Total Projected Benefits ${ }^{1}$ <br> | Active Members | $\$ 318,982,099$ |
| :--- | :--- |
| Disabled Members | $\underline{169,561,173}$ |
| Total Actuarial Present Value of | $\$ 488,543,272$ |} Total Projected Benefits

## Assets and Future Employer Contributions

| Assets ${ }^{2}$ | $\$ 19,068,466$ |
| :--- | ---: |
| Unfunded Actuarial Liability | $249,528,257$ |
| Present Value of Future Normal Costs | $\underline{219,946,549}$ |
| Total Assets and Future Employer Contributions | $\$ 488,543,272$ |

1 Totals may not match due to rounding. 2 Market value.

## ANNUAL REQUIRED CONTRIBUTION (ARC)

GASB 43 defines the Annual Required Contribution (ARC) as the employer's normal cost plus amortization of any unfunded actuarial liability over a period not to exceed 30 years. KPERS has chosen to amortize the unfunded actuarial liability over 15 years as a level percentage of payroll.

The amortization of the Unfunded Actuarial Liability is calculated assuming amortization as a level percent of payroll over 15 years. Payroll is assumed to increase 4 percent per year.

## ANNUAL REQUIRED CONTRIBUTION FOR FISCAL YEAR ENDING JUNE 30, 2013

## A.Employer Normal Costs

(1) Normal Cost as of June 30, 2012
(2) Assumed interest (mid-year timing assumed)
(3) Normal Cost for FY2013 [(1) + (2)]
B. Determination of Current Year Amortization Payment
(1) Unfunded Actuarial Liability
(2) Amortization Period
(3) Amortization Factor
(4) Amortization Amount as of June 30, 2012 [(1) / (3)]
(5) Assumed interest (mid-year timing assumed)
(6) Amortization Amount for FY2013 [(4) + (5)]
C. Determination of Annual Required Contribution
(1) Normal Cost for benefits attributable to service in the current year (A.3)
(2) Amortization of Unfunded Actuarial Liability (B.6)
(3) Annual Required Contribution (ARC) [(1) + (2)]
D. Annual Required Contribution
(1) Annual Required Contribution
(2) Estimated Annual Compensation for FY2013
(3) ARC as a Percentage of Payroll
\$23,289,126
17,582,205
$\$ 40,871,331$
\$40,871,331
6,618,909,195
\$22,782,168
506,958
\$23,289,126
\$249,528,257
15 years
14.5079

17,199,475
382,730
\$17,582,205
$0.62 \%$

## Actuarial Assumptions - Death and Disability



| Pre-retirement | School Males: $70 \%$ of RP-2000 M Employees -2 |
| :--- | :--- |
|  | School Females: $70 \%$ of RP-2000 F Employees -2 |
|  | State Males: $70 \%$ of RP-2000 M Employees +2 |
|  | State Females: $70 \%$ of RP-2000 F Employees +0 |
|  | Local Males: $90 \%$ of RP-2000 M Employees +2 |
|  | Local Females: $90 \%$ of RP-2000 F Employees -1 |

Disabled Life Mortality RP-2000 Disabled Life Table with same age adjustments as used for Retiree Mortality.

| Rates of Salary Increase | Years of Service | Rate of Increase ${ }^{(1)}$ |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  | School | State | Local |
|  | 1 | $12.00 \%$ | $10.50 \%$ | $10.50 \%$ |
|  | 5 | $6.55 \%$ | $5.60 \%$ | $6.20 \%$ |
|  | 10 | $5.10 \%$ | $4.90 \%$ | $5.20 \%$ |
|  | 15 | $4.60 \%$ | $4.40 \%$ | $4.80 \%$ |
|  | 20 | $4.10 \%$ | $4.10 \%$ | $4.60 \%$ |
|  | 25 | $4.00 \%$ | $4.00 \%$ | $4.10 \%$ |
|  | 30 | $4.00 \%$ | $4.00 \%$ | $4.00 \%$ |
|  | 1) | Includes general wage increase assumption of 4.0 percent (composed of 3.25 |  |  |


| Rates of Termination |  | School |  | State |  | Local |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Duration | Male | Female | Male | Female | Male | Female |
|  | 0 | 21.00\% | 23.00\% | 17.00\% | 19.00\% | 20.00\% | 23.00\% |
|  | 1 | 18.00\% | 18.00\% | 14.50\% | 15.00\% | 16.00\% | 20.00\% |
|  | 2 | 14.00\% | 13.00\% | 12.00\% | 11.00\% | 13.20\% | 17.00\% |
|  | 3 | 10.00\% | 11.00\% | 10.00\% | 10.00\% | 11.00\% | 14.00\% |
|  | 4 | 8.00\% | 9.00\% | 8.00\% | 9.00\% | 9.60\% | 11.50\% |
|  | 5 | 6.50\% | 7.25\% | 7.00\% | 8.00\% | 8.30\% | 9.00\% |
|  | 6 | 5.50\% | 6.25\% | 6.00\% | 7.00\% | 7.10\% | 7.50\% |
|  | 7 | 5.00\% | 5.50\% | 5.20\% | 6.00\% | 6.00\% | 6.50\% |
|  | 8 | 4.50\% | 4.90\% | 4.60\% | 5.00\% | 5.00\% | 5.75\% |
|  | 9 | 4.00\% | 4.30\% | 4.10\% | 4.60\% | 4.40\% | 5.00\% |
|  | 10 | 3.60\% | 3.90\% | 3.90\% | 4.30\% | 3.80\% | 4.25\% |
|  | 11 | 3.20\% | 3.50\% | 3.70\% | 4.00\% | 3.50\% | 3.75\% |
|  | 12 | 2.90\% | 3.10\% | 3.50\% | 3.70\% | 3.30\% | 3.40\% |
|  | 13 | 2.60\% | 2.80\% | 3.30\% | 3.50\% | 3.10\% | 3.20\% |
|  | 14 | 2.40\% | 2.50\% | 3.10\% | 3.30\% | 2.90\% | 3.00\% |
|  | 15 | 2.20\% | 2.30\% | 2.90\% | 3.10\% | 2.70\% | 2.80\% |
|  | 16 | 2.00\% | 2.10\% | 2.70\% | 2.90\% | 2.50\% | 2.60\% |
|  | 17 | 1.80\% | 1.90\% | 2.50\% | 2.70\% | 2.30\% | 2.40\% |
|  | 18 | 1.60\% | 1.70\% | 2.30\% | 2.50\% | 2.10\% | 2.20\% |
|  | 19 | 1.50\% | 1.50\% | 2.10\% | 2.30\% | 1.90\% | 2.00\% |
|  | 20 | 1.40\% | 1.30\% | 1.90\% | 2.10\% | 1.80\% | 1.80\% |
|  | 21 | 1.30\% | 1.20\% | 1.70\% | 1.90\% | 1.70\% | 1.60\% |
|  | 22 | 1.20\% | 1.10\% | 1.50\% | 1.70\% | 1.60\% | 1.40\% |
|  | 23 | 1.10\% | 1.00\% | 1.30\% | 1.50\% | 1.50\% | 1.20\% |
|  | 24 | 1.00\% | 0.90\% | 1.10\% | 1.40\% | 1.40\% | 1.00\% |
|  | 25 | 0.90\% | 0.80\% | 0.90\% | 1.30\% | 1.30\% | 0.90\% |
|  | 26 | 0.80\% | 0.70\% | 0.70\% | 1.20\% | 1.20\% | 0.70\% |
|  | 27 | 0.70\% | 0.60\% | 0.60\% | 1.10\% | 1.10\% | 0.60\% |
|  | 28 | 0.60\% | 0.50\% | 0.50\% | 1.00\% | 1.00\% | 0.50\% |
|  | 29 | 0.50\% | 0.50\% | 0.50\% | 0.50\% | 0.90\% | 0.50\% |
|  | 30 | 0.50\% | 0.50\% | 0.50\% | 0.50\% | 0.80\% | 0.50\% |
|  | $31+$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |

ACTUARIAL 108

| Retirement Rates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| School | 1st Year With 85 Points |  | After 1st Year With 85 Points |  |
|  | Age | Rate | Age | Rate |
|  | 53 | 20\% | 53 | 18\% |
|  | 55 | 20\% | 55 | 18\% |
|  | 57 | 22\% | 57 | 18\% |
|  | 59 | 25\% | 59 | 23\% |
|  | 61 | 30\% | 61 | 30\% |
|  | Early Retirement |  | Normal Retirement |  |
|  | Age | Rate | Age | Rate |
|  | 55 | 5\% | 62 | 30\% |
|  | 56 | 5\% | 63 | 25\% |
|  | 57 | 8\% | 64 | 35\% |
|  | 58 | 8\% | 65 | 35\% |
|  | 59 | 12\% | 66-71 | 25\% |
|  | 60 | 15\% | 72-74 | 20\% |
|  | 61 | 22\% | 75 | 100\% |
| State | 1st Year With 85 Points |  | After 1st Year With 85 Points |  |
|  | Age | Rate | Age | Rate |
|  | 53 | 10\% | 53 | 15\% |
|  | 55 | 15\% | 55 | 15\% |
|  | 57 | 15\% | 57 | 12\% |
|  | 59 | 15\% | 59 | 12\% |
|  | 61 | 30\% | 61 | 25\% |
|  | Early Retirement |  | Normal Retirement |  |
|  | Age | Rate | Age | Rate |
|  | 55 | 5\% | 62 | 30\% |
|  | 56 | 5\% | 63 | 20\% |
|  | 57 | 5\% | 64 | 30\% |
|  | 58 | 5\% | 65 | 35\% |
|  | 59 | 8\% | 66-67 | 25\% |
|  | 60 | 8\% | 68-74 | 20\% |
|  | 61 | 20\% | 75 | 100\% |
| Local | 1st Year With 85 Points |  | After 1st Year With 85 Points |  |
|  | Age | Rate | Age | Rate |
|  | 53 | 11\% | 53 | 10\% |
|  | 55 | 13\% | 55 | 10\% |
|  | 57 | 13\% | 57 | 10\% |
|  | 59 | 15\% | 59 | 12\% |
|  | 61 | 25\% | 61 | 25\% |
|  | Early Retirement |  | Normal Retirement |  |
|  | Age | Rate | Age | Rate |
|  | 55 | 5\% | 62 | 25\% |
|  | 56 | 5\% | 63 | 20\% |
|  | 57 | 5\% | 64 | 30\% |
|  | 58 | 5\% | 65 | 35\% |
|  | 59 | 5\% | 66 | 25\% |
|  | 60 | 5\% | 67-74 | 20\% |
|  | 61 | 15\% | 75 | 100\% |


| Correctional | Normal Retirement at Age 55 |  |
| :--- | :--- | :--- |
|  | Age | Rate |
|  | 55 | $10 \%$ |
| 58 | $10 \%$ |  |
| 60 | $10 \%$ |  |
| 62 | $45 \%$ |  |
| 65 | $100 \%$ |  |

Correctional employees with an age 60 normal retirement date - Age 62.
Inactive vested members - Age 62.
TIAA employees - Age 66.

| LTD Claim Incidence Rates | Male |  |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age | Local | School | State | Local | School | State |
|  | 25 | 0.00044 | 0.00032 | 0.00078 | 0.00065 | 0.00046 | 0.00115 |
|  | 30 | 0.00046 | 0.00032 | 0.00081 | 0.00060 | 0.00043 | 0.00107 |
|  | 35 | 0.00059 | 0.00042 | 0.00104 | 0.00098 | 0.00070 | 0.00173 |
|  | 40 | 0.00087 | 0.00062 | 0.00153 | 0.00139 | 0.00099 | 0.00246 |
|  | 45 | 0.00151 | 0.00107 | 0.00266 | 0.00207 | 0.00148 | 0.00367 |
|  | 50 | 0.00244 | 0.00174 | 0.00432 | 0.00289 | 0.00206 | 0.00511 |
|  | 55 | 0.00409 | 0.00291 | 0.00723 | 0.00399 | 0.00284 | 0.00704 |
|  | 60 | 0.00587 | 0.00418 | 0.01038 | 0.00475 | 0.00338 | 0.00840 |
|  | 65 | 0.00625 | 0.00445 | 0.01104 | 0.00416 | 0.00296 | 0.00735 |
|  | 70 | 0.00698 | 0.00497 | 0.01234 | 0.00383 | 0.00273 | 0.00678 |

## LTD Claim Termination Rates

as percent of 1987 Commissioners Group Disability Table (Based on Actual KPERS Experience)

| Age at Disability | Claim Duration (Months) |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $1-12$ | $13-24$ | $25-60$ | $61+$ |
| Under 30 | $55 \%$ | $75 \%$ | $95 \%$ | $145 \%$ |
| $30-39$ | $55 \%$ | $75 \%$ | $95 \%$ | $145 \%$ |
| $40-49$ | $55 \%$ | $75 \%$ | $95 \%$ | $145 \%$ |
| $50-59$ | $95 \%$ | $135 \%$ | $180 \%$ | $350 \%$ |
| 60 and Over | $350 \%$ | $350 \%$ | $350 \%$ | $350 \%$ |

All claim termination rates are assumed to be 350 percent of the table for attained ages 60 and older.

| Other LTD Assumptions | IBNR Reserve: | 60 percent of expected claim cost for year |
| :--- | :--- | :--- |
|  | Overpayment Recovery: | 65 percent of overpayment balance |
| Future Payroll Growth: | 4.0 percent long-term growth for actuarial valuation. 3.0 percent <br> near-term growth for cashflow projections |  |
|  | Administrative Expenses: | 4.65 percent of claims |
|  | Estimated Offsets: | Estimated approval rate of 55 percent to 75 percent for claims in <br> first three years of disability that do not yet have offsets. Estimated <br> offset amount of 60 percent of gross benefit. |

Waiver Claim Termination Rates
as percent of 1987 Commissioners Group Disability (Based on Actual KPERS Experience)

Other Waiver Assumptions

| Age at Disability |  | Claim Duration (Months) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1-12 | 13-24 | 25-60 | 61+ |
| Under 30 | 55\% | 75\% | 95\% | 145\% |
| 30-39 | 55\% | 75\% | 95\% | 145\% |
| 40-49 | 55\% | 75\% | 95\% | 145\% |
| 50-59 | 95\% | 135\% | 180\% | 350\% |
| 60 and Over | 350\% | 350\% | 350\% | 350\% |
| All claim termination rates are assumed to be 350 percent of the table for attained ages 60 and older. |  |  |  |  |


| Mortality | 80 percent of 2005 Society of Actuaries Group Life <br> Waiver Mortality Table, first 5 years of claim. 100 <br> percent thereafter |
| :--- | :--- |
| Benefit Indexing | Historical indexing is based on actual retirement plan <br> calculations. Indexing for 2006 and later uses a rate of <br> 2.0 percent, which is equivalent to a 3 percent annual <br> assumed increase in the consumer price index, less 1.0 <br> percent as specified by the plan |
| Projected Future Claim Cost as <br> percent of Payroll (used <br> in cashflow projections) | 0.09 percent in 2012-2013, which increases in future <br> due to aging |
| IBNR | 12.5 percent of expected claim cost for year |

## Experience - Death and Disability

As of June 30, 2012

| Death Claims by Death Benefit Paid |  | 2010-2011 |  | 2011-2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Death Benefit Paid | Count | \% of Claims | Count | \% of Claims |
|  | \$0-9,999 | 0 | 0\% | 1 | 1\% |
|  | 10,000-19,999 | 8 | 8\% | 6 | 6\% |
|  | 20,000-29,999 | 9 | 9\% | 5 | 5\% |
|  | 30,000-39,999 | 17 | 17\% | 26 | 25\% |
|  | 40,000-49,999 | 26 | 25\% | 24 | 23\% |
|  | 50,000-59,999 | 9 | 9\% | 19 | 18\% |
|  | 60,000-69,999 | 15 | 15\% | 9 | 9\% |
|  | 70,000-79,999 | 7 | 7\% | 7 | 7\% |
|  | 80,000-89,999 | 6 | 6\% | 1 | 1\% |
|  | 90,000-99,999 | 2 | 2\% | 1 | 1\% |
|  | 100,000+ | 4 | 4\% | 4 | 4\% |
|  | \$Total | 103 | 100\% | 103 | 100\% |
| Death Claims by Age at Death |  | 2010-2011 |  | 2011-2012 |  |
|  | Age at Death | Count | \% of Claims | Count | \% of Claims |
|  | 20-29 | 0 | 0\% | 0 | 0\% |
|  | 30-39 | 1 | 1\% | 5 | 5\% |
|  | 40-49 | 11 | 11\% | 17 | 17\% |
|  | 50-59 | 47 | 46\% | 46 | 45\% |
|  | 60-64 | 36 | 35\% | 30 | 29\% |
|  | 65+ | 8 | 8\% | $\underline{5}$ | 5\% |
|  | Total | 103 | 100\% | 103 | 100\% |
| Active LTD Claims by Age at Disability |  | 2010-2011 |  | 2011-2012 |  |
|  | Age at Disability | Count \% of Claims |  | Count | \% of Claims |
|  | <20 | 1 | 0\% | 1 | 0\% |
|  | 20-29 | 88 | 3\% | 89 | 3\% |
|  | 30-39 | 485 | 17\% | 471 | 17\% |
|  | 40-49 | 1,079 | 38\% | 1,057 | 38\% |
|  | 50-59 | 1,036 | 37\% | 1,004 | 36\% |
|  | 60-64 | 127 | 4\% | 139 | 5\% |
|  | 65+ | 17 | 1\% | $\underline{20}$ | 1\% |
|  | Total | 2,833 | 100\% | 2,781 | 100\% |
| Active LTD Claims by Attained Age |  | 2010-2011 |  | 2011-2012 |  |
|  | Attained Age | Count \% of Claims |  | Count | \% of Claims |
|  | <20 | 0 | 0\% | 0 | 0\% |
|  | 20-29 | 9 | 0\% | 12 | 0\% |
|  | 30-39 | 90 | 3\% | 88 | 3\% |
|  | 40-49 | 480 | 17\% | 429 | 15\% |
|  | 50-59 | 1,434 | 51\% | 1,425 | 51\% |
|  | 60-64 | 762 | 27\% | 757 | 27\% |
|  | 65+ | $\underline{58}$ | 2\% | 70 | 3\% |
|  | Total | 2,833 | 100\% | 2,781 | 100\% |

ACTUARIAL 112

| Active LTD Claims by Net Benefit Amount | Net Monthly Benefit | 2010-2011 |  | 2011-2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Count | \% of Claims | Count | \% of Claims |
|  | \$0-499 | 1218 | 43\% | 1207 | 43\% |
|  | 500-999 | 917 | 32\% | 915 | 33\% |
|  | 1,000-1,499 | 416 | 15\% | 388 | 14\% |
|  | 1,500-1,999 | 185 | 7\% | 174 | 6\% |
|  | 2,000-2,499 | 59 | 2\% | 60 | 2\% |
|  | 2,500-2,999 | 25 | 1\% | 24 | 1\% |
|  | 3,000-3,499 | 8 | 0\% | 10 | 0\% |
|  | 3,500-3,999 | 2 | 0\% | 2 | 0\% |
|  | 4,000-4,499 | 0 | 0\% | 1 | 0\% |
|  | 4,500-4,999 | 0 | 0\% | 0 | 0\% |
|  | 5,000+ | $\underline{3}$ | 0\% | $\underline{0}$ | 0\% |
|  | \$Total | 2,833 | 100\% | 2,781 | 100\% |
| New LTD Claims by Age at Disability |  | 2010-2011 |  | 2011-2012 |  |
|  | Age at Disability | Count | \% of Claims | Count | \% of Claims |
|  | <20 | 0 | 0\% | 0 | 0\% |
|  | 20-29 | 6 | 2\% | 8 | 3\% |
|  | 30-39 | 29 | 9\% | 15 | 5\% |
|  | 40-49 | 71 | 23\% | 64 | 21\% |
|  | 50-59 | 157 | 50\% | 161 | 53\% |
|  | 60-64 | 46 | 15\% | 50 | 16\% |
|  | 65+ | 4 | 1\% | $\underline{6}$ | 2\% |
|  | Total | 313 | 100\% | 304 | 100\% |
| New LTD Claims by Attained Age |  | 2010-2011 |  | 2011-2012 |  |
|  | Attained Age | Count | \% of Claims | Count | \% of Claims |
|  | <20 | 0 | 0\% | 0 | 0\% |
|  | 20-29 | 4 | 1\% | 6 | 2\% |
|  | 30-39 | 25 | 8\% | 10 | 3\% |
|  | 40-49 | 63 | 20\% | 59 | 19\% |
|  | 50-59 | 157 | 50\% | 149 | 49\% |
|  | 60-64 | 55 | 18\% | 69 | 23\% |
|  | $65+$ | $\underline{9}$ | 3\% | 11 | 4\% |
|  | Total | 313 | 100\% | 304 | 100\% |



## Actuarial Methods

## ACTUARIAL COST METHOD

The actuarial cost method determines, in a systematic way, the incidence of employer contributions required to provide plan benefits. It also determines how actuarial gains and losses are recognized in Plan costs. These gains and losses result from the difference between the actual experience under the plan and the experience predicted by the actuarial assumptions.

The cost of the Plan is derived by making certain specific assumptions as to rates of interest, disability, mortality, turnover, etc., which are assumed to hold for many years into the future. Since actual experience may differ somewhat from long term assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the Plan.

Actuarial liabilities and comparative costs shown in this Report were computed using the Entry Age Normal (EAN) Actuarial Cost Method, which consists of the following cost components:

Under the EAN cost method, the actuarial present value of each member's projected benefits is allocated on a level basis over the member's compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial liability. The unfunded actuarial liability represents the difference between the actuarial liability and the normal cost of assets as of the valuation date. The unfunded actuarial liability is calculated each year and reflects experience gains/losses.

The Unfunded Actuarial Liability (UAL) is the difference between the Actuarial Liability and the Valuation Assets. KPERS has chosen to amortize the UAL over 15 years as a level percentage of payroll.

GASB 43 allows a variety of cost methods to be used. This method was selected because it is consistent with the KPERS retirement system funding and it tends to produce stable costs. Other methods used do not change the ultimate liability, but do allocate it differently between what has been earned in the past and what will be earned in the future. If a different method was used, the normal cost and unfunded actuarial liability would change. The net effect of the change may result in an increase or decrease in the annual required contribution (ARC). If desired, we can provide more details.

## ASSET VALUATION METHOD

Assets are valued at market value.

## Plan Provisions Overview

KPERS Death and Disability Plan is a cost-sharing multiple employer plan that provides long term disability (LTD) and life insurance benefits to eligible employees. Eligible employees consist of all individuals who are:

1. Currently active members of KPERS.
2. Employees of an educational institution under the Kansas Board of Regents as defined in K.S.A. 74-4925.
3. Elected officials.

The plan provides a group life insurance benefit for active members through a fully-insured program with Minnesota Life Insurance Company. Because this benefit is fully-insured, it is not included in the scope of this actuarial valuation. The plan also provides a self-funded LTD benefit and a self-funded life insurance benefit for disabled members (referred to as "group life waiver of premium"). These items are considered "Other Post-Employment Benefits" (OPEB) under GASB accounting rules, and they are included in this actuarial valuation.

## Key Provisions of the LTD Benefit

## DEFINITION OF DISABILITY

For the first 24 months following the end of the benefit waiting period, a member is totally disabled if the member is unable to perform the material and substantial duties of his or her regular occupation due to sickness or injury. Thereafter, the member is totally disabled if the member is unable to perform the material and substantial duties of any gainful occupation due to sickness or injury.

## BENEFIT WAITING PERIOD

For approved claims, benefits begin on the later of (a) the date the member completes 180 continuous days of total disability; or (b) the date the member ceases to draw compensation from his or her employer.

## MONTHLY BENEFIT

The monthly benefit is 60 percent of the member's monthly rate of compensation, with a minimum of $\$ 100$ and a maximum of $\$ 5,000$. The monthly benefit is subject to reduction by deductible sources of income, which include Social Security primary disability or retirement benefits, worker's compensation benefits, other disability benefits from any other source by reason of employment, and earnings from any form of employment.

## MAXIMUM BENEFIT PERIOD

If the disability begins before age 60, benefits are payable while disability continues until the member's 65th birthday or retirement date, whichever first occurs. If the disability occurs at or after age 60, benefits are payable while disability continues, for a period of five years or until the date of the member's retirement, whichever first occurs.

## LIMITATION FOR MENTAL ILLNESSES AND SUBSTANCE ABUSE

Benefit payments for disabilities caused or contributed to by substance abuse or non-biologically-based mental illnesses are limited to the term of the disability or 24 months per lifetime, whichever is less.

## COST OF LIVING INCREASE

There are no automatic cost-of-living increase provisions. KPERS has the authority to implement an ad hoc cost-of-living increase.

## Key Provisions of the Group Life Waiver of Premium Benefit

## BENEFIT AMOUNT:

Upon the death of a member who is receiving monthly disability benefits, the plan will pay a lump-sum benefit to eligible beneficiaries. The benefit amount will be 150 percent of the greater of (a) the member's annual rate of compensation at the time of disability, or (b) the member's previous 12 months of compensation at the time of the last date on payroll. If the member had been disabled for five or more years, the annual compensation or salary rate at the time of death will be indexed before the life insurance benefit is computed. The indexing is based on the consumer price index, less one percentage point.

## ACCELERATED DEATH BENEFIT

If a member is diagnosed as terminally ill with a life expectancy of 12 months or less, he or she may be eligible to receive up to 100 percent of the death benefit rather than having the benefit paid to the beneficiary.

## CONVERSION RIGHT

If a member retires or disability benefits end, he or she may convert the group life insurance coverage to an individual life insurance policy.

Changes in the UAAL occur for various reasons. The net decrease in the UAAL from July 1, 2010 to July 1, 2012 was $\$ 21.5$ million. The components of this net change are shown in the table below (in millions):

Unfunded Actuarial Accrued Liability, July 1, 2010

- Impact of new claim experience different from expected
- Impact of terminated claim experience different from expected
- Impact of change in assumptions
- Impact of new entrants (active)
- Other liability experience and asset experience

Unfunded Actuarial Accrued Liability, July 1, 2012
\$271.0
\$ (25.8)
\$ (6.3)
\$ 0.1
\$ 3.4
\$ 7.1
\$249.5

## SHORT TERM SOLVENCY TEST-DEATH AND DISABILITY PLAN

Last five fiscal years valued

| Disabled Employer <br> Financed Portion (A) | Active Member <br> Employer Financed <br> Portion (B) | Actuarial Value of <br> Assets | Portion of Accrued <br> Liabilities Covered <br> by Assets |  |
| :--- | ---: | ---: | ---: | ---: |
| $06 / 30 / 06$ | $\$ 239,753,827$ | $\$ 114,396,152$ | $\$ 18,723,957$ | $5.3 \%$ |
| $06 / 30 / 07$ | $237,913,406$ | $117,815,215$ | $25,567,653$ | 7.2 |
| $06 / 30 / 081$ | $231,282,196$ | $123,777,984$ | $38,570,957$ | 10.9 |
| $06 / 30 / 10$ | $188,151,374$ | $95,606,171$ | $12,750,759$ | 4.5 |
| $06 / 30 / 12$ | $169,561,173$ | $99,035,550$ | $19,068,466$ | 7.1 |

1 Starting June 30, 2008 the KPERS Death and Disability Benefits Program valuation will be performed biennally.

A short term solvency test, which is one means of determining a system's progress under its funding program, compares the plan's present assets with contributions on deposit, (A) the liability for future benefits to present disabled lives, and (B) the actuarial liability for service already rendered by active members. The Death and Disability Plan requires no member contributions, it is funded by employer contributions.

## Statistical Section

## FIDUCIARY

First and always.


## Statistical Highlights of the System's Financial Trends

The Statistical Section presents several schedules that provide financial trend analysis of the Retirement System's overall financial health and additional analytical information on employers' membership data, retirement benefits and other post employment benefits (OPEB). The schedules beginning on this page through page 123 provide revenues, expenses and funding status information for the past ten fiscal years for KPERS and Death and Disability (OPEB) plans. On page 121 a schedule is presented that allocates the total benefits and type of refunds that were paid. On pages 124 through 126 various schedules are presented to depict the level of monthly benefits by number of retirees, retirement type and options, and years of service. On pages 127 and 128, information is provided showing the top ten participating employers determined by number of covered active employees. The source of the information in these schedules is derived from the comprehensive annual financial reports, unless otherwise noted.

## REVENUES BY SOURCE

Last ten fiscal years

|  |  | Contributions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Member | Employer | Employer Insurance (OPEB) | Misc | Net Investment Income (KPERS) | Net Investment Income (OPEB) | Total |
| 2004 | \$230,349,955 | \$714,353,221 ${ }^{2}$ | \$ - ${ }^{1}$ | \$182,113 | \$1,335,895,581 | \$330,336 | \$2,281,111,203 |
| 2005 | 233,226,034 | 261,961,687 | 31,990,734 | 178,105 | 1,222,707,749 | 388,372 | 1,750,452,681 |
| 2006 | 246,203,381 | 298,711,909 | 53,319,639 | 175,539 | 1,354,021,324 | 386,439 | 1,952,818,231 |
| 2007 | 256,995,275 | 339,509,022 | 59,308,991 | 228,986 | 2,161,413,409 | 668,063 | 2,818,123,746 |
| 2008 | 269,603,155 | 395,752,214 | 62,400,369 | 225,736 | $(650,071,204)$ | 968,222 | 78,878,492 |
| 2009 | 278,619,872 | 449,235,653 | 36,334,585 ${ }^{3}$ | 154,113 | $(2,592,555,321)$ | 345,732 | (1,827,865,369) |
| 2010 | 289,616,027 | 492,005,566 | 29,549,494 ${ }^{4}$ | 101,899 | 1,485,935,124 | 32,381 | 2,297,240,491 |
| 2011 | 294,314,002 | 525,726,734 | 48,911,1974 | 190,770 | 2,499,472,278 | 18,333 | 3,368,633,314 |
| 2012 | 298,105,053 | 568,015,364 | 49,620,870 ${ }^{5}$ | 129,622 | 89,045,782 | 10,852 | 1,004,927,543 |
| 2013 | 306,631,621 | 617,925,370 | 48,891,432 ${ }^{6}$ | 537,741 | 1,747,230,627 | 20,823 | 2,721,237,614 |

1 Per 2000 and 2003 legislation, employers were not required to remit the Group Life and Disability Insurance portion of required employer contributions. 2 Pension obligation bonds for $\$ 440$ million were issued in 2004.
3 Per 2009 legislation, employers were not required to remit the Group Life and Disability Insurance portion of required employer contributions
4 Per 2010 legislation, employers were not required to remit the Group Life and Disability Insurance portion of required employer contributions from April 1, 2010 through June 30, 2010 and April 1, 2011 through June 30, 2011.

5 Per 2012 legislation, employers were not required to remit the Group Life and Disability Insurance portion of required employer contributions from April 1, 2012 through June 30, 2012

6 Per 2013 legislation, employers were not required to remit the Group Life and Disability Insurance portion of required employer contributions from April 1, 2013 through June 30, 2013.

## BENEFITS BY TYPE

Last ten fiscal years

| Fiscal <br> Year | Monthly <br> Retirement <br> Benefits | Retirement <br> Dividend | Death <br> Benefits | Refund of <br> Contributions <br> Separations | Refund of <br> Contributions <br> Deaths | Insurance <br> Premiums <br> (KPERS) | Disability, <br> Insurance |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | $\$ 670,246,402$ | $\$ 6,672,212$ | $\$ 8,685,182$ | $\$ 35,903,879$ | $\$ 5,275,591$ | $\$ 6,362,986$ | $\$ 44,033,406$ |
| Premiums (OPEB) |  |  |  |  |  |  |  |

## EXPENSES BY TYPE

Last ten fiscal years
Refund of Contributions

| Fiscal Year | Benefits | Separations | Death | Insurance Premiums (KPERS) | Administration (Retirement) | Disability Insurance Premium (OPEB) | Administration (OPEB) ${ }^{1}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | \$ 685,603,796 | \$ 35,903,879 | \$ 5,275,591 | \$ 6,362,986 | \$7,231,295 | \$ 44,033,406 | \$ | \$ 784,410,953 |
| 2005 | 745,413,160 | 40,395,640 | 6,378,293 | 5,997,113 | 7,340,147 | 47,705,996 | - | 853,230,349 |
| 2006 | 814,789,655 | 40,628,580 | 6,197,596 | 5,973,688 | 7,718,879 | 48,984,269 |  | 924,292,667 |
| 2007 | 877,332,611 | 40,632,701 | 5,496,510 | 6,382,962 | 8,552,925 | 49,202,924 | 340,619 | 987,941,252 |
| 2008 | 954,093,592 | 43,197,593 | 5,275,097 | 6,824,361 | 9,253,050 | 49,893,770 | 350,076 | 1,068,887,539 |
| 2009 | 1,009,177,354 | 38,156,001 | 5,773,422 | 6,946,461 | 11,085,498 | 47,356,797 | 361,887 | 1,118,857,420 |
| 2010 | 1,069,165,206 | 37,214,954 | 6,147,736 | 7,035,185 | 10,158,398 | 43,746,954 | 375,792 | 1,173,844,225 |
| 2011 | 1,156,823,960 | 43,579,892 | 5,984,123 | 6,752,185 | 9,261,260 | 46,753,126 | 363,357 | 1,269,517,903 |
| 2012 | 1,246,974,132 | 49,665,542 | 6,231,284 | 6,128,984 | 9,620,933 | 49,040,446 | 307,177 | 1,367,968,498 |
| 2013 | 1,298,444,838 | 48,265,870 | 5,633,961 | 6,058,253 | 10,426,813 | 42,499,559 | 431,084 | 1,411,760,378 |

1 Administration expenses for the Group Death and Disability Plan prior to fiscal year 2007 are included in the administrative expenses of the Retirement System.

## CHANGES IN NET POSITION

Last seven fiscal years ${ }^{1}$

| 2007 |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Additions <br> Contributions | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |  |
| $\quad$Member Contributions | $\$ 306,631,621$ | $\$ 298,105,053$ | $\$ 294,314,002$ | $\$ 289,616,027$ | $\$ 278,619,872$ | $\$ 269,603,155$ | $\$ 256,995,275$ |
| Employer Contributions | $\underline{617,925,370}$ | $\underline{568,015,364}$ | $\underline{525,726,734}$ | $\underline{492,005,566}$ | $\underline{449,235,653}$ | $\underline{395,752,213}$ | $\underline{339,509,022}$ |
| Total Contributions | $\underline{924,556,991}$ | $\underline{866,120,417}$ | $\underline{820,040,736}$ | $\underline{\underline{781,621,593}}$ | $\underline{\underline{727,855,525}}$ | $\underline{\underline{665,355,368}}$ | $\underline{\underline{596,504,297}}$ |

Investments
Net Appreciation in Fair Value of
Investments
Interest
Dividends
Real Estate Income, Net of
Operating Expenses
Other Investment Income
Less Investment Expense
Net Investment Income
From Securities Lending Activities

| Securities Lending Income | 4,827,054 | 4,353,102 | 5,431,118 | 5,372,538 | (8,838,220) | 95,645,344 | 125,998,402 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Securities Lending Expenses |  |  |  |  |  |  |  |
| Borrower Rebates | (2,450,894) | (1,769,773) | 739,912 | $(48,804)$ | (10,469,638) | (89,471,546) | (120,938,041) |
| Management Fees | 1,309,439 | 1,305,208 | (1,020,082) | $(692,273)$ | (1,309,509) | (2,870,760) | (1,003,820) |
| Total Securities Lending Activities Expense | 1,141,455 | 464,565 | (280,170) | $(741,077)$ | (11,779,147) | (92,342,306) | $\underline{(121,941,861)}$ |
| Net Income from Security Lending Activities | 5,968,509 | 4,817,667 | 5,150,948 | 4,631,461 | (20,617,367) | 3,303,038 | 4,056,541 |
| Total Net Investment Income | 1,747,230,627 | 89,045,782 | 2,499,472,278 | 1,485,935,124 | (2,592,555,321) | (650,064,654) | 2,161,413,409 |
| Other Miscellaneous Income | 534,268 | 127,708 | 174,430 | 74,088 | 110,178 | 136,955 | 132,874 |
| Total Additions (Net Reductions) | 2,672,321,886 | 955,293,907 | 3,319,687,444 | 2,267,630,805 | (1,864,589,618) | 15,427,669 | 2,758,050,580 |

Deductions

| Monthly Retirement Benefits | (1,288,986,517) | $(1,237,559,898)$ | (1,147,209,272) | $(1,060,205,818)$ | $(999,939,614)$ | $(945,704,657)$ | $(868,179,029)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Refunds of Contributions | (53,899,831) | $(55,896,826)$ | $(49,564,015)$ | $(43,362,690)$ | $(43,929,423)$ | $(48,472,690)$ | $(46,129,211)$ |
| Death Benefits | $(9,458,321)$ | $(9,414,234)$ | $(9,614,688)$ | $(8,959,388)$ | $(9,237,740)$ | $(8,388,935)$ | $(9,153,582)$ |
| Insurance Premiums and Disability Benefits | $(6,058,253)$ | $(6,128,984)$ | $(6,752,185)$ | $(7,035,185)$ | $(6,946,461)$ | $(6,824,361)$ | $(6,382,962)$ |
| Administrative Expenses | (10,426,813) | (9,620,933) | (9,261,260) | (10,158,398) | (11,085,498) | (9,253,050) | (8,552,925) |
| Total Deductions to Plan Net Position | (1,368,829,735) | (1,318,620,875) | (1,222,401,420) | (1,129,721,480) | $(1,071,138,736)$ | (1,018,643,693) | (938,397,709) |
| Change in Net Position | \$1,303,492,151 | \$(363,326,968) | \$2,097,286,025 | \$1,137,909,326 | \$(2,935,728,354) | \$(1,003,216,024) | \$1,819,652,871 |

[^5]
## CHANGES IN NET POSITION -DEATH AND DISABILITY PLAN

Last seven fiscal years ${ }^{1}$

|  | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |  |
| Contributions |  |  |  |  |  |  |  |
| Employer Contributions | \$48,891,432 | \$49,620,870 | \$48,911,197 | \$29,549,494 | \$36,334,585 | \$62,400,370 | \$59,308,991 |
| Total Contributions | 48,891,432 | 49,620,870 | 48,911,197 | 29,549,494 | 36,334,585 | 62,400,370 | 59,308,991 |
| Investments |  |  |  |  |  |  |  |
| Interest | 20,823 | 10,852 | 18,333 | 36,229 | 351,362 | 968,222 | 668,063 |
| Less Investment Expense | - | - | (114) | $(3,848)$ | $(5,630)$ | $(6,550)$ | $(6,239)$ |
| Net Investment Income | 20,823 | 10,852 | 18,219 | 32,381 | 345,732 | 961,672 | $(6,239)$ |
| Total Net Investment Income | $\underline{20,823}$ | 10,852 | 18,219 | 32,381 | 345,732 | 961,672 | $(6,239)$ |
| Other Miscellaneous Income | 3,473 | 1,914 | 16,340 | $\underline{27,811}$ | 43,935 | 88,781 | 96,112 |
| Total Additions (Net Reductions) to Plan Net Position | 48,915,728 | 49,633,636 | 48,945,756 | 29,609,686 | 36,724,252 | 63,450,823 | 59,398,864 |
| Deductions |  |  |  |  |  |  |  |
| Insurance Premiums and Disability Benefits (OPEB) | $(42,499,559)$ | $(49,040,446)$ | $(46,753,126)$ | $(43,746,954)$ | $(47,356,797)$ | $(49,893,770)$ | $(49,202,924)$ |
| Administrative Expenses | $(431,084)$ | (307,177) | $(363,243)$ | (375,792) | $(361,887)$ | (350,076) | (334,380) |
| Total Deductions to Plan Net Position | (42,930,643) | $(49,347,623)$ | $(47,116,369)$ | (44,122,746) | $(47,718,684)$ | $(50,243,846)$ | $(49,537,304)$ |
| Change in Net Position | \$5,985,085 | \$286,013 | \$1,829,387 | \$(14,513,060) | \$(10,994,432) | \$13,206,977 | \$9,861,560 |

1 Information available for current and prior six fiscal years.

## BENEFIT AND REFUND DEDUCTIONS FROM NET POSITION BY TYPE

| Last eight fiscal years' |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Benefit | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
| Age and service benefits: |  |  |  |  |  |  |  |  |
| Retirees | \$1,228,537,001 | \$1,180,214,270 | \$1,092,518,456 | \$1,008,271,726 | \$950,746,107 | \$898,910,097 | \$823,994,836 | \$763,960,585 |
| Survivors | 60,449,516 | 57,345,628 | 54,690,816 | 51,934,092 | 49,193,507 | 46,794,560 | 44,184,193 | 42,018,147 |
| Death in service benefits | 9,458,321 | 9,414,234 | 9,614,688 | 8,959,388 | 9,237,740 | 8,388,935 | 9,153,582 | 8,810,923 |
| Insurance Premiums | 6,058,253 | 6,128,984 | 6,752,185 | 7,035,185 | 6,946,461 | 6,824,361 | 6,383,962 | 5,973,688 |
| Insurance Premiums and Disabiltiy benefits (OPEB) | 42,499,559 | 49,040,446 | 46,753,126 | 43,746,954 | 47,356,797 | 49,893,770 | 49,202,924 | 48,984,269 |
| Total Benefits | \$1,347,002,650 | \$1,302,143,562 | \$1,210,329,271 | \$1,119,947,345 | \$1,063,480,612 | \$1,010,811,723 | \$932,919,497 | \$869,747,612 |
| Type of Refund |  |  |  |  |  |  |  |  |
| Death | \$5,633,961 | \$6,231,284 | \$5,984,123 | \$6,147,736 | \$5,773,422 | \$5,275,097 | \$5,496,510 | \$6,197,596 |
| Separation | 48,265,870 | 49,665,542 | 43,579,892 | 37,214,954 | 38,156,001 | 43,197,593 | 40,632,701 | 40,628,580 |
| Total Refunds | \$53,899,831 | \$55,896,826 | $\underline{\text { \$49,564,015 }}$ | \$43,362,690 | \$43,929,423 | \$48,472,690 | \$46,129,211 | \$46,826,176 |

[^6]
## HIGHLIGHT OF OPERATIONS — 10-YEAR SUMMARY

|  | 2013 | 2012 | 2011 | 2010 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Membership Composition |  |  |  |  |  |
| Number of Retirants | 77,727 | 74,665 | 70,349 | 67,219 | 64,803 |
| Number of Survivors ${ }^{2}$ | 6,591 | 6,360 | 6,149 | 5,945 | 5,764 |
| New Retirants During the Fiscal Year | 6,071 | 6,941 | 6,245 | 5,188 | 4,893 |
| Active and Inactive Members ${ }^{1}$ | 202,022 | 200,732 | 202,150 | 204,155 | 197,822 |
| Participating Employers | 1,506 | 1,504 | 1,511 | 1,499 | 1,492 |
| Financial Results (in millions) |  |  |  |  |  |
| Member Contributions | \$307 | \$298 | \$294 | \$290 | \$279 |
| Employer Contributions ${ }^{3}$ | 667 | 618 | 575 | 522 | 486 |
| Retirement / Death Benefits | 1,298 | 1,247 | 1,157 | 1,069 | 1,009 |
| Investment Income ${ }^{4}$ | 1,747 | 89 | 2,499 | 1,486 | $(2,592)$ |
| Employer Contribution Rate ${ }^{5}$ |  |  |  |  |  |
| KPERS--State / School | 10.37\% | 9.77\% | 9.17\% | 8.57\% | 7.97\% |
| KPERS--Local ${ }^{6}$ | 8.94 | 8.34 | 7.74 | 7.14 | 6.54 |
| KP\&F (Uniform Participating) ${ }^{6}$ | 17.26 | 16.54 | 14.57 | 12.86 | 13.51 |
| Judges | 24.15 | 21.68 | 19.89 | 20.90 | 22.08 |
| TIAA | - | - | - | - | - |
| Unfunded Actuarial Liability (in millions) |  |  |  |  |  |
| KPERS-State / School | \$7,658 | \$6,920 | \$6,244 | \$5,805 | \$6,240 |
| KPERS-Local | 1,699 | 1,542 | 1,395 | 1,315 | 1,385 |
| KP\&F | 866 | 739 | 598 | 530 | 619 |
| Judges | 29 | 27 | 27 | 26 | 36 |
| TIAA ${ }^{7}$ | - | - | - | - | - |
| Funding Ratios ${ }^{8}$ |  |  |  |  |  |
| KPERS-State / School | 53.90\% | 56.80\% | 59.90\% | 61.60\% | 56.90\% |
| KPERS-Local | 59.50 | 61.20 | 63.20 | 63.70 | 59.00 |
| KP\&F | 66.50 | 69.80 | 74.20 | 76.20 | 70.50 |
| Judges | 81.40 | 82.50 | 82.50 | 82.30 | 74.60 |
| TIAA | - | - | - | - | - |

1 Membership information taken from System's actuarial valuation.
2 This is the number of joint annuiants as of December 31 per the System's records starting December 31, 2005.
3 Pension obligation bonds for $\$ 440$ million were issued in 2004.
4 Investment income for prior years has been adjusted to reflect changes in unrealized appreciation
5 Rates include Group Life and Disability contributions where applicable. Per 2000 and 2001 legislation, employers were not required to remit the Group Life and
Disability portion of the Actual Rate from April 1, 2000 through December 31, 2001. Per 2002 and 2003 legislation, employers were not required to remit the Group
Life and Disability portion of the Actual Rate from July 1, 2002 through December 31, 2002 or from April 1, 2003 through June 30, 2004 . Per 2009 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from March 1, 2009 through November 30, 2009 . Per 2010 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from April 1, 2010 through June 30, 2010 and from April 1, 2011 through June 30 , 2011. Per 2012 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from April 1, 2012 through June 30, 2012. Per 2013 legislation, employers were not required to remit Group Life Insurance and Disability portion of the Actual Rate from April 1, 2013 , through June 30, 2013.

6 KPERS Local and KP\&F contribution rates are reported on a calendar year basis.
7 Legislation provided for bonds to be issued December 31, 2002 to fully fund the existing unfunded liability for the TIAA group.
8 The funding percentage indicates the actuarial soundess of the System. Generally, the greater the percentage, the stronger the System.

## HIGHLIGHT OF OPERATIONS - 10-YEAR SUMMARY

|  | 2008 | 2007 | 2006 | 2005 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Membership Composition |  |  |  |  |  |
| Number of Retirants | 61,489 | 60,166 | 57,954 | 61,125 | 59,124 |
| Number of Survivors ${ }^{2}$ | 5,613 | 5,599 | 5,394 | - | - |
| New Retirants During the Fiscal Year | 4,780 | 4,423 | 4,452 | 4,141 | 3,612 |
| Active and Inactive Members ${ }^{1}$ | 195,187 | 192,307 | 190,305 | 189,020 | 189,460 |
| Participating Employers | 1,482 | 1,474 | 1,474 | 1,461 | 1,454 |
| Financial Results (in millions) |  |  |  |  |  |
| Member Contributions | \$270 | \$257 | \$246 | \$233 | \$230 |
| Employer Contributions ${ }^{3}$ | 458 | 399 | 352 | 294 | 714 |
| Retirement / Death Benefits | 954 | 877 | 815 | 745 | 686 |
| Investment Income ${ }^{4}$ | (649) | 2,162 | 1,354 | 1,223 | 1,336 |
| Employer Contribution Rate ${ }^{5}$ |  |  |  |  |  |
| KPERS--State / School | 7.37\% | 6.77\% | 6.07\% | 5.47\% | 4.58\% |
| KPERS--Local ${ }^{6}$ | 5.93 | 5.31 | 4.61 | 4.01 | 3.22 |
| KP\&F (Uniform Participating) ${ }^{6}$ | 13.88 | 13.32 | 12.39 | 11.69 | 9.47 |
| Judges | 22.38 | 19.11 | 21.97 | 19.22 | 16.67 |
| TIAA | - | - | - | 0.60 | - |
| Unfunded Actuarial Liability (in millions) |  |  |  |  |  |
| KPERS--State / School | \$4,312 | \$4,135 | \$3,926 | \$3,584 | \$2,734 |
| KPERS--Local | 941 | 893 | 869 | 824 | 588 |
| KP\&F | 284 | 322 | 341 | 313 | 249 |
| Judges | 15 | 15 | 17 | 22 | 15 |
| TIAA ${ }^{7}$ | - | - | - | - | - |
| Funding Ratios ${ }^{8}$ |  |  |  |  |  |
| KPERS--State / School | 68.60\% | 67.50\% | 67.21\% | 68.60\% | 74.07\% |
| KPERS--Local | 70.10 | 68.80 | 67.38 | 67.30 | 73.69 |
| KP\&F | 85.50 | 82.40 | 80.46 | 81.10 | 84.04 |
| Judges | 88.70 | 87.40 | 85.02 | 80.10 | 84.92 |
| TIAA | - | - | - | - | - |

1 Membership information taken from System's actuarial valuation.
2 This is the number of joint annuiants as of December 31 per the System's records starting December 31, 2005.
3 Pension obligation bonds for $\$ 440$ million were issued in 2004.
4 Investment income for prior years has been adjusted to reflect changes in unrealized appreciation.
5 Rates include Group Life and Disability contributions where applicable. Per 2000 and 2001 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from April 1, 2000 through December 31, 2001. Per 2002 and 2003 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from July 1, 2002 through December 31, 2002 or from April 1, 2003 through June 30, 2004. Per 2009 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from March 1, 2009 through November 30, 2009. Per 2010 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from April 1, 2010 through June 30, 2010 and from April 1, 2011 through June 30, 2011. Per 2012 legislation, employers were not required to remit the Group Life and Disability portion of the Actual Rate from April 1, 2012 through June 30, 2012. Per 2013 legislation, employers were not required to remit Group Life Insurance and Disability portion of the Actual Rate from April 1, 2013, through June 30, 2013.
6 KPERS Local and KP\&F contribution rates are reported on a calendar year basis.
7 Legislation provided for bonds to be issued December 31, 2002 to fully fund the existing unfunded liability for the TIAA group.
8 The funding percentage indicates the actuarial soundess of the System. Generally, the greater the percentage, the stronger the System.

## NUMBER OF RETIRED MEMBERS AND SURVIVORS BY TYPE OF BENEFIT

As of December 31, 2012
Monthly Benefit
\$ -99
$\$ 100-199$
$\$ 200-299$
$\$ 300-399$
$\$ 400-499$
$\$ 500-599$
$\$ 600-699$
$\$ 700-799$
$\$ 800-899$
$\$ 900-999$
$\$ 1,000-1,499$
$\$ 1,500-1,999$
$\$ 2,000-2,499$
$\$ 2,500-2,999$
$\$ 3,000-3,499$
$\$ 3,500-3,999$
$\$ 4,000$ or More
Totals

| Number of |
| ---: |
| Retirees |
| 4,343 |
| 5,768 |
| 5,833 |
| 5,668 |
| 5,175 |
| 4,664 |
| 4,049 |
| 3,676 |
| 3,400 |
| 3,232 |
| 13,397 |
| 10,309 |
| 6,877 |
| 3,660 |
| 1,893 |
| 970 |
| 1,404 |
| $\underline{84,318}$ |


| Normal |
| ---: |
| Retirement |
| 3,966 |
| 3,842 |
| 3,422 |
| 3,343 |
| 3,114 |
| 2,936 |
| 2,647 |
| 2,454 |
| 2,395 |
| 2,434 |
| 11,372 |
| 9,687 |
| 6,657 |
| 3,549 |
| 1,827 |
| 947 |
| $\underline{1,371}$ |
| $\underline{65,963}$ |


| Early |
| ---: |
| Retirement |
| 369 |
| 1,881 |
| 2,372 |
| 2,275 |
| 2,002 |
| 1,685 |
| 1,361 |
| 1,179 |
| 948 |
| 744 |
| 1,750 |
| 403 |
| 120 |
| 53 |
| 35 |
| 9 |
| $\underline{27}$ |
| $\underline{17,213}$ |

$\left.\begin{array}{rr}\text { Service-Connected } \\ \text { Death or Disability }\end{array} \begin{array}{r}\text { Nonservice-Connected } \\ \text { Death or Disability }\end{array}\right\}$

## NUMBER OF RETIRED MEMBERS AND SURVIVORS BY MONTHLY BENEFIT AMOUNT

As of December 31, 2012


## NUMBER OF RETIRED MEMBERS AND SURVIVORS BY TYPE OF PAYMENT OPTION

As of December 31, 2012

| Monthly Benefit | Maximum No Survivor | Joint <br> 1/2 to <br> Survivor | Joint Same to Survivor |  | Joint 3/4 to Survivor | Widowed Children Survivor | Life <br> Certain w/5 Yrs | Certain w/15 Yrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ - 99 | 3,432 | 266 | 439 | 53 | 36 | 4 | 33 | 80 |
| \$100-199 | 4,103 | 583 | 709 | 110 | 106 | 29 | 28 | 100 |
| \$200-299 | 4,132 | 625 | 752 | 85 | 132 | 14 | 30 | 63 |
| \$300-399 | 3,899 | 627 | 761 | 80 | 157 | 39 | 26 | 79 |
| \$400-499 | 3,598 | 581 | 672 | 85 | 136 | 40 | 16 | 47 |
| \$500-599 | 3,215 | 540 | 613 | 49 | 143 | 30 | 22 | 52 |
| \$600-699 | 2,770 | 447 | 549 | 59 | 134 | 35 | 16 | 39 |
| \$700-799 | 2,470 | 464 | 477 | 46 | 135 | 33 | 16 | 35 |
| \$800-899 | 2,206 | 490 | 450 | 42 | 135 | 39 | 10 | 28 |
| \$900-999 | 2,082 | 501 | 417 | 37 | 135 | 32 | 10 | 18 |
| \$1,000-1,499 | 8,302 | 2,133 | 1,740 | 148 | 767 | 178 | 40 | 89 |
| \$1,500-1,999 | 6,538 | 1,733 | 1,134 | 62 | 648 | 120 | 26 | 48 |
| \$2,000-2,499 | 4,469 | 1,197 | 651 | 50 | 414 | 58 | 21 | 17 |
| \$2,500-2,999 | 2,330 | 664 | 336 | 30 | 257 | 26 | 8 | 9 |
| \$3,000-3,499 | 1,188 | 351 | 185 | 13 | 136 | 12 | 3 | 5 |
| \$3,500-3,999 | 578 | 178 | 112 | 6 | 84 | 8 | 1 | 3 |
| \$4,000 or More | $\underline{707}$ | 346 | 199 | 8 | 140 | - | 1 | 3 |
| Totals | $\underline{56,019}$ | $\underline{\underline{11,726}}$ | $\underline{\underline{10,196}}$ | $\underline{\underline{963}}$ | $\underline{\underline{3695}}$ | $\underline{697}$ | $\underline{307}$ | $\underline{\underline{715}}$ |

## AVERAGE BENEFIT BYYEARS OF SERVICE - FIVE YEAR SUMMARY

New retirees by calendar year

| Service Credit |  | 2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less Than 5 | Retired Members | 203 | 262 | 263 | 305 | 259 |
|  | Average FAS ${ }^{1}$ | \$24,286.91 | \$21,194.51 | \$23,919.51 | \$24,025.35 | \$27,378.64 |
|  | Average Benefit | \$130.90 | \$110.58 | \$93.25 | \$104.10 | \$138.07 |
|  | Average Years | 2.67 | 2.56 | 2.65 | 2.82 | 2.80 |
| 5-9.99 | Retired Members | 341 | 347 | 435 | 460 | 459 |
|  | Average FAS ${ }^{1}$ | \$27,224.87 | \$27,718.33 | \$28,869.68 | \$30,982.85 | \$32,228.24 |
|  | Average Benefit | \$277.67 | \$300.13 | \$292.23 | \$312.36 | \$325.52 |
|  | Average Years | 7.73 | 7.66 | 7.75 | 7.76 | 7.61 |
| 10-14.99 | Retired Members | 736 | 713 | 877 | 1,036 | 975 |
|  | Average FAS ${ }^{1}$ | \$32,265.54 | \$32,669.13 | \$33,333.42 | \$35,236.86 | \$33,774.49 |
|  | Average Benefit | \$471.14 | \$484.31 | \$478.88 | \$507.92 | \$484.07 |
|  | Average Years | 12.19 | 12.18 | 12.14 | 12.23 | 12.22 |
| 15-19.99 | Retired Members | 765 | 706 | 822 | 972 | 770 |
|  | Average FAS ${ }^{1}$ | \$37,387.87 | \$37,154.28 | \$39,884.61 | \$39,410.16 | \$39,659.90 |
|  | Average Benefit | \$783.99 | \$800.55 | \$830.36 | \$837.31 | \$860.25 |
|  | Average Years | 17.40 | 17.39 | 17.30 | 17.30 | 17.38 |
| 20-24.99 | Retired Members | 730 | 685 | 819 | 988 | 911 |
|  | Average FAS ${ }^{1}$ | \$41,860.17 | \$43,734.53 | \$44,677.45 | \$45,174.03 | \$45,799.95 |
|  | Average Benefit | \$1,154.33 | \$1,284.91 | \$1,238.44 | \$1,236.79 | \$1,308.97 |
|  | Average Years | 22.34 | 22.45 | 22.23 | 22.37 | 22.42 |
| 25-29.99 | Retired Members | 754 | 763 | 852 | 1,026 | 870 |
|  | Average FAS ${ }^{1}$ | \$49,038.10 | \$48,788.05 | \$50,662.87 | \$52,267.39 | \$53,691.38 |
|  | Average Benefit | \$1,738.41 | \$1,726.15 | \$1,775.08 | \$1,839.53 | \$1,944.89 |
|  | Average Years | 27.47 | 27.42 | 27.35 | 27.30 | 27.25 |
| 30-34.99 | Retired Members | 751 | 771 | 926 | 1,056 | 799 |
|  | Average FAS ${ }^{1}$ | \$54,546.48 | \$55,828.21 | \$57,899.34 | \$57,115.11 | \$57,857.40 |
|  | Average Benefit | \$2,227.64 | \$2,337.01 | \$2,418.71 | \$2,373.81 | \$2,475.40 |
|  | Average Years | 32.06 | 31.94 | 32.03 | 32.14 | 32.10 |
| 35-39.99 | Retired Members | 270 | 316 | 401 | 468 | 311 |
|  | Average FAS' | \$56,508.71 | \$60,485.97 | \$60,225.79 | \$58,272.80 | \$61,819.37 |
|  | Average Benefit | \$2,541.95 | \$2,763.31 | \$2,710.63 | \$2,650.18 | \$2,915.96 |
|  | Average Years | 37.03 | 37.06 | 36.92 | 37.07 | 36.95 |
| 40-44.99 | Retired Members | 67 | 63 | 143 | 144 | 108 |
|  | Average FAS ${ }^{1}$ | \$53,281.02 | \$58,960.07 | \$61,221.12 | \$59,078.25 | \$65,700.90 |
|  | Average Benefit | \$2,862.03 | \$3,235.13 | \$2,964.44 | \$3,080.72 | \$3,230.99 |
|  | Average Years | 41.84 | 41.63 | 41.72 | 41.78 | 41.52 |
| 45-49.99 | Retired Members | 6 | 7 | 8 | 15 | 11 |
|  | Average FAS ${ }^{\text {1 }}$ | \$42,007.13 | \$53,159.68 | \$59,155.97 | \$59,128.20 | \$56,584.64 |
|  | Average Benefit | \$2,464.83 | \$2,647.02 | \$2,926.19 | \$2,936.16 | \$2,842.29 |
|  | Average Years | 48.17 | 45.82 | 46.31 | 46.47 | 47.34 |
| 50 and Over | Retired Members | 2 | 9 | 4 | 3 |  |
|  | Average FAS ${ }^{1}$ | \$37,202.08 | \$47,291.16 | \$71,532.67 | \$82,670.19 | \$79,425.94 |
|  | Average Benefit | \$3,535.44 | \$2,662.89 | \$4,209.75 | \$4,305.29 | \$4,676.20 |
|  | Average Years | 56.50 | 54.06 | 56.06 | 52.08 | 50.25 |
| Total Number | Retired Members | 4,625 | 4,642 | 5,550 | 6,473 | 5,474 |
|  | Average FAS' | \$41,992.17 | \$42,772.08 | \$44,667.14 | \$45,091.55 | \$45,129.48 |
|  | Average Benefit | \$1,252.78 | \$1,327.48 | \$1,364.27 | \$1,370.68 | \$1,365.30 |
|  | Average Years | 21.57 | 21.62 | 21.89 | 21.97 | 21.16 |

[^7]Dedicated fiduciary. First and always.

## PRINCIPAL PARTICIPATING EMPLOYERS

Last eight fiscals years'

|  | 2013 |  |  | 2012 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participating Government | Covered Employees | Rank | \% of Total System | Covered Employees |  | \% of Total System |
| State of Kansas | 25,293 | , | 16\% | 25,382 | 1 | 16\% |
| USD 259, Wichita | 6,709 | 2 | 4\% | 6,542 | 2 | 4\% |
| USD 233, Olathe | 4,274 | 3 | 3\% | 4,185 | 3 | 3\% |
| USD 512, Shawnee Mission | 3,678 | 4 | 2\% | 3,705 | 4 | 2\% |
| USD 500, Kansas City | 3,287 | 5 | 2\% | 3,191 | 5 | 2\% |
| USD 229, Blue Valley | 3,088 | 6 | 2\% | 3,014 | 7 | 2\% |
| Johnson County | 3,065 | 7 | 2\% | 3,098 | 6 | 2\% |
| Sedgwick County | 2,549 | 8 | 2\% | 2,605 | 9 | 2\% |
| USD 501, Topeka Public Schools | 2,339 | 9 | 1\% | 2,336 | 8 | 2\% |
| USD 497, Lawrence | 1,697 | 10 | 1\% | 1,627 | 10 | 1\% |
| All Other ${ }^{2}$ | 100,074 |  | 65\% | 99,369 |  | 64\% |
| Total (1,504 employers) | $\underline{\underline{156,053}}$ |  | $\underline{\underline{100 \%}}$ | $\underline{\underline{155,054}}$ |  | $\underline{\underline{100 \%}}$ |
|  | 2011 |  |  | 2010 |  |  |
| Participating Government | Covered Employees | Rank | \% of Total System | Covered Employees | Rank | \% of Total System |
| State of Kansas | 27,066 | 1 | 17\% | 26,735 | 1 | 17\% |
| USD 259, Wichita | 6,749 | 2 | 4\% | 6,861 | 2 | 4\% |
| USD 233, Olathe | 4,082 | 3 | 3\% | 4,339 | 3 | 3\% |
| USD 512, Shawnee Mission | 3,837 | 4 | 2\% | 4,005 | 4 | 2\% |
| USD 500, Kansas City | 3,165 | 5 | 2\% | 3,178 | 5 | 2\% |
| USD 229, Blue Valley | 2,977 | 6 | 2\% | 2,957 | 6 | 2\% |
| Johnson County | 2,633 | 7 | 2\% | 2,706 | 7 | 2\% |
| Sedgwick County | 2,256 | 9 | 1\% | 2,298 | 9 | 1\% |
| USD 501, Topeka Public Schools | 2,341 | 8 | 1\% | 2,466 | 8 | 2\% |
| USD 497, Lawrence | 1,595 | 10 | 1\% | 1,715 | 10 | 1\% |
| All Other ${ }^{2}$ | 102,004 |  | 64\% | 104,291 |  | 65\% |
| Total (1,504 employers) | $\underline{\underline{158,705}}$ |  | 100\% | $\underline{\underline{161,551}}$ |  | 100\% |

1 Information available for current and prior seven fiscal years. State of Kansas includes the Board of Regents
2 In 2013, "All Other" consisted of:

| Type | Number | Covered <br> Employees |
| :--- | ---: | ---: |
| School districts | 272 | 48,839 |
| Cities and Counties | 541 | 27,089 |
| Post-Secondary Education ${ }^{3}$ | 48 | 11,551 |
| Other | $\underline{633}$ | $\underline{12,595}$ |
|  | $\underline{\underline{1,494}}$ | $\underline{\underline{100,074}}$ |

3 Post-Secondary Education does not include State Board of
Regents institutions.
Source: Data provided by KPERS Information Technology and Benefits and Member Services divisions.

## PRINCIPAL PARTICIPATING EMPLOYERS

Last eight fiscals years ${ }^{1}$

|  | 2009 |  |  |  | 2008 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participating Government | Covered Employees | Rank |  | \% of Total System | Covered Employees | Rank | \% of Total System |
| State of Kansas | 25,775 | 1 |  | 16\% | 25,299 | 1 | 16\% |
| USD 259, Wichita | 6,850 | 2 |  | 4\% | 6,748 | 2 | 4\% |
| USD 233, Olathe | 4,625 | 3 |  | 3\% | 4,307 | 3 | 3\% |
| USD 512, Shawnee Mission | 4,167 | 4 |  | 3\% | 4,128 | 4 | 3\% |
| USD 500, Kansas City | 3,324 | 5 |  | 2\% | 3,337 | 5 | 2\% |
| USD 229, Blue Valley | 2,983 | 6 |  | 2\% | 2,930 | 7 | 2\% |
| Johnson County | 2,476 | 8 |  | 2\% | 3,137 | 6 | 2\% |
| Sedgwick County | 1,847 | 9 |  | 1\% | 2,313 | 9 | 1\% |
| USD 501, Topeka Public Schools | 2,529 | 7 |  | 2\% | 2,548 | 8 | 2\% |
| USD 497, Lawrence | 1,766 | 10 |  | 1\% | 1,712 | 10 | 1\% |
| All Other ${ }^{2}$ | 100,723 |  |  | 64\% | 98,231 |  | 64\% |
| Total (1,504 employers) | $\underline{\underline{157,065}}$ |  |  | $\underline{\underline{100 \%}}$ | $\underline{\underline{154,690}}$ |  | $\underline{\underline{100 \%}}$ |
|  |  | 2007 |  |  | 2006 |  |  |
| Participating Government | Covered Employees |  | Rank | \% of Total System | Covered Employees | Rank | \% of Total System |
| State of Kansas | 25,069 |  | 1 | 17\% | 25,134 | 1 | 17\% |
| USD 259, Wichita | 6,590 |  | 2 | 4\% | 6,546 | 2 | 4\% |
| USD 233, Olathe | 4,277 |  | 3 | 3\% | 4,155 | 3 | 3\% |
| USD 512, Shawnee Mission | 4,007 |  | 4 | 3\% | 3,968 | 4 | 3\% |
| USD 500, Kansas City | 3,334 |  | 5 | 2\% | 3,436 | 5 | 2\% |
| USD 229, Blue Valley | 2,809 |  | 7 | 2\% | 2,770 | 7 | 2\% |
| Johnson County | 3,002 |  | 6 | 2\% | 3,229 | 6 | 2\% |
| Sedgwick County | 2,309 |  | 9 | 2\% | 2,434 | 9 | 2\% |
| USD 501, Topeka Public Schools | 2,469 |  | 8 | 2\% | 2,544 | 8 | 2\% |
| USD 497, Lawrence | 1,692 |  | 10 | 1\% | 1,736 | 10 | 1\% |
| All Other ${ }^{2}$ | 95,891 |  |  | 63\% | 93,121 |  | 62\% |
| Total (1,504 employers) | $\underline{\underline{151,449}}$ |  |  | $\underline{\underline{100 \%}}$ | $\underline{\underline{149,073}}$ |  | $\underline{\underline{100 \%}}$ |

1 Information available for current and prior seven fiscal years. State of Kansas includes the Board of Regents
2 In 2013, "All Other" consisted of:

| Type | Number | Covered <br> Employees |
| :--- | ---: | ---: |
| School districts | 272 | 48,839 |
| Cities and Counties | 541 | 27,089 |
| Post-Secondary Education ${ }^{3}$ | 48 | 11,551 |
| Other | $\underline{\underline{633}}$ | $\underline{12,595}$ |
|  | $\underline{\underline{1,494}}$ | $\underline{\underline{100,074}}$ |

3 Post-Secondary Education does not include State Board of Regents institutions.

Source: Data provided by KPERS Information Technology and Benefits and Member Services divisions.

## PRINCIPAL PARTICIPATING EMPLOYERS-DEATH AND DISABILITY PLAN

Last seven fiscal years ${ }^{1}$

|  | 2013 |  |  | 2012 |  |  | 2011 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participating Government | Covered Employees | Rank | \% of Total System | Covered Employees | Rank | \% of Total System | Covered Employees |  | \% of Total System |
| State of Kansas | 29,553 | 1 | 19\% | 32,085 | 1 | 21\% | 37,904 | 1 | 24\% |
| USD 259, Wichita | 6,709 | 2 | 4\% | 6,542 | 2 | 4\% | 6,749 | 2 | 4\% |
| USD 233, Olathe | 4,274 | 3 | 3\% | 4,185 | 3 | 3\% | 4,082 | 3 | 3\% |
| USD 512, Shawnee Mission | 3,678 | 4 | 2\% | 3,705 | 4 | 2\% | 3,837 | 4 | 2\% |
| USD 500, Kansas City | 3,287 | 5 | 2\% | 3,191 | 5 | 2\% | 3,165 | 5 | 2\% |
| USD 229, Blue Valley | 3,088 | 6 | 2\% | 3,014 | 6 | 2\% | 2,977 | 6 | 2\% |
| Johnson County | 2,447 | 7 | 2\% | 2,488 | 7 | 2\% | 2,633 | 7 | 2\% |
| USD 501, Topeka Public Schools | 2,339 | 8 | 2\% | 2,336 | 8 | 2\% | 2,341 | 8 | 1\% |
| Sedgwick County | 2,030 | 9 | 1\% | 2,082 | 9 | 1\% | 2,256 | 9 | 1\% |
| USD 497, Lawrence | 1,697 | 10 | 1\% | 1,627 | 10 | 1\% | 1,595 | 10 | 1\% |
| All Other ${ }^{2}$ | 93,590 |  | 62\% | 94,058 |  | 61\% | 90,319 |  | 57\% |
| Total (1,409 employers) | $\underline{\underline{152,692}}$ |  | $\underline{\underline{100 \%}}$ | $\underline{\underline{155,313}}$ |  | $\underline{\underline{100 \%}}$ | $\underline{\underline{157.858}}$ |  | $\underline{\underline{100 \%}}$ |
|  | 2010 |  |  | 2009 |  |  | 2008 |  |  |
| Participating Government | Covered Employees | Rank | \% of Total System | Covered Employees | Rank | \% of Total System | Covered Employees |  | \% of Total System |
| State of Kansas | 37,756 | 1 | 23\% | 38,230 | 1 | 23\% | 40,431 | 1 | 25\% |
| USD 259, Wichita | 6,861 | 2 | 4\% | 6,850 | 2 | 4\% | 6,748 | 2 | 4\% |
| USD 233, Olathe | 4,339 | 3 | 3\% | 4,625 | 3 | 3\% | 4,307 | 3 | 3\% |
| USD 512, Shawnee Mission | 4,005 | 4 | 2\% | 4,167 | 4 | 3\% | 4,128 | 4 | 3\% |
| USD 500, Kansas City | 3,178 | 5 | 2\% | 3,324 | 5 | 2\% | 3,337 | 5 | 2\% |
| USD 229, Blue Valley | 2,957 | 6 | 2\% | 2,983 | 7 | 2\% | 2,930 | 7 | 2\% |
| Johnson County | 2,706 | 7 | 2\% | 2,476 | 6 | 2\% | 3,137 | 6 | 2\% |
| USD 501, Topeka Public Schools | 2,466 | 8 | 1\% | 2,529 | 8 | 2\% | 2,548 | 8 | 2\% |
| Sedgwick County | 2,298 | 9 | 1\% | 1,847 | 9 | 1\% | 2,313 | 9 | 1\% |
| USD 497, Lawrence | 1,715 | 10 | 1\% | 1,766 | 10 | 1\% | 1,712 | 10 | 1\% |
| All Other 2 | 97,393 |  | 59\% | 94,685 |  | 58\% | 92,321 |  | 56\% |
| Total (1,409 employers) | $\underline{\underline{165,674}}$ |  | 100\% | $\underline{\underline{163,482}}$ |  | 100\% | $\underline{\underline{163,912}}$ |  | $\underline{\underline{100 \%}}$ |
| 2007 |  |  |  |  |  |  |  |  |  |
| Participating Employer | Covered Employees | Rank | \% of Total System | 1 Information available for current and prior six fiscal years. State of Kansas includes the Board of Regents. |  |  |  |  |  |
| State of Kansas | 37,871 | 1 | 24\% | 2 In 2013, "All Other" consisted of: |  |  |  |  |  |
| USD 259, Wichita | 6,590 | 2 | 4\% | Type |  |  | ber Covered |  |  |
| USD 233, Olathe | 4,277 | 3 | 3\% | School districtsCities and Counties |  |  | 248,839 |  |  |
| USD 512, Shawnee Mission | 4,007 | 4 | 3\% | Cities and Counties <br> Post-Secondary Education ${ }^{3}$ |  |  | $\begin{array}{rl} 476 & 20 \\ 48 & 11 \end{array}$ | 20,605 |  |
| USD 500, Kansas City | 3,334 | 5 | 2\% | Other |  |  | $3 \quad 12,595$ |  |  |
| USD 229, Blue Valley | 2,809 | 7 | 2\% |  |  |  | . 408 | 3,590 |  |
| Johnson County | 3,002 | 6 | 2\% | 3 Post-Secondary Education does not include State Board of Regents institutions. |  |  |  |  |  |
| USD 501, Topeka Public Schools | 2,469 | 8 | 2\% | Source: Data provided by KPERS Information Technology and Benefits and Member Services divisions. |  |  |  |  |  |
| Sedgwick County | 2,309 | 9 | 1\% |  |  |  |  |  |  |
| USD 497, Lawrence | 1,692 | $10 \quad 1 \%$ |  |  |  |  |  |  |  |
| All Other 2 | 90,826 |  |  |  |  |  |  |  |  |  |
| Total (1,409 employers) | $\underline{\underline{159,186}}$ | 100\% |  |  |  |  |  |  |  |

## THE FIDUCIARY STANDARD IS OUR DRIVING FORCE.

> That means we put the interest of our members first. It is the highest standard of care and accountability.
> A fiduciary relationship is highlighted by good faith, loyalty and trust.
> KPERS serves members as a fiduciary by holding assets in trust for them, growing those assets and delivering promised benefits when the time comes.


[^0]:    1 Beginning with the 12/31/03 actuarial valuation, the actuarial cost method was changed to the Entry Age Normal (EAN) method.

[^1]:    1 Amounts include changes in unrealized appreciation and exclude interest and dividend accruals. Amounts exclude security lending cash collateral of $\$ 1,051,425,908$ for fiscal year 2012, and fiscal year 2013 cash collateral of \$1,639,377,142.
    2 Temporary Investments include foreign currencies, and securities purchased and maturing within 90 days of fiscal year end.
    3 REIT securities were classified in Real Estate in the fiscal year end $6 / 30 / 2012$ CAFR. They have been re-classified as Equities in this fiscal year end $06 / 30 / 2013$ report. The June 30, 2012 values above have been adjusted to include REITs in Equities: $93,175,000$ moved from real estate to domestic equity. $\$ 26,428,000$ moved from real estate to international equity.

[^2]:    1 Reflects the impact of re－establishing the KP\＆F Supplemental Actuarial Liability at December 31，2002．The additional unfunded actuarial liability as of December 31， 2000 for the State／School and Local groups not recognized in the prior valuation due to the phase－in of the change in actuarial procedures is included．
    2 Change in asset valuation method．

[^3]:    *The Statutory Employer Contribution Rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of $1.10 \%$ for FY 2016. This rate does not include the contribution rate for the Death and Disability Program.

[^4]:    1 Totals may not match due to rounding.

[^5]:    1 Information available for current and prior six fiscal years.

[^6]:    1 Information available for current year and prior seven years.

[^7]:    ${ }^{1}$ Average Final Average Salary
    Source: Data provided by KPERS Information Technology and Benefits and Member Services divisions.

