# Comprehensive Annual Financial Report

Kansas Public Employees Retirement System

A component unit of the State of Kansas

Fiscal Year Ended June 30, 2004

Prepared by KPERS staff 611 S. Kansas Ave., Suite 100 Topeka, KS 66603-3803

Glenn Deck, Executive Director Leland Breedlove, Chief Fiscal Officer

# Table of Contents

Certificate of Achievement for Excellence in Financial Reporting	7
Transmittal Letter From Executive Director	8
Board of Trustees	10
Organization Chart	11
Values That Guide Us	12
Financial Section	
Independent Auditors' Report	14
Management's Discussion & Analysis	15
Basic Financial Statements	
Statement of Plan Net Assets	20
Statement of Changes in Plan Net Assets	21
Notes to Financial Statements	22
Required Supplementary Information	
Schedule of Employer Contributions	33
Schedule of Funding Progress	33
Actuarial Valuation Information	34
Supplementary Information	
Schedule of Contributions	35
Schedule of Administrative Expenses	36
Schedule of Investment Income by Asset Class	37
Schedule of Investment Fees and Expenses	38
Investment Section	
Chief Investment Officer's Review	40
Equity Review	43
Fixed Income	44
Real Estate	45
Alternative Investments	45
Alternative Investments Initiated on or after July 1991	48
Schedule of Investment Summary	50
U.S. Equity Commissions	51
List of Largest Holdings	52

Actuarial Section	
Actuary's Certification Letter	54
Overview	56
Projected Contribution Rates	59
Contribution Rates	61
Experience - All Systems Combined/Assets/Liabilities	62
Summary of Changes in Unfunded Actuarial Liability	66
Summary of Changes in Actuarial Contribution Rate by System	67
Summary of Historical Changes in Total System Unfunded Actuarial Liability	68
Calculation of Excess (Shortfall) Investment Income for Actuarial Value of Net Assets	
-State/School	69
-Local	69
-KP&F	70
–Judges	70
Development of Actuarial Value of Net Assets	71
Summary of Principal Results-All Systems Combined	72
Summary of Principal Results–KPERS (State)	73
Summary of Principal Results–KPERS (School)	74
Summary of Principal Results–KPERS (Local)	75
Summary of Principal Results–KP&F	76
Summary of Principal Results–Judges	77
Actuarial Assumptions and Methods	78
Plan Provisions	85
Short Term Solvency Test	92
Schedule of Active Member Valuation Data	93
Schedule of Employer Contribution Rates	94
Retirants, Beneficiaries - Changes in Rolls - All Systems	95
Membership Profile	95
Summary of Membership Data	96
Statistical Section	
Highlights of Operations - Ten-Year Summary	98
Expenses by Type	100
Revenues by Source	100
Schedule of Benefits by Type	101
Comparison of Benefits Paid to Retired Members	101
Schedule of Retired Members and Survivors by Type of Benefit	102
Average Monthly Benefit by Years of Service - New Retirees, Five-Year Summary	103
Benefit Amount	104
Acknowledgments	
KPERS Staff	106
Consultants, Investment Managers and Custodian, Life and Disability Benefits	107
,	,

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Kansas Public Employees Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2003

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

ANGE OFFICE ON THE STATES AND ANGE OFFICE ON THE STATES AND ANGE OR POPARITON OR PO

anugh Zielle President

**Executive Director** 



KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

KATHLEEN SEBELIUS, GOVERNOR

October 19, 2004

#### Dear Board of Trustees and Members:

I am pleased to present the Kansas Public Employees Retirement System's 2004 Annual Report. This annual report covers Retirement System operations for the fiscal year that ended June 30, 2004, and was prepared through the combined efforts of Retirement System staff members. Our operating results and financial position are presented in conformity with accounting principles generally accepted in the United States of America.

This report consists of several sections. The first section is the introductory section, which includes this letter. The second is the financial section, and includes the Statement of Plan Net Assets as of June 30, 2004, and the Management's Discussion and Analysis (MD&A). The independent certified public accounting firm Berberich Trahan & Co., P.A., conducted an annual audit of the Retirement System. The firm's report on the Retirement System's financial statements is also included in the financial section.

The investment section is the third section of the annual report, detailing the Retirement System's investment portfolio performance. Total assets at the end of the fiscal year were slightly over \$10.3 billion, and the System realized a 15.4 percent return for the fiscal year. All asset classes had positive returns, led by the System's equity investments in U.S. and international markets.

The fourth and fifth sections of the annual report are the actuarial and statistical sections. The actuarial section describes the System's funding basis, actuarial assumptions, contributions and funded ratios. The statistical section provides tables and several graphics concerning membership, benefits and other data.

The Retirement System's management utilizes a system of adequate internal accounting controls designed to protect assets and provide reasonable assurance regarding financial record reliability. To the best of our knowledge, the enclosed data is accurate in all material respects and is reported in a manner to present fairly our financial position and operating results. Responsibility for the data accuracy, as well as the completeness and fairness of the presentation, including all disclosures, rests with the System's management.

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 comprehensive annual financial report for the fiscal year that ended June 30, 2003. 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 government 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. The Retirement System has received the Certificate of Achievement for each of the last nine consecutive fiscal years. We believe our current report again conforms to the program requirements, and we will submit it to the GFOA for consideration.

Over the last few years, the Retirement System has seen modest membership growth. On December 31, 2003, System membership included 148,145 active members, 41,315 inactive members, 59,124 retirees and beneficiaries, and 1,454 affiliated employers. During that same time, assets available for retirement benefits were 75.2 percent of the total accrued actuarial liability, as computed by the System's actuary, Milliman USA. Current Kansas law provides that this unfunded actuarial liability will be amortized over a 40-year period from July 1, 1993.

In recent years, the Retirement System's highest strategic priority has been to develop a comprehensive plan to address the long-term retirement funding shortfall. Funding improvements made during 2003 and 2004 represent key steps toward improving the System's financial condition.

- 2003 legislation (HB 2014) increased the State/School group's employer contribution rate cap and authorized issuing up to \$500 million in pension obligation bonds.
- Pension obligation bonds sold in February 2004 added an additional \$440.2 million to the System's fund balance.
- 2004 legislation (SB 520) increased the Local group's employer contribution rate cap and allowed the KPERS Board to establish its own actuarial and amortization methods.

Improvements to date are helping, but significant challenges remain. Progress needs to be monitored closely and additional contributions or plan design changes may be necessary in the future to solve this long-term issue.

With long-term retirement funding progress under way, the Retirement System Board and staff are turning attention toward KPERS' death and disability program funding. Employer contribution moratoriums over the last four years have reduced the death and disability fund balance to a critical level and the program has become "pay as you go." We need to both increase funding and introduce cost-savings measures to restore the program's financial stability. However, changes in plan design and employer contributions require new legislation to move forward. In the coming year, we will work with the Governor, Legislature and employers to develop the necessary changes to strengthen the disability program's financial position, while continuing to provide good benefits that protect employees and their income.

Even while addressing significant funding issues, KPERS' goal is always to provide timely, thorough and accessible service to our members and employers. Over the last year, we have made strides to produce quality projects and improve our service. Some examples include:

- Cutting delivery time by four weeks on member annual statements.
- Decreasing optional group life insurance premiums for members by 25 percent and providing a new electronic enrollment process.
- Completing a successful pilot for web-based employer reporting. We will expand to other employers this year.
- Implementing new call center software for the InfoLine, greatly enhancing call center management and improving call center answer rates.
- Launching a new KPERS web site with a user-friendly design and greatly expanded content.
- Establishing an internal audit function to improve the System's internal controls and performance.
- Cutting the average processing time for withdrawals to two weeks.
- Improving service to inactive members with targeted information and using an outside vendor for address searches and updates.

This year's accomplishments are important and add to the Retirement System's successful track record over the last 42 years of consistently providing retirement, disability and survivor benefits to Kansas public servants and public employers. We are committed to continuously improving our services. Your comments and suggestions are essential and always welcome. We appreciate the opportunity to serve you.

Sincerely,

Glenn Deck

Executive Director

Tlenn 1) ens

# Board of Trustees

#### Michael Braude, Chairperson

Mission Woods, Retired President and CEO of the Kansas City Board of Trade Appointed by the Governor

#### Liz Miller, Vice-Chairperson Lawrence, Former Bank and Investment Executive Appointed by the Governor

#### Jo Diane (Jody) Boeding

Kansas City, KS, Assistant Counsel for the Unified Government of Wyandote County/Kansas City, Kansas Appointed by the Board to fill the unexpired term of elected member - non-school

#### Jarold W. Boettcher

Beloit, President and CEO of Boettcher Enterprises, Inc., and Boettcher Supply, Inc. Appointed by the Governor

#### **Bruce Burditt**

District Manager, Modern Woodmen of America Appointed by the Speaker of the House

#### **Lynn Jenkins**

Topeka, Kansas State Treasurer Statutory member

#### **Don Steffes**

McPherson, retired banker Appointed by the President of the Senate

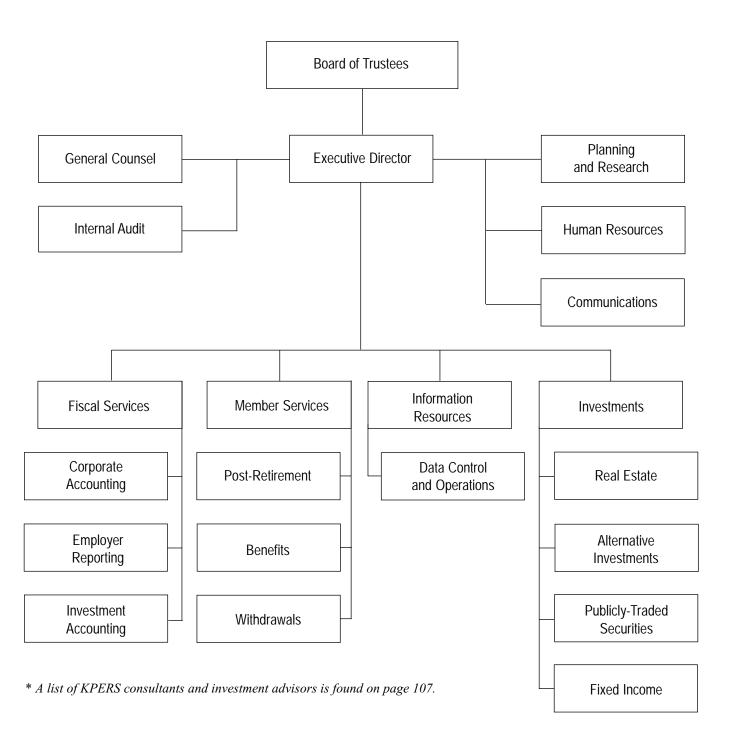
#### Marjorie Lee Webb

Shawnee Mission, retired teacher - currently teaching part-time in Shawnee Mission Elected by school members

#### **Doug Wolff**

Topeka, Vice President of Product Development for Security Benefit Group Appointed by the Governor

# Organization Chart



## Values That Guide Us

#### Service

We strive to provide excellent service that is timely, accurate, thorough and accessible. Members and employers should receive the best service possible.

#### **Integrity**

We conduct business in an honest, ethical and fair environment. We adhere to the highest standards of professional and ethical conduct.

#### Respect

We acknowledge that our dedicated employees are essential to our success. We value the unique contributions of individuals and encourage mutual respect, civility, diversity and personal development.

#### Accountability

We take ownership and responsibility for our actions and their results. We are fiscally responsible and performance oriented.

#### Innovation

We seek creative solutions to long-range situations and everyday issues. We are willing to embrace change and consider new ideas.

#### **Teamwork**

We work together to achieve common goals. We are committed to sharing both risks and rewards; we value openness and flexibility.

# Financial Section

# Financial

Certified Public Accountants

3630 SW Burlingame Road Topeka, KS 66611-2050 Telephone 785 234 3427 Toll Free 1 800 530 5526 Facsimile 785 233 1768 E-mail cpa@cpakansas.com

#### INDEPENDENT AUDITORS' REPORT

The Board of Trustees Kansas Public Employees Retirement System:

We have audited the accompanying statement of plan net assets of the Kansas Public Employees Retirement System (System), a component unit of the State of Kansas, as of June 30, 2004, and the related statement of changes in plan net assets for the year then ended. These basic financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these basic financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

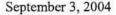
In our opinion, the basic financial statements referred to above present fairly, in all material respects, the plan net assets of the Kansas Public Employees Retirement System as of June 30, 2004, and the changes in plan net assets for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued a report dated September 3, 2004 on our consideration of the System's internal control over financial reporting and on our tests on its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis included on pages 15 through 19 is not a required part of the basic financial statements but is supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements. The accompanying introductory, investment, actuarial and statistical sections and required supplementary and supplementary information are presented for purposes of additional analysis and are not a required part of the basic financial statements. The investment and actuarial sections and required supplementary and supplementary information have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole. The introductory and statistical sections have not been subjected to auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

Berberick Trahan . Co., PA.





#### Management's Discussion & Analysis

This section presents management's discussion and analysis of the Kansas Public Employees Retirement System financial performance during the fiscal year that ended June 30, 2004. 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
- Kansas Police and Firemen's Retirement System
- Kansas Retirement System for Judges

All three systems are part of a governmental, defined benefit, contributory plan covering substantially all Kansas public employees. The Kansas Retirement System for Judges is a single employer group, while the other two are multi-employer, cost-sharing groups. The State of Kansas and Kansas school districts are required to participate, whereas participation by local political subdivisions is optional but irrevocable once elected.

#### **Financial Highlights**

- The System's net assets increased by \$1.5 billion or 16.8 percent from \$8,930,442,322 to \$10,427,142,572.
- As of December 31, 2003, the date of the most recent actuarial valuation, the Retirement System's funded ratio was 75.2 percent.
- The unfunded actuarial liability increased from \$2.829 billion at December 31, 2002, to \$3.586 billion at December 31, 2003.
- On a market value basis, this year's investment return rate was positive 15.4 percent, compared with last year's return of 4.0 percent.
- Monthly benefits paid to retirees and beneficiaries increased 4.8 percent from \$646 million in fiscal year 2003 to \$677 million in fiscal year 2004.
- The State of Kansas issued \$540.25 million in pension obligation bonds, and KPERS received net proceeds of \$479.1 million in fiscal year 2004. These bonds funded a portion of the KPERS state and school groups' unfunded actuarial liability.

#### 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 financial statements
- Required supplementary information 3)
- Other supplementary schedules

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

#### (1) Basic Financial Statements

A Statement of Plan Net Assets as of June 30, 2004, and a Statement of Changes in Plan Net Assets for the fiscal year ended June 30, 2004, 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.

#### (2) 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 below.

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, and the method used to value investments, and additional information about cash, securities lending and derivatives.

In Section J of note 2 is 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 Fund, 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 describes System capital expenditure commitments to real estate and alternative investments. This section also generally describes potential System contingencies.

#### (3) Required Supplementary Information

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

#### (4) 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, 2004, amounted to \$10,427,142,572, an increase of \$1.49 billion (16.8 percent) from \$8,930,442,322 at June 30, 2003. Following are two summary schedules, Plan Net Assets and Changes in Plan Net Assets, comparing information from fiscal years 2003 and 2004.

#### **Summary Comparative Statement of Plan Net Assets**

	As of June 30, 2004	As of June 30, 2003	Percentage Change
Assets			
Cash and Deposits	\$ 3,611,466	\$ 5,261,095	(31.36)%
Receivables	1,452,424,569	1,538,278,206	5.58
Investments at Fair Value	10,759,162,291	9,388,170,382	14.60
Invested Securities Lending Collateral	2,078,302,191	1,860,279,374	11.72
Capital Assets and Supplies Inventory	2,503,441	2,421,701	3.38
Total Assets	14,296,003,958	12,794,410,758	11.74
Liabilities			
Administrative Costs	828,108	904,441	(8.44)
Benefits Payable	1,313,956	1,325,501	(0.87)
Securities Purchased	1,788,417,131	2,001,459,120	(10.64)
Securities Lending Collateral	2,078,302,191	1,860,279,374	11.72
Total Liabilities	3,868,861,386	3,863,968,436	0.13
Net Assets	\$10,427,142,572	\$ 8,930,442,322	16.76%

#### **Summary Comparative Statement of Changes in Plan Net Assets**

	Year Ended	Year Ended	Percentage
	June 30, 2004	June 30, 2003	Change
Additions			
Contributions	\$944,703,176	\$456,210,770	107.08%
Net Investment Income	1,331,971,630	322,252,818	313.33
Net Investment Income from Securities Lending Activities	4,254,284	3,803,825	11.84
Total Net Investment Income	1,336,225,914	326,056,643	309.81
Other Miscellaneous Income	182,113	82,257	121.40
Total Additions	2,281,111,203	782,349,670	191.57
Deductions			
Monthly Retirement Benefits	676,918,614	645,716,079	4.83
Refunds of Contributions	41,179,470	39,608,946	3.97
Death Benefits	8,685,182	7,826,064	10.98
Insurance Premiums and Benefits	50,396,392	53,829,235	(6.38)
Administrative Expenses	7,231,295	7,215,024	0.23
Total Deductions	784,410,953	754,195,348	4.01
Net Increase	1,496,700,250	28,154,322	5,216.06
Net Assets Beginning of Year	8,930,442,322	8,902,288,000	0.32
Net Assets End of Year	\$10,427,142,572	\$8,930,442,322	16.76%

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 \$456.2 million in fiscal year 2003 to \$944.7 million in fiscal year 2004. The \$488.5 million increase in contributions is mainly attributed to pension obligation bonds issued by the State of Kansas in fiscal year 2004.

The System recognized a net investment gain of \$1.336 billion for the 2004 fiscal year, compared with a net investment gain of \$326 million for the 2003 fiscal year. Total return for the portfolio was a positive 15.4 percent. System net investments amounted to \$10.38 billion at June 30, 2004, which was \$1.49 billion (16.8 percent) more than the \$8.89 billion in total System investments at June 30, 2003. The Retirement System's one-, three-, five- and ten-year investment performance against the assumed rate of investment return are shown in the chart below.

One Year	Latest Three Years	Latest Five Years	Latest Ten Years	Assumed Rate of Return
15.40%	4.56%	3.80%	9.60%	8.00%

At June 30, 2004, the System held \$5.6 billion in U.S. equity and international equity securities, an increase of \$1.06 billion from the 2003 fiscal year. U.S. equity and international equity securities earned returns of approximately 19.9 percent and 27.4 percent, respectively, for the 2004 fiscal year. These compare with the Retirement System's benchmark returns of 20.5 percent and 30.3 percent, respectively.

The System held \$3.7 billion in U.S. debt and international debt securities, an increase of \$426 million from the 2003 fiscal year. The TIPS portfolio return for 2004 was positive with a return of 5.6 percent versus the benchmark return of 5.6 percent. The performance of the System's other fixed income securities during fiscal year 2004 was 3.1 percent compared with the benchmark of 2.3 percent. Real estate investments increased \$83 million to \$706.9 million at June 30, 2004. Real estate investments returned approximately 15.9 percent for the 2004 fiscal year, versus the benchmark real estate return of 13.3 percent. The System held \$537.9 million in alternative investments, which was a \$54.8 million increase from June 30, 2003. Alternative investments earned a return of approximately 18.7 percent for the 2004 fiscal year, compared to the benchmark alternative investment return of a positive 15.0 percent. At June 30, 2004, the System held \$182.5 million in short-term investments, which was a decrease of \$197.3 million from June 30, 2003.

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 the fiscal year 2004, net securities lending income amounted to \$4.3 million compared with \$3.8 million in fiscal year 2003.

Deductions from net assets held in trust for benefits include retirement, death and survivor benefits, and administrative expenses. For the 2004 fiscal year, retirement, death and insurance benefits amounted to \$777.2 million, an increase of \$30.2 million (4 percent) from the 2003 fiscal year. The increase in benefit payments was a result of an increase in the number of retirees. For the 2004 fiscal year, System administrative expenses amounted to \$7.231 million compared with \$7.215 million in fiscal year 2003. The ratio of System administrative expenses to the number of members (approximately \$29 per member) continues to be very cost-efficient compared to other statewide retirement plans.

#### **Funding Status**

An actuarial valuation of the Retirement System's assets and benefit obligations is performed annually. At the date of the most recent actuarial valuation, December 31, 2003, the funded status decreased to 75.2 percent from 77.6 percent at December 31, 2002. The unfunded liability was \$3.586 billion at December 31, 2003, compared with \$2.829 billion at December 31, 2002. This decrease in funded status relates primarily to a change in the actuarial cost method to the Entry Age Normal (EAN) method for all three groups.

The System's consulting actuary has recommended that future employer contributions be increased to improve the longterm funding of the KPERS State/School and Local groups. During the 2003 legislative session, legislation was passed that increased the statutory cap on employer contributions of the State/School school group 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. During fiscal year 2004, the following were adopted as part of that comprehensive plan to address the funding status of the Retirement System:

- The Legislature raised the statutory cap on annual employer contribution rate increases from 0.15 percent for local employers to 0.4 percent in 2006, 0.5 percent in 2007, and 0.6 percent in 2008 and beyond.
- The State of Kansas issued \$540.25 million in pension obligation bonds, and KPERS received net proceeds of \$479.1 million in fiscal year 2004.
- The Legislature split the KPERS State/School group into two separate groups (the State employees group and the School employees group) for actuarial calculations and determining of employer contribution rates.
- The Retirement System's Board of Trustees implemented the actuarial components of the new funding plan by adopting the traditional Entry Age Normal actuarial cost method and a five-year asset smoothing method.

It has been KPERS objective in recent years to develop a consensus among the Legislature, Governor and other interested parties on a comprehensive funding plan to ensure the System's financial health. Passing the 2003 and 2004 legislation for employer contribution rate increases and issuing pension obligation bonds were significant steps in this plan. During the 2004 interim, the Legislature's Joint Committee on Pensions, Investments, and Benefits will continue to study the long-term funding plan for the System. KPERS is working with the Joint Committee to analyze a range of plan design alternatives for possible consideration by the Governor and Legislature in 2005.

#### **Death & Disability Program**

The Retirement System administers the group insurance reserve fund as described in note 2 of the notes to the basic financial statements. The actuary performs an actuarial valuation of this fund on an annual basis with the last valuation completed for June 30, 2003. Legislation passed by the 2003 Legislature placed another moratorium on contributions to this fund for all of fiscal year 2004. As of June 30, 2004, the fund had assets of \$29.2 million. Employers resumed the historical contributions (0.6 percent of payroll) to this fund beginning July 1, 2004. However, funding at this level is not sufficient to keep this fund solvent after June 30, 2005.

In order to address the financial viability of this fund, the Board of Trustees will recommend program changes to the Legislature's Joint Committee on Pensions Investments and Benefits. The program changes under consideration include (1) increasing the contribution rate to 1 percent and (2) plan design modifications to reduce future program costs. Any changes to funding and plan design adjustment will require legislation in the 2005 session, with implementation in fiscal year 2006.

#### Statement of Plan Net Assets as of June 30, 2004

With Comparative Figures for 2003

	2004 Totals	2003 Totals
	2004 10tais	2003 Totals
Assets		
Cash and Deposits Cash	\$54.C42	047.507
Casn Deposits with Insurance Carrier	\$54,643	\$47,507
Deposits with insurance Carrier	3,556,823	5,213,588
Total Cash and Deposits	3,611,466	5,261,095
Receivables		
Contributions	40,332,275	35,120,391
Investment Income	42,778,358	40,963,683
Sale of Investment Securities	1,369,313,936	1,462,194,132
Total Receivables	1,452,424,569	1,538,278,206
Investments at Fair Value		
Domestic Equities	3,513,446,210	3,024,580,762
International Equities	2,136,913,681	1,621,533,252
Cash and Equivalents	182,506,767	379,764,010
Fixed Income	3,681,472,192	3,255,500,484
Alternative Investments	537,928,156	483,143,921
Real Estate	706,895,285	623,647,953
Total Investments at Fair Value	10,759,162,291	9,388,170,382
Invested Securities Lending Collateral	2,078,302,191	1,860,279,374
Capital Assets and Supplies Inventory	2,503,441	2,421,701
Total Assets	14,296,003,958	12,794,410,758
I to be tilled a co		
Liabilities Administrative Costs	929 109	004 441
Benefits Payable	828,108 1,313,956	904,441 1,325,501
Securities Purchased	1,788,417,131	2,001,459,120
Securities Furchased Securities Lending Collateral	2,078,302,191	1,860,279,374
Securities Lending Condicidi	2,070,302,171	1,000,2/3,3/4
Total Liabilities	3,868,861,386	3,863,968,436
Net assets held in trust for pension benefits	\$10,427,142,572	\$8,930,442,322

A schedule of funding progress for the plan is presented on page 33.

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

#### Statement of Changes in Plan Net Assets for the Fiscal Year Ended June 30, 2004 With Comparative Figures for 2003

	2004 Totals	2003 Totals
Additions		
Contributions		
Member Contributions	\$230,349,955	\$224,746,447
Employer Contributions	714,353,221	231,464,323
Total Contributions	944,703,176	456,210,770
nvestments		
Net Appreciation in Fair Value of Investments	1,087,128,878	85,233,479
Interest	132,004,016	145,411,285
Dividends	91,477,150	76,508,361
Real Estate Income, Net of Operating Expenses	39,514,695	31,217,255
Other Investment Income	565,492	557,611
other investment income	1,350,690,231	338,927,991
Less Investment Expense	(18,718,601)	(16,675,173)
Net Investment Income	1,331,971,630	322,252,818
Net investment income	1,331,771,030	
From Securities Lending Activities	22 020 102	25 070 044
Securities Lending Income	23,020,103	25,878,944
Securities Lending Expenses	(15, 605, 445)	(20.0(1.000)
Borrower Rebates	(17,697,447)	(20,861,098)
Management Fees	(1,068,372)	(1,214,021)
Total Securities Lending Activities Expense	(18,765,819)	(22,075,119)
Net Income from Security Lending Activities	4,254,284	3,803,825
Total Net Investment Income	1,336,225,914	326,056,643
Other Miscellaneous Income	182,113	82,257
otal Additions	2,281,111,203	782,349,670
Deductions		
Monthly Retirement Benefits Paid	(676,918,614)	(645,716,079)
tefunds of Contributions	(41,179,470)	(39,608,946)
Peath Benefits	(8,685,182)	(7,826,064)
nsurance Premiums and Benefits	(50,396,392)	(53,829,235)
Administrative Expenses	(7,231,295)	(7,215,024)
otal Deductions	(784,410,953)	(754,195,348)
lat Income	4 400 700 050	00.454.000
let Increase	1,496,700,250	28,154,322
let Assets held in trust for Pension Benefits	0.000 //2.000	0.002.200.
Balance Beginning of Year	8,930,442,322	8,902,288,000
Balance End of Year	<u>\$10,427,142,572</u>	\$8,930,442,322

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

#### Note 1 - Plan Description

#### A. 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 systems are part of a tax-exempt, defined benefit, contributory plan covering substantially all public employees in Kansas. The Kansas Retirement System for Judges is a single employer group, while the other two are multi-employer, cost-sharing groups. The State of Kansas and Kansas schools are required to participate, while participation by local political subdivisions is optional but irrevocable once elected. Participating employers and retirement system membership are as follows:

#### **Number of Participating Employers**

	KPERS	KP&F	Judges
State of Kansas	1	1	1
Counties	105	24	_
Cities	358	49	_
Townships	53	_	_
School Districts	304		_
Libraries	116	_	_
Conservation Districts	82	_	_
Extension Councils	80		
Community Colleges	44	_	_
Recreation Commissions	38	_	_
Hospitals	29	_	_
Cemetery Districts	13	_	_
Other	156	_	
Total	1,379	74	1

#### **Membership by Retirement Systems**

	KPERS	KP&F	Judges	Total
Retirees and beneficiaries currently receiving benefits	55,509	3,456	159	59,124
Inactive members entitled to benefits	8,055	76	13	8,144
Inactive members not entitled to benefits	32,158	1,011	2	33,171
Current active members	141,401	6,494	250	148,145
Total	237,123	11,037	424	248,584

#### B. 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.

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 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.

Active members (except KP&F members) are covered by basic group life insurance. The life insurance benefit is 150 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 the beneficiary(ies) 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. Annual disability income benefits are based on two-thirds 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. 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 have group life insurance coverage and to accrue participating service credit.

#### C. Contributions

Member contributions (from 4 to 7 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 will increase 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 will increase 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.

The amortization period for the unfunded liability of all three systems is 40 years from July 1, 1993. Employer contributions for group life insurance and long-term disability income benefits are set by statute at 0.6 percent of covered payroll for KPERS and 0.4 percent for Judges.

However, 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 to this fund. 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.

#### Note 2 - Summary of Significant Accounting Policies

#### A. 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.

#### **B.** Basis of Accounting

The Retirement System's financial statements are prepared on the accrual basis in accordance with accounting principles generally accepted in the United States of America. Member and employer contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

#### C. New Accounting Standards

In an effort to provide the public with better information about the risks that could potentially impact a government's ability to provide services and pay its debts, the Government Accounting Standards Board (GASB) has published Statement No. 40, Deposit and Investment Risk Disclosures, which the System adopted for fiscal year 2004. The new accounting guidance requires that state and local governments communicate key information about deposit and investment risks, frequently one of the largest assets on a government's balance sheet. Under Statement 40, state and local governments are required to disclose information covering four principal areas:

- Investment credit risk disclosures, including credit quality information issued by rating agencies.
- Interest rate disclosures that include investment maturity information, such as weighted average maturities or specific identification of the securities.
- Interest rate sensitivity for investments that are highly sensitive to changes in interest rates (example, inverse floaters, enhanced variable-rate investments and certain asset-backed securities).
- Foreign exchange exposures that would indicate the foreign investment's denomination.

#### D. 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 of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### E. 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 sales price at current exchange rates. The fair value of real estate investments is based on independent appraisals. Investments that are not publicly traded are reported at estimated fair value.

#### F. Cash and Deposits

Cash deposits are classified in three categories of credit risk to indicate the Retirement System's risk level. The three categories are:

- 1. Insured or collateralized with securities held by the State Treasurer or its custodian in the name of the State of Kansas.
- 2. Collateralized with securities held by the pledging financial institution's trust department or custodian in the name of the State of Kansas.
- 3. Uncollateralized.

As of June 30, 2004, the cash deposits of \$54,643 held by the State Treasurer were in credit risk category "1." The Retirement System's deposits with its insurance carrier were \$3,556,823 at June 30, 2004, and were in credit risk category "3."

#### **G. 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 percent of the total book value of the fund.
- The annual allowance for new alternative (non-publicly traded) investments is limited to 1 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 acts.
- Provides for an annual audit and requires that the Board annually examine the investment program, specific investments, and its policies and practices.

At June 30, 2004, the Retirement System did not have investments (other than those issued by the U.S. government) in any one organization representing 5 percent or more of the System's assets.

The Retirement System's permissible investment categories include:

- 1) Equities.
- 2) Fixed income securities.
- 3) Cash equivalents.
- 4) Real estate.
- 5) Derivative products.
- 6) Alternative investments.

In fulfilling its responsibilities, the Board of Trustees has contracted with 13 investment management firms and a master global custodian. Presently, the Retirement System has investments in the financial futures market. Futures contracts are contracts for delayed delivery or receipt 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. Daily, the net change in the

futures contract value is settled in cash with the exchanges. 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. At June 30, 2004, the Retirement System had futures contracts with a fair value of approximately \$182,100,000. Cash equivalents and short-term investments in amounts necessary to settle the futures contracts were held in the portfolio so that no leverage was employed, in accordance with the Statement of Investment Policy.

The Retirement System's Statement of Investment Policy authorizes participation in a securities lending program administered by the master global custodian, Mellon Trust. 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 percent of fair value on domestic securities and 105 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, 2004, the maturities of securities in this dedicated bond portfolio are as follows: 43 percent of the fair value of the securities mature within 30 days; 19 percent mature between 31 and 180 days; and 38 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. Therefore, the Retirement System does not incur any credit risk as it relates to this activity. 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, 2003, and June 30, 2004, were \$1,827,580,110 and \$2,136,687,810, respectively. Collateral held by the Retirement System for June 30, 2003, and June 30, 2004, was \$1,881,337,715 and \$2,173,652,076, respectively. Net income produced from securities lending activities for fiscal year 2003 was \$3,803,825 and for fiscal year 2004 was \$4,254,284.

The Retirement System's international investment managers use forward contracts to hedge 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. The Retirement System also contracts with a currency overlay manager to manage the currency exposure to the System's passive international equity portfolio. 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. Controls are established by the investment managers to monitor the creditworthiness of the counterparties.

All forward foreign currency contracts are carried at fair value by the Retirement System. As of June 30, 2004, the System had sold forward currency contracts with a fair value of \$1,134,208,839 and had bought forward currency contracts with a fair value of \$1,135,939,821. Purchases of forward currency contracts are liabilities reported as Securities Purchased, and sales of forward currency contracts are receivables reported as Sale of Investment Securities.

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. Options strategies used by the Retirement System are designed to provide exposures to positive market moves and limit exposures to interest rate and currency fluctuations.

The Retirement System internally manages a Treasury Inflation Protected Securities (TIPS) portfolio. TIPS are fixed income securities issued by the U.S. Treasury that pay a fixed coupon rate plus an adjustment for subsequent inflation. At June 30, 2004, the Retirement System had invested in TIPS with a fair value of approximately \$964,900,000.

#### **Custodial Credit Risk**

Custodial credit risk is when in the event a financial institution or counterparty fails, the System would not be able to recover value of deposits, investments or collateral securities that are in the possession of an outside party. One hundred percent (100%) of the System's investments are held in the System's name and are not subject to creditors of the custodial bank.

#### **Concentration Risk**

The System does not have any investments representing five percent or more of System assets, in any single issuer other than the U.S. Government.

#### **Currency Risk**

Currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. The Retirement System's investments at June 30, 2004, were distributed among the following currencies.

<b>USD Equivalent</b>	Currency	<u>Percent</u>
\$ 69,404,592	Australian Dollar	0.54%
551,877,947	British Pound	4.30
6,331,633	Danish Krone	0.05
769,024,409	Euro Current Unit	5.99
39,001,395	Hong Kong Dollar	0.30
546,497,841	Japanese Yen	4.26
1,647,635	Malaysian Ringgit	0.01
2,310,069	New Zealand Dollar	0.02
8,939,084	Norwegian Krone	0.07
1,715,768	S. Korean Won	0.01
19,978,019	Singapore Dollar	0.16
44,647,334	Swedish Krona	0.35
160,309,642	Swiss Franc	1.25
7,392,874	Thailand Baht	0.06
10,608,386,240	U.S. Dollar*	<u>82.64</u>
\$ 12,837,464,482	Total Currencies	100.00%

<sup>\*</sup>Includes securities lending collateral of \$2,078,302,191

The System's asset allocation and investment policies include active and passive investments in international securities as shown above. The System's target allocation is to have 19 percent of assets invested in international equities (excluding securities lending collateral). The System was at 19.9 percent on June 30, 2004. Core Plus bond managers are allowed to invest up to 20 percent of their portfolio in non-dollar securities. The System utilizes a currency overlay manager to reduce risk by hedging up to 50 percent of the foreign currency for selected international equity portfolios. At June 30, 2004 the System's total foreign currency exposure was 14.4 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+ managers to have at least 70 percent of holdings in investment grade securities. Each portfolio is required to maintain a reasonable risk level relative to its benchmark. System assets (in thousands) subject to credit risk are shown with current credit ratings below.

Quality <u>Rating</u>	Commercial <u>Paper</u>	<u>Corporate</u>	<u>Agency</u>	U.S. <u>Government</u>	Securites Lending <u>Collateral</u>	Grand Total
NR	\$ 123,561	\$ 36,239			\$ 581,309	\$ 741,109
AAA		95,611	\$ 757,994	\$ 1,706,954	172,806	2,733,365
AA	27,115	209,551			1,091,769	1,328,435
A		104,099			232,418	336,517
BAA		263,630				263,630
BA		254,799				254,799
В		214,039				214,039
CAA		35,255				35,255
Total	\$ 150,676	\$ 1,213,223	\$ 757,994	\$ 1,706,954	\$ 2,078,302	\$ 5,907,149

Comercial paper also includes 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 on this table. The Securities Lending Collateral class has the following policy requirements: to be rated A3/A- or better; Commercial paper must be A1/P1; Asset-backed securities must be AA3/AA- or better; repurchase agreements must be 102 percent collateralized with A3/A- or A1/P/1 or better securities and held by the custodial bank or third-party custodian.

#### 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+ managers to be within 20 percent of their benchmark duration, and all fixed portfolios shall 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 below (in thousands) grouped by effective duration ranges.

Effective Duration	Commercial Paper	Corporate	Agency	U.S. Government	Securites Lending Collateral	Grand Total
0-1 yr	\$150,676	\$245,428	\$365,246	\$152,586	\$2,078,302	\$2,983,238
1-3 yrs		188,111	159,336	181,235		528,682
3-5 yrs		199,677	171,018	222,947		593,642
5-10 yrs		423,961	63,611	105,227		592,799
10-20 yrs		156,046	7,783	1,044,959		1,208,788
Total	\$150,676	\$1,213,223	\$757,994	\$1,706,954	\$2,078,302	\$5,907,149

Treasury Inflation Protected Securities (TIPS) comprise 94 percent of the US Government, 10-20 yrs group. Total TIPS for all duration ranges were valued at \$964,902,976 at June 30, 2004. Securities Lending Collateral policy limits the maximum average portfolio maturity to 90 days and only floating rate, and fixed rate asset-backed securities may mature beyond 13 months.

#### H. Capital Assets and Supplies Inventory

Furniture, fixtures and equipment are reported on the Statement of Plan Net Assets at historical cost, net of accumulated depreciation. These assets are depreciated on a straight-line 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, 2004, was \$2,116,548. Office supplies inventory in the amount of \$34,396 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 Plan Net Assets as a capital asset and are being depreciated. Accumulated depreciation on the administrative portion of the building and garage as of June 30, 2004 was \$1,701,395. The office building and garage are being depreciated over a period of 33 years on an accelerated method. At June 30, 2004, the carrying value of the System's administrative headquarters was \$2,118,308.

#### I. Compensated Accrued Absences

Expenses for accumulated vacation and sick leave earned by Retirement System personnel are recorded when earned by the employee. If employees end employment with the State of Kansas, they are compensated for vacation benefits accrued in varying amounts ranging from one to 30 days. Compensation for accumulated sick leave requires three conditions:

- 1) Accumulation of 800 hours.
- 2) Minimum of eight years of credited service.
- 3) Termination with the State of Kansas on or after reaching retirement age.

If all conditions are met, the employee will be compensated in accordance with applicable personnel regulations. The minimum amount of sick leave to be compensated is 30 days; the maximum amount is 60 days.

#### J. 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 of Trustees employer contribution rates required to maintain the System on an actuarial reserve basis.

#### Various Reserves

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 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 percent per year. The balance at June 30, 2004, was \$3,893,911,309, 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, 2004, was \$4,517,110,565. The unfunded liability was \$3,586,084,092.

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, 2004, was \$5,558,543,751, and was fully funded.

The Group Insurance Reserve Fund represents employer contributions, which pay 100 percent of the cost of group life insurance and long-term disability coverage. Insurance premiums and benefits consist of:

- 1) Claims paid under the insurance contract.
- 2) Deposits made by the Retirement System to pay disability benefits to eligible participants. An actuarial valuation of this fund was last completed for June 30, 2003.

A moratorium on contributions was in place for the all of fiscal year 2004. The balance at June 30, 2004, was \$29,182,453 and remains less than fully funded.

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, 2004, was \$14,462,591, 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, 2004, was \$15,995, and was fully funded.

#### K. 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.

#### L. 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 are required to contribute 4 percent of their annual salary. The Retirement System's contributed 4.58 percent of covered payroll for fiscal year 2004. For the period July 1, 2002, through March 31, 2003, KPERS contributed 4.98 percent of covered payroll. For the period April 1, 2003, through June 30, 2003, KPERS contributed 4.38 percent of covered payroll. Covered payroll was approximately \$3,234,839 and \$3,224,719 for 2004 and 2003, respectively. The Retirement System's contributed approximately \$140,689 and \$138,557 for 2004 and 2003, respectively.

#### M. Non-Retirement Funds

The 2000 legislative session assigned to the Retirement System the investment responsibilities of two funds with nonretirement money, K.S.A. 75-5321(a) established the Senior Services Trust Fund and this fund exists solely to provide income to the nursing facility service payment program, the home and community based nursing facility program, and the income eligible (home care) program. The Treasurer's Unclaimed Property Fund was established to provide investment earnings available for periodic transfer to the State Treasury for the credit of the State General Fund. Legislation was also provided to defray the reasonable expenses of administrating these funds. During fiscal year 2003, investments for the Senior Services Trust Fund were liquidated and transferred to the State of Kansas Department on Aging. Investments under management for the Treasurer's Unclaimed Property Fund were \$114,500,430 at June 30, 2004.

#### *Note 3 - Funding Policy*

#### A. Funding

The law governing the Retirement System requires the actuary to make an annual valuation of the System's liabilities and reserves and determine the contribution 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, 2000. As a result of this study, the Board of Trustees adopted new assumptions in regard to retirement rates, mortality and withdrawal rates.

In fiscal year 2004, the Kansas Legislature passed additional legislation impacting the funding of the Retirement System. The KPERS State/School group was split for actuarial purposes and calculating employer rates into two separate groups: State and School. The statutory cap for the Local group effective in calendar year 2006 was raised to 0.4 percent with subsequent increases of 0.5 percent in calendar year 2007 and 0.6 percent in calendar year 2008. In addition, KP&F Tier I members may retire with unreduced benefits at any age after 32 years of service.

Legislation was also passed authorizing the Board of Trustees to select the actuarial cost method, the amortization method and the amortization period for all three systems. In fiscal year 2004, The Board of Trustees changed the actuarial cost methods and asset valuation method for all the groups. The actuarial cost method for all groups was changed to Entry Age Normal (EAN) level percent of pay cost method. The prior actuarial cost methods were the Projected Unit Credit (PUC) for KPERS, the Aggregate Cost method with Supplemental Unfunded Actuarial Liability for KP&F, and the Frozen Entry Age method for Judges. This change in actuarial cost method provides for a consistent valuation basis for all three plans and moves the Retirement System's funding method to the method most commonly used by public retirement system.

The new asset valuation 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 evenly over a five-year period.

#### **B.** Legislation

In September 2003, the State of Kansas issued \$40,250,000 of Series 2003 H State pension funding bonds. Of the total amount the bond issue, \$15,350,000 of the bond proceeds were used for the purpose of financing the unfunded actuarial liability of the TIAA group of members. In addition, the State of Kansas contributed an additional \$2 million 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, the State's employer contribution rates for the State KPERS, School, State KP&F and Judges groups will include an additional amount to finance the debt service payments for this portion of the bonds. KPERS will collect additional contributions for the debt service payments beginning in fiscal year 2005 and transfer these funds to the State of Kansas.

In February, 2004, the State of Kansas issued \$500 million in pension obligation bonds, and KPERS received net proceeds of \$440.2 million in March 2004. The proceeds of these are used to assist with the financing of the unfunded actuarial liability for the State and School group. The debt service on the bonds will be 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, 2002, and December 31, 2003, can be attributed to the following (in millions):

Unfunded Actuarial Liability, December 31, 2002	\$ 2,829
Effect of contribution cap/time lag	178
Expected increase due to amortization method	47
Loss from investment return	140
Demographic experience	(37)
All other experience	5
Change in actuarial assumptions	0
Change in actuarial cost method	1,147
Change in asset valuation method	(286)
Change in benefit provisions (KP&F)	3
Preliminary unfunded acutuarial liability, December 31, 2003	\$ 4,026
Receivable bond proceeds	(440)
Unfunded Actuarial Liability, December 31, 2003	\$ 3,586

#### D. 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 June 30, 2000, and December 31, 2000, actuarial valuations provide the basis for Board certification of employer contribution rates for fiscal years 2003 and 2004, respectively. As explained in Note 1, legislation has limited the amounts that employers are required to contribute for State/ School employees 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 0.6 percent contribution rate for the Death and Disability Program) and the statutory contribution rates for fiscal years 2003 and 2004 are as follows:

	State/S	School	Correction Employees		
Fiscal	Actuarial	Statutory	Actuarial	Statutory	
Year	Rate	Rate	Rate	Rate	
2003	5.57%	4.38%	7.28%/7.92%	6.09%/6.73%	
2004	7.05%	4.58%	7.08%/7.57%	4.61%/5.10%	

The results of December 31, 2000, and December 31, 2001, actuarial valuations provide the basis for Board certification of local employer contribution rates for fiscal years beginning in 2003 and 2004, respectively. The actuarially determined employer contribution rates and statutory contribution rates for fiscal years 2003 and 2004 are as follows:

Local					
Fiscal Year	Actuarial Rate	Statutory Rate			
2003	4.13%	3.07%			
2004	4.64%	3.22%			

**KP&F**. The uniform participating service rate for all KP&F employers was 6.86 percent for the fiscal year beginning in 2003 and 9.47 percent for the fiscal year beginning in 2004. 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 12.26 percent of payroll for the fiscal year ended 2003 and 16.67 percent of payroll for the fiscal year ended 2004.

The law specifies employee contributions as: 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 percent for KPERS members, 7 percent for KP&F members, and 6 percent for Judges members as the member's employee contributions. All required contributions have been made as follows:

/- 1		T1 1.3	
(Expressed	ın	Thousands)	

	Employer	Member	Contributions as a percent
	Contributions	Contributions (1)	of Covered Payroll
KPERS- State/School	\$ 158,107	\$ 148,293	8.2%
KPERS - Local	38,736	51,922	7.5
KP&F	34,701	22,569	20.6
Judges	3,729	1,090	22.6
Subtotal	\$ 235,273	\$ 223,874	8.7%
TIAA Bond Proceeds	14,015		
13th Check Bond Proceeds	24,900		
Pension Obligation Bonds	440,165		
Total	\$ 714.353		

<sup>\*</sup>An estimated \$434 million of employer and employee contributions were made to cover normal cost, an estimated \$19 million was made for the amortization of the unfunded accured liability.

#### E. Historical Trend Information

Historical trend information, showing the Retirement System's progress in accumulating sufficient assets to pay benefits when due, is presented on page 33 and is titled, "Required Supplementary Information."

#### Note 4 - Commitments and Contingencies

As of June 30, 2004, the Retirement System was committed to additional funding of \$8,476,000 in the form of capital expenditures on separate account real estate holdings in the portfolio, \$270,089,000 for commitments on venture capital investments, and \$53,001,000 for capital calls on real estate property trusts 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.

<sup>1)</sup> Member contributions do not include Optional Life Insurance contributions of approximately \$6.5 million.

#### Required Supplementary Information

#### **Schedule of Employer Contributions**

Year Ended June 30	Annual Required Contribution	Percentage Contributed	
1995	\$ 129,083,585	100.2 %	
1996 (1)	173,927,737	82.5	
1997	199,521,423	74.7	
1998	216,270,482	77.3	
1999	256,813,541	79.0	
2000	234,941,116	80.6	
2001	277,096,692	77.6	
2002	289,519,647	79.7	
2003	311,365,296	78.9	
2004 (2)	317,900,432	74.0	

<sup>1)</sup> For fiscal years ending after June 30, 1996, the actual contributions for KPERS employers were substantially lower than the actuarially required amount, due to statutory limitations on annual increases as discussed in Note 1C.

#### **Schedule of Funding Progress**

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
06/30/95	\$ 5,510,957	\$ 6,991,029	\$ 1,480,072	79 %	\$ 3,766,917	39 %
06/30/96	6,158,755	7,603,111	1,444,356	81	3,945,207	37
06/30/97	6,875,918	8,251,986	1,376,068	83	4,108,320	33
06/30/98	7,749,203	9,340,685	1,591,482	83	4,273,627	37
06/30/99	8,601,876	9,999,246	1,397,370	86	4,480,717	31
06/30/00	9,568,275	10,801,397	1,233,122	89	4,684,768	26
12/31/00 (1)	9,835,182	11,140,014	1,304,832	88	4,876,555	27
12/31/01	9,962,918	11,743,052	1,780,134	85	5,116,384	35
12/31/02	9,784,862	12,613,599	2,828,736	78	4,865,903 (2)	58
12/31/03	10,853,462	14,439,546 (3)	3,586,084	75	4,978,132	72

<sup>1)</sup> The actuarial valuation date was changed to a calendar year basis.

<sup>2)</sup> Does not include pension obligation bonds of \$440 million.

Beginning with the 12/31/02 actuarial valuation, the unfunded actuarial liability of the TIAA group was eliminated. Therefore, covered payroll no longer includes the salaries of non-KPERS unclassified employees of the Board of Regents institutions previously included.

<sup>3)</sup> Beginning with the 12/31/03 actuarial valuation, the actuarial cost method was changed to the Entry Age Normal (EAN) method.

### Required Supplementary Information

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

	KPERS System	KP&F System	Judges System
Valuation Date	12/31/03	12/31/03	12/31/03
Actuarial cost method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method	Level Percent closed	Level Percent closed	Level Percent closed
Remaining amortization period	29 years	29 years	29 years
Asset valuation method	Difference between actual return and expected return on assets' market value calculated yearly and recognized over five-year period	Difference between actual return and expected return on assets' market value calculated yearly and recognized over five-year period	Difference between actual return and expected return on assets' market value calculated yearly and recognized over five-year period
Actuarial assumptions: Investment rate of return (1) Projected salary increases (1)	8.0% 4.0–9.8%	8.0% 4.0–12.5%	8.0% 5.5%
Cost of Living Adjustment	none	none	none

<sup>1)</sup> Salary increases and investment rate of return include a 3.5 percent inflation component.

#### **Schedule of Contributions**

For the Fiscal Year Ended June 30, 2004

Kansas Public Employees Retirement System	m		
State/School Contributions			
Members	\$148,293,435		
Employers	160,145,687		
Total State / School Contributions	, .,	\$308,439,122	
Local Contributions			
Members	51,922,069		
Employers	38,736,225		
Total Local Contributions		90,658,294	
Total Contributions, Kansas Public Employe	es Retirement System		\$399,097,416
Kansas Police and Firemen's System			
State Contributions			
Members	2,413,623		
Employers	2,792,242		
Total State Contributions		5,205,865	
Local Contributions			
Members	20,155,271		
Employers	30,041,516		
Total Local Contributions		50,196,787	
Total Contributions, Kansas Police and Firen	nen's System		55,402,652
Kansas Retirement System for Judges			
State Contributions			
Members	1,090,382		
Employers	3,557,360		
Total State Contributions		4,647,742	
Total Contributions, Kansas Retirement Syst	tem for Judges		4,647,742
Optional Life Insurance			
Member Contributions			
State Employees	3,478,445		
Local Employees	2,997,374		
Total Contributions	, ,	6,475,819	
Total Contributions, Optional Life Insurance			6,475,819
Subtotal Contributions and Insurance			465,623,629
Bond Proceeds			479,079,547
Grand Total – All Contributions			\$944,703,176

Per legislation, employers were not required to remit the Group Life and Disability portion of the actual employer contribution rate from July 1, 2003, through June 30, 2004.

#### **Schedule of Adminstrative Expenses**

For the Fiscal Year Ended June 30, 2004

Salaries and Wages		\$4,301,157
Professional Services		
Actuarial	\$189,109	
Audit	32,500	
Data Processing	420,751	
Legal	31,931	
Other Professional Services	738,571	
Total Professional Services	,	1,412,862
Communication		
Advertising	4,509	
Postage	209,195	
Printing	87,651	
Telephone	42,741	
Total Communication	·	344,096
Building Administration		
Building Management	75,422	
Janitorial Service	40,260	
Office and Equipment Rent	20,602	
Real Estate Taxes	79,535	
Utilities	53,824	
Total Building Administration		269,643
Miscellaneous		
Dues and Subscriptions	30,971	
Repair and Service Agreements	74,687	
Fees-Other Services	75,780	
Supplies	125,280	
Temporary Services	140,811	
Travel	103,079	
Other Miscellaneous	40,306	
Depreciation	312,623	
Total Miscellaneous		903,537
Total Administrative Expenses	•	\$7,231,295

# Schedule of Investment Income by Asset Class For the Fiscal Year Ended June 30, 2004

	Interest, Dividends	Gains and	
Asset Classification	and Other Transactions	(Losses)	Total
Marketable Equity Securities			
Domestic Equities	\$37,912,844	\$556,796,969	\$594,709,813
International Equities	41,892,598	418,417,695	460,310,293
Subtotal Marketable Equities	79,805,442	975,214,664	1,055,020,106
Marketable Fixed Income Securities			
Domestic Fixed Income			
Government	54,992,976	10,398,063	65,391,039
Corporate	72,606,460	(22,663,540)	49,942,920
Subtotal Marketable Fixed Income	127,599,436	(12,265,477)	115,333,959
Temporary Investments	3,920,686	116,359	4,037,045
Total Madatable Occurren	044 005 504	000 005 540	4 474 004 440
Total Marketable Securities	211,325,564	963,065,546	1,174,391,110
Real Estate	39,514,695	47,177,107	86,691,802
Alternative Investments	12,155,602	76,886,225	89,041,827
Total Real Estate and			
Alternative Investments	51,670,297	124,063,332	175,733,629
Other Investment Income			
Securities Lending	4,254,284	_	4,254,284
Recaptured Broker Commissions	355,830	_	355,830
Miscellaneous Income	209,662	_	209,662
Total Other Investment Income	4,819,776	_	4,819,776
Total Investment Income	\$267,815,637	\$1,087,128,878	\$1,354,944,515
	Managor and Custodi	an Fees and Expenses	
	Investment Manager F	•	(17,520,389)
	Custodian Fees and Ex		(611,580)
	Other Investment Expe		(586,632)
	Total Investment Fees	_	(18,718,601)
	<b>e</b> =	\$1,336,225,914	

#### **Schedule of Investment Fees and Expenses**

For the Fiscal Year Ended June 30, 2004

Domestic Equity Managers		
Barclays Global Investors	\$3,025,200	
Capital Guardian Trust Co.	343,828	
Wellington Management Co.	1,948,528	
Subtotal Domestic Equity Managers		\$5,317,556
International Equity Managers		
Alliance Capital Management	1,000,875	
Barclays Global Investors	271,933	
Lazard Freres Asset Management	1,595,447	
Morgan Stanley Asset Management	1,637,130	
Nomura Capital Management	625,896	
Subtotal International Equity Managers		5,131,281
Fixed Income Managers		
Loomis, Sayles & Co.	1,110,453	
Pacific Investment Management Co.	1,048,718	
Payden & Rygel Investment Counsel	800,858	
Western Asset Management Co.	863,864	
Subtotal Fixed Income Managers		3,823,893
Foreign Currency Overlay Manager		
Pareto Partners	1,177,981	
Subtotal Foreign Currency Overlay Manager		1,177,981
Real Estate and Alternative Investment Managers		
AEW Capital Management	1,312,527	
Lend Lease	219,145	
Portfolio Advisors	358,154	
Morgan Stanley Prime Property Fund	56,589	
Subtotal Real Estate and Alternative Managers		1,946,415
Cash Equivalent Manager		
Payden & Rygel Investment Counsel	123,263	
Subtotal Cash Management		123,263
Total Investment Management Fees		17,520,389
Other Fees and Expenses	(11.500	
Mellon Trust - Custodian Fees and Expenses	611,580	
Consultant Fees	559,100	
Litigation Expenses	27,532	4 400 046
Subtotal Other Fees and Expenses		1,198,212
Total Investment Fees and Expenses		\$18,718,601

## Investment Section

# Investment

#### Chief Investment Officer's Review

#### Robert Woodard

The Kansas Public Employees Retirement System's investment portfolio represents all contributions to the plan, from both members and their employers, as well as all net earnings on these assets. These reserves are held in support of both current and future benefits to which members have earned entitlement. Total assets at the end of the fiscal year were slightly over \$10.3 billion. This money receives the benefit of a diversified, carefully monitored investment portfolio that includes stocks, bonds, real estate, alternative investments and cash.

#### **Asset Allocation**

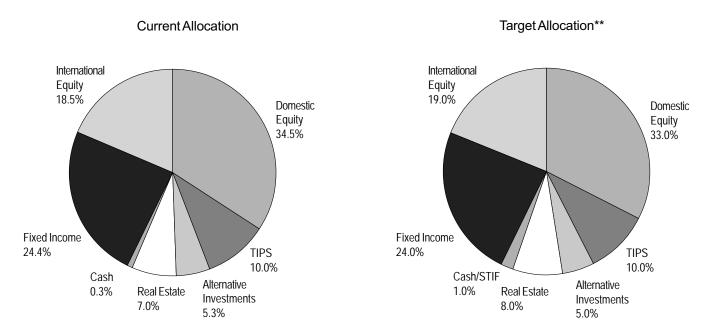
Stock holdings are invested primarily in companies doing business in the United States, but also include a significant exposure to stocks of companies operating outside the U.S. By diversifying a portion of the total stock portfolio away from the U.S., we expect over time to realize positive returns while simultaneously reducing the risk of adverse total returns. Since global economies generally operate independently, an exposure to foreign markets provides a higher probability of realizing positive results, on average, without as much year-to-year variability as might exist in a U.S. only portfolio. The Board of Trustees has carefully selected several domestic and international managers to supervise a total of 12 portfolios that make up this portion of the portfolio. By utilizing several managers, the fund enjoys further diversification among manager styles and is less reliant on any one manager's performance.

The bond holdings in the portfolio are similarly diversified, as are the managers. As with the equity investments, the portfolio is primarily invested domestically with a small portion of international opportunities added for additional yield and diversification. The Board has chosen five managers to supervise these pools.

Additional investments in real estate, alternative investments and cash complete the portfolio. Real estate and alternative investments provide return opportunities as well as diversification to the portfolio. This helps to further smooth the variability of the System's annual returns. Cash is held primarily to facilitate the settlement of purchases and sales of securities within the portfolio. It also provides for the operational needs of the System. During fiscal year 2004, nearly \$780 million in benefits or refunds were distributed to members and their families.

#### Portfolio Asset Allocation

For the Period Ending June 30, 2004



<sup>\*\*</sup>The Domestic Equity and Cash Allocations reflect the impact of the Cash Securitization Portfolio.

#### **Investment Policy**

To guide the implementation of the System's broad investment objectives the Board of Trustees has adopted a Statement of Investment Policy, Objectives and Guidelines. The Statement complements the KPERS Statutes and documents the principles and standards which are believed to guide the management of the assets of the System. It is binding upon all persons with authority over System assets, including investment managers, custodians, consultants, staff, and the Board of Trustees.

The Statement of Investment Policy, Objectives and Guidelines is the product of the Board's careful and prudent study and is reviewed and updated annually. It sets forth the investment policies, objectives, and guidelines which the Board of Trustees judges to be appropriate and prudent, in consideration of the needs of the System, and to comply with the 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 directions of ERISA to the greatest extent desirable. As such, this Statement is written to be consistent with ERISA.

Among other things, the Statement establishes the criteria against which the investment managers retained are to be measured and communicates the investment policies, objectives, guidelines, and performance criteria to the Board, staff, investment advisors, consultants, and all other interested parties. In addition, it serves as a review document to guide the ongoing oversight of the investment of the Fund and as a yardstick for compliance with K.S.A. 74-4901 et seq.

The Statement also provides guidance in the areas of corporate governance and proxy voting. Specifically, the System expects that each proxy vote will be individually reviewed and acted upon in the long-term economic best interests of members and beneficiaries. All proxy votes, whether initiated by an external manager, internal KPERS management or through a third party service are reviewed annually to assess compliance. With regard to corporate governance, the Statement sets forth the criteria by which the System requires that in each case the manager base his actions on the long-term economic best interests of members and beneficiaries.

#### **Recent Performance**

The System realized a 15.4 percent return for the fiscal year, well in excess of the actuarial assumption of 8 percent. Total returns were led by the System's equity investments, with domestic (U.S.) equity investments returning just under 20 percent for the year and international equity investments returning over 27 percent. Also supporting the portfolio were the returns of the real estate segment (15.9 percent) led by Real Estate Investment Trusts and the Alternative Investments at 18.7 percent. Alternative Investments are typically less liquid investments in areas such as venture capital, buyouts and distressed debt. All other asset classes (fixed income and cash) were also positive, albeit by more modest amounts. Additional investment performance detail by asset class is on the following page.

#### **Investment Performance Report**

For the Period Ending June 30, 2004

Time-Weighted Return (1)	Last Year	Latest 3 Years	Latest 5 Years
Total Portfolio	15.4%	4.6%	3.8%
Policy Index	15.2%	5.2%	4.1%
Consumer Price Index	3.2%	2.1%	2.7%
Domestic Equity Portfolio	19.9%	1.1%	0.4%
KPERS Equity Benchmark	20.5%	1.4%	0.5%
International Equity Portfolio	27.4%	2.3%	0.8%
KPERS Int'l Equity Benchmark	30.3%	2.8%	-0.7%
Fixed Income Portfolio	3.1%	7.6%	7.1%
KPERS Fixed Income Benchmark	2.3%	7.1%	6.2%
TIPS Portfolio	5.6%	11.9%	NA
KPERS TIPS Benchmark	5.6%	11.8%	NA
Real Estate Portfolio	15.9%	10.0%	9.9%
KPERS Real Estate Benchmark	13.3%	8.6%	10.3%
Alternative Investment Portfolio	18.7%	-2.2%	1.3%
KPERS Alternative Investment Benchmark	15.0%	6.9%	7.7%
Cash Equivalents Portfolio	1.1%	1.9%	3.8%
Merrill Lynch 0-1 Yr. Treasury Index	1.0%	2.0%	3.5%

<sup>(1)</sup> Time weighted total return includes income and changes in market value.

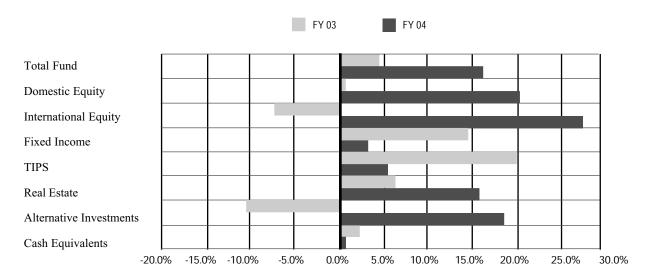
In periods of volatile markets it is important to keep in mind that the long-term health and stability of the System is not predicated on any single year or single decade of performance, be it exceptionally good or exceptionally disappointing. Like the benefits that the assets are held to eventually pay, the investment strategy will continue to focus on the long-term. This includes the application of prudent diversification and moderation in return expectations.

The Retirement System employs a staff of eight professionals to provide oversight and management of the System's assets and the System's external asset managers. Under the oversight of the Chief Investment Officer, responsibility for the portfolio is divided by asset class. The Deputy Chief Investment Officer is assigned to equity securities, the Fixed Income Investment Officer to fixed income securities, the Real Estate Investment Officer to real estate and the Alternative Investment Officer position (currently vacant), is in charge of alternative investments. These individuals' comments on their respective areas follow. In keeping with our mandate to prudently manage the assets of the System solely for the benefit of the participants, we will continue to seek out opportunities to deliver consistent risk adjusted returns and to contain overhead.

<sup>(2)</sup> Above performance data presented in conformance with AIMR standards.

#### **Return Comparison by Asset Class**

For Fiscal Years Ending June 2003 and June 2004



#### **Equity Review**

#### Scott Peppard, Deputy Chief Investment Officer

During the 2004 fiscal year, the System's domestic and international equity portfolios experienced favorable absolute returns, providing the highest returns among the asset classes in which the System invests. For the year ending June 30, 2004, domestic stocks in general returned over 20 percent and international stocks returned just under 33 percent. During this period the U.S. dollar weakened, which accounted for nearly all of the return differential between the domestic and international equity markets.

Almost all of the gains in the fiscal year were achieved during the first eight months (July 2003 through February 2004), as the domestic markets experienced positive returns in seven out of eight months while developed international equity markets were positive in all eight months. The favorable market returns from July to February can be attributed to a recovering economy and a low interest rate environment. From March to June returns were flat, due in part to uncertainties associated with rising oil prices, the timing and magnitude of interest rate hikes by the Federal Reserve and the war in Iraq.

The returns for both the domestic and international equity indexes were much improved over recent fiscal years. For FY 2004 domestic equities, as measured by the Russell 3000 Index, increased in value by 20.5 percent. This compares extremely well against the 0.8 percent and negative 17.2 percent returns of FY2003 and FY2002, respectively. The Morgan Stanley Capital International Europe, Australia and Far East Index (MSCI EAFE), a proxy for developed country international equity markets, gained 32.9 percent. Again, this was much better than the negative 6.1 percent return in FY2003 and the negative 9.2 percent return in FY2002.

The System's domestic equity portfolio is made up of six separate portfolios. Five of the portfolios are actively managed, which means that the portfolio's objective is to earn a return greater than their assigned benchmark. The active portfolios are managed by external investment managers. The remaining portfolio is passively managed by KPERS internal management team. The objective of this portfolio is to match the return of the assigned benchmark. When considered in aggregate, the portfolios have characteristics that are similar to that of the Russell 3000. During the most recent fiscal year, the overall portfolio returned 19.9 percent, compared to the 20.5 percent return of the Russell 3000 Index. Two of the five portfolios met or exceeded the benchmark return while the remaining three underperformed. The passive portfolio returned 19.4 percent relative to its Russell 1000 benchmark return of 19.5 percent.

Similarly, the international equity portfolio consists of six separate externally managed equity portfolios with an additional advisor in place to manage a portion of the currency exposure. The total international portfolio, including the currency manager's activities, returned 27.4 percent versus 30.3 percent for the MSCI EAFE Index, adjusted for currency hedging.

Excluding the currency overlay manager, the combined portfolios returned 29.1 percent for the fiscal year. While the return is very favorable in absolute terms, the consolidation underperformed the MSCI EAFE Index return of 32.9 percent. Like the domestic portfolio, the international portfolio uses both active and passive management. For the fiscal year, only one manager outperformed, while four under performed their benchmark. One portfolio was added during the year and had less than a year of history with the System. The passive strategy slightly under performed.

The System's external investment management team remained stable over the year, with the exception of moving about half of the passive international equity portfolio to an enhanced index mandate. The enhanced index portfolio is expected to add value relative to its benchmark while pursuing a risk controlled strategy.

During the first half of FY2005, the System will be going through its triennial asset/liability study. The study's objective is to develop a strategic asset mix that is designed to meet the funding needs of the System. In conjunction with this study, the manager structure will be analyzed in an effort to maximize return given the associated risks.

#### **Fixed Income**

#### Cheri Woolsey, Fixed Income Investment Officer

The System's traditional fixed income portfolio returned 3.1 percent for fiscal year 2004. On a relative basis, the portfolio out performed the KPERS fixed income benchmark return of 2.3 percent. Through active management, three of four external managers added value based on their ability to identify opportunities to enhance portfolio returns. The passively managed Treasury Inflation Protected Securities (TIPS) portfolio performed well in both relative and absolute terms with a return of 5.62 percent versus its benchmark's return of 5.57 percent.

During the fiscal year, price volatility in fixed income increased as the financial markets fixated on when and by how much interest rates and inflation would rise. The markets evaluated every comment by Federal Reserve Chairman Greenspan and watched for key economic indicators that might lead to short-term rate increases. However, the Fed's targeted short-term federal funds rate remained at 1.0 percent and the long awaited increase to 1.25 percent did not occur until June 2004. Conversely, medium and long-term rates trended higher throughout the fiscal year based on investor anticipation of an eventual Fed tightening to counter increasing inflation expectations. These rising interest rates produced price declines that resulted in lower total returns for fixed income than in previous years (e.g. fiscal year 2003 returns were 14 percent for fixed income and slightly over 19 percent for TIPS).

Throughout the year, inconsistent economic data also contributed to erratic price movements for fixed income. Economic growth was fueled by strong consumer confidence and spending that was predicated on low interest rate mortgages and cashout refinancing. Additional economic stimulus was created by the president's tax relief package that gave taxpayers more discretionary dollars to spend on goods and services. Yet, corporations refrained from investing in capital improvements or hiring, and instead focused on improving their balance sheets. Unemployment continued to remain comparatively high for an economic recovery, a recovery that was for a time referred to as "the jobless recovery." Economists dissected and openly debated the growth and quality of jobs reflected in monthly payroll data, lending to additional market confusion on the Fed's intention to raise rates.

Corporate high yield securities were the best performing among major fixed income components. The System's high-yield manager returned 11.3 percent compared to the benchmark's return of 10.4 percent. High yield tends to perform extremely well in a recovering economy based on its equity-like valuation. Investor demand for high yield also increased as the "carry trade" was readily available. This strategy allows investors to take advantage of a steep upward sloping yield curve. It is typically used by sophisticated investors who use leverage to borrow at extremely low short-term rates and invest the proceeds in riskier, longer-term assets such as high-yield and emerging markets. Combined, the recovering economy and the carry trade contributed to the continued demand for high yield and resulted in strong returns in spite of rising rates.

Single-digit returns for fixed income and TIPS is the consensus expectation for the next few years. If interest rates rise in a measured fashion, and absent a stronger than expected overall economic recovery, fixed income should continue to deliver reasonable absolute returns and good diversification. In this environment, the System's TIPS portfolio should contribute to positive performance since TIPS provide a monthly inflation adjustment in addition to a real return. We expect this adjustment to help mitigate price declines in the overall fixed income portion of the portfolio if interest rates rise.

#### **Real Estate**

#### Robert Schau, Real Estate Investment Officer

For fiscal year 2004, the System continued to target an 8 percent exposure to real estate assets, with actual investments reaching 6.8 percent. This allocation is expected to provide a steady source of relatively high current income returns and enhance portfolio diversification by reducing overall return volatility.

The System's long-term investment strategy includes direct and indirect ownership of institutional quality office, industrial, retail and multifamily properties in major metropolitan areas, with a target weighting of one-half of the real estate portfolio. The other half includes investments in publicly traded real estate investment trusts (REITs) and participation in several noncore investment funds, consisting of pooled holdings of properties (having higher risk and return expectations).

Commercial real estate performance historically has been highly correlated to overall economic growth. We correctly anticipated that a recession of the magnitude experienced in the late 1980s would not be repeated before a recovery, and have steadily worked toward reaching the targeted weighting. In fact, during the recent recession, low interest rates and lack of competitive yield vehicles have driven real estate values up, even as operating results have declined. The System has taken advantage of this market by continuing its program of favorably refinancing outstanding debt and realizing profits on strategic property sales. Diversification has improved with three new acquisitions; a grocery anchored shopping center in Minneapolis, a high-end multifamily property near West Palm Beach and a high-quality open-end core fund.

For the fiscal year ending June 30, 2004, the portfolio generated a total return (defined as value changes plus current income) of 15.9 percent (compared to 6.4 percent last year). This was substantially above the 13.3 percent blended benchmark (consisting of policy-weighted components for private and public equity real estate), and well above last year's benchmark performance of 4.8 percent. The majority of the excess performance was driven by exposure in two REIT portfolios which provided returns of 30 and 27 percent, respectively, and to the more aggressive non-core funds which generated a return of almost 11 percent. Over the past five years, the total portfolio has contributed an average return of 10.0 percent, the highest of any asset class.

Real estate historically has had risk and return characteristics that fall between debt and equity. Therefore, while pleased with these results, we do not expect this out performance to continue indefinitely. This is particularly likely as the System's returns have been generated with a moderate risk exposure - i.e., 40 percent debt levels and no core acquisitions involving development or leasing challenges. We are cognizant of the cyclicality inherent in individual sectors, as well as the extraordinary amount of capital flowing into real estate. U.S. institutional tax-exempt real estate assets have increased to \$266 billion in 2003, from a base of about \$125 billion ten years earlier. Recent surveys project an additional increase of up to \$50 billion in 2004 alone. Pricing at the margin is largely being driven by individuals who are arbitraging the low cost of capital against the relatively high yields. That strategy will not be indefinitely sustainable, and it has often ended badly for the asset class in which it has occurred. These risks are accentuated by the prospect of rising interest rates in a fragile economy.

That said, unlike past real estate boom/bust cycles, transparency in the form of information and disclosure is materially better, reigning in developers and reducing the risk of oversupply. Equally important, the high current income component remains virtually unmatched in the capital markets for the foreseeable future. As this cash flow characteristic corresponds well with the requirements of an aging population (both domestically and internationally), we anticipate that the flow of funds into this sector will likely be sustainable for some time and that operational results are likely to improve in most property types and markets. As such, we intend to remain focused on achieving the targeted real estate exposure level.

#### Alternative Investments

#### Don Deseck, Senior Investment Accountant

Alternative investments are traditionally focused on private debt and equity assets that are not traded on an organized exchange. Large institutional investors like KPERS purchase alternative investments in an effort to improve their total portfolio returns and to diversify risk. Alternative investments provide an opportunity for higher returns due to the inefficiencies and illiquidity inherent in this portion of the capital markets. These excess returns are expected to compensate for the greater risk of loss and the extreme volatility of returns. To help manage and diversify these risks, alternative investments are frequently made in a pooled format, usually as a limited partnership or limited liability corporation. At

present, the System has investment relationships with 35 different investment managers across 53 distinct partnership funds. The portfolio is further diversified across several investment sectors including buyout, venture capital, mezzanine and distressed debt.

The System has a 5 percent target allocation to alternatives and a current weighting slightly in excess of that amount. The System began constructing the majority of the current alternative investment portfolio in 1997 with commitments made over the ensuing four years. Due to fluctuations in the market value of both the alternative investment portfolio and the underlying aggregate portfolio, the exposure to alternatives has varied between 5 and 6 percent of total investments. Recent legislation replaced a 5 percent limitation on total alternative investments with an annual 1 percent limit on new investments. Staff is in the process of evaluating the System's future alternative investment portfolio strategy given these new statutory developments.

Alternative investment performance is highly sensitive to the general state of the economy and the health of the public equity markets. Over the course of the fiscal year, the economy steadily strenghtened with continued growth in corporate profitability, productivity and employment. In turn, public markets stabilized, providing for the resurgence of initial public offerings (IPOs), which are a primary exit vehicle for many private equity investments. As the fiscal year drew to a close, the economy and capital markets seemed to be losing some momentum, and optimism over continued growth was somewhat offset with concerns about terrorism, energy prices and potentially rising interest rates.

KPERS' aggregate alternative investment portfolio performance reflected the turnaround in the economy and the public markets with an 18.7 percent return for fiscal year 2004, substantially exceeding the index benchmark of 15 percent. Within the asset class, venture capital returns were the best for the fiscal year, followed by buyout, distressed debt and mezzanine. Exemplifying the volatility of these assets, until recently the buyout strategy had produced the best returns and venture capital the worst. KPERS' portfolio is still in the early stages of maturation and the long-term expectations for this asset class remain positive.

As required by K.S.A. 74-4904, a schedule of alternative investment initiated on or after July 1, 1991, is listed on the following two pages. Another schedule, summarizing changes in fair value of investments, is on page 50. A listing of domestic broker commissions paid in fiscal year 2004 and the top ten equities and fixed income holdings at fiscal year end are shown on pages 51 and 52.

### Alternative Investments Initiated on or After July 1, 1991 $^{\left(1\right)}$

Shares	Description	Cost	Market Value	
	Included in Alternative Investments Portfolios:			
11,250,000	Advanced Technology VI LP	\$8,799,988	\$4,004,978	
14,400,000	Apax Europe IV LP	5,938,924	6,130,620	
18,480,000	Apax Europe V LP	12,754,353	14,117,465	
5,000,000	Battery Ventures V LP	1,531,561	1,580,420	
8,985,925	Battery Ventures VI LP	6,938,021	4,253,110	
10,770,037	Beacon Group Energy Fund II	4,121,624	5,568,928	
17,625,353	Behrman Capital II LP	12,685,058	10,056,885	
20,741,262	Behrman Capital III LP	18,179,354	18,454,725	
5,543,913	Candover 1997 Us #1 Fund LP	362,920	1,444,030	
17,067,044	Capital Resource Partners IV	13,497,152	10,612,834	
5,593,603	Cinven Second Fund US LP	5,142,527	8,268,333	
15,092,907	Clayton Dubilier & Rice VI LP	9,790,887	7,816,767	
12,480,139	Cypress Merchant Banking II	11,938,034	12,479,827	
9,500,000	Dominion Fund V LP	6,225,904	2,783,481	
4,750,000	El Dorado Ventures IV LP	1,583,722	306,427	
8,000,000	El Dorado Ventures V LP	5,725,541	3,178,760	
10,000,000	El Dorado Ventures VI LP	8,526,771	6,674,270	
17,397,353	GTCR Capital Partners LP	12,103,555	11,936,028	
26,577,662	GTCR Fund VII LP	21,439,333	20,184,273	
3,075,000	GTCR Fund VII/A LP	1,997,752	2,921,358	
14,900,000	Halpern Denny Fund III LP	8,681,953	10,279,808	
18,779,894	Harvest Partners III LP	15,349,191	14,795,157	
15,524,188	Kelso Investment Assoc VI	5,821,957	12,792,567	
13,590,056	Littlejohn Fund II LP	10,517,085	12,767,219	
16,999,811	McCown De Leeuw & Co IV LP	6,995,534	8,229,473	
20,000,000	MD Sass Corp Resurgence	6,905,508	12,666,880	
16,808,919	MD Sass Corp Resurgence II	6,691,665	11,857,633	
15,388,559	MD Sass Corp Resurgence III	7,746,285	11,449,858	

Shares	Description	Cost	Market Value
17,666,196	Oak Hill Capital Partners LP	\$ 9,702,166	\$ 9,307,047
13,000,000	OCM Opportunities Fund II LP	4,645,220	5,026,060
20,000,000	OCM Opportunities Fund III	6,940,057	11,072,440
8,000,000	OneLiberty Fund IV LP	4,368,128	2,873,432
16,500,000	OneLiberty Ventures 2000 LP	14,486,432	9,797,766
21,200,000	TA IX, L. P.	15,465,065	22,645,819
10,700,000	TA Subordinated Debt Fund LP	7,692,514	8,483,281
15,268,000	TCV IV LP	9,928,644	12,085,156
16,910,043	Thomas H Lee Equity Fund IV	10,956,263	10,808,020
17,474,885	Thomas H Lee Equity Fund V	14,727,980	19,016,781
4,518,438	Trinity Ventures VI LP	1,429,163	987,369
12,750,000	Trinity Ventures VII LP	8,888,326	4,423,256
9,240,000	Trinity Ventures VIII LP	7,480,648	4,730,871
19,730,748	Triumph Partners III LP	12,528,650	10,030,067
12,600,000	Vantagepoint Venture III	6,844,347	3,452,312
14,100,000	Vantagepoint Venture IV LP	10,980,727	9,527,455
15,351,999	Vestar Capital Partners IV LP	11,219,447	12,357,545
16,594,668	VS & A Communications III	12,040,134	11,631,269
20,000,000	Warburg Pincus Equity (8)	3,650,819	11,934,940
25,200,000	Welsh, Carson IX LP	13,126,863	20,348,143
19,800,000	Welsh, Carson VIII LP	13,378,635	15,255,365
19,954,755	Willis Stein & Partners II LP	8,326,495	6,829,395
25,672,493	Willis Stein & Partners III	23,880,083	23,101,367
13,304,898	Windjammer Fund II LP	9,661,849	11,428,548
15,277,377	Windward Capital Partners II	10,543,140	18,651,065
st 1991 Investme	ents	\$490,883,951	\$523,416,882

<sup>(1)</sup> Investment values quoted without spin-offs or distributions.

#### **Schedule of Investment Summary**

(In Thousands) (1) For the Fiscal Year Ended June 30, 2004

	June 30, 2003 Fair Value	Purchases and Other Increases	Sales and Other Decreases	June 30, 2004 Fair Value	Asset Mix Fair Value
Marketable Securities					
Domestic Equities	\$3,024,581	\$986,276	\$(497,411)	\$3,513,446	32.65%
International Equities	1,621,533	1,260,835	(745,454)	2,136,914	19.86
Total Fixed Income	3,255,500	10,155,754	(9,729,782)	3,621,472	34.22
Temporary Investments (2)	379,764	21,593,784	(21,791,041)	182,507	1.70
Total Marketable Securities	8,281,378	33,996,649	(32,763,688)	9,514,339	88.43
Real Estate and Alternative Investment	s				
Real Estate	623,648	155,902	(72,655)	706,895	6.57
Direct Placements					
and Limited Partnerships	483,144	208,307	(153,523)	537,928	5.00
Total Real Estate and					
Alternative Investments	1,106,792	364,209	(226,178)	1,244,823	11.57
Total	\$9,388,170	\$34,360,858	(\$32,989,866)	\$10,759,162	100.00%

<sup>1)</sup> Amounts include changes in unrealized appreciation and exclude interest and dividend accruals. Amounts exclude security lending cash collateral of \$1,860,279,374 for FY 2003 and FY 2004 cash collateral of \$2,078,302,191.

<sup>2)</sup> Temporary Investments include foreign currencies and securities maturing within 90 days of purchase date.

# **U.S. Equity Commissions**For the Fiscal Year Ended June 30, 2004

Broker Name	Commissions Paid	Shares	Commission Per Share	Percent of Total Commissions
	1 2		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Goldman Sachs & Co, NY	\$ 131,343	3,335,450	\$0.04	7.6%
Morgan Stanley & Co Inc, NY	129,012	4,458,355	0.03	7.4
Credit Suisse First Boston Corp, NY	113,959	2,525,295	0.05	6.6
Citigroup Gbl Mkts Inc, New York	113,584	3,097,230	0.04	6.5
Merrill Lynch Pierce Fenner Smith Inc NY	109,065	2,368,900	0.05	6.3
Lehman Bros Inc, New York	107,815	2,168,567	0.05	6.2
Banc Of America Secs LLC, Charlotte	91,951	2,301,700	0.04	5.3
Ubs Securities LLC, New York	68,094	1,455,800	0.05	3.9
Jefferies & Co Inc, New York	60,674	1,443,000	0.04	3.5
Sg Americas Securities LLC, New York	55,390	1,204,100	0.05	3.2
Investment Technology Groups, NY	53,956	4,143,600	0.01	3.1
Schwab Charles & Co Inc, San Francisco	43,538	1,174,600	0.04	2.5
Thomas & Weisel Inc, San Francisco	40,952	855,400	0.05	2.4
Bear Stearns & Co Inc, NY	37,208	797,100	0.05	2.1
Morgan J P Secs Inc, New York	33,322	792,300	0.04	1.9
Soundview Finl Group, Stanford	31,878	659,100	0.05	1.8
Wachovia Capital Markets LLC, Charlotte	29,546	620,400	0.05	1.7
Knight Sec Broadcort, Jersey City	26,639	771,500	0.03	1.5
Deutsche Banc Alex Brown Inc, NY	25,470	613,400	0.04	1.5
Oppenheimer & Co Inc, New York	23,941	524,800	0.05	1.4
First Clearing LLC, Richmond	21,945	731,500	0.03	1.3
Bear Stearns Sec Corp, Brooklyn	18,627	372,539	0.05	1.1
Stephens Inc, Little Rock	16,793	340,300	0.05	1.0
Maxcor Finl Inc, Jersey City	16,143	538,100	0.03	0.9
Bridge Trading Co, St Louis	15,999	399,800	0.04	0.9
Others	321,615	9,820,327	0.03	18.5
Total Broker Commissions	\$1,738,456	47,513,163	\$0.04	100.0 %

#### List of Largest Holdings(a)

as of June 30, 2004

Equities		
Security	Fair Value (\$)	
Citigroup Inc Com	\$56,255,700	
Microsoft Corp Com	54,999,763	
Pfizer Inc Com Stk USD0.05	49,711,965	
General Elec Co Com	48,630,586	
HSBC Hldgs Ord USD 0.05 (UK)	47,036,232	
Exxon Mobil Corp	46,875,821	
Vodafone Group Pic Ord USD0.10	43,527,590	
Bank of America Corp	42,153,368	
Total SA Eur10	40,207,504	
CISCO Inc Com	36,232,679	
	Citigroup Inc Com Microsoft Corp Com Pfizer Inc Com Stk USD0.05 General Elec Co Com HSBC Hldgs Ord USD 0.05 (UK) Exxon Mobil Corp Vodafone Group Pic Ord USD0.10 Bank of America Corp Total SA Eur10	

Fixed Income				
Par Value	Security	Description	Fair Value (\$)	
\$ 570,888,107	US Treasury Inflation Index Bd	3.875% 04/15/2029	\$ 728,239,142	
112,737,280	US Treasury Inflation Index Bd	3.625% 04/15/2028	137,574,994	
98,490,720	US Treasury Inflation Index Bd	3.375% 04/15/2032	119,881,919	
81,800,000	US Treasury Bill	0.000% 07/08/2004	81,661,516	
70,990,000	US Treasury Notes	2.500% 05/31/2006	70,769,931	
63,670,000	US Treasury Notes	4.000% 06/15/2009	64,223,929	
49,640,000	Commit To Pur FNMA Sf Mtg	6.500% 07/01/2034	51,676,014	
50,380,000	Commit To Pur FNMA Sf Mtg	5.000% 8/01/2019	20,245,050	
49,700,000	Goldman Cat 2 Repo	1.450% 07/01/2004	49,700,000	
50,000,000	US Treasury Notes	3.375% 12/15/2008	49,375,000	
20,000,000	OB Heading Hotes	3.37370 12/13/2000	17,575,00	

<sup>(</sup>a) A complete listing of the System's holdings is available at the Retirement System office. Does not include holdings of commingled funds

# Actuarial Section

# Actuarial



October 28, 2004

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

#### Dear Members of Board:

At your request, we have conducted our annual actuarial valuation of the Kansas Public Employees Retirement System as of December 31, 2003. The major findings of the valuation are contained in this report. While there was no change in the actuarial assumptions, there were changes made to both the actuarial cost method and the asset valuation method from the prior valuation. The report also reflects several legislative changes. All of the information and the supporting schedules found on page 56 through 84 of the Actuarial Section have been provided by Milliman, Inc. We also provided the information used in the supporting schedules in the Schedules of Funding Progress in the Financial Section as well as the employer contribution rates shown in the Schedule of Employer Contributions in the Financial Section.

In preparing our report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member 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. 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 principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We hereby 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 internally consistent, individually reasonable (taking into account the experience of the Plan and reasonable expectations of future experience); and which, in combination, offer our best estimate of anticipated experience under the Plan. 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 the set of assumptions used in this valuation. The assumptions comply with the requirements of Statement 25 of the Government Accounting Standards Board.

This report has been prepared for the Board of Trustees. Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the System. Determinations for purposes other than this may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. Other users of this report are cautioned not to rely on the information contained herein if their purpose for its use is not consistent with the purpose for which the report was prepared.

We would like to express our appreciation to Glenn Deck, Executive Director of the System, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

I, Patrice A. Beckham F.S.A., am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Brent A. Banister F.S.A., am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

MILLIMAN, Inc.

Sincerely,

Patrice A. Beckham, F.S.A.

Patrice Beckham

Brent A. Banister, F.S.A.

But a. But

Consulting Actuary Actuary

#### Section I, Board Summary

#### Overview

The Kansas Public Employees Retirement System is an umbrella organization which administers the following three statewide pension groups under one plan: 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, 2003, actuarial valuations 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, and
- analyze and report on trends in System contributions, assets, and liabilities over the past several years.

There are a number of significant changes that are first reflected in this valuation:

- changing the actuarial cost method,
- changing the asset valuation method,
- issuance of Pension Obligation Bonds (POBs),
- increases in the statutory cap for Local employers,
- a benefit enhancement for KP&F, and
- splitting the State/School group into two separate groups.

The number of changes and the magnitude of their impact make it very difficult to compare the results of the current valuation to those performed in prior years. Each change is discussed individually. Also, the impact of each change on the System's Unfunded Actuarial Liability (UAL) and actuarial contribution rates is quantified.

The 2004 Legislature passed the 2004 KPERS Omnibus Bill (SB520), which contained several provisions that impacted the valuation and are reflected in this report:

- The KPERS Board of Trustees was given authority to select the actuarial cost method and the amortization method and amortization period for all three systems.
- The KPERS State/School group was split for actuarial purposes, including the calculation of employer contribution rates, into two separate groups: State and School.
- The statutory cap for the Local group increases to 0.40 percent in CY2006, with subsequent increases of 0.50 percent in CY2007 and 0.60 percent in CY2008 and beyond.
- Tier I members of KP&F may retire with unreduced benefits after 32 years of service regardless of age.

The valuation results provide a "snapshot" view of the System's financial condition on December 31, 2003. The unfunded actuarial liability for the System as a whole increased by \$782 million, due to various factors, the most significant of which was the change in the actuarial cost method. A detailed analysis of the change in the unfunded actuarial liability from December 31, 2002, to December 31, 2003, is shown on page 65.

There were significant changes in the actuarial procedures this year as the Board took action to implement the actuarial components of the long-term funding plan. Both the actuarial cost method and the asset valuation method were changed for all groups.

The prior actuarial cost method was the Projected Unit Credit (PUC) method for KPERS, the Aggregate Cost method with a Supplemental Unfunded Actuarial Liability for KP&F, and the Frozen Entry Age method for Judges. At the May meeting of the KPERS Board of Trustees, the Board adopted a resolution changing the actuarial cost method for all three Systems to the traditional Entry Age Normal (EAN) cost method for the December 31, 2003, valuation. This change provides for a consistent valuation basis for all three plans and moves the System's funding method to the method most commonly used by public retirement systems.



The asset valuation method was also changed by the Board effective with the December 31, 2003, valuation. Under the previous method, the expected value of plan assets was determined using the prior year's actuarial value of assets, actual receipts and disbursements of the Fund for the year, and the assumed rate of investment return. The actuarial value of assets was the expected value plus one-third of the difference between actual market value and the expected value. The new 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 evenly over a five-year period. The new smoothing method was implemented by calculating the gain or loss on market value in prior years as though the method had always been in place.

On March 10, 2004, the State of Kansas issued Pension Obligation Bonds in the amount of \$500 million. The net proceeds of \$440.2 million were transferred to KPERS to assist with financing the unfunded actuarial liability for the State/School group. The debt service payment on the bonds is paid in addition to the State's KPERS contribution. The bond proceeds are treated as a receivable for the December 31, 2003, valuation. The proceeds were allocated to the State and School groups based on the unfunded actuarial liability (UAL) as of December 31, 2003, determined under the Entry Age Normal cost method for each group. The resulting allocation was \$36.5 million to the State and \$403.7 million to the School group.

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 statutory cap, which has been changed periodically, is currently 0.50 percent in FY2007 for State and School and will increase to 0.60 percent in FY 2008. Legislation passed in 2004 increased the statutory cap for Local employers from 0.15 percent to 0.40 percent in CY 2006, 0.50 percent in CY 2007 and 0.60 percent in CY 2008 and thereafter. Based on the results of the current valuation and assuming an 8 percent return on the market value of assets in 2004 and beyond and that all other assumptions are met in the future and the current statutory caps, the statutory and actuarial contributions rates will converge before the end of the amortization period.

Due to favorable experience and the allocation of the POB proceeds, the State reached equilibrium with the December 31, 2003, actuarial valuation. "Equilibrium" means that the actual contribution rate being paid into the System will equal the actuarial contribution rate. However, due to the use of an asset smoothing method, there are still deferred investment losses that have not been recognized in the actuarial process. For the State group, the amount of deferred loss is \$150 million. If the actuarial assumed rate of 8 percent is met for calendar year 2004, \$120 million of the deferred loss for the State will flow into the actuarial value of assets and result in an increase in the UAL in the December 31, 2004, valuation. If this occurs, the actuarial contribution rate would increase about 0.90 percent to 6.11 percent. The statutory cap would limit the increase in the contribution rate to 5.81 percent and the State would again be out of equilibrium.

Prior actuarial valuation reports have addressed concerns about the long term funding of KPERS. KPERS' funded status has improved due to legislation, Board action and strong investment performance in 2003. The State has reached equilibrium (statutory rate is equal to the actuarial rate) and, given the current statutory caps, the School and Local groups are projected to reach equilibrium before the end of the amortization period (2033). The System is in actuarial balance and the long term funding has improved dramatically. Due to the use of an asset smoothing method and the delayed reflection of market experience in the actuarial value of assets, it is expected that additional actuarial losses will be reflected in the unfunded actuarial liability over the next few years. This will result in an increase in the UAL and a corresponding increase in the contribution for the UAL payment, but the System is expected to remain in actuarial balance if all actuarial assumptions are met going forward. For the School and Local groups, the shortfall between the actuarial and statutory contribution rates will produce additional increases in the UAL. As a result, the actuarial contribution rate for these groups is expected to increase until equilibrium is reached.



#### **Contribution Rates**

The System's funding objective 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 2033. Actuarial contribution rates consist of a normal cost rate and an amortization payment. The contribution rates in the December 31, 2003, valuation will set rates for fiscal year end 2007 for the State and 2006 for Local employers.

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, is currently 0.50 percent in FY2007 for State and School and will increase to 0.60 percent in FY 2008. Legislation passed in 2004 increased the statutory cap for Local employers from 0.15 percent to 0.40 percent in CY 2006, 0.50 percent in CY2007 and 0.60 percent in CY2008 and thereafter.

A summary of actuarial and statutory employer contribution rates for the Retirement System (excluding the statutory contribution for the Death and Disability Program) follows:

December 31, 2003, Valuation		
Actuarial	Statutory	Difference
5.21%	5.21%	0.00%
9.75%	5.77% 1	3.98%
6.24%	3.81% 1	2.43%
12.39%	12.39%	0.00%
19.11%	19.11%	0.00%
	Actuarial 5.21% 9.75% 6.24% 12.39%	Actuarial Statutory  5.21% 5.21%  9.75% 5.77% 1  6.24% 3.81% 1  12.39% 12.39%

	December 31,		
System	Actuarial	Statutory	Difference
State/School	9.14%	5.27%	3.87%
Local	5.44%	3.41% 1	2.03%
Police & Fire-Uniform Rates <sup>2</sup>	11.63%	11.63%	0.00%
Judges	21.97%	21.97%	0.00%

<sup>&</sup>lt;sup>1</sup> Rates for this fiscal year, by statute, are allowed to increase by a maximum of 0.50 percent for State and School and 0.40 percent for Local employees per year plus the cost of any benefit enhancements.

Employer Contribution Rates for the Correctional Employee Groups are shown below:

	Actuarial	Statutory
Retirement Age 55:	7.17%	7.17%
Retirement Age 60:	7.04%	7.04%



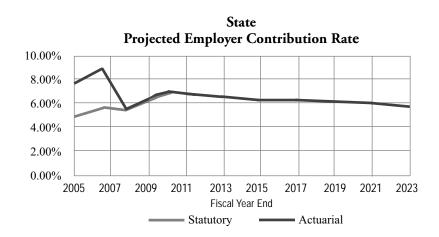
<sup>&</sup>lt;sup>2</sup> For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 12.52 percent which includes a payment of 0.76 percent for the debt service payment on the bonds issued for the 13th check. The uniform rate does not include the payment required to amortize the unfunded past service liability or any 15 percent excess benefit liability determined separately for each employer.

There were significant changes to the actuarial basis used to develop contribution rates in this valuation. The following chart compares the baseline numbers (no change in actuarial cost method or asset valuation method) and the current valuation results:

	Norm Before	al Cost After	UAL Pa Before	yment After	Total (EE Before	+ ER) After
State/School*	9.29%	7.81%	3.72%	4.83%	13.01%	12.64%
Local	7.75%	7.36%	1.95%	2.88%	9.70%	10.24%
KP&F (Local)	16.09%	14.78%	3.85%	4.18%	19.94%	18.96%
Judges	19.27%	17.86%	5.33%	6.07%	24.60%	23.93%

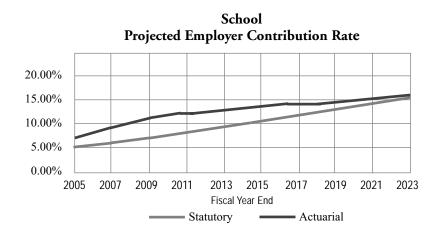
<sup>\*</sup>Informational only. Separate rates apply for State and School groups effective December 31, 2003.

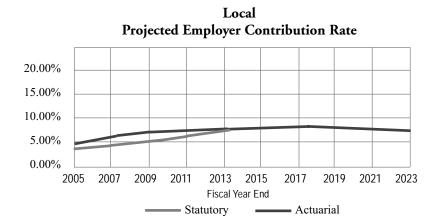
Due to statutory caps, the full actuarial contribution rate is not contributed for the School and the Local groups. Based on the current valuation, there is a difference (shortfall) between the actuarial and statutory contribution rates of 3.98 percent, and 2.43 percent respectively for the School and Local groups. Assuming an 8 percent return on the market value of assets for 2004 and beyond, and that all other actuarial assumptions are met in the future, and the current statutory caps the statutory and actuarial contribution rates are projected to converge for Locals in 2014 and Schools in 2025.





Despite a rate of return on the market value of assets of over 20 percent for 2003, there was an actuarial experience loss on the actuarial value of assets. The impact of negative experience is reflected in the unfunded actuarial liability (UAL). The result is the actuarial loss increases the payment on the UAL but the normal cost rate is not impacted. As the remainder of the deferred investment loss is recognized in the actuarial value of assets in future years, contribution rates can be expected to continue to increase.

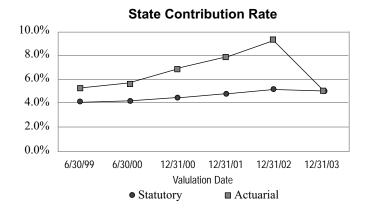




The funding for the State and School groups was strengthened by the bond issue and subsequent deposit of \$440 million. With the separation of the State and Schools into two separate groups, the impact of the bond issue is less obvious. For comparative purposes the actuarial contribution rate was calculated on a combined basis. The State/School actuarial contribution rate would have been 8.64 percent, as compared to 9.14 percent last year, despite increases in the UAL due to the change in the actuarial cost method and an actuarial experience loss for the 2003 year.

Historical contribution rates for each group are shown below. 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 group for contribution rate calculations into two separate groups. In addition, bonds were issued by the State to help finance the UAL of the State and School groups and the actuarial methods were changed for all groups. These changes impact the comparability of contribution rates from the 2003 valuation and prior years.

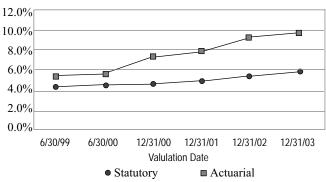




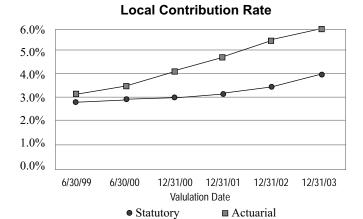
Investment experience in 2000 - 2002 resulted in an increase in the actuarial contribution rate. The split of the State into a separate group in the 2003 valuation, coupled with the bonds issued, significantly lowered the actuarial rate. Currently, the State group is at equilibrium.

Due to investment experience, changes in actuarial methods, 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 increased.

#### **School Contribution Rate**

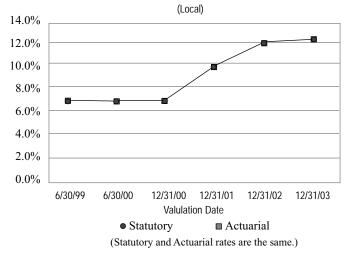


The Local contribution rate has also been impacted by recent investment performance. As a result, the difference between the statutory and actuarial contribution rate has increased. Legislation passed in 2004 provided for increased statutory caps, which should reduce the difference in future years.

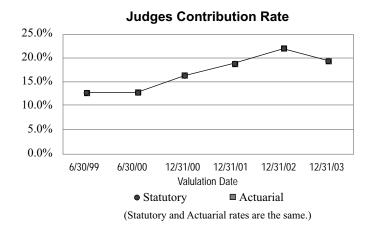


Strong investment returns before 2000 held employer contribution rates at a very low level. Investment experience since then has dramatically increased the contribution rates.

#### **KP&F Contribution Rate**







Significant changes in the actuarial assumptions in the December 31, 2000 valuation and investment experience in recent years have generally resulted in higher contribution rates.

#### Experience – All Systems Combined

#### December 31, 2002 - December 31, 2003

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, 2003. 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 both Systems' assets and liabilities impacted the change in the actuarial contribution rates between the December 31, 2002, and December 31, 2003, actuarial valuations. On the following pages each component is examined and quantified.

#### **Assets**

As of December 31, 2003, the System had total funds when measured on a market value basis, of \$9.8 billion, excluding receivables and assets held for the Group Insurance and Optional Life reserves. This was a increase of \$1.6 billion from the December 31, 2002, figure of \$8.2 billion. The components of the change in the market value of assets for the Retirement System (in millions) are set forth below:

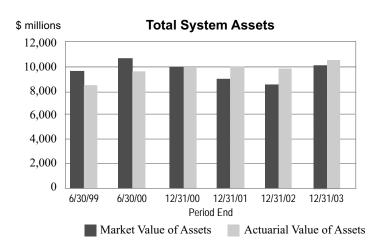
	Market Value \$ (millions)
Assets, December 31, 2002	\$8,241
Receivables	42
Adjusted Assets, December 31, 2002	\$8,283
Employer and Member Contributions	439
Benefit Payments and Expenses	(703)
Investment Income	1,778
Assets, December 31, 2003	\$9,797
• Receivables (POB Proceeds)	440
Adjusted Assets, December 31, 2003	\$10,237



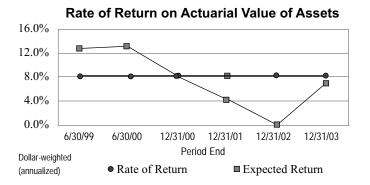
The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The asset valuation method was changed by the Board effective with the December 31, 2003, valuation. Under the previous method, the expected value of plan assets was determined using the prior year's actuarial value of assets, actual receipts and disbursements of the Fund for the year and the assumed rate of investment return. The actuarial value of assets was the expected value plus one-third of the difference between actual market value and the expected value. The new 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. To implement the new smoothing method the gain or loss on the market value of assets for the prior four years was calculated and recognized at 20 percent per year. The detailed development of the actuarial value of assets as of December 31, 2003, for each group is shown on pages 69 through 71. The impact of the change in the asset smoothing method was to increase the actuarial value of assets by \$285 million.

The actuarial value of assets as of December 31, 2003, including receivables, was \$10.853 billion. The annualized dollarweighted rate of return for 2003 measured on the actuarial value of assets, prior to the change in method, was 6.3 percent and measured on the market value of assets, as reported by KPERS, was 22.1 percent.

Due to the use of an asset smoothing method, there is \$617 million of deferred investment loss that has not yet been recognized. Absent investment returns in excess of 8 percent in the next few years to offset this deferred investment loss, it will gradually be reflected in the actuarial value of assets. As this occurs through the smoothing method, the valuation results will show an actuarial loss on assets even if the 8 percent assumed rate of return is met. If such a loss occurs, it will result in an increase in the UAL and the actuarial contribution rate.



Due to rates of return in the 1990s in excess of the actuarial assumption, the market value generally exceeded the actuarial value of assets. The market experience from 2000 to 2002 reversed that trend. Due to strong investment returns during 2003, the gap between the market value and actuarial value of assets decreased significantly. However, the actuarial value of assets continues to exceed the market value.



The rate of return on the actuarial (smoothed) value of assets exceeded the assumed rate of 8 percent until 2001. Rates are expected to remain below 8 percent for the next few years as the deferred investment losses are reflected in the actuarial value of assets.



#### Liabilitites

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 and the unfunded portion thereof.

Effective with the December 31, 2003, actuarial valuation, the actuarial cost method was changed to the Entry Age Normal method for all groups. As a result there was a change in the actuarial liability for all groups. The Actuarial Liability (AL), Actuarial Value of Assets (AVA) and the Unfunded Actuarial Liability (UAL) for all Systems (\$millions) are summarized below:

	State	School	Local	KP&F	Judges
Actuarial Liability (prior)	\$2,542	\$7,138	\$1,997	\$1,514	\$101
Change to EAN	205	656	237	48	0
Actuarial Liability (EAN)	\$2,747	\$7,794	\$2,234	\$1,562	\$101
Actuarial Value of Assets	(2,520)	(5,287)	(1,646)	(1,313)	(86)
Unfunded Actuarial Liability	\$227	\$2,507	\$588*	\$249*	\$15

\*Includes UAL for prior service being paid off by individual employers.

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. Payments on the UAL increase four percent each year, the same as the payroll growth assumption.

In the early years of the period, the payment is less than the interest accruing on the UAL. As a result, the dollar amount of UAL is expected to increase for many years before it begins to decline. In addition, with the planned difference in the statutory and actuarial contribution rates prior to convergence, 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 (both asset and liability), 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 2003). Both the State/School and Local groups had a small net liability gain. Retiree mortality, retirement experience and service purchases resulted in an actuarial loss which was more than offset by a gain on salary experience. The experience loss from investment return on the actuarial value of assets was greater than the net liability gain so overall experience was a loss.



Between December 31, 2002, and December 31, 2003, the change in the unfunded actuarial liabilities for the System as a whole was as follows (in millions):

	\$ (millions)
Unfunded Actuarial Liability, December 31, 2002	\$ 2,829
effect of contribution cap/time lag	178
expected increase due to amortization method	47
loss from investment return	140
demographic experience*	(37)
all other experience	5
change in actuarial cost method	1,147
change in asset valuation method	(286)
change in benefit provisions (KP&F)	3
Preliminary UAL, December 31, 2003	\$4,026
receivable bond proceeds	(440)
Unfunded Actuarial Liability, December 31, 2002	\$3,586

Liability gain is about 0.26 percent of total actuarial liability.

A detailed summary of the change in the unfunded actuarial liability by System is shown on page 66.

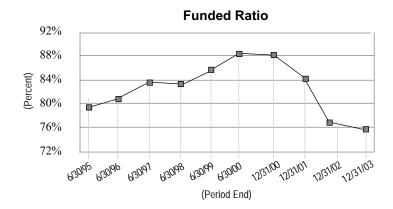
There is currently \$617 million of deferred investment loss that will eventually be recognized in the actuarial value of assets in the next few years. As the prior investment losses are recognized, the UAL will increase by that amount, absent favorable experience to offset it. If the assumed rate of 8 percent is not met on the market value of assets it will result in an additional increase in the UAL and an additional amount of deferred investment loss to be recognized later.

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 change to the Entry Age Normal actuarial cost method in the 2003 valuation resulted in an increase in the UAL and a decrease in the funded status.

The funded status information is shown below (in millions):

	6/30/98	6/30/99	6/30/00	12/31/00	12/31/01	12/31/02	12/31/03
Funded Ratio	83.0%	86.0%	88.6%	88.3%	84.8%	77.6%	75.2%
Unfunded Actuarial Liability (UAL)	\$1,591	\$1,397	\$1,233	\$1,305	\$1,780	\$2,829	\$3,586





Due to strong investment returns, the funded status of the System generally improved in the last half of the 1990s. Recent changes in actuarial valuation procedures coupled with low investment returns have significantly reduced the funded ratio.

#### **Summary of Changes in Unfunded Actuarial Liability**

December 31, 2003, Valuation

\$(millions)	State/School	Local	KP&F*	Judges*	Total
UAL in 12/31/02 Valuation Report	\$2,238.8	\$340.0	\$232.5	\$17.4	\$2,828.7
• Effect of contribution cap/timing	150.7	27.1	0.0	0.0	177.8
• Expected increase due to method	43.1	6.0	(1.6)	(0.2)	47.3
• Actual vs Expected experience					
Investment return	118.5	21.6	0.0	0.0	140.1
Demographic experience	(35.0)	(1.8)	0.0	0.0	(36.8)
• All other experience	4.5	0.0	0.0	0.0	4.5
• Change in assumptions	0.0	0.0	0.0	0.0	0.0
• Change in actuarial cost method*	862.6	236.7	48.4	0.1	1,147.8
• Change in asset valuation method	(209.5)	(41.7)	(32.4)	(2.0)	(285.6)
• Change in benefit provisions (KP&F only)	0.0	0.0	2.5	0.0	2.5
• Receivable bond proceeds	(440.2)	0.0	0.0	0.0	(440.2)
UAL in 12/31/03 Valuation Report	\$2,733.5**	\$587.9	\$249.4	\$15.3	\$3,586.1

<sup>\*</sup> The actuarial cost method was changed to the Entry Age Normal cost method with the December 31, 2003, valuation.



<sup>\*\*</sup> The allocation of this amount between the State and the School group was \$226.8 and \$2,506.7 million respectively.

#### **Summary of Changes in Actuarial Contribution Rate by System**

as of December 31, 2003

Percentage of Payroll	State/School	Local	KP&F*	Judges
Actuarial Contribution Rate in 12/31/02 Valuation Change Due to Amortization of UAL	9.14%	5.44%	11.63%	21.97%
• Effect of contribution cap/time lag	0.25	0.13	0.00	0.00
Amortization method	0.00	0.00	0.00	(0.27)
Investment experience	0.20	0.10	0.00	0.00
Liability experience	(0.06)	(0.01)	0.00	0.00
• All other experience	0.10	(0.03)	0.08	0.12
Assumption change	0.00	0.00	0.00	0.00
Change in cost method	1.46	1.12	0.86	0.04
Change in asset valuation method	(0.35)	(0.20)	(0.58)	(0.78)
Changes in benefit provisions	0.00	0.00	0.04	0.00
• POB proceeds	(0.74)	0.00	0.00	0.00
Change in Normal Cost Rate				
• Experience	0.12	0.08	1.67	(0.56)
Change in cost method	(1.48)	(0.39)	(1.31)	(1.41)
Actuarial Contribution Rate in 12/31/03 Valuation	8.64%	6.24%	12.39%	19.11%

<sup>\*</sup> Contribution rate for Local employers only.



# Summary of Historical Changes in Total System UAL

as of December 31, 2003, Valuation

					ă Î	As Reported on Valuation Date	d on Valu	nation Da	Ite			
\$(millions)	6/30/94	96/30/92	96/08/9	76/08/9	86/30/98	66/08/9	00/08/9	12/30/00	12/31/01	12/31/02	12/31/03	Total
Actuarial Experience vs Assumed												
· Investment	\$(102)	\$(143)	\$(280)	\$(323)	\$(413)	\$(369)	\$(441)	\$(23)	\$350	\$644	\$140	(096)\$
· Other	320	72	136	157	104	46	66	84	(6)	89	(32)	1,045
Assumption Changes	0	96)	0	0	350	0	0	(206)	0	0	0	84
Changes in Data/Procedures	244	0	0	0	0	21	71	145**	5	177**	(586)	377
Change in Cost Method	0	0	0	0	0	0	0	0	0	0	1,147	1,147
Effect of Contribution Cap/Lag	*	95	70	63	54	78	99	09	115	143	178	922
Amortization Method	*	47	38	35	32	30	22	12	14	21	47	298
Change in Benefit Provisions	75	0	0	0	88	0	19	0	0	37	3	222
Bond Issue	0	0	0	0	0	0	0	0	0	(41)	(440)	(481)
Total	\$537	\$(25)	\$(36)	\$(68)	\$215	\$(194)	\$(164)	\$72	\$475	\$1,048	\$757	\$2,618

\*Not calculated for this year.

\*\*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 actuarial procedures is also included.

Unfunded actuarial liability 12/31/03: \$3,586 million Unfunded actuarial liability 6/30/93: \$968 million



## Calculation of Excess (Shortfall) Investment Income for Actuarial Value of Net Assets State/School\*

		12/31/2000**	12/3/2001	12/31/2002	12/31/2003
1.	Market Value of Assets, beginning of year	\$7,548,289,289	\$7,064,114,860	\$6,526,556,674	\$5,883,616,048
2.	Contributions, during year	129,261,891	281,369,451	284,037,672	297,188,900
3.	Benefits, during year	(234,825,688)	(470,861,634)	(500,512,922)	(517,899,204)
4.	Expected net investment income	294,072,306	557,695,319	513,632,105	462,030,712
5.	Transfers and receivables	0	0	37,975,755	440,165,000
6.	Expected Value of Assets, end of year	\$7,736,797,798	\$7,432,317,996	\$6,861,689,284	\$6,565,101,456
7.	Market Value of Assets, end of year	7,064,114,860	6,526,556,674	5,883,616,048	7,361,579,683
8.	Excess (shortfall) of net investment income	(\$672,682,938)	(\$905,761,322)	(\$978,073,236)	\$796,478,227

<sup>\*</sup>Includes asset values for the TIAA group.

# Calculation of Excess (Shortfall) Investment Income for Actuarial Value of Net Assets Local

	12/31/2000*	12/3/2001	12/31/2002	12/31/2003
1. Market Value of Assets, beginning of year	\$1,589,102,489	\$1,498,000,095	\$1,395,342,080	\$1,297,926,648
2. Contributions during year	34,219,018	71,859,932	79,874,944	86,210,953
3. Benefits during year	(45,578,437)	(100,750,022)	(91,964,349)	(99,630,311)
4. Expected net investment income	62,120,586	118,706,635	111,153,093	103,307,684
5. Transfers and receivables	0	0	900,320	0
6. Expected Value of Assets, end of year	\$1,639,863,656	\$1,587,816,640	\$1,495,306,088	\$1,387,814,974
7. Market Value of Assets, end of year	1,498,000,095	1,395,342,080	1,297,926,648	1,561,501,396
8. Excess (shortfall) of net investment income	(\$141,863,561)	(\$192,474,560)	(\$197,379,440)	\$173,686,422

<sup>\*</sup> The plan year ended 12/31/00 was a short plan year from 7/1/00 to 12/31/00.



<sup>\*\*</sup> The plan year ended 12/31/00 was a short plan year from 7/1/00 to 12/31/00.

#### Calculation of Excess (Shortfall) Investment Income for Actuarial Value of Net Assets KP&F

	12/31/2000*	12/3/2001	12/31/2002	12/31/2003
Market Value of Assets, beginning of year	\$1,306,299,006	\$1,232,301,955	\$1,149,732,145	\$1,034,446,737
2. Contributions during year	27,081,703	48,285,229	50,858,313	51,088,147
3. Benefits during year	(35,513,089)	(70,152,742)	(76,751,521)	(79,934,661)
4. Expected net investment income	51,082,950	97,726,283	90,962,769	81,624,076
5. Transfers and receivables	0	0	2,707,853	0
6. Expected Value of Assets, end of year	\$1,348,950,570	\$1,308,160,725	\$1,217,509,559	\$1,087,224,299
7. Market Value of Assets, end of year	1,232,301,955	1,149,732,145	1,034,446,737	1,232,406,980
8. Excess (shortfall) of net investment income	(\$116,648,615)	(\$158,428,580)	(\$183,062,822)	\$145,182,681

<sup>\*</sup> The plan year ended 12/31/00 was a short plan year from 7/1/00 to 12/31/00.

#### Calculation of Excess (Shortfall) Investment Income for Actuarial Value of Net Assets **Judges**

	12/31/2000*	12/3/2001	12/31/2002	12/31/2003
1. Market Value of Assets, beginning of year	\$83,792,482	\$79,533,257	\$74,599,904	\$67,137,447
2. Contributions during year	2,126,608	3,957,838	3,716,116	4,123,659
3. Benefits during year	(2,180,954)	(4,977,864)	(5,194,517)	(5,106,275)
4. Expected net investment income	3,286,164	6,322,644	5,909,994	5,332,447
5. Transfers and receivables	0	0	171,353	0
6. Expected Value of Assets, end of year	\$87,024,300	\$84,835,875	\$79,202,850	\$71,487,278
7. Market Value of Assets, end of year	79,533,257	74,599,904	67,137,447	81,081,078
8. Excess (shortfall) of net investment income	(\$7,491,043)	(\$10,235,971)	(\$12,065,403)	\$9,593,800

<sup>\*</sup> The plan year ended 12/31/00 was a short plan year from 7/1/00 to 12/31/00.



#### **Development of Actuarial Value of Net Assets**

	State/School	Local	KP&F	Judges	Total
Excess (shortfall) of investment income					
a. Year ending 12/31/03	\$796,478,227	\$173,686,422	\$145,182,681	\$9,593,800	\$1,124,941,130
b. Year ending 12/31/02	(978,073,236)	(197,379,440)	(183,062,822)	(12,065,403)	(1,370,580,901)
c. Year ending 12/31/01	(905,761,322)	(192,474,560)	(158,428,580)	(10,235,971)	(1,266,900,434)
d. Year ending 12/31/00	(672,682,938)	(141,863,561)	(116,648,615)	(7,491,043)	(938,686,158)
e. Total	(\$1,760,039,268)	(\$358,031,140)	(\$312,957,336)	(\$20,198,618)	(\$2,451,226,362)
Deferral of excess (shortfall) of investment income					
a. Year ending 12/31/03 (80%)	\$637,182,582	\$138,949,138	\$116,146,145	\$7,675,040	\$899,952,904
b. Year ending 12/31/02 (60%)	(586,843,942)	(118,427,664)	(109,837,693)	(7,239,242)	(822,348,540)
c. Year ending 12/31/01 (40%)	(362,304,529	(76,989,824)	(63,371,432)	(4,094,389)	(506,760,173)
d. Year ending 12/31/00 (20%)	(134,536,588)	(28,372,712)	(23,329,723)	(1,498,209)	(187,737,232)
e. Total	(\$446,502,476)	(\$84,841,063)	(\$80,392,703)	(\$5,156,799)	(\$616,893,041)
Market Value of Assets, end of year	\$7,361,579,683	\$1,561,501,396	\$1,232,406,98	\$81,081,078	\$10,236,569,137
Actuarial Value of Assets, end of year	\$7,808,082,159	\$1,646,342,459	\$1,312,799,683	\$86,237,877	\$10,853,462,178
Actuarial Value divided by market value	106.1%	105.4%	106.5%	106.4%	106.0%
Allocation between State and School (without POB)*					
Market Value - State	\$2,333,521,278				
Market Value - School	4,587,893,405				
Actuarial Value - State	2,484,057,415				
Actuarial Value - School	4,883,859,744				
POB Receivable**	\$440,165,000				
Allocated to State	36,515,432				
Allocated to School	403,649,568				
Adjusted Actuarial Value of Assets - State	\$2,520,572,847				
Adjusted Actuarial Value of Assets - School	\$5,287,509,312				

<sup>\*</sup>Actuarial Value for State and School split in proportion to Market Value.



<sup>\*\*</sup>Allocated in proportion to Unfunded Actuarial Liability.

# Summary of Principal Results All Systems Combined

			,	T
		12/31/03	12/31/02	
		Valuation	Valuation 	%Change
1.	Participant Data			
	Number of:			
	Active Members	148,145	147,294	0.6 %
	Retired Members and Beneficiaries	59,124	57,597	2.7
	Inactive Members	41,315	40,404	2.3
	Total Members	248,584	245,295	1.3
	Projected Annual Salaries of Active Members	\$ 4,978,131,785	\$ 4,865,902,928	2.3
	1.7			
	Annual Retirement Payments for	D (25 512 464	D 600 462 025	5.0
	Retired Members and Beneficiaries	\$ 635,712,464	\$ 600,463,025	5.9
•	Assets and Liabilities			
2.		\$ 14,439,546,270	\$ 12,613,598,626	14.5
	Total Actuarial Liability	\$ 14,439,340,270	\$ 12,015,398,020	14.3
	Assets for Valuation Purposes	10,853,462,178	9,784,862,188	10.9
	Assets for variation rulposes	10,033,702,176	7,704,002,100	10.7
	Unfunded Actuarial Liability	3,586,084,092	2,828,736,438	
	Chianaca rictuariar Diachity	3,300,001,072	2,020,730,130	



# Summary of Principal Results Kansas Public Employees Retirement System (State)

			<b>-</b>	1
		12/31/03	12/31/02	0/ Ch
		Valuation	Valuation	%Change
1.	Participant Data			
	Number of:			
	Active Members	24,933	24,934	0.0 %
	Retired Members and Beneficiaries	14,137	13,247	6.7
	Inactive Members	5,913	5,612	5.4
	Total Members	44,983	43,793	2.7
	Projected Annual Salaries			
	of Active Members	\$833,252,904	\$ 838,397,642	(0.6)
	Annual Retirement Payments for			
	Retired Members and Beneficiaries	\$141,291,491	\$132,595,231	6.6
2.	Assets and Liabilities			
	Total Actuarial Liability	\$2,747,341,651	\$2,415,071,587	13.8
	Assets for Valuation Purposes	2,520,572,847	2,309,556,304	9.1
	Unfunded Actuarial Liability	226,768,804	105,515,283	
3.	Employer Contribution Rates as a Percent of P	ayroll		
	Normal Cost	3.37%	4.83%	
	Amortization of Unfunded Actuarial			_
	and Debt Service	1.84%	1.06%	
	Actuarial Contribution Rate	5.21%	5.89%	
	Statutory Employer Contribution Rate*	5.21%	5.27%	

<sup>\*</sup> Statutory Employer Contribution Rate may not exceed last year's rate by more than the statutory rate increase of 0.5 percent. This rate does not include the 0.6 percent contribution rate for the Death and Disability Program.



#### **Summary of Principal Results** Kansas Public Employees Retirement System (School)

	12/31/03 Valuation	12/31/02 Valuation	%Change
Participant Data		_	
Number of:			
Active Members	80,169	80,109	0.1 %
Retired Members and Beneficiaries	30,093	29,151	3.2
Inactive Members	24,999	24,872	0.5
Total Members	135,261	134,132	0.8
Projected Annual Salaries			
of Active Members	\$ 2,585,895,939	\$ 2,534,768,517	2.0
Annual Retirement Payments for			
Retired Members and Beneficiaries	\$ 332,917,524	\$ 311,503,562	6.9
Assets and Liabilities			
Total Actuarial Liability	\$ 7,794,261,207	\$6,736,497,855	15.7
Assets for Valuation Purposes	5,287,509,312	4,603,213,237	14.9
Unfunded Actuarial Liability	2,506,751,895	2,133,284,618	
Employer Contribution Rates as a Percent of I	Payroll		
Normal Cost	3.95%	5.29%	
Amortization of Unfunded Actuarial			
and Debt Service	5.80%	4.89%	
Actuarial Contribution Rate	9.75%	10.18%	
Statutory Employer Contribution Rate*	5.77%	5.27%	
	Active Members Retired Members and Beneficiaries Inactive Members Total Members  Projected Annual Salaries of Active Members  Annual Retirement Payments for Retired Members and Beneficiaries  Assets and Liabilities  Total Actuarial Liability  Assets for Valuation Purposes  Unfunded Actuarial Liability  Employer Contribution Rates as a Percent of Information of Unfunded Actuarial and Debt Service  Actuarial Contribution Rate	Participant Data  Number of:  Active Members 80,169 Retired Members and Beneficiaries 30,093 Inactive Members 24,999 Total Members 135,261  Projected Annual Salaries of Active Members \$2,585,895,939  Annual Retirement Payments for Retired Members and Beneficiaries \$332,917,524  Assets and Liabilities  Total Actuarial Liability \$7,794,261,207  Assets for Valuation Purposes 5,287,509,312  Unfunded Actuarial Liability 2,506,751,895  Employer Contribution Rates as a Percent of Payroll  Normal Cost 3.95%  Amortization of Unfunded Actuarial and Debt Service 5.80%  Actuarial Contribution Rate 9,75%	Participant Data         Valuation           Number of:         80,169         80,109           Active Members         80,169         80,109           Retired Members and Beneficiaries         30,093         29,151           Inactive Members         24,999         24,872           Total Members         135,261         134,132           Projected Annual Salaries of Active Members         \$ 2,585,895,939         \$ 2,534,768,517           Annual Retirement Payments for Retired Members and Beneficiaries         \$ 332,917,524         \$ 311,503,562           Assets and Liabilities         Total Actuarial Liability         \$ 7,794,261,207         \$ 6,736,497,855           Assets for Valuation Purposes         5,287,509,312         4,603,213,237           Unfunded Actuarial Liability         2,506,751,895         2,133,284,618           Employer Contribution Rates as a Percent of Payroll         Normal Cost         3.95%         5.29%           Amortization of Unfunded Actuarial and Debt Service         5.80%         4.89%           Actuarial Contribution Rate         9.75%         10.18%

<sup>\*</sup> Statutory Employer Contribution Rate may not exceed last year's rate by more than the statutory rate increase limit of 0.5 percent. This rate does not include the 0.60 percent contribution rate for the Death and Disability Program.



## Summary of Principal Results Kansas Public Employees Retirement System (Local)

		12/31/03 Valuation	12/31/02 Valuation	%Change
1.	Participant Data			
	Number of:			
	Active Members	36,299	35,235	3.0 %
	Retired Members and Beneficiaries	11,279	10,969	2.8
	Inactive Members	9,301	8,838	5.2
	Total Members	56,879	55,042	3.3
	Projected Annual Salaries			
	of Active Members	\$ 1,212,174,026	\$ 1,153,168,204	5.1
	Annual Retirement Payments for			
	Retired Members and Beneficiaries	\$ 83,190,648	\$ 78,602,629	5.8
2.	Assets and Liabilities			
	Total Actuarial Liability	\$ 2,234,229,454	\$ 1,858,721,775	20.2
	Assets for Valuation Purposes	1,646,342,459	1,518,684,533	8.4
	Unfunded Actuarial Liability	587,886,995	340,037,242	
3.	Employer Contribution Rates as a Percent of F	Payroll		
	Normal Cost	3.36%	3.67%	
	Amortization of Unfunded Actuarial			
	and Supplemental Liability	2.88%	1.77%	-
	Actuarial Contribution Rate	6.24%	5.44%	
	Statutory Employer Contribution Rate*	3.81%	3.41%	

<sup>\*</sup> Statutory Employer Contribution Rate exceeds last year's rate by the statutory rate increase limit of 0.4 percent. This rate does not include the 0.6 percent contribution rate for the Death and Disability Program.



## **Summary of Principal Results** Kansas Police and Firemen's Retirement System (KP&F)

		12/31/03 Valuation	12/31/02 Valuation	%Change
١.	Participant Data			
	Number of:			
	Active Members	6,494	6,548	(0.8) %
	Retired Members and Beneficiaries	3,456	3,338	3.5
	Inactive Members	1,087	961	13.1
	Total Members	11,037	10,847	1.8
	Projected Annual Salaries			
	of Active Members	\$ 324,682,693	\$ 317,784,548	2.2
	Annual Retirement Payments for			
Reti	red Members and Beneficiaries	\$ 73,469,109	\$ 69,902,312	5.1
<u>.</u>	Assets and Liabilities			
	Total Actuarial Liability	\$ 1,562,157,258	\$ 1,467,979,675	6.4
	Assets for Valuation Purposes	1,312,799,683	1,235,479,858	6.3
	Unfunded Actuarial Liability	249,357,575	232,499,817	
	Employer Contribution Rates as a Percent of Payr	oll		
	Normal Cost	8.21%	7.85%	
	Amortization of Unfunded Actuarial			
	and Supplemental Liability	4.18%	3.78%	_
	Actuarial Contribution Rate (Local Employees)	12.39%	11.63%	
	Statutory Employer Contribution Rate*	12.39%	11.63%	

<sup>\*</sup> 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 or 15 perecent excess benefit liability, determined separately for each employer. The rate shown in the December 31, 2002, column does not include the 0.06% increase for fiscal years beginning in 2005 to pay for the benefit enhancement passed by the 2004 Legislature.



# Summary of Principal Results Retirement System for Judges (Judges)

ipant Data  per of:  the Members  and Members and Beneficiaries  we Members  Members  Annual Salaries  tive Members	12/31/03 Valuation  250 159 15 424  \$ 22,126,223	12/31/02 Valuation  248 154 15 417	%Change  0.8 %  3.2  0.0  1.7
per of: the Members and Members and Beneficiaries we Members Members teted Annual Salaries tive Members	159 15 424	154 15 417	3.2 0.0
e Members and Beneficiaries we Members Members Members eted Annual Salaries tive Members	159 15 424	154 15 417	3.2 0.0
d Members and Beneficiaries we Members Members eted Annual Salaries tive Members	159 15 424	154 15 417	3.2 0.0
ve Members  Members  eted Annual Salaries  cive Members	15 424	15 417	0.0
Members  eted Annual Salaries  etive Members	424	417	
eted Annual Salaries rive Members	<u></u>		1.7
ive Members	\$ 22,126,223	\$ 21 784 017	
	\$ 22,126,223	\$ 21 784 017	
-1 D -ti		ψ 21,/07,01/	1.6
al Retirement Payments for			
mbers and Beneficiaries	\$ 4,843,692	\$ 4,597,899	5.3
s and Liabilities			
Actuarial Liability	\$ 101,556,700	\$ 97,798,899	3.8
s for Valuation Purposes	86,237,877	80,399,421	7.3
nded Actuarial Liability	15,318,823	17,399,478 *	
oyer Contribution Rates as a Percent of Payroll	ļ		
al Cost	13.04%	15.00%	
tization of Unfunded Actuarial			
upplemental Liability	6.07%	6.97%	
rial Contribution Rate	19.11%	21.97%	
ory Employer Contribution Rate**	19.11%	21.97%	
1	Actuarial Liability  for Valuation Purposes  ded Actuarial Liability  over Contribution Rates as a Percent of Payrol  al Cost  tization of Unfunded Actuarial  upplemental Liability  rial Contribution Rate	Actuarial Liability \$ 101,556,700  If for Valuation Purposes 86,237,877  Ided Actuarial Liability 15,318,823  In oper Contribution Rates as a Percent of Payroll  In Cost 13.04%  Itization of Unfunded Actuarial applemental Liability 6.07%  In all Contribution Rate 19.11%	Actuarial Liability \$ 101,556,700 \$ 97,798,899  s for Valuation Purposes 86,237,877 80,399,421  ded Actuarial Liability 15,318,823 17,399,478 *  over Contribution Rates as a Percent of Payroll  al Cost 13.04% 15.00%  dization of Unfunded Actuarial applemental Liability 6.07% 6.97%  rial Contribution Rate 19.11% 21.97%

<sup>\*</sup>The "frozen" Unfunded Actuarial Liability was reset as of December 31, 2002.



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

## Actuarial Assumptions and Methods

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 valuation and in calculating actuarial equivalent values based on such investigation. An actuarial experience study was conducted for the three years ending December 31, 2000. As a result of this study, the Board of Trustees adopted the assumptions to be used for the valuations effective December 31, 2000.

### A. Actuarial Assumptions (As of December 31, 2000)

### Kansas Public Employees Retirement System (KPERS)

Rate of Investment Return 8.0 percent

Implicit Inflation Rate 3.5 percent

School (male): 1994 GAM Male Table Rates of Mortality

> School (female): 1994 GAM Female Table -1 Nonschool (male): 1994 GAM Male Table +2 Nonschool (female): 1994 GAM Female Table +1

Disabled Life Mortality 1994 GAM Table Set forward 12 years

Rates of Salary Increase

Years	R		
of Service	State	School	Local
1	7.8%	9.8%	7.8%
5	5.6	6.7	6.2
10	4.9	5.1	5.2
15	4.4	4.6	4.8
20	4.1	4.1	4.6
25	4.0	4.0	4.1
30	4.0	4.0	4.0

<sup>\*</sup>Includes general wage increase assumption of 4.0 percent (composed of 3.5 percent inflation and 0.50 percent productivity.)

#### **Rates of Termination**

School - Male Years of Service

Age	<2	2	3	4	5 or more
25	23.0%	19.0%	13.0%	10.0%	10.0%
30	20.5%	17.2%	12.5%	10.0%	6.0%
35	19.7%	16.0%	12.0%	10.0%	4.3%
40	19.3%	15.6%	12.0%	10.0%	3.2%
45	18.8%	15.3%	12.0%	10.0%	2.6%
50	18.4%	14.9%	12.0%	10.0%	2.1%

#### School - Female Years of Service

Age	<2	2	3	4	5 or more
25	26.0%	20.7%	17.5%	11.3%	11.5%
30	23.5%	16.2%	14.4%	9.2%	8.0%
35	20.0%	13.5%	12.5%	8.0%	4.8%
40	16.5%	11.3%	9.0%	7.3%	3.0%
45	14.0%	10.2%	8.7%	7.1%	2.0%
50	13.4%	9.9%	8.5%	7.0%	2.0%

#### State - Male Years of Service

Age	<2	2	3	4	5 or more
25	18.0%	19.1%	16.3%	14.0%	10.0%
30	18.0%	15.3%	13.0%	11.1%	10.0%
35	15.0%	13.3%	11.4%	9.8%	5.9%
40	15.0%	12.0%	10.3%	8.8%	4.0%
45	13.0%	11.7%	10.0%	8.5%	3.0%
50	13.0%	11.4%	9.8%	8.4%	2.0%

## State - Female Years of Service

Age	<2	2	3	4	5 or more
25	25.0%	23.0%	19.1%	15.0%	16.9%
30	20.5%	18.9%	15.7%	12.3%	10.8%
35	17.8%	16.4%	13.4%	10.7%	6.6%
40	16.3%	15.0%	11.4%	9.8%	4.7%
45	15.8%	14.5%	10.2%	9.5%	3.5%
50	15.5%	14.3%	10.2%	9.3%	3.5%

#### Local - Male Years of Service

Age	<2	2	3	4	5 or more
25	23.0%	19.5%	16.1%	15.0%	12.0%
30	18.0%	15.3%	12.6%	11.7%	9.5%
35	15.0%	12.0%	10.5%	9.8%	5.7%
40	12.5%	10.6%	8.8%	8.1%	4.1%
45	11.3%	10.0%	7.9%	7.3%	3.6%
50	11.0%	10.0%	7.7%	7.2%	3.2%

#### Local - Female Years of Service

Age	<2	2	3	4	5 or more
25	25.0%	22.5%	18.8%	15.8%	12.0%
30	20.0%	18.0%	15.0%	12.6%	8.8%
35	17.5%	15.8%	13.1%	11.0%	7.3%
40	15.8%	14.2%	11.9%	10.0%	5.5%
45	15.3%	13.8%	11.5%	9.6%	4.5%
50	15.0%	13.5%	11.3%	9.5%	4.0%

#### **Retirement Rates**

 $Rule\ of\ 85-School$ 

	1st Year	After 1st Year	Early R	Early Retirement		etirement
Age	With 85 Points	With 85 Points	Age	Rate	Age	Rate
53	20%	10%	55	3%	62	40%
55	20%	15%	56	3%	63	30%
57	25%	15%	57	3%	64	35%
59	25%	25%	58	5%	65	40%
61	35%	35%	59	10%	66	20%
			60	10%	67	20%
			61	20%	68	20%
					69	20%
					70	100%

Rule of 85 - State

	1st Year	After 1st Year	Early Retirement		Normal Retirement	
Age	With 85 Points	With 85 Points	Age	Rate	Age	Rate
53	17%	15%	55	3%	62	40%
55	17%	15%	56	3%	63	25%
57	17%	15%	57	3%	64	30%
59	15%	15%	58	3%	65	45%
61	30%	25%	59	5%	66	30%
			60	7%	67	25%
			61	20%	68	25%
					69	20%
					70	100%

Rule of 85 – Local

	1st Year	After 1st Year	Early R	etirement	Normal R	etirement
Age	With 85 Points	With 85 Points	Age	Rate	Age	Rate
53	10%	5%	55	3%	62	35%
55	10%	10%	56	3%	63	25%
57	10%	10%	57	3%	64	25%
59	10%	15%	58	3%	65	40%
61	25%	25%	59	5%	66	20%
			60	5%	67	20%
			61	15%	68	20%
					69	20%
					70	100%

- Inactive vested members Age 62
- For correctional employees with an age 55 normal retirement date:

Age	Rate
55	10%
58	15%
60	15%
62	35%
65	100%

- For correctional employees with an age 60 normal retirement date Age 62
- For TIAA employees Age 66

Rates of Disability					
Age	School	State	Local		
25	.025%	.036%	.030%		
30	.025%	.146%	.065%		
35	.035%	.230%	.097%		
40	.050%	.305%	.130%		
45	.096%	.376%	.190%		
50	.213%	.511%	.330%		
55	.452%	.892%	.600%		
60	.850%	1.400%	1.200%		

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

#### **Probability of Vested Members Leaving Contributions With System**

Age	School	State	Local
25	60%	51%	35%
30	60%	51%	40%
35	65%	53%	47%
40	74%	63%	61%
45	83%	69%	71%
50	88%	83%	82%
55	100%	100%	100%

Marriage Assumption: 70 percent of all members are assumed married with male spouse assumed three years older than female.

## Kansas Police and Firemen's Retirement System (KP&F)

Rate of Investment Return 8.0 percent

Implicit Inflation Assumption 3.5 percent

1994 GAM Table\* Rates of Mortality

\*70 percent of preretirement deaths assumed to be service related

1994 GAM Table Set forward 12 years Disabled Life Mortality

Rates of Salary Increase

Years of Service	Rate of Increase*
1	12.5%
5	7.0%
10	4.9%
15	4.3%
20	4.0%
25	4.0%

<sup>\*</sup>Includes general wage increase assumption of 4.0 percent (composed of 3.5 percent inflation and 0.50 percent productivity)

#### **Rates of Termination**

Tier I: 3 percent for ages less than 41; 0 percent thereafter

Tier II:

Years of Service	Rate
1	13.0%
5	6.0%
10	2.5%
15	1.0%
20	1.0%
25	0.0%

#### **Retirement Rates**

Tier I:

Early Retirement			Normal F	Retirement
Age	Rate		Age	Rate
		Under	55	40%
50	5%		55	60%
51	5%		56	25%
52	10%		57	20%
53	20%		58	35%
54	30%		59	65%
			60	100%

Tion	П.	
1 101	11.	

Early Retirement		Normal R	Normal Retirement	
Age	Rate	Age	Rate	
50	10%	50	45%	
51	10%	53	30%	
52	10%	55	30%	
53	10%	58	20%	
54	25%	60	100%	

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

Rates	Ωŧ.	1100	hı	11 tx
raics	$\mathbf{v}_{\mathbf{I}}$	Disa	UI.	πιν

Age	Rate
22	.06%
27	.07%
32	.15%
37	.35%
42	.60%
47	1.00%
52	1.60%
57	2.55%

<sup>\*\* 90</sup> percent assumed to be service-connected under KP&F Tier I.

Marriage Assumption: 80 percent of all members assumed married with male spouse assumed to be three years older than female.

## Kansas Retirement System for Judges (Judges)

Rate of Investment Return	8.0 percent
Implicit Inflation Assumption	3.5 percent

Rates of Mortality 1994 GAM Table

Rates of Salary Increase 5.5 percent Rates of Termination None assumed

Disabled Life Mortality Same as Healthy Lives

Rates of Disability None assumed

Retirement Age Age 64 or current age, if greater

Marriage Assumption: 70 percent of all members are assumed married with male spouse assumed three years older than female.

#### **B. Actuarial Methods**

#### **Funding Method**

Under the EAN 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 age. 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 (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. The UAL is calculated each year and reflects experience gains/losses.

Several components of the UAL are amortized over different periods. The increase in the UAL from the 1998 COLA is amortized over 15 years. The increase in the UAL for Local employers resulting from 2003 legislation which made the 13th check for pre-July 2, 1987, retirees a permanent benefits is funded over a ten-year period beginning in 2005. The remainder of the UAL is amortized over a period originally set at 40 years beginning July 1, 1993.

The UAL 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.

## Plan Provisions

NOTE: In the interest of simplicity, certain generalizations have been made. The law and the rules adopted by the Board of Trustees will control specific situations.

#### 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 three statewide retirement systems:

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

All three systems are defined benefit, contributory plans that cover substantially all public employees in Kansas. The Kansas Retirement System for Judges is a single employer plan, while the other two are cost-sharing, multi-employer plans. The State of Kansas is required to participate, but local political subdivisions participation is optional but irrevocable once elected. Certain legislative employees also receive benefit payments.

#### Kansas Public Employees Retirement System (State, Local and School)

#### **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 become KPERS members on their employment date. School employees who work at least 630 hours per year or 3.5 hours per day for 180 days are eligible for membership. Non-school employees become KPERS members after one year of continuous employment. State employees and non-school employees of local employers have first-day coverage for death and disability benefits if their employer elects the coverage. KPERS retirees may not become contributing members again.

#### Retirement: Age and Service Requirements

Eligibility

- Age 65
- Age 62 with ten years of credited service
- 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. Benefits — Benefits are based on the member's years of credited service, final average salary (FAS) and a statutory multiplier. Effective July 1, 2001, at retirement a member may receive a lump-sum payment of up to 50 percent of the actuarial present value of the member's lifetime benefit. His or her monthly retirement benefit is then permanently reduced.

For those hired on or after July 1, 1993, FAS is the average of their three highest years, excluding additional compensation, such as sick and annual leave.

For those who were hired before July 1, 1993, FAS is the greater of either a:

- Four-year FAS including additional compensation, such as sick and annual leave; or
- Three-year FAS excluding additional compensation, such as sick and annual leave.

Prior Service Credit — Prior service credit is 0.75 percent to 1 percent of FAS per year [School employees receive 0.75] percent FAS for each year of prior service that is not credited under the former Kansas School Retirement System (KSRS)]. Participating Service Credit — Participating service credit is 1.75 percent of FAS. Working after Retirement — A member must wait 30 days after his or her retirement date before working for any employer who participates in KPERS. If a retired

member then goes to work for an employer he or she worked for during his or her last two years of KPERS participation, the member has a \$15,000-per-year earnings limit.

#### **Early Retirement**

Eligibility — Eligibility is age 55 and ten years of credited service. Benefit — The retirement benefit is reduced 0.2 percent per month if the member is from age 60 to age 62, plus 0.6 percent per month if the member is from age 55 to age 60.

#### **Vesting Requirements**

Eligibility — A member must have ten years of credited service. Should the vested member end employment, the member must leave accumulated contributions on deposit with the Retirement System to be eligible for future benefits. If a vested member ends employment and withdraws accumulated contributions, the member loses all rights and privileges under the Retirement System. If a vested member who is married ends employment and wants to withdraw accumulated contributions, the member's spouse must provide consent for the contribution withdrawal, since any benefits to which the spouse may have been entitled in the future would be lost as well. 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 — If members leave employment they can withdraw their contributions, plus interest, after 30 days. Members lose any rights and benefits when they withdraw from KPERS, such as insurance coverage. Former members who return to covered employment within five years will not have lost any membership rights or privileges, if they haven't withdrawn contributions. The Retirement Act does not allow members to borrow from contributions. The employer portion of contributions remains with the System when a member ends employment and withdraws contributions. The Retirement System will refund contributions only after all contributions have been reported by the member's former employer.

Disability Benefit — KPERS Death and Disability Program provides disability income benefits, financed by employer contributions of 0.6 percent of a member's compensation. A member must be totally disabled for 180 continuous days. Benefits accrue from the later of the 181st day of continuous disability or from the first day when compensation from the employer ceases. The long-term disability benefit is two-thirds of the member's annual compensation on the date disability begins, reduced by Social Security benefits (members must apply), Workers' Compensation benefits and any other employment-related disability benefits. The minimum monthly benefit is \$100. Members receiving disability benefits continue to receive service credit under KPERS, group life insurance coverage and waiver of optional group life insurance premiums if the member is under age 65 when first disabled. The waiver of optional group life insurance premiums ends January 1, 2004, for new disabled members. If a disabled member retires after receiving disability benefits for at least five years immediately before retirement, the member's FAS is adjusted by statute.

Non-Service Connected Death Benefit — The active member's designated beneficiary receives the member's accumulated contributions plus interest in a lump sum. If the member had reached age 55 with ten years of credited service, and the spouse is the sole beneficiary, then the spouse may choose a lifetime benefit instead of receiving the returned contributions. If a member with 15 or more years of service dies and was not of retirement age, and the spouse is the sole beneficiary, then the spouse can elect one of the survivor options at the time the member would have first been of retirement age.

Service-Connected Accidental Death Benefit — The active member's accumulated contributions plus interest, a \$50,000 lump sum, and an annual benefit based on 50 percent of FAS (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 a full-time student), in this order of preference. The monthly accidental death benefit is in lieu of any joint/survivor benefit.

Insured Death Benefit — KPERS Death and Disability Program provides an insured death benefit equal to 150 percent of the active member's annual compensation on the date of death. If a disabled member dies after receiving disability benefits for at least five years immediately before death, the member's current annual rate of compensation is adjusted by statute.

Death Benefit After Retirement — The retiree's beneficiary receives a \$4,000 lump sum. The beneficiary may assign this benefit to a funeral establishment. The beneficiary for the \$4,000 death benefit may be, but is not always, the same person as the member's joint annuitant. A retiree may name a funeral establishment as 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 dies before the retired member, the reduced benefit payment is increased to the amount the retired member would have received if no retirement option had been selected. Benefits payable to a joint annuitant stop 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**

Members contribute 4 percent of their gross earnings. Interest is credited to members' contribution accounts on June 30 each year, based on account balance as of the preceding December 31. Those who became members before July 1, 1993, earn 8 percent interest per year. Those who became members on and after July 1, 1993, earn 4 percent interest.

#### **Employer Contributions**

Rates are certified by the Board of Trustees based on results of annual actuarial valuations; however, annual increases are capped by state statute.

#### **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 FAS for each year of credited prior service. Service after 1961 is counted for purposes of determining eligibility for vesting. These members are also covered by the KPERS Death and Disability Benefits Program.

#### **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 plant operators
- d) Correctional industries employees
- e) Correctional food service employees
- f) Correctional maintenance employees

For groups (a) and (b) with at least three consecutive years of credited service, in such positions immediately before retirement, normal retirement age is 55 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 before retirement, normal retirement age is 60 and early retirement requirements are age 55 with ten years of credited service. Both groups are also eligible for full benefits when age and service equal 85 "points."

#### Kansas Police and Firemen's Retirement System (KP&F)

#### **Retirement: Age and Service Requirements**

Eligibility — TIER I \*:

- · Age 55 and 20 years of service
- Any age with 32 years of service

#### Eligibility — TIER II \*\*:

- Age 50 and 25 years of service
- Age 55 and 20 years of service
- Age 60 and 15 years of service

Benefits — Benefits are based on the member's Final Average Salary (FAS) and years of service. Effective July 1, 2001, at retirement a member may receive a lump-sum payment of up to 50 percent of the actuarial present value of the member's lifetime benefit. His or her monthly retirement benefit is then permanently reduced.

For those who were hired before July 1, 1993, FAS is the average of the highest three of the last five years of credited participating service, including additional compensation, such as sick and annual leave.

For those who are hired on or after July 1, 1993, FAS is the average of the highest three of the last five years of participating service, excluding additional compensation, such as sick and annual leave.

Annual benefits at normal retirement age equal FAS x 2.5 percent x years of service (up to 32 years).

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. Working After Retirement — A member must wait 30 days after his or her retirement date before working for any employer who participates in KP&F. If a retired member then goes to work for an employer he or she worked for during his or her last two years of KP&F participation, the member has a \$15,000-per-year earnings limit.

#### **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 credited service; if ending employment, the member must leave contributions with the Retirement System to be eligible for future benefits.

Eligibility — TIER II \*\*: The member must have 15 years of credited service to be considered vested. To draw a benefit before age 60, however, the member must have 20 years of credited service. If ending employment, the member must leave contributions with the Retirement System to be eligible for future benefits.

#### **Other Benefits**

Withdrawal Benefit — If members leave employment before retirement they can withdraw their contributions, plus interest, after 30 days. When members withdraw from KP&F they lose any rights and benefits, such as insurance coverage.

If a married vested member ends employment and wants to withdraw accumulated contributions, the member's spouse must consent to the withdrawal, since any of the spouse's future benefits will be forfeited as well. Former members who return to covered employment within five years will not lose any membership rights or privileges if they haven't withdrawn contributions. The Retirement Act does not allow members to borrow from contributions. The employer contributions remain with the System when a member ends employment and withdraws. The Retirement System will refund contributions only after all contributions have been reported by the member's former employer.

#### **Disability Benefits**

TIER I \*: Service-Connected Disability — There is no age or service requirement to be eligible for this benefit. A member receives a pension of 50 percent of FAS, plus 10 percent of FAS for each dependent child under age 18 (or up to age 23 for full-time students), to a maximum of 75 percent of FAS. If dependent benefits aren't payable, the benefit is 2.5 percent for

each year, to a maximum of 80 percent of FAS. When a member receiving service-connected disability benefits dies, the spouse and dependent children receive service-connected death benefits if the member dies within two years of retirement or after two years from the same service-connected cause. If service-connected death benefits aren't payable, the spouse receives a lump-sum payment of 50 percent of the member's FAS. Also, either the spouse or the dependent children receive a pension of half of the member's benefit.

TIER I\*: Non Service-Connected Disability — This pension is calculated at 2.5 percent of FAS per year of service, to a maximum benefit of 80 percent of FAS (minimum benefit is 25 percent of FAS). When a member receiving non-serviceconnected disability benefits dies, the surviving spouse receives a lump-sum payment of 50 percent of FAS. Also, either the spouse or the dependent children receive a pension of half of the member's benefit.

TIER II \*\*: There is no distinction between service-connected and non-service-connected disability benefits. Benefit is 50 percent of FAS. Service credit is granted during the disability period. Disability benefits convert to age and service retirement as soon as the member is eligible for full retirement benefits. If the member is disabled for at least five years immediately before retirement, the member's FAS is adjusted by statute. Disability benefits are offset \$1 for each \$2 earned after the first \$10,000 of earnings.

#### **Death Benefits**

TIER I \* and TIER II \*\*: Service Connected Death — There is no age or service requirement, and a pension of 50 percent of FAS goes to the spouse, plus 10 percent of FAS goes to each dependent child under age 18 [or up to age 23 if full time student(s)], to a maximum of 75 percent of FAS.

Non-Service-Connected Death — A lump sum of 100 percent of FAS goes to the spouse; and a pension of 2.5 percent of FAS per year of 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. If there is no surviving spouse or children the lump-sum payment less refundable contributions and interest is paid to the beneficiary.

Inactive Member Death — If an inactive member with 20 or more years of service dies and was not of retirement age, and the spouse is the sole beneficiary, then the spouse can elect one of the survivor options at the time the member would have first been of retirement age. If an inactive member is eligible to retire when he or she dies, and the spouse is the sole beneficiary, the spouse may elect to receive benefits as a joint annuitant under any option instead of receiving the member's contributions.

Death Benefit After Retirement — The retiree's beneficiary may assign this benefit to a funeral establishment. The beneficiary for the \$4,000 death benefit may be, but is not always, the same person as the member's joint annuitant. A retiree may name a funeral establishment as 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 dies before the retired member, the reduced benefit payment is increased to the amount the retired member would have received if no retirement option had been selected. Benefits payable to a joint annuitant stops 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.

The surviving spouse of a transfer member (who was covered by a local plan on the employer's entry date, who dies after retirement, and who had not elected a retirement benefit option), receives a lump-sum payment of 50 percent of FAS. Also, 75 percent of the member's benefit is payable either to the spouse or to dependent children.

- \* TIER I Members have Tier I coverage if they were employed before July 1, 1989, and if 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.

#### **Member Contributions**

Members contribute 7 percent of their gross earnings. For members with 32 years service credit, the contribution rate is reduced to 2 percent of compensation.

A few members employed before January 1, 1976, have contributions reduced by their Social Security contributions, not including contributions for Medicare. These members' benefits are reduced by 50 percent of original Social Security benefits accruing from employment with the participating employer.

#### Kansas Retirement System for Judges (Judges)

#### **Employer Contributions**

The employer rates are certified by the Board of Trustees based on the results of annual actuarial valuations.

#### Retirement: Age and Service Requirements

Eligibility

- Age 65
- Age 62 with ten years of credited service
- 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. Benefit — The benefit is based on the member's Final Average Salary (FAS), which is the average of the three highest years of service as a judge. Effective July 1, 2001, at retirement a member may receive a lump-sum payment of up to 50 percent of the actuarial present value of the member's lifetime benefit. His or her monthly retirement benefit is then permanently reduced.

The basic formula for those who were members before July 1, 1987, is 5 percent of FAS for each year of service up to ten years, plus 3.5 percent for each year, to a maximum of 70 percent of FAS. 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 FAS.

Employment after Retirement: Retired judges may enter into an agreement to work for up to 104 days at 25 percent of the current salary of a judge. The agreement is for two years and may be renewed for up to 12 years. Retirement benefits will be suspended in any case where a retired judge is elected or appointed to a judgeship. The judge in that case resumes active participation and will accrue additional service credit. When the judge retires again, the retirement benefit is recalculated.

#### **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 0.2 percent per month if the member is from age 60 to age 62, plus 0.6 percent per month if the member is from age 55 to age 60.

#### **Vesting Requirements**

Eligibility — There is no minimum service requirement. However, if ending 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 — Normal benefit accrued at termination is payable at age 62 or in a 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 permanently physically or mentally disabled. The disability benefit, payable until age 65, is 3.5 percent of FAS for each year of service. The minimum benefit is 50 percent of FAS. Benefits are recalculated when the member reaches retirement age. If a judge is disabled for at least five years immediately before retirement, the judge's FAS is adjusted by statute.

Withdrawal Benefit — If members leave employment they can withdraw their contributions, plus interest, after 30 days. When members withdraw from KPERS they lose any rights and benefits, such as insurance coverage. Former members who return to covered employment within five years will not have lost any membership rights or privileges, if they haven't withdrawn contributions. The Retirement Act does not allow members to borrow from contributions. The employer portion of contributions remains with the System when a member ends employment and withdraws contributions. KPERS will refund contributions only after all contributions have been reported by the member's former employer.

Death Benefit Before Retirement — A lump sum insured death benefit equal to 150 percent of the active member's annual compensation on the date of the member's death is payable; plus a refund of the member's accumulated contributions. 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. The spouse must be the member's sole designated beneficiary to exercise this option. If the member had at least 15 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.

Death Benefit After Retirement — The retiree's beneficiary receives a \$4,000 lump sum. The beneficiary may assign this benefit to a funeral establishment. A retiree may also directly name a funeral establishment as beneficiary. If the member had selected an option with survivor benefits, benefits are paid to the joint annuitant or to the member's designated beneficiary. Under joint and survivor retirement options, if the joint annuitant dies before the retired member, the reduced benefit payment is increased to the amount the retired member would have received if no retirement option had been selected. Benefits payable to a joint annuitant stop when the joint annuitant dies. If the member did 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**

Judges contribute 6 percent of gross earnings. When an active member reaches the maximum retirement benefit level of 70 percent of FAS, the contribution rate is reduced to 2 percent.

#### **Employer Contributions**

Rates are certified by the Board of Trustees, based on results of annual actuarial valuations and statutory regulations set by the Legislature.

#### **Short Term Solvency Test**

Last Ten Fiscal Years

Valuation Date	Member Contributions (A)	Retirants and Beneficiaries (B)	Active Members Employer Financed Portion (C)	Assets Available for Benefits	Portions of A overe (A)	Accrued Lia ed by Asset (B)	
	(-7	(-)	(-)		(- 4	(-)	(-,
06/30/95	\$ 1,958,992,138	\$ 2,678,609,811	\$ 2,353,427,051	\$ 5,510,957,394	100%	100%	37%
06/30/96	2,159,113,770	3,037,892,830	2,406,103,997	6,158,754,752	100	100	40
06/30/97	2,337,511,704	3,232,733,926	2,681,740,618	6,875,918,348	100	100	49
06/30/98	2,522,614,846	3,841,556,459	2,976,514,154	7,749,203,022	100	100	47
06/30/99	2,725,881,233	4,125,714,368	3,147,650,125	8,601,875,670	100	100	56
06/30/00	2,929,469,325	4,454,897,319	3,417,030,430	9,568,274,828	100	100	64
12/31/00	3,007,338,917	4,576,452,175	3,556,222,919	9,835,181,839 (1)	100	100	63
12/31/01	3,330,859,571	4,903,096,418	3,509,095,766	9,962,917,897	100	100	49
12/31/02	3,353,870,165	5,247,201,306	4,012,527,155	9,784,862,188	100	100	30
12/31/03	3,595,082,177	5,558,543,751	5,285,920,342	10,853,462,178 (2)	100	100	32

<sup>1)</sup> Actuarial valuation date was changed to a calendar year.

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) active 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 on deposit (item A) and the liabilities for future benefits to present retired lives (item B) will be fully covered by present assets with the exception of rare circumstances. 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.

<sup>2)</sup> Actuarial cost method was changed to the Entry Age Normal (EAN) for all three plans.

## **Schedule of Active Member Valuation Data (1)**

Valuation Date	Number of Active Members (2)	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll (Millions) (2)	Average Payroll	Percentage Increase in Average Payroll
06/30/95	131,270	6.6%	1,309	1.7%	\$ 3,309	\$ 25,208	1.2%
06/30/96	134,470	2.4	1,344	2.7	3,464	25,760	2.2
06/30/97	136,241	1.3	1,371	2.0	3,590	26,350	2.3
06/30/98	134,866	-1.0	1,397	1.9	3,765	27,915	5.9
06/30/99	137,969	2.3	1,407	0.7	4,088	28,529	2.2
06/30/00	140,559	1.9	1,416	0.6	4,290	30,471	6.8
12/31/00	143,337	2.0	1,423	0.5	4,455	30,412	-0.2
12/31/01	145,666	1.6	1,435	0.8	4,675	32,094	5.5
12/31/02	147,294	1.1	1,442	0.5	4,866	32,984	2.8
12/31/03	148,145	0.6	1,454	0.8	4,978	32,944	-0.1

<sup>1)</sup> Data provided to actuary reflects active membership information as of January 1.

<sup>2)</sup> Excludes TIAA salaries.

## **Schedule of Employer Contribution Rates**

Last Ten Fiscal Years (1)

KPER	S State/Schoo	I
Fiscal	Actuarial	Actual
Year	Rate	Rate
1995	3.10%	3.20 %
1996	4.11	3.30
1997	5.17	3.59
1998	5.23	3.79
1999	5.33	3.99
2000	5.27	4.19
2001	6.15	3.98 (2)
2002	6.00	4.78
2003	6.17	4.98 (3)
2004	7.05	4.58 (3)

к	PERS Local	
Fiscal	Actuarial	Actual
Year	Rate	Rate
1995	3.05%	2.30 %
1996	3.72	2.48
1997	3.73	2.63
1998	3.86	2.78
1999	3.86	2.93
2000	3.89	3.22
2001	3.88	2.77 (2)
2002	4.07	3.52
2003	4.73	3.67 (3)
2004	4.64	3.22 (3)

	TIAA	
Fiscal	Actuarial	Actual
Year	Rate	Rate
1995	1.70 %	1.70 %
1996	1.75	1.75
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 (3)
2004	n/a	n/a (4)

к	P&F (Uniform	Rate)
Fiscal	Actuarial	Actual
Year	Rate	Rate
1995	6.95 %	6.95 %
1996	9.65	9.65
1997	9.73	9.73
1998	9.45	9.45
1999	7.36	7.36
2000	7.35	7.35
2001	6.97	6.97
2002	6.79	6.79
2003	6.86	6.86
2004	9.47	9.47

	Judges	
Fiscal	Actuarial	Actual
Year	Rate	Rate
1995	8.00 %	8.00 %
1996	10.35	10.35
1997	16.00	16.00
1998	15.67	15.67
1999	15.67	15.67
2000	14.38	14.38
2001	16.14	15.74 (2)
2002	12.88	12.88
2003	12.66	12.66 (3)
2004	16.67	16.67 (3)

- 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.
- 2) 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.
- 3) 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.

## Retirants, Beneficiaries - Changes in Rolls - All Systems

Last Ten Fiscal Years

		Ad	ditions	De	letions	ı		
Fiscal Year Ended June 30	Number at Beginning of Year	Number Added	Annual Allowances	Number Removed	Annual Allowances	Number at End of Year	% Change in Number of Retirants	% Change in Additions Allowances
1995	43,371	3,463	\$41,898,882	1,530	\$6,690,418	45,304	4.50%	(1.00)%
1996	45,304	3,119	37,681,571	1,677	7,233,445	46,746	3.20	(10.10)
1997	46,746	3,456	42,581,075	1,643	7,829,006	48,559	3.90	13.00
1998	48,559	3,228	40,731,685	1,716	7,638,945	50,071	3.10	(4.30)
1999	50,071	3,328	41,833,222	1,756	9,151,705	51,643	3.10	2.70
2000	51,643	3,360	44,028,303	1,862	9,563,949	53,141	2.90	5.20
2001	53,141	3,112	44,919,587	1,951	10,020,387	54,302	2.20	2.00
2002	54,302	3,689	45,669,820	1,922	9,552,087	56,069	3.30	1.70
2003	56,069	3,585	48,718,476	2,116	10,942,002	57,538	2.60	6.70
2004	57,538	3,612	50,253,218	2,009	11,940,793	59,141	2.60	3.20

## **Membership Profile**

Last Ten Years, as of December 31

Valuation Date	Active	Inactive	Retirees & Beneficiaries	Total Membership
1994	131,387	16,091	44,285	191,763
1995	134,565	16,397	48,572	199,534
1996	136,285	21,443	47,940	205,668
1997	134,866	23,588	50,058	208,512
1998	138,292	25,463	51,639	215,394
1999	140,833	27,664	53,137	221,634
2000	143,591	35,482	54,396	233,469
2001	145,910	38,056	56,115	240,081
2002	147,294	40,404	57,597	245,295
2003	148,145	41,315	59,124	248,584

<sup>1)</sup> Actuarial valuation date was changed to a calendar year.

## **Summary of Membership Data**

Retiree and Beneficiary Member Valuation Data (1)   12/31/03   12/31/2002			
Number         55,509         33,367           Average Benefit         \$10,042         \$9,794           Average Age         72,91         73.08           Police & Fire           Number         3,456         3,338           Average Benefit         \$21,258         \$20,941           Average Age         61.20         60.90           Judges           Number         159         154           Average Benefit         \$30,463         \$29,856           Average Age         73.30         72.80           System Total           Number         \$5,124         \$6,859           Average Benefit         \$10,752         \$10,503           Average Age         72.23         72.36           Active Member Valuation Data (1)         12/31/03         12/31/02           KPERS           Number         141,401         140,278           Average Current Age         44,96         44.64           Average Pay         \$32,111         \$31,634           Police & Fire           Number         6,494         6,548           Tier I         744         782	Retiree and Beneficiary Member Valuation Data (1)	12/31/03	12/31/2002
Number         55,509         33,367           Average Benefit         \$10,042         \$9,794           Average Age         72,91         73.08           Police & Fire           Number         3,456         3,338           Average Benefit         \$21,258         \$20,941           Average Age         61.20         60.90           Judges           Number         159         154           Average Benefit         \$30,463         \$29,856           Average Age         73.30         72.80           System Total           Number         \$5,124         \$6,859           Average Benefit         \$10,752         \$10,503           Average Age         72.23         72.36           Active Member Valuation Data (1)         12/31/03         12/31/02           KPERS           Number         141,401         140,278           Average Current Age         44,96         44.64           Average Pay         \$32,111         \$31,634           Police & Fire           Number         6,494         6,548           Tier I         744         782	KPERS		
Average Benefit \$10,042 \$9,794 Average Age 72.91 73.08  Police & Fire  Number 3,456 3,338 \$20,941 Average Age 61.20 60.90  Judges  Number 159 154 Average Benefit \$30,463 \$29,856 Average Benefit \$30,463 \$29,856 Average Age 73.30 72.80  System Total  Number 5,124 56,859 Average Age 72.23 72.36  Active Member Valuation Data (1) 12/31/03 12/31/02  KPERS  Number 141,401 140,278 Average Current Age 44.96 44.64 Average Service 10.59 10.36 Average Pay \$32,111 \$31,634  Police & Fire  Number 6,494 6,548 Tier II 7,44 782 Tier II 5,750 5,766 Average Current Age 38.80 38.40 Average Pay \$49,017 \$47,580  Judges  Number 250 248 Average Current Age 55.10 55.00 Average Pay \$86,770 \$86,116  System Total  Number 148,145 147,074 Average Pay \$86,770 \$86,116  System Total  Number 148,145 147,074 Average Current Age 44.71 44.38 Average Service 10.60 10.37		55,509	53,367
Average Age         72.91         73.08           Police & Fire         Number         3,456         3,338           Average Benefit         \$21,258         \$20,941           Average Age         61.20         60.90           Judges         Number         159         154           Average Benefit         \$30,463         \$29,856           Average Age         73.30         72.80           System Total         Number         \$9,124         \$6,859           Average Benefit         \$10,752         \$10,503         Average Age           Average Age         72.23         72.36         Active Member Valuation Data (1)         12/31/03         12/31/02           KPERS         Number         \$141,401         \$140,278         Average Current Age         \$4.96         \$4.64			
Number         3,456         3,338           Average Benefit         \$21,258         \$20,941           Average Age         61.20         60.90           Judges           Number         159         154           Average Benefit         \$30,463         \$29,856           Average Age         73.30         72.80           System Total           Number         \$9,124         \$6,859           Average Benefit         \$10,752         \$10,503           Average Age         72.23         72.36           Active Member Valuation Data (1)         12/31/03         12/31/02           KPERS           Number         141,401         140,278           Average Current Age         44.96         44.64           Average Service         10.59         10.36           Average Pay         \$32,111         \$31,634           Police & Fire           Number         6,494         6,548           Tier I         744         782           Tier II         5,750         5,766           Average Current Age         38.80         38.40           Average Pay         \$49,017			
Average Benefit       \$21,258       \$20,941         Average Age       61.20       60.90         Judges	Police & Fire		
Average Benefit \$21,258 \$20,941 Average Age 61.20 60.90    Judges	Number	3,456	3,338
Average Age 61.20 60.90  Judges Number 159 154 Average Benefit \$30,463 \$29,856 Average Age 73.30 72.80  System Total Number 59,124 56,859 Average Benefit \$10,752 \$10,503 Average Age 72.23 72.36  Active Member Valuation Data (1) 12/31/03 12/31/02  KPERS Number 141,401 140,278 Average Gurrent Age 44,96 44.64 Average Service 10.59 10.36 Average Pay \$32,111 \$31,634  Police & Fire Number 6,494 6,548 Tier I 744 782 Tier II 744 782 Tier II 744 782 Tier II 5,750 5,766 Average Service 10.95 10.59 Average Current Age 38.80 38.40 Average Service 10.95 10.59  Judges Number 250 248 Average Pay \$49,017 \$47,580  Judges Number 250 248 Average Pay \$49,017 \$55.00 Average Pay \$49,017 \$55.00 Average Pay \$86,770 \$86,116  System Total Number 250 \$86,116  System Total Number 148,145 147,074 Average Pay \$86,770 \$86,116  System Total Number 148,145 147,074 Average Current Age 44,71 44,38 Average Service 10.60 10.37	Average Benefit		\$20,941
Number         159         154           Average Benefit         \$30,463         \$29,856           Average Age         73.30         72.80           System Total           Number         \$59,124         \$6,859           Average Benefit         \$10,752         \$10,503           Average Age         72.23         72.36           KPERS           Number Valuation Data (1)         12/31/03         12/31/02           KPERS           Number Urrent Age         44.96         44.64           Average Current Age         44.96         44.64           Average Pay         \$32,111         \$31,634           Police & Fire           Number         6,494         6,548           Tier I         744         782           Tier II         5,750         5,766           Average Current Age         38.80         38.40           Average Pay         \$49,017         \$47,580           Judges           Number         250         248           Average Current Age         55.10         55.00           Average Pay         \$86,770         \$86,116           Syste	Average Age		60.90
Average Benefit       \$30,463       \$29,856         Average Age       73.30       72.80         System Total         Number       \$9,124       \$6,859         Average Benefit       \$10,752       \$10,503         Average Age       72.23       72.36         Active Member Valuation Data (1)       12/31/03       12/31/02         KPERS         Number       141,401       140,278         Average Current Age       44.96       44.64         Average Pay       \$32,111       \$31,634         Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Pay       \$86,770       \$86,116         System Total       Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       <	Judges		
Average Age     73.30     72.80       System Total     39,124     56,859       Average Benefit     \$10,752     \$10,503       Average Age     72.23     72.36       Active Member Valuation Data (1)     12/31/03     12/31/02       KPERS       Number     141,401     140,278       Average Current Age     44.96     44.64       Average Service     10.59     10.36       Average Pay     \$32,111     \$31,634       Police & Fire       Number     6,494     6,548       Tier I     744     782       Tier II     5,750     5,766       Average Current Age     38.80     38.40       Average Service     10.95     10.59       Average Pay     \$49,017     \$47,580       Judges       Number     250     248       Average Current Age     55.10     55.00       Average Pay     \$86,770     \$86,116       System Total     Number     148,145     147,074       Average Current Age     44.71     44.38       Average Service     10.60     10.37	Number	159	154
System Total   Number   59,124   56,859   Average Benefit   \$10,752   \$10,503   Average Age   72.23   72.36	Average Benefit	\$30,463	\$29,856
Number         59,124         56,859           Average Benefit         \$10,752         \$10,503           Average Age         72.23         72.36           Active Member Valuation Data (1)         12/31/03         12/31/02           KPERS           Number         141,401         140,278           Average Current Age         44,96         44,64           Average Service         10.59         10.36           Average Pay         \$32,111         \$31,634           Police & Fire           Number         6,494         6,548           Tier I         744         782           Tier II         5,750         5,766           Average Current Age         38,80         38,40           Average Service         10.95         10.59           Average Pay         \$49,017         \$47,580           Judges           Number         250         248           Average Current Age         55.10         55.00           Average Service         11.30         11.06           Average Pay         \$86,770         \$86,116           System Total           Number         44.71	Average Age	73.30	72.80
Average Benefit       \$10,752       \$10,503         Average Age       72.23       72.36         Active Member Valuation Data (1)       12/31/03       12/31/02         KPERS       Number       141,401       140,278         Average Current Age       44.96       44.64       44.64         Average Service       10.59       10.36         Average Pay       \$32,111       \$31,634         Police & Fire       Valuation       44.74       782         Tier I       744       782       766         Average Current Age       38.80       38.40       38.40         Average Service       10.95       10.59       10.59         Average Pay       \$49,017       \$47,580         Judges       Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total       Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	System Total		
Average Age         72.23         72.36           Active Member Valuation Data (1)         12/31/03         12/31/02           KPERS         Number         141,401         140,278           Average Current Age         44.96         44.64           Average Service         10.59         10.36           Average Pay         \$32,111         \$31,634           Police & Fire           Number         6,494         6,548           Tier I         744         782           Tier II         5,750         5,766           Average Current Age         38.80         38.40           Average Service         10.95         10.59           Average Pay         \$49,017         \$47,580           Judges           Number         250         248           Average Service         11.30         11.06           Average Pay         \$86,770         \$86,116           System Total           Number         148,145         147,074           Average Current Age         44.71         44.38           Average Service         10.60         10.37			56,859
Active Member Valuation Data (1)       12/31/03       12/31/02         KPERS       Number       141,401       140,278         Average Current Age       44.96       44.64         Average Service       10.59       10.36         Average Pay       \$32,111       \$31,634         Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37		\$10,752	\$10,503
KPERS         Number       141,401       140,278         Average Current Age       44.96       44.64         Average Service       10.59       10.36         Average Pay       \$32,111       \$31,634         Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Average Age	72.23	72.36
Number       141,401       140,278         Average Current Age       44.96       44.64         Average Service       10.59       10.36         Average Pay       \$32,111       \$31,634         Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Active Member Valuation Data (1)	12/31/03	12/31/02
Average Current Age       44.96       44.64         Average Service       10.59       10.36         Average Pay       \$32,111       \$31,634         Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	KPERS		
Average Service       10.59       10.36         Average Pay       \$32,111       \$31,634         Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Number	141,401	140,278
Average Pay       \$32,111       \$31,634         Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Average Current Age	44.96	44.64
Police & Fire         Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Average Service	10.59	10.36
Number       6,494       6,548         Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Average Pay	\$32,111	\$31,634
Tier I       744       782         Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Police & Fire		
Tier II       5,750       5,766         Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Number	6,494	6,548
Average Current Age       38.80       38.40         Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Tier I		782
Average Service       10.95       10.59         Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37			
Average Pay       \$49,017       \$47,580         Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37			
Judges         Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	<del>-</del>		
Number       250       248         Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Average Pay	\$49,017	\$47,580
Average Current Age       55.10       55.00         Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37			
Average Service       11.30       11.06         Average Pay       \$86,770       \$86,116         System Total         Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37			
Average Pay       \$86,770       \$86,116         System Total			
System Total           Number         148,145         147,074           Average Current Age         44.71         44.38           Average Service         10.60         10.37			
Number       148,145       147,074         Average Current Age       44.71       44.38         Average Service       10.60       10.37	Average Pay	\$86,770	\$86,116
Average Current Age       44.71       44.38         Average Service       10.60       10.37		140.145	145.05
Average Service 10.60 10.37			
Average ray \$32,436			
	Average Pay	\$32,944	\$32,430

 $<sup>1)\</sup> Data\ provided\ to\ actuary\ reflects\ active\ membership\ information\ as\ of\ January\ 1.$ 

## Statistical Section

# Statistical

**Highlights of Operations – Ten-Year Summary** 

	2004	2003	2002	2001
Membership Composition				
Number of Retirants (a)	59,124	57,597	56,115	54,396
New Retirants During the Fiscal Year	3,612	3,585	3,689	3,112
Active and Inactive Members (a)	189,460	187,698	183,966	179,073
Participating Employers	1,454	1,442	1,435	1,423
Financial Results (Millions)				
Member Contributions	\$230	\$225	\$210	\$204
Employer Contributions (g)	714	231	221	193
Retirement/Death Benefits	686	654	636	559
Investment Income (b)	1,336	326	(464)	(798)
Employer Contribution Rate (c)				
KPERS—State/School	4.58%	4.98%	4.78%	3.98%
KPERS—Local (d)	3.22	3.67	3.52	2.77
KP&F (Uniform Participating) (d)	9.47	6.86	6.79	6.97
Judges	16.67	12.66	12.88	15.74
TIAA		2.27	2.03	1.21
Unfunded Actuarial Liability (Millions)				
KPERS—State/School	\$2,734	\$2,239	\$1,506	\$1,120
KPERS—Local	588	340	185	90
KP&F	249	232	59	62
Judges	15	17	10	10
TIAA (e)			20	23
Funding Ratios (f)				
KPERS—State/School	74.07%	75.64%	82.46%	86.23%
KPERS—Local	73.69	81.71	89.12	94.29
KP&F	84.04	84.16	95.53	95.22
Judges	84.92	82.21	88.94	88.66
TIAA			48.32	41.18

a) Membership information taken from System's actuarial valuation.

- d) KPERS Local and KP&F contribution rates are reported on a calendar year basis.
- e) Legislation provided for bonds to be issued in 2003 to fully fund the existing unfunded liability for the TIAA group.

Investment income for prior years has been adjusted to reflect changes in unrealized appreciation.

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.

## **Highlights of Operations – Ten-Year Summary**

	2000	1999	1998	1997	1996	1995
Membership Composition						
Number of Retirants (a)	51,639	50,058	47,940	48,572	44,285	43,165
New Retirants During the Fiscal Year	3,360	3,328	3,228	3,456	3,119	3,463
Active and Inactive Members (a)	163,755	158,454	157,728	150,962	147,478	135,607
Participating Employers	1,415	1,407	1,397	1,371	1,344	1,309
Financial Results (Millions)						
Member Contributions	\$193	\$185	\$174	\$171	\$173	\$159
Employer Contributions (g)	185	202	167	156	143	130
Retirement/Death Benefits	506	473	429	397	364	334
Investment Income (b)	1,315	954	1,247	974	1,095	906
Employer Contribution Rate (c)						
KPERS—State/School	4.19%	3.99%	3.79%	3.59%	3.30%	3.209
KPERS—Local (d)	3.22	2.93	2.78	2.63	2.48	2.30
KP&F (Uniform Participating) (d)	7.35	7.36	9.45	9.73	9.65	6.95
Judges	14.38	15.67	15.67	16.00	10.35	8.00
TIAA	1.82	1.93	1.66	1.89	1.75	1.70
Unfunded Actuarial Liability (Millions)						
KPERS—State/School	\$860	\$973	\$1,142	\$933	\$1,014	\$1,051
KPERS—Local	36	76	104	131	121	123
KP&F	307	317	313	288	283	279
Judges	8	8	8	5	5	5
TIAA (e)	23	23	24	19	21	22
Funding Ratios (f)						
KPERS—State / School	88.82%	86.36%	83.03%	84.19%	81.48%	79.199
KPERS—Local	97.56	94.41	91.47	88.34	87.99	86.51
KP&F	79.68	77.28	75.62	74.77	72.81	70.72
Judges	90.53	89.42	88.21	91.21	90.15	89.10
TIAA	39.72	34.16	28.83	31.26	25.38	22.62

f) The funding percentage indicates the actuarial soundness of the System, generally, the greater the percentage, the stronger the System.

Pension obligation bonds for \$440 million were issued in 2004.

## **Expenses by Type**

Fiscal Year	Benefits	Withdrawals	Insurance	Administration	Total
1995	\$ 333,924,392	\$ 26,542,254	\$ 35,873,212	\$ 4,312,658	\$ 400,652,516
1996	364,102,629	30,687,458	34,108,251	4,493,293	433,391,631
1997	396,660,948	36,761,626	36,048,625	4,659,099	474,130,298
1998	428,997,161	41,510,908	37,639,743	4,702,566	512,850,378
1999	472,571,948	40,860,950	41,892,190	5,442,410	560,767,498
2000	505,941,764	43,631,850	42,199,878	5,689,571	597,463,063
2001	558,901,552	43,967,623	46,456,603	6,843,434	656,169,212
2002	636,398,865	39,066,937	47,625,764	6,776,044	729,867,610
2003	653,542,143	39,608,946	53,829,235	7,215,024	754,195,348
2004	685,603,796	41,179,470	50,396,392	7,231,295	784,410,953

## **Revenues by Source**

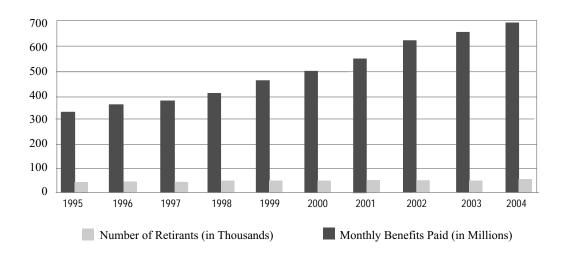
		Contributions	Net			
Fiscal Year	Member	Employer	Employer Insurance	Misc.	Investment Income	Total
1995	\$ 159,250,384	\$ 106,496,039	\$ 22,881,197	\$ 533,638	\$ 906,231,045	\$ 1,195,392,303
1996	173,247,638	119,319,684	24,084,601	97,505 (1)	1,095,001,676	1,411,751,104
1997	171,120,750	133,053,259	23,226,519	92,827	974,302,417	1,301,795,772
1998	173,954,587	142,931,373	24,173,870	173,035	1,247,347,928	1,588,580,793
1999	185,180,551	175,581,182	26,071,503	210,116	953,992,725	1,341,036,077
2000	192,776,305	168,100,637	17,164,419	245,354	1,314,770,498	1,693,057,213
2001	204,142,810	193,384,289	—— (2)	175,815	(798,126,783)	(400,423,869)
2002	209,624,015	207,611,045	13,862,682	137,633	(463,746,959)	(32,511,584)
2003	224,746,447	222,882,765	8,581,558	82,257	326,056,643	782,349,670
2004	230,349,955	714,353,221 (3)	—— (2)	182,113	1,336,225,914	2,281,111,203

- 1) Beginning in Fiscal Year 1996, refund of current year benefit payments were accounted as a reduction to benefit expenses.
- 2) Per legislation, employers were not required to remit the Group Life and Disability Insurance portion of required employer contributions.
- 3) Pension obligation bonds for \$440 million were issued in 2004.

## Schedule of Benefits by Type

Fiscal Year	Monthly Retirement Benefits	Retirement Dividend	Death Benefits	Refunds of Contributions	Disability Insurance Premiums & Benefits
1995	\$ 315,965,280	\$ 11,019,325	\$ 6,742,192	\$ 26,542,254	\$ 36,070,807
1996	346,390,529	10,701,234	7,010,866	30,687,458	34,108,251
1997	378,656,752	10,173,553	7,830,644	36,761,625	36,048,625
1998	411,626,428	9,673,950	7,682,253	41,510,908	37,639,743
1999	455,265,896	9,443,527	7,862,525	40,860,950	41,892,190
2000	489,058,357	8,811,628	8,071,779	43,631,850	42,199,878
2001	542,389,577	8,284,487	8,227,488	43,967,623	46,456,603
2002	619,959,068	7,744,988	8,694,809	39,066,937	47,625,764
2003	638,498,630	7,217,449	7,826,064	39,608,946	53,829,235
2004	670,246,402	6,672,212	8,685,182	41,179,470	50,396,392

## **Comparison of Benefits Paid to Retired Members**



## Schedule of Retired Members and Survivors by Type of Benefit

June 30, 2004

Amount of	Number													
Monthly	of	Тур	e of Retire	ment				Opt	ion Typ	e Selecte	d			
Benefits	Retirants	1,3,5	2,4	6,8	7,9	1	2	3	4	5,8	6,7	9	0	Other
\$ - 99	3,473	3,036	416	8	13	2,813	258	236	41	32	11	20	55	7
\$100-199	5,563	3,442	2,033	69	19	4,049	679	515	93	76	59	27	48	18
\$200-299	5,738	3,047	2,607	73	11	4,131	650	591	112	115	61	23	48	8
\$300-399	5,389	2,983	2,334	48	24	3,778	587	656	108	136	38	26	58	2
\$400-499	4,418	2,528	1,822	49	19	3,109	507	542	73	112	31	9	34	1
\$500-599	3,763	2,319	1,401	32	11	2,600	416	474	60	122	9	47	31	4
\$600-699	3,210	1,967	1,192	33	18	2,199	359	445	56	96	11	16	26	2
\$700-799	2,784	1,739	996	35	14	1,876	347	361	51	106	7	16	19	1
\$800-899	2,349	1,543	733	57	16	1,540	298	321	37	111	15	9	18	0
\$900-999	2,066	1,481	507	56	22	1,316	291	293	32	103	10	6	15	0
\$1,000-1,499	8,331	7,030	990	212	99	4,959	1,325	1,230	97	568	72	27	52	1
\$1,500-1,999	6,264	5,901	142	136	85	3,629	1,071	837	57	565	50	21	33	1
\$2,000-2,499	3,232	3,123	31	53	25	1,834	620	351	29	361	11	18	7	1
\$2,500-2,999	1,403	1,359	24	10	10	686	319	144	20	221	3	4	6	0
\$3,000-3,499	622	599	17	3	3	258	154	81	5	117	2	3	2	0
\$3,500-3,999	278	276	1	1	0	121	58	31	3	65	0	0	0	0
\$4,000 +	255	250	5	0	0	97	68	26	2	61	0	0	1	0
Totals	59,138	42,623	15,251	875	389	38,995	8,007	7,134	876	2,967	390	272	453	46

#### **Type of Retirement**

- 1, 3, 5, Normal
- 2, 4, Early
- 6, 8, Service-connected death and disability
- 7,9, Non-service connected death and disability

## Option Type Selected

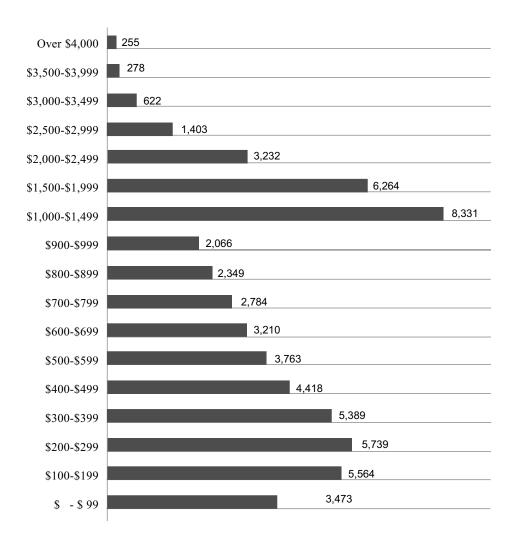
- 1, Maximum, no survivor benefit
- 2, Joint, 1/2 to survivor
- 3, Joint, same to survivor
- 4, Life with ten years certain
- 5, 8, Joint with 3/4 to survivor
- 6,7, Widowed, children, survivor
- 9, Life with five years certain
- 0, Life with 15 years certain

## Average Monthly Benefit by Years of Service

New Retirees, Five-Year Summary

			Calendar Year		
Service Credit	1999	2000	2001	2002	2003
Less than 5 years	159	150	189	191	196
Average Benefit	\$76.38	\$84.08	\$123.00	\$178.38	\$111.97
Average Years	2.46	2.30	2.47	2.33	2.27
5-9.9 Years	237	249	221	201	218
Average Benefit	\$253.02	\$281.88	\$222.53	\$197.94	\$230.30
Average Years	7.01	7.01	7.08	7.16	6.88
10-14.99 Years	527	559	521	557	556
Average Benefit	\$387.82	\$423.63	\$379.37	\$451.20	\$429.97
Average Years	11.75	11.91	11.87	12.04	11.86
15-19.99	490	466	502	496	515
Average Benefit	\$646.49	\$640.33	\$608.25	\$684.88	\$669.08
Average Years	17.04	16.87	16.96	16.93	16.89
20-24.99	450	431	435	454	432
Average Benefit	\$913.36	\$917.57	\$935.92	\$952.70	\$1,011.30
Average Years	21.84	21.94	21.90	22.04	21.87
25-29.99	510	527	557	523	543
Average Benefit	\$1,464.29	\$1,574.01	\$1,478.75	\$1,466.67	\$1,515.03
Average Years	26.94	27.08	27.18	27.05	27.14
30-34.99	617	633	671	703	667
Average Benefit	\$1,861.44	\$1,960.60	\$1,842.36	\$1,918.15	\$2,026.35
Average Years	31.80	31.83	32.01	31.89	31.84
35-39.99	268	234	233	211	233
Average Benefit	\$2,146.47	\$2.119.73	\$2.038.41	\$2,137.57	\$2,278.46
Average Years	36.79	36.71	36.44	36.69	36.66
40-44.99	79	73	75	68	66
Average Benefit	\$2,177.81	\$2,350.35	\$2,296.74	\$2,221.94	\$2,511.66
Average Years	41.65	41.49	41.65	41.38	41.44
45-49.99	13	11	9	14	17
Average Benefit	\$2,604.31	\$2,338.06	\$2,103.47	\$2,346.95	\$2,129.79
Average Years	45.62	46.18	45.67	46.21	46.24
50 and Over	5			7	4
Average Benefit	\$3,421.89	\$	\$ —	\$2,805.10	\$3,325.39
Average Years	52.00		_	54.43	55.60
Total Number	3,355	3,333	3,413	3,425	3.447
Average Benefit	\$1,102.19	\$1,133.32	\$1,086.60	\$1,129.21	\$1,164.22
Average Years	21.99	21.78	21.95	21.94	21.74

## Benefit Amount as of June 2004



# Acknowledgements Section

# Acknowledgements

#### **KPERS Staff**

Melvin Abbott Earlene Hagenmeier Kim Raines

Cathy Adams Kevin Hancock Alberta Rea

Yohonna Barraud Lisa Hernandez Teresa Ryan

Kristen Basso Duane Herrmann MaryAnn Sachs

Steve Beck Arlene Hill Marilynn Sawyer

Dianna Berry Denise Hilmes Robert Schau

Harvey Best John Hooker J. Alan Schuler

Becky Betts Melva Janke Jessica Schuman

Anita Bradley Casey Kidder Rhonda Shumway

Leland Breedlove Cheryl Koch Patricia Simecka

Kathleen Burns Judy Lambert Bette Snoddy

Amy Cobos Debra Lewis Aleta Spreer

Lorie Conklin Vivian Liu Kelly Szabo

Kelly Cornelison Mandy Lowe Peter Szabo

Tammy Cruz Melonie Lundy Lise Ullery

Jim Darnall Joyce Mark Christina VanWinkle

Andrea Davenport Priscilla Martinez Marsha Veal

Oma Davis Laurie McKinnon Craig Weltman

Glenn Deck Judy McNeal Steven Wesley

Donald Deseck Janice Minger Max Williams

Yolanda Dickinson Noble Morrell Carol Wilson

Jill Emme Lisa Ngole Deanna Winters

Mitchell Fick John Oliver Robert Woodard

Renae Forque Scott Peppard Cheri Woolsey

Sue Gamblian Diana Peters Linda Wulfkuhle

Connie Gardner Linda Porter Pat Zimmerman

Kay Gleason Pam Price

Darlene Glover Joan Quattlebaum

Mary Beth Green Cathy Rafferty

Carolyn Haden Randy Rahberg

#### Consultants

Actuary - Milliman USA, Omaha, Nebraska

Auditors — Berberich Trahan & Co., P.A., Topeka, Kansas

Investment Consultant — Pension Consulting Alliance, Inc., Encino, California

Investment Consultant — Ennis Knupp, Chicago, Illinois

Portfolio Advisors, LLC, Darien, Connecticut

#### **Investment Managers**

AEW Capital Management, L.P., Boston, Massachusetts

Alliance Capital Management Corp., New York, New York

Barclays Global Investors, San Francisco, California

Capital Guardian Trust Company, Los Angeles, California

Lazard Freres Asset Management, New York, New York

Loomis, Sayles & Company, Inc., Boston, Massachusetts

Morgan Stanley Asset Management, New York, New York

Nomura Capital Management, Inc., New York, New York

Pacific Investment Management Company, Newport Beach, California

Pareto Partners, New York, New York

Payden & Rygel Investment Counsel, Los Angeles, California

Wellington Management Company, LLP, Boston Massachusetts

Western Asset Management Company, Pasadena, California

#### **Investment Custodian**

Mellon Trust, Everett, Massachusetts

#### Life Insurance and Long-Term Disability Benefits

Life: Minnesota Life Insurance Company, St. Paul, Minnesota

Disability: Self Insured, Administered by Security Benefit Group, Topeka, Kansas