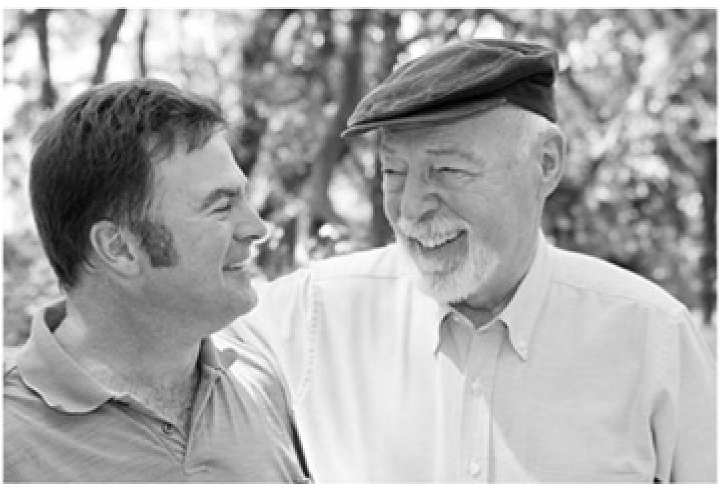
Serving **members** is not just our job.

It is our **mission**.



Annual Comprehensive Financial Report
For the Fiscal Year Ended June 30, 2022

Kansas Public Employees Retirement System
a component unit of the State of Kansas

KPERS

Annual Comprehensive Financial Report
For the Fiscal Year Ended June 30, 2021

Kansas Public Employees Retirement System
a component unit of the State of Kansas

Prepared by KPERS Staff
611 S. Kansas Ave., Ste 100, Topeka, KS 66603
Alan D. Conroy, Executive Director
Judy McNeal, Chief Fiscal Officer

KPERS

OUR MISSION

KPERS, in its fiduciary capacity, exists to deliver retirement, disability and survivor benefits to its members and their beneficiaries.

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TRANSMITTAL LETTER

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

October 28, 2022

We are pleased to present the Kansas Public Employees Retirement System's (KPERS) Annual Comprehensive Financial Report (ACFR) for Fiscal Year 2022. In addition to informing the Board of Trustees, members and employers, our annual report fulfills KPERS' reporting responsibilities as defined in Kansas statute. Printed copies are readily available to the public and a full version is posted on our website, kpers.org.

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

ENSURING ACCURACY

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

The Retirement System maintains a framework of internal controls to establish reasonable assurance that assets are safeguarded, transactions are completed accurately and financial statements are fair and reliable. We also have an internal audit program that reports to the Board of Trustees. There are inherent limitations to internal controls, and risk cannot always be foreseen or completely eliminated. KPERS' objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements, since the cost of internal control should not exceed the benefits obtained. In addition to internal controls, the independent certified public accounting firm CliftonLarsonAllen LLP conducted an independent audit of the Retirement System's financial statements for Fiscal Year 2022.

OUR PROFILE

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

We are a statewide, cost-sharing multiple employer defined benefit retirement plan containing three different groups:

- Public Employees
- Kansas Police and Firefighters
- Judges

Retirement System benefits are offered by slightly over 1,500 state and local employers. KPERS has over 333,000 members, including active, inactive and retired members. The Retirement System paid over $2.0 billion in retirement benefit payments for Fiscal Year 2022. Over 85 percent of those benefits remained in Kansas. Retirement System assets totaled $24.5 billion on June 30, 2022.

Along with the defined benefit plan, KPERS also oversees two voluntary supplemental plans, KPERS 457 and KPERS 401(a). KPERS 457 is a voluntary deferred compensation plan for State of Kansas employees. Another 413 local public employers also participate, including 16 new employers in Fiscal Year 2022. The 401(a) plan has 12 employers, including two new employers in

Fiscal Year 2022. It is an employer sponsored retirement plan that allows for both employee and employer contributions.

KPERS 457 plan has over 26,162 total and 13,081 actively contributing participants. Total plan assets equaled about $1.3 billion at the end of Fiscal Year 2022. The KPERS 457 plan's financial information is not included in this annual report.

A nine-member Board of Trustees oversees the Retirement System: four are appointed by the Governor; one is appointed by the President of the Kansas Senate; one is appointed by the Speaker of the Kansas House of Representatives; two are elected by Retirement System members; and one is the statewide elected State Treasurer. The Board appoints an executive director who manages a staff to carry out daily operations. The Board approves the System's annual operating budget. As a component unit of the State of Kansas, the budget is also approved by the Kansas Legislature and Governor as part of the regular legislative budgetary process.

INVESTMENTS

KPERS' assets are invested according to the "prudent expert standard of care" for the sole purpose of providing benefits to members and beneficiaries. We have designed our investment portfolio to withstand short-term market volatility and economic downturns, as well as to benefit from strong economic and market environments.

Over time, solid investment performance is an important component to sound funding. Our actuarial projections assume an average, long-term net investment return of 7.00 percent. In May 2022, the Board changed from a 7.75 percent assumption to the current 7.00 percent. For some years, returns will be below that rate and, in other years, returns will exceed it. As of June 30, 2022, KPERS' 25-year annualized total return average was 7.3 percent, exceeding the 7.00 percent target.

For Fiscal Year 2022, the Retirement System's broadly diversified investment portfolio produced a total return of negative 4.7 percent, outperforming the Policy Index benchmark by 3.8 percent for the fiscal year.

The Retirement System's investment portfolio ended the fiscal year at approximately $24.3 billion in assets. For more information about KPERS diversified and disciplined approach to executing our investment strategy, please refer to the investment section in this report, beginning on page 54. This section also provides details about our asset allocation and a general overview of each asset class and its performance.

KPERS contracts for the services of various independent consultants essential to the effective and professional operation of the System. A list of the consultants and advisors is included in the Introductory Section on page 14. In the Investments Section a schedule of entities to whom KPERS paid broker commissions is on page 66.

FINANCIAL POSITION AND FUNDING OUTLOOK

For many years, KPERS has been facing a long-term funding shortfall, significantly affected by two recessions and less than the required employer contributions for 25 years.

The Kansas Legislature has taken steps over the last decade to incrementally address the long-term funding shortfall, including pension funding bonds, increasing member contributions, commitments to increase employer contributions over time, creating a cash balance plan for new members and an additional $1.25 billion funding in 2022.

Employers in all plans and membership groups are now making contributions at the actuarially required contribution rate. Consistent employer contributions over time are one of the most important factors for plan funding and continuing to improve the System's funded status.

It has been a slow climb from the System's lowest funded ratio of 56 percent in 2012 to the current 72 percent, down from 73 percent in 2021. Even with the effect of reducing the investment assumption this year, KPERS' largest member group, the KPERS State/School group, should reach the 80 percent funded ratio mark in 2023 and 100 percent in 2039 if all actuarial assumptions are met.

It is important to remember that continued funding improvement hinges on meeting our investment target over time, in addition to consistent employer contributions matching actuarial funding requirements year after year.

For information on KPERS' funding projections by plan and group, please see the actuarial section beginning on page 67.

UNFUNDED ACTUARIAL LIABILITY

The unfunded actuarial liability (UAL) amount is the gap between the actuarial value of assets and the actuarial liability for service already earned by public employees.

According to the December 31, 2021, actuarial valuation, the System's UAL increased by about $1.3 billion to $9.8 billion. The UAL was previously $8.5 billion as of December 31, 2020. The anticipated downward shift was due in large part to the Board of Trustees reducing KPERS' long-term investment assumption from 7.75 percent to 7.00 percent in May 2022. The Retirement System's UAL is projected to decrease in the coming years with employers consistently making full actuarial required contributions and continued positive investment experience.

FUNDED RATIO

The funded ratio is the ratio of assets to future liabilities. The last valuation showed the System's funded ratio at 72 percent, down from 73 percent the previous year, but up from a low of 56 percent in 2012. Over the long-term, the funded ratio is expected to improve steadily if assumptions are met and scheduled contributions are made.

For public pension plans like KPERS, funding over 80 percent and rising is generally good. Funding below 60 percent is poor and needs prompt attention. While the System does not have an immediate crisis, long-term funding requires ongoing, careful oversight.

MAJOR INITIATIVES AND ACCOMPLISHMENTS

Pension Administration System and Business Processes Modernization Initiative

KPERS has continued preparing for our future full-scale modernization project. The project will improve our pension administration system with efficient business processes, tools for increased organization productivity, and the highest quality interactions with our members and employers. However, the modernization project will not be completed for several years, and we need to use our current system in the meantime. To that end, efforts in Fiscal Year 2022 included:

- Improving collaboration with our technology vendor
- Identifying some root causes of system issues and recommended solutions
- Designing tracking tools for more accountability and efficiency
- Strengthening our internal technology and project management teams
- Continuing to support the existing system

The root cause issues identified ranged from some inefficient system design and testing approaches, to process documentation and the heavy load of manual operations required by the system. In our next phase of preparation, we will set the scope and priorities for addressing identified root cause issues. Then work to stabilize and improve the existing system for use before we remodel it into our vision for the future information system.

Data Governance Program

As an outflow of the pension administration system modernization project, KPERS launched a data governance program. To have a truly modernized system, we need the information stored in it to be accurate and dependable.

Our goal with the program is to have better reporting, more reliable and accurate data, and one trusted source of information that best serves our members, employers, and employees. Part of that will be making it easier to share information across our organization and further increasing data security.

Data governance aligns people, processes, and technology to support overall business goals and objectives. In Fiscal Year 2022 we laid a foundation of strategies and standards on which to build the program. Once an internal oversight council was established, we recruited and trained employees to be "data stewards." This key group of staff members helped take data governance from ideas to action. They assessed how the program will work at KPERS and tackled our first initiatives, standardizing mailing addresses in our system and creating a business glossary. We chose mailing addresses as the first project to put us on track for a quick win, demonstrating to staff what data governance can do for KPERS operations. The business glossary is a more extensive project. It is a living document that defines key terms and the data fields we use in our information system and as part of our business processes. Data stewards hosted information gathering sessions to gain input from employees across the organization and the project will continue into Fiscal Year 2023.

As a whole, KPERS' data governance program will continue to evolve. It will be an ongoing effort for years to come with the goal of integrating it across the organization anytime a task or project includes member and employer data.

Lowering Investment Return Assumption to 7%

In May 2022, the Board of Trustees lowered KPERS' assumed investment rate of return from 7.75 percent to 7.00 percent. Setting actuarial assumptions is part of the Board's fiduciary duty to members and to make sure promised benefits are paid. The investment return assumption has the most impact when calculating System liabilities (cost of promised benefits) and the resulting employer contributions. The investment assumption has been changed 8 times since 1962, most recently in 2016.

The foundation for the Board's decision was three-fold.

- Fairness: An investment assumption that is too high asks future generations of employers to pay more than their fair share.
- The market: A 7.0 percent assumption is more appropriate compared to the previous 7.75 percent based on current and projected market data from our investment experts.
- Best practices: The lower return rate better reflects best practices in the actuarial industry and brings us in line with the average for other major U.S. pension plans.

Among the effects of lowering the rate are an increased unfunded liability and reduced funded ratio the first year the change went into effect.

The change also increases employer contribution rates for one year before beginning to drop again. Assuming lower investment returns means employers shoulder more of the liability cost to make up the difference. The Board utilized reamortization of the unfunded actuarial liability to help mitigate employer rate increases.

BY THE NUMBERS—IN FISCAL YEAR 2022:

- About 1.3 million retirement benefit payments paid totaling over $2.0 billion
- 6,100 pension inceptions completed
- 25,000 beneficiary designations processed
- $36.5 million in life insurance benefits paid
- 38,650 member enrollments and transfers processed
- 9,400 withdrawals paid totaling $91 million
- $16 million in benefits paid to 1,850 disabled employees
- 98,857 incoming calls with an average of 405 a day answered with an average wait time of 34 seconds to reach customer service
- 22,000 emails answered

AWARDS & ACKNOWLEDGMENTS

KPERS participated in a benchmarking survey conducted by CEM Benchmarking, Inc. When compared with other public pensions in the 2021 survey, KPERS earned an overall service score of 82 matching the peer median score of 82. KPERS' peer group is a high service group, including six of the top 10 scoring retirement systems in the CEM database. In addition, we measured very favorably with regard to cost. KPERS' administrative cost per member is $61, well below the peer median cost of $86. Benchmarking results continue to show KPERS is delivering good customer service for a low, economical cost.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Retirement System for the 2021 ACFR. The Certificate of Achievement is a prestigious national award, recognizing conformance with the highest standards for preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized annual comprehensive financial report, the contents of which must conform to program standards. The annual comprehensive financial report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. The Retirement System has received the Certificate of Achievement for each of the last 28 fiscal years. We believe our current report again conforms to the program requirements, and we will submit it to the GFOA to determine its eligibility for another certificate.

In addition to the GFOA certificate, KPERS also earned the Public Pension Standards Award for Funding and Administration in 2022 from the Public Pension Coordinating Council (PPCC). The standards serve as a benchmark by which to measure public defined benefit plans in the areas of benefits, actuarial valuation, independent audit, investments, communications and long-term funding.

The annual report continues to be the product of team effort, both KPERS staff and advisors. We thank the Board for its leadership and our entire dedicated staff whose work this report represents. The report is an important asset to our organization, and we use the information in this report to make key decisions. It helps us honor our fiduciary commitment and provide members with the service they need to get the most from their benefits.

Sincerely,

Alan D. Conroy

Alan D. Conroy,
Executive Director

Judy McNeal

Judy McNeal
Chief Fiscal Officer

BOARD OF TRUSTEES

OUR ORGANIZATION

BOARD OF TRUSTEES

EXECUTIVE DIRECTOR

Alan D. Conroy

ADMINISTRATION

General Counsel, Laurie McKinnon
Internal Audit, Janette Martin
Planning and Research, Jarod Waltner
Human Resources, Julie Baker
KPERS 457, Arlen Zentner
Project Management, Susan Hancock
Communications, Kristen Basso

INVESTMENTS

Chief Investment Officer, Elizabeth B.A. Miller
- Equity Investments
- Real Estate Investments
- Fixed Income Investments
- Alternative Investments

FISCAL SERVICES

Chief Fiscal Officer, Judy McNeal
- Corporate Accounting
- Employer Reporting
- Investment Accounting
- Employer Auditing

BENEFITS AND MEMBER SERVICES

Chief Benefits Officer, Mary Beth Green
- Disability and Death Benefits
- Retirement Benefits
- Withdrawal Benefits
- InfoLine
- Education and Training

INFORMATION TECHNOLOGY

Chief Information Officer, John Cahill
- Application and Data Management
- Cyber-Security
- Operations

KPERS STAFF

Richard Aldape
Kelly Alexander
Crystie Amaro
Michael Arvidson Jr
Paige Ashley
Karina Ayala
Julie Baker
Yohonna Barraud
Kristen Basso
DuWayne Belles
A. Kathleen Billings
John Black
Candace Blythe
Karla Bradford
Anita Bradley
Breanna Briggs
Amy Brown
Tracy Brull
Annika Bush
Melissa Butler
John Cahill
Tyler Caleb
Andryana Campbell
James Campbell
Blaine Clark
Amanda Cobler
Alan Conroy
Scott Crider
Becky Dekat
Ardith Dunn
Amy Dunton
Letisha Eastman
Yarlenis Ensley
Allie Estanol
Melissa Findlay
Bruce Fink
Crystal Fischer
James Fleming
Shelly Fruits
Elaine Gaer
Sue Gamblian
Connie Gardner
Raymond Gentry
Billie-Jo Gerisch
Michael Gilliland
Shlomo Ginsburg
Lisa Gonzales
Taryn Gonzales
Mary Beth Green
Kyle Grimes
Susan Hancock
Alec Hawley
Jordan Hecker
Vicky Hein
Connor Henrichs
Lorie Hernandez
Candice Heth
Liza Hoffman
Dalton Holmes
John Hooker
Mirel Howard
Kaylie Hughes
Brittany Hulse
Ineke Ingram
Charla Jefferson
Marais Johnson-Herl
Teresa Jurgens
Vanessa Katra
Casey Kidder
Shannon Kuehler
Les Lauber
Denise Leakey
Lindsey Leslie
Debra Lewis
Melinda Locke
Candi Luat
Janette Martin
Jack Martin
Kurt Mathews
Heather McHardie
Laurie McKinnon
Jason McKinzie
Judy McNeal
Elizabeth Miller
Noble Morrell
Lesa Moyer
Kali Newell
Lisa Ngole
Dawn Nichols
Tracy Nicolay
Shawn Nix
Sonja Parry
Chris Parsons
Katherine Phelps
Alissa Powell
Sheila Putman
Tyler Pyle
Justin Quick
Teresa Quick
Kimberley Raines
Norm Remp
Elizabeth Rincon
Marla Rivares
Dean Roney
Jamie Rose
Rika Rowe
Jasmine Russ
Teresa Ryan
Ashley Sage
Alley Salmon
Nathan Schmidt
Crystal Schnacker
Alan Schuler
Annette Scott
Ciera Seele
Adam Sester
Aditi Sharma
Hallie Shermoen
Rhonda Shumway
Cherie Smith
Derek Smith
Brecken Stadler
Marsha Stafford
Kale Stone
Raquel Talavera
Amber Tarrant
Carmen Torres
Jessica Tufts
Jason Van Fleet
Jackie VandeVelde
Clayton Viehweg
Kelly Vu
Daniel Wadsworth
Jarod Waltner
Barbara Warhurst
Ashley Warren
Emily Washington
Brie Watson
Michaela Watson
Kelsea Watts
Lisa Wehrly
Jessica Wells
Amy Whitmer
Megan Wilk
Max Williams
Emily Wilson
Krystal Yegon
Leah Zeller
Arlen Zentner
Pat Zimmerman

CONSULTANTS AND ADVISORS

Auditors: CliftonLarsonAllen LLP, Greenwood Village, CO

Accounting: KPMG LLP, Chicago, IL

Actuary: Cavanaugh Macdonald, Bellevue, NE

Information Technology: The Segal Company, New York, NY

INVESTMENT CONSULTANTS

Mercer Alternatives, LLC, El Dorado Hills, CA
Meketa Investment Group, Portland, OR
The Townsend Group, Cleveland, OH

INVESTMENT MANAGERS

Adrian Lee & Partners, Dublin, Ireland
Baillie Gifford Overseas Limited, Edinburgh, Scotland
BlackRock Institutional Trust Company, San Francisco, CA
CenterSquare Investment Management Inc., Plymouth Meeting, PA
Insight Investment Inc., New York, NY
JP Morgan Investment Management Inc., New York, NY
Lazard Asset Management, LLC, New York, NY
Loomis Sayles & Company, LP, Boston, MA
MacKay Shields LLC, New York, NY
Mellon Capital Management Corporation, San Francisco, CA
Molpus Timberlands Management, Jackson, MS
Payden & Rygel Investment Counsel, Los Angeles, CA
Russell Investment Group, Tacoma, WA
State Street Global Advisors, Boston, MA
T Rowe Price Associates, Inc., Baltimore, MD
Wellington Management Company, Boston, MA
Western Asset Management Company, Pasadena, CA

Investment Custodian: State Street Bank and Trust, Boston, MA

Life Insurance: Standard Insurance Company, Portland, OR

Long-Term Disability: Self Insured, Administered by Disability Management Services, Inc., Springfield, MA

Brokers: See the "Schedule of U.S. Equity Commissions" on page 66.

GFOA CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Certificate of Achievement for Excellence in Financial Reporting to KPERS for the 2021 annual report. KPERS has received the award for each of the last 28 consecutive fiscal years.

Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Kansas Public Employees Retirement System

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

PPCC PUBLIC PENSION STANDARDS AWARD

The Public Pension Coordinating Council (PPCC) awarded the Public Pension Standards Award for Funding and Administration to KPERS for 2022.

PPCC

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2022

Presented to

Kansas Public Employees Retirement System

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

Financial
Section

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

Board of Trustees
Kansas Public Employees Retirement System
Topeka, Kansas

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the Kansas Public Employees Retirement System (the System), a component unit of the State of Kansas, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the System, as of June 30, 2022, and the changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Board of Trustees
Kansas Public Employees Retirement System

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in the employers' net pension liability, schedule of employers' net pension liability, schedule of employers' contributions, and schedule of investment returns, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required

Board of Trustees
Kansas Public Employees Retirement System

supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The other supplementary information listed in the table of contents is presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory section, investment section, actuarial section, and statistical section but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 28, 2022, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely 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 effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Denver, Colorado
October 28, 2022

MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents management's discussion and analysis of the Kansas Public Employees Retirement System's financial performance for the fiscal year ended June 30, 2022. 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 the administrator of a cost sharing defined-benefit pension plan (Pension Plan) providing pension benefits to the following three statewide pension groups under one plan, as provided by chapter 74, article 49 of the Kansas Statutes:

- Public Employees
- Police and Firemen
- Judges

Substantially all public employees in Kansas are covered by the Pension Plan. The State of Kansas and Kansas schools are required to participate, while participation by local political subdivisions is optional but irrevocable once elected.

FINANCIAL HIGHLIGHTS

The System's net position decreased approximately $782.5 million or approximately negative 3.1 percent to $24.5 billion as of June 30, 2022, compared to an increase of $4.6 billion or approximately 22.6 percent, from $20.6 billion to $25.3 billion as of June 30, 2021.

The System's June 30, 2022, financial actuarial valuation calculated a total pension liability at June 30, 2022, of $35.1 billion, compared to $33.1 billion as of June 30, 2021, an increase of $2.0 billion or 6.1 percent. The net pension liability at June 30, 2022, was $10.6 billion, an increase over the prior year of approximately $2.8 billion. The discount rate used to determine the total pension liability changed from 7.25 percent at the prior measurement date, June 30, 2021, to 7.00 percent at the current measurement date, June 30, 2022.

On a fair value basis, this year's money-weighted rate of return on investments was negative 5.12 percent, compared to last year's return of 25.89 percent.

Monthly retirement benefits paid to retirees and beneficiaries increased 4.7 percent to approximately $2.0 billion for Fiscal Year 2022, compared to $1.9 billion in Fiscal Year 2021.

The 2021 Legislature passed House Bill 2405, which authorized the state of Kansas to issue bonds, series 2021K, with net proceeds of $500 million to fund a portion of the School unfunded actuarial liability. The bond proceeds were received by KPERS on August 26, 2021.

The 2022 Legislature passed Senate Bill 421, which authorized the state of Kansas to transfer $1.125 billion from the State General Fund (SGF) directly to KPERS in Fiscal Years 2022 and 2023. The first $253.9 million pays off outstanding accounts receivable for KPERS-School employer contributions withheld in Fiscal Year 2017 and Fiscal Year 2019 ("layering payments") while the remaining $871.1 million is applied to the KPERS-School unfunded actuarial liability. In Fiscal Year 2022, $600 million was transferred in May and June 2022. In Fiscal Year 2023 Senate Bill 421 authorized two additional transfers which total $271 million, and will be reflected in the Fiscal Year 2023 financial statements.

OVERVIEW OF THE FINANCIAL STATEMENTS

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

- Financial statements
- Notes to the financial statements
- Required supplementary information
- Other supplementary schedules

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

FINANCIAL STATEMENTS

A Statement of Fiduciary Net Position as of June 30, 2022, and a Statement of Changes in Fiduciary Net Position for the fiscal year ended June 30, 2022, are presented in this report. These financial statements reflect the resources available to pay benefits to retirees and other beneficiaries.

NOTES TO THE FINANCIAL STATEMENTS

The financial statement notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes to the financial statements can be found immediately following the financial statements.

REQUIRED SUPPLEMENTARY INFORMATION

The required supplementary information consists of schedules and related notes concerning the financial status of the Retirement System (Pension Plan).

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.

CONDENSED FINANCIAL INFORMATION 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 position at June 30, 2022, amounted to $24.5 billion. Following are two summary schedules, Fiduciary Net Position and Changes in Fiduciary Net Position, showing information for Fiscal Years 2022 and 2021 for the pension plan.

SUMMARY STATEMENT OF FIDUCIARY POSITION

	As of June 30, 2022	As of June 30, 2021
Assets		
Cash and Deposits	$ 29,129,206	$ 21,573,889
Receivables	252,403,475	484,675,507
Investments at Fair Value	24,249,672,318	24,818,151,875
Capital Assets and Supplies Inventory	2,116,841	2,483,843
Total Assets	24,533,321,840	25,326,885,114
Liabilities		
Administrative Costs	2,397,344	1,711,880
Benefits Payable	9,702,824	5,529,045
Securities Purchased	49,145,568	65,048,870
Total Liabilities	61,245,736	72,289,795
Net Position Restricted for Pensions	$ 24,472,076,104	$ 25,254,595,319

SUMMARY STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

	Year Ended June 30, 2022	Year Ended June 30, 2021
Additions		
Contributions	$ 2,607,768,113	$ 1,466,885,214
Net Investment Income / (Loss)	(1,295,608,395)	5,185,033,888
Other Miscellaneous Income	37,474,396	19,967,235
Total Additions	1,349,634,114	6,671,886,337
Deductions		
Monthly Retirement Benefits	2,007,550,258	1,916,524,189
Refunds	91,273,393	76,647,575
Death Benefits	13,831,599	13,809,622
Administrative Expenses	19,498,079	17,183,637
Total Deductions	2,132,153,329	2,024,165,023
Net Increase /(Decrease)	(782,519,215)	4,647,721,314
Fiduciary Net Position Beginning of Year	25,254,595,319	20,606,874,005
Fiduciary Net Position End of Year	$ 24,472,076,104	$ 25,254,595,319

FINANCIAL ANALYSIS OF THE RETIREMENT SYSTEM

Additions to the System's fiduciary net position restricted for pensions include employer and member contributions, as well as investment income. Total contributions to the Retirement System were approximately $2.6 billion in Fiscal Year 2022, compared to approximately $1.5 billion in Fiscal Year 2021.

The System recognized net investment income of negative $1.3 billion for Fiscal Year 2022. The total time-weighted return for the portfolio, net of fees, was negative 5.1 percent, compared to the benchmark return of negative 8.5 percent. System investments at fair value amounted to $24.4 billion at June 30, 2022. The Retirement System's time-weighted one-, three-, five-, ten- and 25-year investment performance returns, net of fees, are shown in the following table. The actuarial assumed rate of return is 7.00 percent.

2022				
1 Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 25 Years
(5.1%)	6.7%	6.9%	8.2%	7.0%

The System recognized net investment income of $5.2 billion for the 2021 Fiscal Year. System investments at fair value amounted to $24.8 billion at June 30, 2021.

At June 30, 2022, the System held $10.9 billion in US equity and international equity securities. US equity and international equity securities earned net returns of approximately negative 13.8 percent and negative 24.3 percent, respectively, for Fiscal Year 2022.

At June 30, 2021, the System held $13.4 billion in US equity and international equity securities. US equity and international equity securities earned returns of approximately 43.9 percent and 34.9 percent, respectively, for Fiscal Year 2021.

The System held $6.1 billion in US debt and international debt securities at June 30, 2022. The net performance of the System's fixed income securities during Fiscal Year 2022 was negative 10.6 percent. Real estate investments amounted to $3.7 billion at June 30, 2022, and returned approximately 31.3 percent for the 2022 Fiscal Year. The System held $2.8 billion in alternative investments, which earned a return of approximately 29.2 percent for the 2022 Fiscal Year. At June 30, 2022, the pension plan held $745.2 million in short-term investments and the custodial funds held $109.8 million. Cash and deposits include investment cash and foreign currencies held at the custodial bank as of June 30, 2022, totaling approximately $28.4 million.

The System held $5.8 billion in US debt and international debt securities at June 30, 2021. The net performance of the System's fixed income securities during Fiscal Year 2021 was 1.2 percent. Real estate investments amounted to $2.9 billion at June 30, 2021, and returned approximately 8.5 percent for the 2021 Fiscal Year. The System held $2.3 billion in alternative investments, which earned a return of approximately 50.9 percent for the 2021 Fiscal Year. At June 30, 2021, the pension plan held $265.8 million in short-term investments and the custodial funds held $86.5 million. Cash and deposits include investment cash and foreign currencies held at the custodial bank as of June 30, 2021, totaling approximately $20.5 million.

Deductions from fiduciary net position restricted for pensions include retirement benefits, refunds, survivor benefits and administrative expenses. For the 2022 Fiscal Year, retirement benefits amounted to approximately $2.0 billion, an increase of $91.0 million or 4.7 percent from Fiscal Year 2021. For the 2022 Fiscal Year, System administrative expenses amounted to $19.5 million, an increase of $2.3 million from Fiscal Year 2021. The ratio of System administrative expenses to the number of members continues to be very cost-efficient compared to other statewide retirement plans.

NET PENSION LIABILITY

The annual financial actuarial valuation for the System, as of June 30, 2022, estimates the total pension liability in accordance with requirements established by GASB Statement No. 67, Financial Reporting Standards for Pension Plans, as amended. The total pension liability (TPL) is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of plan member service. The net pension liability (NPL) is the total pension liability, net of the pension plan's fiduciary net position. As of June 30, 2022, the pension plan's fiduciary net position as a percentage of the total pension liability was 69.75 percent.

PENSION PLAN

In response to KPERS' long-term funding shortfall, the 2012 Legislature made changes to future benefits and contributions, affecting both current members and employers, to improve KPERS long-term sustainability. The Governor signed Senate Substitute for HB 2333 into law on June 1, 2012. This legislation affects new hires, current members and employers. Beginning in 2014, the statutory cap on employer contributions was increased. For Fiscal Year 2017 and beyond, the statutory cap is 1.2 percent. The changes are expected to improve KPERS long-term funding and help all three groups reach full funding by 2033. The actual funding progress will be heavily dependent on the actual investment experience of the System in future years.

The 2015 Legislature passed and the Governor approved Senate Bill 228 authorizing the issuance of $1.0 billion in pension obligation bonds. The bonds were successfully issued in August 2015 and the proceeds transferred to the Retirement System.

The 2021 Legislature passed House Bill 2405, which authorized the state of Kansas to issue pension obligation bonds, series 2021K, net proceeds of $500 million to fund a portion of the

School-Group's unfunded actuarial liability. The bond proceeds were received by KPERS on August 26, 2021 and are reflected in the Fiscal Year 2022 financial statements.

The 2022 Legislature passed Senate Bill 421, which authorized the state of Kansas to transfer $1.125 billion from the State General Fund (SGF) directly to KPERS in Fiscal Years 2022 and 2023. The first $253.9 million pays off outstanding accounts receivable for KPERS-School employer contributions withheld in Fiscal Year 2017 and Fiscal Year 2019 ("layering payments") while the remaining $871.1 million is applied to the KPERS-School unfunded actuarial liability. In Fiscal Year 2022, $600 million was transferred in May/June 2022.

In addition Senate Bill 421 authorized two additional transfers in Fiscal Year 2023 which total $271.0 million. The first transfer of $146.1 million was received August 1, 2022. The second transfer of $125.0 million is expected to be received December 1, 2022.

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

This financial report is designed to provide a general overview of the Kansas Public Employees Retirement Systems' finances for all interested parties. An electronic copy of this report is available at the System's website kpers.org. Requests for a printed copy of this report should be directed to the System as follows:

Kansas Public Employees Retirement System
611 S. Kansas Ave., Suite 100
Topeka, KS 66603-3869
1-888-275-5737

STATEMENT OF FIDUCIARY NET POSITION

As of June 30, 2022

	Pension Plan	Custodial Funds
Assets:		
Cash	$ 711,402	$ 3,560,858
Cash at Custodial Bank	28,417,804	-
Deposits with Insurance Carrier	-	170,786
Total Cash	29,129,206	3,731,644
Receivables:		
Contributions	164,557,779	11,542,957
Investment Income	6,305,611	102,186
Sale of Investment Securities	81,540,085	-
Total Receivables	252,403,475	11,645,143
Investments at Fair Value:		
Domestic Equities	6,115,676,833	-
International Equities	4,735,586,315	-
Short Term	745,212,570	109,749,827
Fixed Income	6,123,528,483	-
Alternative Investments	2,823,032,127	-
Real Estate	3,706,635,990	-
Total Investments	24,249,672,318	109,749,827
Capital Assets and Supplies Inventory	2,116,841	-
Total Assets	24,533,321,840	125,126,614
Liabilities:		
Administrative Costs	2,397,344	-
Benefits Payable	9,702,824	5,289,377
Securities Purchased	49,145,568	-
Total Liabilities	61,245,736	5,289,377
Net Position		
Restricted for:		
Pensions	24,472,076,104	-
Individuals, organizations, and other governments	-	497,693
Postemployment benefits other than pensions	-	119,339,544
	$ 24,472,076,104	$ 119,837,237

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

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Fiscal Year Ended June 30, 2022

	Pension Plan	Custodial Funds
Additions:		
Contributions:		
Member Contributions	$ 481,840,395	$ 7,911,594
Employer Contributions	2,125,927,718	61,039,651
Total Contributions	2,607,768,113	68,951,245
Investments:		
Net Depreciation in Fair Value of Investments	(1,625,408,068)	-
Interest	134,630,290	222,025
Dividends	234,760,510	-
Real Estate Income, Net of Operating Expenses	111,257,792	-
Other Investment Income	45,341,926	-
	(1,099,417,550)	222,025
Less Investment Expense	196,190,845	-
Net Investment Income / (Loss)	(1,295,608,395)	222,025
Other Miscellaneous Income	37,474,396	4,829
Total Additions	1,349,634,114	69,178,099
Deductions:		
Monthly Retirement Benefits Paid	2,007,550,258	-
Refunds of Contributions	91,273,393	-
Death Benefits	13,831,599	-
Insurance Premiums and Disability Benefits	-	43,401,551
Administrative Expenses	19,498,079	556,952
Total Deductions	2,132,153,329	43,958,503
Net Increase (Decrease) in Fiduciary Net Position	(782,519,215)	25,219,596
Fiduciary Net Position Restricted for Pensions		
Beginning of Year	25,254,595,319	94,617,641
End of Year	$ 24,472,076,104	$ 119,837,237

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

NOTE 1 – ORGANIZATION AND PLAN DESCRIPTION

The Kansas Public Employees Retirement System (KPERS, or the System) is a body corporate and an instrumentality of the State of Kansas. KPERS is governed by a nine-member board of trustees of which: 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 System's managing officer. KPERS is a component unit of the State of Kansas.

KPERS is the administrator of a cost-sharing defined-benefit pension plan (Pension Plan) for the State of Kansas providing pension benefits to the following three statewide pension groups under one plan, as provided by K.S.A. 74, article 49:

- Public Employees
- Police and Firemen
- Judges

Substantially all public employees in Kansas are covered by the plan. The State of Kansas and Kansas schools are required to participate, while participation by local political subdivisions is optional but irrevocable once elected.

KPERS pays Death and Disability Plan benefits to members on behalf of employers as provided by K.S.A. 74, article 4927. KPERS also collects and pays premiums for the optional group life insurance plan, as authorized by K.S.A. 74, article 4927. This plan provides additional employee paid life insurance coverage for active members. These benefits are not administered through qualifying trusts based on the criteria in Governmental Accounting Standards Board (GASB) Statement No. 74. Accordingly, the activity for these benefits are presented in custodial funds.

PLAN MEMBERSHIP BY EMPLOYEE GROUP

Participating membership by statewide pension group as of December 31, 2021, (most recent actuarial valuation date) is as follows:

MEMBERSHIP BY RETIREMENT SYSTEMS (1)

	KPERS	KP&F	Judges	Total
Retirees and beneficiaries currently receiving benefits (2)	104,879	6,068	322	111,269
Terminated employees entitled to benefits but not yet receiving them	27,580	270	11	27,861
Inactive members, deferred disabled	1,482	197	-	1,679
Inactive members not entitled to benefits	38,847	1,837	-	40,684
Current employees	144,251	7,779	258	152,288
Total	317,039	16,151	591	333,781

(1) Represents System membership at December 31, 2021.
(2) Number of retirement payees as of December 31, 2021.

NUMBER OF PARTICIPATING EMPLOYERS

	KPERS	KP&F	Judges
State of Kansas	1	1	1
Counties	105	42	-
Cities	370	72	-
Townships	60	-	-
School Districts	286	-	-
Libraries	122	-	-
Conservation Districts	84	-	-
Extension Councils	59	-	-
Community Colleges	19	-	-
Educational Cooperatives	22	-	-
Recreation Commissions	46	1	-
Hospitals	28	-	-
Cemetery Districts	13	-	-
Other	211	-	-
Total	1,426	116	1

PLAN BENEFITS

Benefits are established by statute and may only be changed by the Legislature. Members (except Police and Firemen) with ten or more years of credited service, may retire as early as age 55 (Police and Firemen 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" (Police and Firemen 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 36 years of service). Monthly retirement benefits are based on a statutory formula that includes final average salary and years of service. When ending employment, members may withdraw their contributions from their individual accounts, including interest. Members who withdraw their accumulated contributions lose all rights and privileges of membership. For all pension coverage groups, the accumulated contributions and interest are deposited into and disbursed from the membership accumulated reserve fund as established by K.S.A. 74-4922.

Members choose one of seven payment options for their monthly retirement benefits. At retirement a member may receive a lump-sum payment of up to 50 percent of the actuarial present value of the member's lifetime benefit. Their 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.

The 2012 Legislature made changes affecting new hires, current members and employers. A new KPERS 3 cash balance retirement plan for new hires starting January 1, 2015, was created. Normal retirement age for KPERS 3 is 65 with five years of service or 60 with 30 years of service. Early retirement is available at age 55 with ten years of service, with a reduced benefit. Monthly benefit options are an annuity benefit based on the account balance at retirement.

For all pension coverage groups, the retirement benefits are disbursed from the retirement benefit payment reserve fund as established by K.S.A. 74-4922.

For active members (except Police and Firemen) in cases of death as a result of an on-the-job accident for Public Employees, 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 from any group.

CONTRIBUTIONS

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 for each of the three statewide pension groups. The contributions and assets of all three groups are deposited in the Kansas Public Employees Retirement Fund established by K.S.A. 74-4921. All of the retirement groups are funded on an actuarial reserve basis.

For fiscal years beginning in 1995, Kansas legislation established statutory limits on increases in contribution rates for KPERS employers, which includes the state, school and local employers. Annual increases in the employer contribution rates related to subsequent benefit enhancements are not subject to these limitations. The statutory cap increase over the prior year contribution rate is 1.2 percent of total payroll.

The actuarially determined employer contribution rate and the statutory contribution rates are as follows:

	Actuarial Employer Rate	Statutory Cap Rate
State Employee [1]	9.97%	13.33%
School Employee [1]	14.20	13.33
Judges [1]	18.40	18.40
Local Government Employee [2]	8.90	8.90
Police and Firemen [2]	22.99	22.99

(1) Rates shown for KPERS State, School and Judges represent the rates for fiscal year ending June 30.

(2) KPERS Local and KP&F rates are reported for the calendar year.

Employee contribution rates as a percentage of eligible compensation in Fiscal Year 2022 were 6.0 percent for Public Employees, 7.15 percent for Police and Firemen and 6.0 percent or 2.0 percent for Judges.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements have been prepared on the accrual basis of accounting in conformity with US generally accepted accounting principles (GAAP), as prescribed by the Governmental Accounting Standards Board (GASB). KPERS' financial statements include the pension fund and custodial funds.

The pension fund is accounted for on the flow of economic resources measurement focus and the accrual basis of accounting. Contributions are recognized as revenues when due pursuant to statutory requirements. Benefits and refunds are recognized when due and payable and expenses are recorded when the corresponding liabilities are incurred, regardless of when contributions are received or payment is made.

The custodial funds are custodial in nature and account for the assets and liabilities held by KPERS as an agent. Death and disability benefits are paid on behalf of other governments and Optional Group Life Insurance premiums are paid on behalf of employees. These funds do not measure the result of operations.

SHORT TERM INVESTMENTS

The Retirement System considers Short Term Investments to include both Money Market Investments (MMI) and Short Term Investment Funds (STIF). MMI are highly liquid debt instruments purchased within one year of maturity, including US Treasury and Agency obligations. Asset-backed securities, derivatives and structured notes are not included in MMI.

STIF funds are an open-end mutual fund provided and operated by the custodian bank, that serves the daily cash needs of specific investment managers. The STIF funds are not a 2a-7 like investment pool. As such, the unit of account is each share held, and the value of the position is the fair value of the total fund's price multiplied by the number of shares held.

More information regarding the measurement of the fair value of the MMI and STIF Funds is available in Note 5 – Fair Value Measurement.

METHODS USED TO VALUE INVESTMENTS

Investments are reported at fair value. The fair value of active, publicly traded securities are quoted market prices. 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 annual appraisals. Fair value of other securities is determined by the mean of the most recent bid and asked prices as obtained from dealers that make markets in such securities. Fair values of the limited partnership investments are based on valuations of the partnerships as reported by the general partner. Dividends are recorded on the ex-dividend date.

More information regarding the measurement of the fair value of investments is available in Note 5 – Fair Value Measurements.

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:

- Established 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 allocations of common stock to 60.0 percent of the total book value of the fund.
- Limits the possible allocation of total alternative investments to 15.0 percent of the total investment assets of the fund.
- The annual allowance for new alternative (non-publicly traded) investments is limited to 5.0 percent of the market value of the total investment assets of the fund as measured from the end of the preceding calendar year.
- Establishes limits on the structure of future investments in real estate or alternative investments.
- Requires that the Board develop investment policies and objectives to invest fund assets.
- Authorizes the Board to hire qualified professionals/ firms to assist in investing the fund and requires that such professionals/ firms obtain errors and omissions insurance coverage and fidelity bond insurance coverage.
- Authorizes the Board to pay for the services of retained professionals/firms at the rates fixed by the Board, excluding any reimbursement for expenses and subject to the provisions of the appropriations act.
- Provides for an annual audit and requires that the Board annually examine the investment program, specific investments and its policies and practices.

In fulfilling its responsibilities, the Board of Trustees has contracted with 17 investment management firms and a master global custodian. The Retirement System has six permissible investment categories: 1) equities, 2) real estate, 3) fixed-income securities, 4) derivative products, 5) cash equivalents, 6) alternative investments.

The Pension Plan's policy in regard to the allocation of invested assets is established and may be amended by the Board of Trustees. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan. The following was the Board of Trustee's adopted asset allocation policy as of June 30, 2022:

Asset Class	Interim Target Allocations
Domestic Equities	24.0%
International Equities	24.0
Yield Driven (1)	6.0
Real Return (2)	11.0
Fixed	10.0
Short Term Investments	4.0
Real Estate	12.0
Alternatives	9.0
	100.0%

(1) The Yield Driven asset class above is reported in domestic equities and fixed income on the Statement of Fiduciary Position.

(2) The Real Return asset class above is reported in fixed income and real estate on the Statement of Fiduciary Position.

The System's asset allocation and investment policies include active and passive investments in international securities. The Systems target allocation is to have 24 percent of assets in dedicated international equities. At June 30, 2022, the System utilized two currency overlay managers to reduce risk by hedging up to 100 percent of the developed foreign currency market for international equity portfolios. At June 30, 2022, the System's total foreign currency exposure was 64.5 percent hedged.

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

Fixed income securities are considered to be US and foreign treasury or government agency obligations; US or foreign corporate bonds; asset backed securities such as CMOs, mortgage-backed securities and segments of these types of vehicles; or participation in commingled (fixed income) funds, managed by a bank, insurance company or other professional fixed income investment manager. Core fixed managers invest in large, liquid sectors generally consistent with their benchmark. Strategic fixed managers seek investments from the complete range of global fixed income securities. Subject to the Board's limitations, these investments also include the debt of emerging markets. Emerging markets are considered to be those countries that are included in the JP Morgan Emerging Markets Index Global (EMBI Global).

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

- There are at least two other sophisticated investors.
- The System's portion of an investment will not be more than 20.0 percent of the total investment.
- Any individual investment (standing alone or within a pool) must not be more than 2.5 percent of the Fund's total alternative investment commitments.
- A favorable recommendation has been received from an independent expert.
- The investment is consistent with the Investment Policy Statement.
- The Board has received and considered the due diligence findings regarding the investment.
- Criteria have been established that will be used as a guideline to determine when no additional investments will be made and when the investment will be liquidated.

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

RECEIVABLES

In addition to statutorily determined contractually required contributions, certain agencies also make payments through an additional component of their required employer contribution rate or annual installment payments, both options include interest at 8.0 percent per year, for the cost of service credits granted retroactively when the agency initially joined the Retirement System. As of June 30, 2022, the outstanding balance was $2,564,230. These payments are due over various time periods up through December 31, 2032.

CAPITAL ASSETS

Furniture, fixtures and equipment are reported on the Statement of Fiduciary Net Position at historical cost, net of accumulated depreciation. These assets are depreciated on a straight-line basis over an average useful life of three to ten years with no salvage value. The book value of furniture, fixtures, equipment and land as of June 30, 2022, was $24,872,562, with accumulated depreciation of $22,782,116. In Fiscal Year 1999, the Retirement System purchased an office building and garage in Topeka, Kansas. Over sixty percent of the floor space of the office building is used as the System's administrative headquarters and the remaining portion is leased as a real estate investment. The administrative portion of the building and garage are reported on the Statement of Fiduciary Net Position as a capital asset and are being depreciated. Accumulated depreciation on the administrative portion of the building and garage as of June 30, 2022, was $3,135,841. The office building and garage are being depreciated over a period of 33 years on an accelerated method. At June 30, 2022, the carrying value of the System's administrative headquarters was $482,316.

USE OF ESTIMATES

The preparation of financial statements in conformity with GAAP requires the System's management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, disclosure of contingent assets and liabilities and the total pension liability at the date of the financial statements. Actual results could differ from those estimates.

RISKS AND UNCERTAINTIES

The System invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statement of fiduciary net position.

FEDERAL INCOME TAX

The System is a qualified pension plan under Section 401(a) of the Internal Revenue Code (IRC) and, as such, is required to withhold federal income tax from member and benefit recipient payments in accordance with IRC. As a public entity, the System is not required to file a federal income tax return with the Internal Revenue Service.

NEW ACCOUNTING PRONOUNCEMENTS

GASB Statement No. 96, *Subscription-Based Information Technology Arrangements*; or a SBITA. A SBITA is defined as a contract that conveys control of the right to use another party's information technology software, alone or in combination with tangible capital assets. Under this Statement, a government should recognize a right-to-use subscription asset and a corresponding subscription liability. Retirement management is currently evaluating the impact of GASB Statement No. 96, which will be implemented in Fiscal Year 2023. Retirement management has reviewed upcoming standards and has identified GASB Statement No. 96 as applicable to the plan.

GASB Statement No. 99, Omnibus 2022. The objective of this Statement is to enhance comparability in accounting and financial reporting. Retirement management is currently evaluating GASB Statement No. 99, to determine its applicability to the Plan.

NOTE 3 – CASH AND INVESTMENTS

CASH

The System advances cash deposits to a disability administrator for monthly disability benefits and death benefits for members who are disabled. As of June 30, 2022, the System's deposits with its disability administrator were $170,786. The System does not have a deposit policy for custodial credit risk associated with these deposits.

INVESTMENTS

The following table presents a summary of the Retirement System's investments by type as of June 30, 2022, at fair value:

Investment Type	Fair Value
Domestic Equities	$6,115,676,833
International Equities	4,735,586,315
Fixed Income:	
US Government	2,744,682,154
US Agencies	484,360,594
US Corporate	2,454,075,957
Foreign Fixed Income	440,409,778
Short Term Investments	854,962,397
Real Estate:	
Partnerships	1,046,851,307
Commingled Funds	2,584,716,005
Separate Accounts	75,068,678
Alternatives	2,823,032,127
Total	$24,359,422,145

CUSTODIAL CREDIT RISK

The custodial credit risk for investments is the risk that, in the event of the failure of the custodial counterparty to a transaction, the System will not be able to recover the value of investments or collateral securities that are in the possession of the custodial bank. At June 30, 2022, the System had US Dollar and foreign currency balances at custodial banks with a net value of $28.4 million. This is primarily foreign currency deposits facilitating international investments in the respective local markets. The System's deposits of $4.3 million held at the State Treasury were fully collateralized at fiscal year end by FDIC insurance or pledged collateral (government securities or FHLB letters of credit).

CONCENTRATION OF CREDIT RISK

No single issuer represents 1.0 percent or more of System assets other than US Government (11.0 percent) and Agencies (2.2 percent). KPERS' investment policy does not prohibit holdings above 5.0 percent in the debt securities of US government issuers. Government sponsored enterprises (GSEs, such as FNMA) are considered government issuers for the purpose of implementing KPERS investment policy.

FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The System does not have a formal investment policy that limits its exposure to foreign currency risk. The following table presents the foreign currency risk by type of investment as of June 30, 2022:

FOREIGN CURRENCY RISK

USD Equivalent				
Equity	Fixed	Currency	Total	Percent
$ 54,859,801	$ 7,119,537	Australian Dollar	$ 61,979,338	1.41%
10,180,220	-	Brazilian Real	10,180,220	0.23
503,390,191	215,992,051	British Pound Sterling	719,382,242	16.34
333,331,509	14,169,956	Canadian Dollar	347,501,465	7.89
139,540,098	1,760,730	Danish Krone	141,300,828	3.21
1,327,911,628	168,273,764	Euro Currency Unit	1,496,185,392	33.98
414,187,334	-	Hong Kong Dollar	414,187,334	9.41
11,102,878	-	Indonesian Rupiah	11,102,878	0.25
21,731,372	-	Israeli New Shekel	21,731,372	0.49
542,238,803	23,771,316	Japanese Yen	566,010,119	12.86
72,934,579	-	New Taiwan Dollar	72,934,579	1.66
182,399	3,869,842	New Zealand Dollar	4,052,241	0.09
22,390,442	-	Norwegian Krone	22,390,442	0.51
17,807,573	-	Singapore Dollar	17,807,573	0.40
16,692,793	-	S African Comm Rand	16,692,793	0.38
64,808,813	-	South Korean Won	64,808,813	1.47
85,670,150	5,452,582	Swedish Krona	91,122,732	2.07
306,912,539	-	Swiss Franc	306,912,539	6.97
16,605,664	-	Thailand Baht	16,605,664	0.38
$ 3,962,478,786	$ 440,409,778		$ 4,402,888,564	100.00%

CREDIT RISK

Credit risk is the risk that an issuer or other counterparty to a debt investment will not fulfill its obligations. Each fixed portfolio manager is required to maintain a reasonable risk level relative to its benchmark.

In the following table, Short Term includes commercial paper, repurchase agreements and other short-term securities. Agency securities are those implicitly guaranteed by the US Government. US Government securities are treasury securities and agencies explicitly guaranteed. Securities with a "not rated" quality rating are primarily bank loans, certificates of deposit and preferred stock. System assets as of June 30, 2022, subject to credit risk are shown with current credit ratings.

CREDIT RISK

Quality Rating	Short Term Investments	Corporate [1]	US Government	Agency	Total
Not Rated	$ 591,197,717	$ 303,258,656	$ -	$ -	$ 894,456,373
AAA	25,259,441	291,694,407	2,744,682,154	15,131,219	3,076,767,221
AA	23,943,500	240,003,067	-	401,749,798	665,696,365
A	44,703,699	358,872,861	-	20,207,836	423,784,396
A-1/P-1	-	123,869,666	-	-	123,869,666
BBB	169,858,040	774,048,975	-	40,191,950	984,098,965
BB	-	350,104,609	-	4,380,700	354,485,309
B	-	359,815,509	-	2,699,091	362,514,600
CCC	-	101,514,872	-	-	101,514,872
CC	-	3,647,507	-	-	3,647,507
C	-	5,700,601	-	-	5,700,601
Total	$ 854,962,397	$ 2,912,530,730	$ 2,744,682,154	$ 484,360,594	$ 6,996,535,875

(1) Includes preferred equities subject to credit risk.

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 all fixed portfolios maintain a reasonable risk level relative to their benchmarks. The same System assets as above are also subject to interest rate risk. These are shown in the following table grouped by effective duration ranges. The weighted effective durations shown in the following table are grouped by asset category.

INTEREST RATE RISK

Effective Duration	Short Term Investments	Corporate [1]	US Government	Agency	Total
0 – 1 Yr	$ 854,962,397	$ 258,453,955	$ 31,792,066	$ 32,756,089	$ 1,177,964,507
1 – 3 Yrs	-	509,269,047	396,735,476	19,347,779	925,352,302
3 – 5 Yrs	-	624,391,999	349,840,540	111,729,378	1,085,961,917
5 – 10 Yrs	-	983,904,669	1,602,191,356	27,963,270	2,614,059,295
> 10 Yrs	-	536,511,060	364,122,716	292,564,078	1,193,197,854
Grand Total	$ 854,962,397	$ 2,912,530,730	$ 2,744,682,154	$ 484,360,594	$ 6,996,535,875

(1) Includes preferred equities subject to interest rate risk.

ANNUAL MONEY-WEIGHTED RATE OF RETURN

For the year ended June 30, 2022, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was negative 5.12 percent. This return was 25.89 percent for Fiscal Year 2021. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 4 – INVESTMENT DERIVATIVES

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

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

The following table summarizes the derivatives held by the Retirement System as of June 30, 2022:

INVESTMENT DERIVATIVE SUMMARY

	Asset Class (1)	Notional Value	Fair Value
Domestic Equity Futures	Domestic Equities	$ 37,031,355	$ -
International Equity Futures	International Equities	59,969,354	-
Credit Default Swaps	Fixed	29,541,600	(522,848)
Fixed Futures	Fixed	149,595,656	-
Foreign Currency Forwards	Fixed	7,393,509,104	44,463,394
Options	Fixed	22,500	2,475
To-be-announced (TBA) Agency Bonds (2)	Fixed	24,317,800	24,317,800

(1) The Asset Class that the Fair Values and Revenues are included in other schedules. Futures and Options reflect the summed absolute values of the exposures.

(2) TBA Agency Bond notional values are equal to their fair values. KPERS investment policy allows managers to carry short TBA values as long as they have offsetting long holdings in similar securities with similar characteristics.

The following table summarizes the activity of the derivatives held by the Retirement System during the year ended June 30, 2022, at fair value:

INVESTMENT DERIVATIVE FAIR VALUES

	June 30, 2021	Increases	Decreases	June 30, 2022
Credit Default Swaps	$ 1,658,118	$ 73,640,549	$ (75,821,515)	$ (522,848)
TBA Agency Bonds	50,883,107	3,829,147,238	(3,855,712,545)	24,317,800
Foreign Currency Forwards	61,124,880	107,961,983	(124,623,469)	44,463,394
Options Purchased	9,375	395,154	(402,054)	2,475
	$ 113,675,480	$ 4,011,144,924	$ (4,056,559,583)	$ 68,260,821

FUTURES

Futures contracts are commitments for delayed delivery (liability) or receipt (asset) of securities in which the seller agrees to make delivery and the buyer agrees to take delivery at a specified future date, of a specified instrument, at a specified price. Market risk arises due to market price and interest rate fluctuations that may result in a decrease in the fair value of futures contracts. Futures contracts are traded on organized exchanges and require initial margin in the form of cash or marketable securities. Holders of futures contracts look to the exchange for performance under the contract. Accordingly, the credit risk due to nonperformance of counterparties to futures contracts is minimal. Daily, the net change in the futures contract value is settled in cash with the exchanges, making the fair values always equal to zero after the daily margin flow. At the close of business June 30, 2022, the System had total net margins receivable the next day of $0. Short-term investments in amounts necessary to settle the economic value of the futures contracts were held in the payable portfolio so that no leverage was employed in accordance with the Statement of Investment Policy. The daily margin flows affect cash assets held at broker. Realized gains/losses are recognized at contract maturity and included with underlying security type returns. Total losses of $27.4 million were associated with futures for the year ending June 30, 2022.

OPTIONS

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

SWAPS

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

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

TBA AGENCY BONDS

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

FOREIGN CURRENCY FORWARDS

The Retirement System's international investment managers use forward contracts to obtain currencies necessary for trade execution and manage the exposure of the international investments to fluctuations in foreign currency. Active international investment managers use forward contracts to enhance returns or to control volatility. Currency risk arises due to foreign exchange rate fluctuations. Forward foreign exchange contracts are negotiated between two counterparties. The Retirement System could incur a loss if its counterparties failed to perform pursuant to the terms of their contractual obligations. Since the System holds the offsetting currency in the contract, and controls are established by the investment managers to monitor the creditworthiness of the counterparties, risk of actual loss is minimized. Fair value is reflected as unrealized gains or losses when currency rates fluctuate during the life of the contract.

The Retirement System utilizes two currency overlay managers to reduce, or partially hedge, the System's exposure to foreign currencies through the international equities portfolio. At June 30, 2022, the fair value of international equities was $4.7 billion. The overlay managers evaluate the System's international equities exposure to currencies, and buy/sell inverse currency forwards in relation to the overall currency exposures. The inverse relationship of these hedging investment forwards uses their exposure to currency risks to reduce overall System exposure. The Statement of Investment Policy stipulates that the overlay manager should: "Take forward currency exchange contract positions which will have the intent and effect of hedging the currency exposure of the underlying international equity assets." The Statement of Investment Policy further states the forward currency exchange contract positions be used to "maintain an acceptable risk level by reducing the negative volatility of the currency component of return."

The forward contracts are purchased as needs are determined by the hedge manager, and mature quarterly. Gains/losses are realized during those periods and the contracts are rolled over to the next period as appropriate. Through these processes, hedging contracts can adapt to any changes to portfolio currency exposures. Since the hedging currency forwards track to the overall exposure, and they reference the same foreign exchange rates as the underlying portfolio, this hedge is known to be effective through consistent critical terms. An investment portfolio hedge such as this does not match the hedging forwards to any specific hedged security. The accessibility and liquidity of the currency forwards market allows these hedging forwards to roll forward and seamlessly hedge the ongoing foreign currency exposures.

Following is a summary of the foreign currency forwards exposure at the fiscal year ended June 30, 2022:

INVESTMENT CURRENCY FORWARDS

	Notional Cost (USD)	Pending Foreign Exchange Receivables (USD)	Pending Foreign Exchange Payables (USD)	Fair Value June 30, 2022 (USD)
Australian Dollar	$ 397,813,706	$ 391,810,930	$ (393,768,674)	$ (1,957,744)
British Pound Sterling	501,471,576	499,007,620	(501,153,000)	(2,145,380)
Canadian Dollar	428,925,051	429,853,604	(431,840,693)	(1,987,089)
Danish Krone	47,094,734	47,097,431	(45,660,993)	1,436,438
Euro Currency Unit	2,284,680,266	2,279,697,769	(2,258,857,298)	20,840,471
Hong Kong Dollar	1,449,242,839	1,445,352,307	(1,425,572,140)	19,780,167
Israeli New Shekel	215,676,028	215,668,556	(215,494,704)	173,852
Japanese Yen	13,183,792	13,170,367	(12,239,927)	930,440
New Zealand Dollar	1,122,487,992	1,112,844,229	(1,091,950,160)	20,894,069
Norwegian Krone	427,676,203	409,009,576	(422,262,374)	(13,252,798)
Singapore Dollar	284,758,968	276,961,831	(280,816,224)	(3,854,393)
Swedish Krona	83,449,736	83,383,326	(79,087,556)	4,295,770
Swiss Franc	137,048,213	136,095,513	(136,785,922)	(690,409)
	$ 7,393,509,104	$ 7,339,953,059	$ (7,295,489,665)	$ 44,463,394

Investment forwards counterparty exposure at June 30, 2022, is as follows:

INVESTMENT FORWARDS COUNTERPARTY EXPOSURE

Counterparty Name	Notional $USD	Fair Value	Lowest Long-Term Rating
Australia & New Zealand Banking Group	$ 68,043,916	$ (50,853)	A+
Bank Of America N.A.	206,814,093	2,237,517	A+
Bank Of New York Mellon	158,372,601	8,736,229	AA-
Barclays Bank PLC Wholesale	198,058,336	2,147,100	A
BNP Paribas SA	216,546,034	1,996,863	A+
Citibank N.A.	2,560,725	7,043	A+
Credit Agricole CIB	422,770,867	726,575	A+
Credit Suisse International	894,836	104	BBB+
Deutsche Bank AG	200,499,195	2,048,380	BBB+
Goldman Sachs USA	758,465	53,285	BBB+
Goldman Sachs International	192,624,147	2,217,187	A+
HSBC Bank PLC	544,062,766	7,125,926	A-
HSBC Bank USA	260,934,081	185,363	A+
Income Repatriation Boston IBS	1,091,377	(47)	NR
JP Morgan Chase Bank N.A. London	302,036,429	(665,690)	A+
JP Morgan Securities PLC	5,458,872	(2,542)	A+
Morgan Stanley & Co. International PLC	243,876,270	2,576,043	A-
Morgan Stanley Capital Services Inc	2,691,289	120,107	A-
Royal Bank Of Canada	67,799	259	A
Royal Bank Of Canada (UK)	691,834,897	4,264,080	A+
State Street Bank & Trust Company	11,513,882	(10,325)	AA-
State Street Bank London	742,608,336	(2,760,568)	A
Toronto Dominion Bank	1,001,826,074	1,779,365	A+
UBS AG	799,413,689	16,968,261	A+
Westpac Banking Corporation	1,118,150,128	(5,236,268)	A+
	$ 7,393,509,104	$ 44,463,394	

NOTE 5 – FAIR VALUE MEASUREMENT

The Retirement System categorizes fair value measurements of investment assets and liabilities within the fair value hierarchy established by generally accepted accounting principles. As a pension fund, 100 percent of the System's custodied assets and liabilities are held primarily for income or profit for the purpose of paying current or future member benefits. These investments are valued through industry standard practices for the respective type of security at a price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The hierarchy is based on the transparency of inputs to the valuation of the assets as of the measurement date. The three levels are defined as follows:

Level 1 - Inputs to the valuation methodology are quoted prices for identical instruments in active markets.

Level 2 - Inputs other than quoted prices are observable, either directly or indirectly.

Level 3 - One or more significant inputs to the valuation methodology are unobservable.

The following table presents the Retirement System's recurring fair value measurements as of June 30, 2022:

INVESTMENTS AND DERIVATIVE INSTRUMENTS MEASURED AT FAIR VALUE

		Fair Value Measurements Using:		
	Total as of 6/30/2022	Quoted prices in active markets for identical assets Level 1	Significant other observable inputs Level 2	Significant unobservable inputs Level 3
Investments by Fair Value Level				
Debt Securities				
US Treasury	$ 1,513,265,375	$ 282,092,132	$ 1,231,173,243	$ -
US Treasury Commingled	1,166,980,092	-	1,166,980,092	-
GNMA	64,436,687	-	64,436,687	-
US Agency	460,042,794	-	460,042,794	-
US Corporate, Municipalities	2,135,807,254	-	2,135,807,254	-
Yankees	318,789,076	-	318,789,076	-
International	440,409,778	-	440,409,778	-
Total Debt Securities	6,099,731,056	282,092,132	5,817,638,924	-
Equity Securities				
Domestic Common Stock	6,106,650,371	6,106,641,769	-	8,602
Domestic Preferred	9,026,462	9,026,462	-	-
International Common	3,854,285,289	3,854,285,289	-	-
International Commingled and ETF	872,282,493	872,282,493	-	-
International Preferred Stock	9,018,533	9,018,533	-	-
Total Equity Securities	10,851,263,148	10,851,254,546	-	8,602
Real Estate and Alternatives				
Separate Properties	73,189,571	-	-	73,189,571
Home Office Property, Rentable	1,879,107	-	-	1,879,107
Alternatives Distribution	148,988	-	-	148,988
Total Real Estate and Alternatives	75,217,666	-	-	75,217,666
Investments by Fair Value Level	17,026,211,870	11,133,346,678	5,817,638,924	75,226,268
Derivatives by Fair Value				
Swaps	(522,848)	-	(522,848)	-
Options	2,475	2,475	-	-
TBA Agencies	24,317,800	-	24,317,800	-
Total Derivatives by Fair Value Level	23,797,427	2,475	23,794,952	-
Total Investments and Derivatives by Fair Value Level	$ 17,050,009,297	$ 11,133,349,153	$ 5,841,433,876	$ 75,226,268

Investments Measured at Net Asset Value (NAV)		Unfunded Commitment	Transfer or Redemption Frequency	Transfer or Redemption Notice
Private Equity Partnerships	$ 2,822,883,139	$ 971,461,462	Quarterly	30 days
Real Estate Partnerships	1,046,851,307	384,960,532	Quarterly	30 days
Real Estate Core Funds	2,506,204,480	125,000,000	Quarterly	30 days
Real Estate Other Funds	78,511,525	-	Biannual	30 days
Total investments measured at NAV	6,454,450,451			
Short Term Investments measured at amortized cost				
STIF Funds	184,573,776			
Money Market Investments	670,388,621			
Total Short Term Investments	854,962,397			
Total Investment Value	$ 24,359,422,145			

DEBT SECURITIES

Except for the Treasury Level 1 securities noted below, debt securities use Level 2 inputs priced by recognized third-party vendors based on actual prices of similar securities and utilizing industry standard models that consider various assumptions including time value, yield curves, volatility factors, default rates, credit rating and treasury rates. Significant inputs are observable in the marketplace, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace.

US Treasury Level 1 assets were actively traded "on the run" on June 30, 2022. GNMA are those agencies explicitly guaranteed by the US government. Yankee bonds are international corporate and government bonds that qualify to be sold on domestic exchanges in US dollars.

Bonds in the international category are traded in local currencies and are subject to currency risk. See Note 3.

EQUITY SECURITIES

Equity securities include both direct interest in equities and equity funds. The fair value for those equity securities in Level 1 are based on quoted market prices of identical securities or equity funds traded on an established exchange. Level 3 equity securities are valued based on prices provided by investment managers or other unobservable pricing inputs.

REAL ESTATE AND ALTERNATIVES MEASURED AT FAIR VALUE

The Retirement System wholly owns three separate properties including timberland and its home office. These are valued according to annual independent professional appraisals and can be sold at any time. Appraisals utilize comparable sales, inventory estimates and present values of cash flows to determine respective property valuations. There are no unfunded commitments for these properties. In September 2021, the Board authorized the orderly divestiture of the two timberland properties. The home office property is partially System occupied and partially rentable space. This building was split into two units of account at purchase. The System's portion is included in capital assets. The alternatives distribution is valued based on general partner information that is unobservable.

FORWARDS

Currency forwards are included in payables and receivables on the Statement of Net Fiduciary Position. Fair value for these is reflected by adjusting those payable/receivable values for daily fluctuations in currency exchange rates. The System had $7.4 billion in outstanding currency forward contract payables and receivables at June 30, 2022. The net fluctuation in currency rates at that time increased the unrealized fair value of those contracts by $44,463,394. Derivative instruments classified in Level 2 of the fair value hierarchy are valued using a market approach that considers foreign exchange rates. See Note 4 of these financial statements for more information on KPERS derivative investments.

INVESTMENTS MEASURED AT NET ASSET VALUE (NAV)

Private equity partnerships: For eighty-nine (89) private equity partnerships the fair value of each investment has been determined using the NAV per share or its equivalent of the Retirement System's ownership interest in the partners' capital. All partnerships provided audited December 31, 2021, financial reports with unmodified opinions, along with unaudited quarterly or bi-annual reports. Net asset values of one quarter in arrears plus current quarter cash flows are used when recent information is not available. These partnerships are diversified across styles and vintage years. The expected term of each partnership is between seven to ten years. The nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. It is probable that all of the investments in this type will be sold at an amount different from the NAV per share (or its equivalent). Any sales of these would be on an inefficient secondary market that could result in values above or below those listed. Transfers to buyers are restricted to quarter end dates. No sales or redemptions are contemplated.

Real estate partnerships: This type includes thirty-three (33) real estate funds that invest in real estate across different strategies and property types, both domestic and international. The fair value of each investment has been determined using the NAV per share or its equivalent of the Retirement System's ownership interest in the partners' capital. All partnerships provided audited December 31, 2021, financial reports with unmodified opinions, along with unaudited quarterly or bi-annual reports. Net asset values of one quarter in arrears plus current quarter cash flows are used when recent information is not available. These partnerships are diversified across regions and vintage years. The expected term of each partnership is between seven to ten years. The nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. It is probable that all of the investments in this type will be sold at an amount different from the NAV per share (or its equivalent). Any sales of these would be on an inefficient secondary market that could result in values above or below those listed. Transfers to buyers are restricted to quarter end dates. No sales or redemptions are contemplated.

Real estate core & other funds: Eight real estate core funds hold domestic properties that are owned proportionately by investors. All fund properties have annual independent external appraisals, and the fair value of each fund has been determined using the NAV per share or its annual independent external appraisals. The fair value of each real estate core fund has been determined using the NAV per share or its equivalent of the Retirement System's ownership interest in the partners' capital. These investments are expected to have a long-term lifespan as opposed to only seven to ten years and they are expected to produce a steady current income in the form of investment yield while providing portfolio diversification and serving as an inflation hedge. Shares may be redeemed quarterly, with notice to the respective funds, subject to cash availability. One real estate core fund has been approved for full redemption by the Board in January 2020 and that fund is actively being redeemed. No further redemptions are contemplated.

The one real estate other fund is like the core funds except that it is an open-ended domestic private timberland investment vehicle. Its shares may only be redeemed biannually. No redemptions are contemplated.

SHORT TERM INVESTMENTS

STIF funds are an open-end mutual fund provided and operated by the custodian bank, that serves the daily cash needs of specific investment managers. The STIF funds are not a 2a-7 like investment pool and are reported at amortized cost. There are no redemption restrictions and shares were redeemable at $1 per share as of June 30, 2022.

Money Market Investments are highly liquid debt instruments purchased within one year of maturity, including US Treasury and Agency obligations. Asset-backed securities, derivatives and structured notes are not included in money market investments. The amortized cost of the Money Market Investments is materially equivalent to fair value.

NOTE 6 – 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.

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 7.00 percent for those who became members prior to July 1, 1993. For those who first became members after June 30, 1993, interest on employee contributions is credited at the rate of 4.0 percent per year.

The Retirement Benefit Accumulation Reserve represents the accumulation of employer contributions, net investment income not credited to any other reserve and the actuarially computed net pension liability not yet funded.

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 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 expenses amount. The System's administrative expenses are financed from this reserve.

The Optional Term Life Insurance custodial fund accumulates employee contributions to pay their premiums for optional life insurance coverage. The balance at June 30, 2022 was $497,693.

The KPERS Death and Disability Plan, a custodial fund, accumulates premium payments from employers for group life insurance for active members, plus employer contributions to fund the post-employment long-term disability (OPEB) benefit program available to all members. The balance at June 30, 2022 was $119,339,544.

The balance of the System's pension reserves and the net pension liability at June 30, 2022, were as follows:

Reserves	Balance	Net Pension Liability	Pension Reserves
Members Accumulated Contribution Reserve	$ 6,709,110,710	-	$ 6,709,110,710
Retirement Benefit Accumulations Reserve	10,277,781,522	(10,612,481,190)	(334,699,668)
Retirement Benefit Payment Reserve	18,058,668,905	-	18,058,668,905
Expense Reserve	38,996,157	-	38,996,157
Totals	$ 35,084,557,294	$ (10,612,481,190)	$ 24,472,076,104

NOTE 7 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The components of the net pension liability of the participating employers at June 30, 2022, were as follows:

State	$ 5,105,775,549
School	18,725,847,387
Local	6,776,232,258
KP&F	4,256,824,095
Judges	219,878,005
Total Pension Liability	$ 35,084,557,294
Fiduciary Net Position	24,472,076,104
Employers' Net Pension Liability	$ 10,612,481,190
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	69.75%

ACTUARIAL ASSUMPTIONS

The total pension liability was determined by an actuarial valuation as of December 31, 2021, which was rolled forward to June 30, 2022, using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Cost Method	Entry age normal
Price Inflation	2.75 percent
Salary Increase	3.50 to 12.00 percent, including price inflation
Investment Rate of Return	7.00 percent compounded annually, net of investment expense, and including price inflation

Mortality rates were based on the RP-2014 Mortality Tables, with age setbacks and age set forwards as well as other adjustments based on different membership groups. Future mortality improvements are anticipated using Scale MP-2016.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage. Best estimates of arithmetic real rates of return for each major asset class as of the most recent experience study, dated January 7, 2020, as provided by KPERS' investment consultant, are summarized in the following table:

Asset Class	Long-Term Target Allocation	Long-Term Expected Real Rate of Return
US Equities	23.5%	5.20%
Non-US Equities	23.5	6.40
Fixed Income	11.0	1.55
Yield Driven	8.0	4.70
Real Return	11.0	3.25
Real Estate	11.0	4.45
Alternatives	8.0	9.50
Short Term Investments	4.0	0.25

DISCOUNT RATE

The discount rate used to measure the total pension liability was 7.00 percent. The projection of cash flows used to determine the discount rate was based on member and employer contributions as outlined below.

In KPERS, the State/School and Local groups do not necessarily contribute the full actuarial contribution rate. Based on legislation first passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. Subsequent legislation in 2012 set the statutory cap at 0.90 percent for Fiscal Year 2014, 1.0 percent for Fiscal Year 2015, 1.1 percent for Fiscal Year 2016 and 1.2 percent for Fiscal Years 2017 and beyond.

In recent years, the Legislature has made several changes to statutory rates that deviate from the scheduled contribution increases set under the caps established in 2012 for the State/School group. Under 2015 SB 4, the previously certified State/School statutory rate for Fiscal Year 2015 of 11.27 percent was reduced to 8.65 percent for the last half of Fiscal Year 2015 as part of the Governor's allotment. That same session, SB 228 recertified statutory rates for the State/School group to 10.91 percent for Fiscal Year 2016 and 10.81 percent for Fiscal Year 2017 in anticipation of the issuance of $1 billion in pension obligation bonds. Legislation in the 2016 session (SB 161) provided for the delay of up to $100 million in State and School contributions to the Retirement System for Fiscal Year 2016. Concurrently, 2016

House Sub for SB 249 provided that the delayed contributions would be paid in full, with interest at 8 percent, by June 30, 2018. However, legislation passed by the 2017 Legislature removed the repayment provision. In addition, 2017 Senate Sub for Sub HB 2052 delayed $64 million in Fiscal Year 2017 contributions, to be paid over 20 years in level dollar installments. The first year payment of $6.4 million was paid in full at the beginning of Fiscal Year 2018, and appropriations for Fiscal Year 2018 were made for the State/ School group at the statutory contribution rate of 12.01 percent for that year. Additional legislation in the 2017 Session (S Sub for HB 2002) provided for a reduction of $194 million from the previously certified contribution rate of 13.21 percent in the State/School contributions for Fiscal Year 2019. Like the Fiscal Year 2017 reduction, it is to be paid back over a 20-year period, beginning in Fiscal Year 2020. Therefore, both reductions will be accounted for as receivables by the System. The 2018 Legislature passed House Substitute for Senate Bill 109 that provided additional contributions to the school group of $56 million in Fiscal Year 2018 and $82 million in Fiscal Year 2019. The 2019 Legislature passed Senate Bill 9 that provided additional contributions to the school group of $115 million in Fiscal Year 2019. House Sub for Senate Bill 25 from the 2019 Legislative session authorized additional funding for the KPERS School Group in Fiscal Year 2020 of $51 million. The 2021 Legislature passed House Bill 2405, which authorizes the state of Kansas to issue bonds with net proceeds of $500 million to fund a portion of the School unfunded actuarial liability. Senate Bill 159 recertified the State/School contribution rates for Fiscal Years 2022 and 2023. Fiscal Year 2022 was recertified from 14.09 percent to 13.33 percent and Fiscal Year 2023 from 13.86 percent to 13.11 percent. The bond proceeds were received by KPERS on August 26, 2021. The 2022 Legislature passed Senate Bill 421, which authorized the state of Kansas to transfer $1.125 billion from the State General Fund (SGF) directly to KPERS in Fiscal Years 2022 and 2023. The first $253.9 million pays off the outstanding accounts receivable for KPERS-School employer contributions withheld in Fiscal Year 2017 and Fiscal Year 2019, discussed previously, while the remaining $871.1 million is applied to the KPERS-School unfunded actuarial liability. In Fiscal Year 2022, $600 million was transferred to the System. In Fiscal Year 2023 Senate Bill 421 authorizes two additional transfers which total $271 million. These transfers were reflected in the projected cash flows.

Based on the employer contribution history described above, it is a reasonable assumption that the State/School group's contribution rate may not be certified at the statutory rate at some point in the future. It has been assumed that the contribution rates will be made within the same range as have been seen in the past few years. Using this assumption, actuarial modeling indicates that employer contribution rates for the State/School group are sufficient to avoid a depletion date.

The Local, Kansas Police and Firemen and Judges groups are contributing at the full actuarial contribution rate.

SENSITIVITY OF THE NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

The following presents the net pension liability calculated using the discount rate of 7.00 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00 percent) or 1-percentage-point higher (8.00 percent) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability	$14,993,470,295	$10,612,481,190	$6,954,866,030

NOTE 8 – PENSION OBLIGATION BONDS

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 have been invested to assist with financing the State and School group's unfunded actuarial liability. The debt service on the bonds will be paid by the State of Kansas in addition to the State's regular employer contributions to KPERS.

In August 2015, the State of Kansas issued $1 billion in pension obligation bonds and KPERS received the full proceeds. The proceeds have been invested to assist with financing the State and School group's unfunded actuarial liability. The debt service on the bonds will be paid by the State of Kansas in addition to the State's regular employer contributions to KPERS.

In August 2021, the State of Kansas issued $500 million in pension obligation bonds and KPERS received the full proceeds. The proceeds have been invested to assist with financing the State and School group's unfunded actuarial liability. The debt service on the bonds will be paid by the State of Kansas in addition to the State's regular employer contributions to KPERS.

NOTE 9 – CONTINGENCIES

As of June 30, 2022, the Retirement System was committed to additional funding of capital expenditures on separate account real estate holdings, commitments on private equity, and capital calls on core and noncore real estate property trust investments, as disclosed in Note 5 – Fair Value Measurement.

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

NOTE 10 – SUBSEQUENT EVENTS

Subsequent events have been evaluated through October 31, 2022, which is the date the financial statements were available to be issued.

REQUIRED SUPPLEMENTARY INFORMATION – RETIREMENT PLAN

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY

Last Nine Fiscal Years ($ in Thousands) (1)

	2022	2021	2020	2019	2018
Total Pension Liability:					
Service Cost	$ 666,910	$ 608,798	$ 581,722	$ 563,297	$ 552,423
Interest	2,321,174	2,257,132	2,217,512	2,146,531	2,084,822
Changes of Benefit Terms	-	101	-	-	-
Differences Between Expected and Actual Experience	192,192	113,131	110,055	75,441	(47,143)
Changes of Assumptions	962,890	1,001,426	529,310	-	-
Benefit Payments, Including Refunds of Member Contributions	(2,112,655)	(2,006,981)	(1,906,848)	(1,833,297)	(1,755,854)
Net Change in Total Pension Liability	2,030,511	1,973,607	1,531,751	951,972	834,248
Total Pension Liability – Beginning	33,054,046	31,080,439	29,548,688	28,596,716	27,762,469
Total Pension Liability – Ending (a)	35,084,557	33,054,046	31,080,439	29,548,688	28,596,716
Plan Fiduciary Net Position:					
Contributions – Employer	1,025,928	1,007,571	1,008,544	925,352	831,735
Contributions – Member	481,840	459,314	451,568	437,353	420,285
Contributions – Non-Employer (2)	1,100,000	-	51,000	213,543	56,000
Total Net Investment Income	(1,295,608)	5,185,034	347,464	1,216,685	1,516,929
Other Miscellaneous Income	37,474	19,967	20,699	5,488	5,734
Benefit Payments, Including Refunds of Member Contributions	(2,112,655)	(2,006,981)	(1,906,848)	(1,833,297)	(1,755,854)
Administrative Expenses	(19,498)	(17,184)	(13,607)	(13,280)	(12,460)
Net Change in Plan Fiduciary Net Position	(782,519)	4,647,721	(41,180)	951,845	1,062,369
Plan Fiduciary Net Position – Beginning	25,254,595	20,606,874	20,648,054	19,696,209	18,633,840
Plan Fiduciary Net Position – Ending (b)	24,472,076	25,254,595	20,606,874	20,648,054	19,696,209
Employers' Net Pension Liability (a) - (b)	$ 10,612,481	$ 7,799,451	$ 10,473,565	$ 8,900,634	$ 8,900,507

See accompanying independent auditors' report.

(1) Schedule is intended to show information for 10 years. Additional years will be displayed as they are available. Numbers may not add due to rounding.

(2) Pension obligation bond proceeds 2015H received in Fiscal Year 2016, pension obligation bond 2021K issued in Fiscal Year 2022, $500 million. Additional contributions for the School group in 2018, 2019, 2020, and 2022.

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY (CONTINUED)

Last Nine Fiscal Years ($ in Thousands) (1)

	2017	2016	2015	2014
Total Pension Liability:				
Service Cost	$ 570,703	$ 571,263	$ 571,944	$ 572,291
Interest	2,046,674	1,985,329	1,926,405	1,866,797
Changes of Benefit Terms	713	-	1,467	-
Differences Between Expected and Actual Experience	(154,326)	(133,493)	(135,542)	(216,248)
Changes of Assumptions	574,844	-	(53,014)	-
Benefit Payments, Including Refunds of Member Contributions	(1,686,676)	(1,627,032)	(1,524,380)	(1,432,846)
Net Change in Total Pension Liability	1,351,932	796,067	786,880	789,994
Total Pension Liability – Beginning	26,410,538	25,614,471	24,827,591	24,037,597
Total Pension Liability – Ending (a)	27,762,469	26,410,538	25,614,471	24,827,591
Plan Fiduciary Net Position:				
Contributions – Employer	761,610	739,184	690,564	701,818
Contributions – Member	414,538	404,856	382,058	332,163
Contributions – Non-Employer (2)	-	1,000,000	-	-
Total Net Investment Income	2,060,925	49,171	561,174	2,553,843
Other Miscellaneous Income	(97,873)	2,904	1,076	242
Benefit Payments, Including Refunds of Member Contributions	(1,686,676)	(1,627,032)	(1,524,380)	(1,432,846)
Administrative Expenses	(11,116)	(12,172)	(10,768)	(9,636)
Net Change in Plan Fiduciary Net Position	1,441,408	556,911	99,724	2,145,584
Plan Fiduciary Net Position – Beginning	17,192,432	16,635,521	16,535,797	14,390,213
Plan Fiduciary Net Position – Ending (b)	18,633,840	17,192,432	16,635,521	16,535,797
Employers' Net Pension Liability (a) - (b)	$ 9,128,629	$ 9,218,106	$ 8,978,950	$ 8,291,794

See accompanying independent auditors' report.

(1) Schedule is intended to show information for 10 years. Additional years will be displayed as they are available. Numbers may not add due to rounding.

(2) Pension obligation bond proceeds 2015H received in Fiscal Year 2016, pension obligation bond 2021K issued in Fiscal Year 2022, $500 million. Additional contributions for the School group in 2018, 2019, 2020, and 2022.

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY

Last Nine Fiscal Years ($ in Thousands)[1]

	2022	2021	2020	2019	2018
Total Pension Liability	$ 35,084,557	$ 33,054,046	$ 31,080,439	$ 29,548,688	$ 28,596,716
Plan Fiduciary Net Position	24,472,076	25,254,595	20,606,874	20,648,054	19,696,209
Employers' Net Pension Liability	$ 10,612,481	$ 7,799,451	$ 10,473,565	$ 8,900,634	$ 8,900,507
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	69.75%	76.40%	66.30%	69.88%	68.88%
Covered Payroll	$ 7,837,185	$ 7,547,246	$ 7,411,388	$ 7,168,557	$ 6,824,710
Net Pension Liability as a Percentage of Covered Payroll	135.41%	103.34%	141.32%	124.16%	130.42%

	2017	2016	2015	2014
Total Pension Liability	$ 27,762,469	$ 26,410,538	$ 25,614,471	$ 24,827,591
Plan Fiduciary Net Position	18,633,840	17,192,432	16,635,521	16,535,797
Employers' Net Pension Liability	$ 9,128,629	$ 9,218,106	$ 8,978,950	$ 8,291,794
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	67.12%	65.10%	64.95%	66.60%
Covered Payroll	$ 6,715,593	$ 6,388,450	$ 6,635,196	$ 6,424,739
Net Pension Liability as a Percentage of Covered Payroll	135.93%	144.29%	135.32%	129.06%

See accompanying independent auditors' report.

(1) Schedule is intended to show information for 10 years. Additional years will be displayed as they are available.

SCHEDULE OF EMPLOYER'S CONTRIBUTIONS

Last 10 Fiscal Years ($ in Thousands)

	2022	2021	2020	2019	2018
Actuarially Determined Contribution	$ 1,015,599	$ 1,029,106	$ 1,022,243	$ 921,045	$ 937,808
Contribution In Relation to the Actuarially Determined Contribution	1,009,751	993,216	992,099	908,931	817,653
Contribution Deficiency (Excess)	$ 5,848	$ 35,890	$ 30,144	$ 12,114	$ 120,155
Covered Payroll	$ 7,837,185	$ 7,547,246	$ 7,411,388	$ 7,168,557	$ 6,824,710
Contributions as a Percentage of Covered Payroll	12.88%	13.16%	13.39%	12.70%	11.98%

	2017	2016	2015	2014	2013
Actuarially Determined Contribution	$ 920,789	$ 891,638	$ 908,019	$ 842,286	$ 825,197
Contribution In Relation to the Actuarially Determined Contribution	745,021	721,313	676,173	668,811	617,925
Contribution Deficiency (Excess)	$ 175,768	$ 170,325	$ 231,846	$ 173,475	$ 207,272
Covered Payroll	$ 6,715,593	$ 6,388,450	$ 6,635,196	$ 6,424,739	$ 6,523,850
Contributions as a Percentage of Covered Payroll	11.09%	11.29%	10.19%	10.41%	9.47%

See accompanying independent auditors' report.

SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

	2022	2021	2020	2019	2018
Annual Money-Weighted Rate of Return, Net of Investment Expense	(5.12%)	25.89%	1.76%	6.31%	8.34%

	2017	2016	2015	2014	2013
Annual Money-Weighted Rate of Return, Net of Investment Expense	12.35%	0.33%	3.58%	18.10%	13.87%

See accompanying independent auditors' report.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The actuarially determined contribution rates in the schedule of the Retirement System's contributions are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule.

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	KP&F	Judges
Valuation Date	12/31/2021	12/31/2021	12/31/2021
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Age Normal Amortization Method	Level Percent Closed	Level Percent Closed	Level Dollar Closed
Remaining Amortization Period	17 years	22 years	20 years
Asset Valuation Method	Difference between actual return and expected return on market value recognized evenly over five-year period.		
Actuarial Assumptions:			
Investment Rate of Return [1]	7.00%	7.00%	7.00%
Projected Salary Increases [1]	3.50% - 11.50%	3.50% - 12.00%	4.00%
Cost of Living Adjustment	None	None	None

(1) Salary increases and investment rate of return include an inflation component of 2.75 percent.

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF CONTRIBUTIONS

Pension Plan

Fiscal Year Ended June 30, 2022

Kansas Public Employees Retirement System			
State / School Contributions			
Members	$ 315,779,743		
Employers	1,802,160,349		
Total State / School Contributions		$ 2,117,940,092	
Local Contributions			
Members	120,282,612		
Employers	180,732,291		
Total Local Contributions		301,014,903	
Total Contributions KPERS			$ 2,418,954,995
Kansas Police and Firemen's System			
State Contributions			
Members	3,856,276		
Employers	12,195,161		
Total State Contributions		16,051,437	
Local Contributions			
Members	40,058,867		
Employers	125,173,198		
Total Local Contributions		165,232,065	
Total Contributions KP&F			181,283,502
Kansas Retirement System for Judges			
State Contributions			
Members	1,862,896		
Employers	5,666,720		
Total State Contributions		7,529,616	
Total Contributions Judges			7,529,616
Grand Total All Contributions			$ 2,607,768,113

SCHEDULE OF ADMINISTRATIVE EXPENSES

Pension Plan

Fiscal Year Ended June 30, 2022

Salaries and Wages		$ 9,996,649
Professional Services		
Actuarial	$ 408,063	
Audit	125,500	
Data Processing	1,547,104	
Legal	21,228	
Other Professional Services	4,269,034	
Total Professional Services		6,370,929
Communication		
Postage	246,989	
Printing	52,091	
Telephone	246,842	
Total Communication		545,922
Building Administration		
Building Management	93,858	
Janitorial Service	106,411	
Utilities	102,261	
Total Building Administration		302,530
Miscellaneous		
Dues and Subscriptions	23,404	
Office and Equipment Rent	63,284	
Other Miscellaneous	520,704	
Repair and Maintenance	130,933	
Supplies	87,338	
Temporary Services	94,805	
Travel	45,685	
Depreciation	1,315,896	
Total Miscellaneous		2,282,049
Total Administrative Expenses		**$ 19,498,079**

SCHEDULE OF INVESTMENT INCOME BY ASSET CLASS

Pension Plan

Fiscal Year Ended June 30, 2022

Asset Classification	Interest, Dividends and Other Transactions	Gains and Losses	Total
Marketable Equity Securities			
Domestic Equities	$ 112,688,559	$ (1,229,779,795)	$ (1,117,091,236)
International Equities	122,071,951	(1,465,346,657)	(1,343,274,706)
Subtotal Marketable Equities	234,760,510	(2,695,126,452)	(2,460,365,942)
Marketable Fixed Income Securities			
Government	31,226,127	(391,722,551)	(360,496,424)
Corporate	99,755,600	(398,634,055)	(298,878,455)
Subtotal Marketable Fixed	130,981,727	(790,356,606)	(659,374,879)
Temporary Investments	3,648,563	413,394,335	417,042,898
Total Marketable Securities	369,390,800	(3,072,088,723)	(2,702,697,923)
Real Estate	111,257,792	705,642,365	816,900,157
Alternative Investments	45,341,926	741,038,290	786,380,216
Total Real Estate and Alternative Investments	156,599,718	1,446,680,655	1,603,280,373
	$ 525,990,518	$ (1,625,408,068)	$ (1,099,417,550)

Manager and Custodian Fees and Expenses	
Investment Manager Fees	(30,236,354)
Custodian Fees & Expenses	(1,381,416)
Investment Legal & Consulting Expenses	(2,312,581)
Partnership Management Fees & Expenses	(159,229,307)
Investment Operations Expenses	(3,031,187)
Total Investment Fees and Expenses	(196,190,845)
Net Investment Income	**$ (1,295,608,395)**

SCHEDULE OF INVESTMENT MANAGEMENT FEES AND EXPENSES

Pension Plan

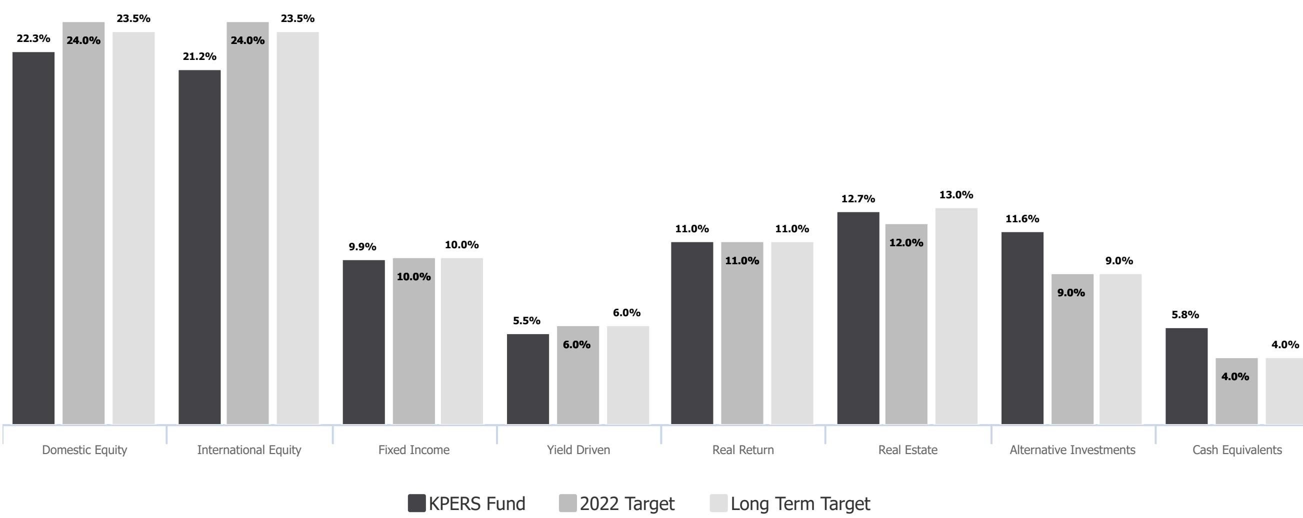
Fiscal Year Ended June 30, 2022

Domestic Equity Managers	
BlackRock Institutional Trust Co.	$ 326,359
Mellon Capital Management Corp.	264,749
Subtotal Domestic Equity Managers	**591,108**
International Equity Managers	
Baillie Gifford Overseas Limited	4,425,358
JP Morgan Investment Management	4,045,108
Lazard Asset Management LLC	2,996,127
State Street Global Advisors	281,825
Wellington Management Co.	4,902,601
Subtotal International Equity Managers	**16,651,019**
Fixed Income Managers	
BlackRock Institutional Trust Co.	502,364
Loomis Sayles & Co. L.P.	2,003,333
MacKay Shields LLC	1,497,794
T Rowe Price Associates Inc.	1,116,941
Western Asset Management Co.	1,663,070
Subtotal Fixed Income Managers	**6,783,502**
Currency Overlay and Securitization Managers	
Adrian Lee & Partners	1,802,829
Insight Investment Inc.	1,952,470
Russell Investment Group	151,664
Subtotal Currency Overlay and Securitization Managers	**3,906,963**
REIT Investment Managers	
CenterSquare Investment Management Inc.	1,401,948
Subtotal REIT Managers	**1,401,948**
Cash Equivalent Manager	
Payden & Rygel Investment Counsel	901,814
Subtotal Cash Management	**901,814**
Total Investment Management Fees	**30,236,354**
Other Fees and Expenses	
State Street Bank - Custodian Fees and Other Expenses	1,381,416
Consultant Fees	2,111,869
Legal Expenses	200,712
Investment Operations	3,031,187
Partnership Management Expenses	159,229,307
Subtotal Other Fees and Expenses	**165,954,491**
Total	**$ 196,190,845**

Investment
Section

CHIEF INVESTMENT OFFICER'S REVIEW

The Kansas Public Employees Retirement System investment portfolio represents all contributions to the plan, from both members and their employers, as well as net earnings on these assets. Total assets at the end of Fiscal Year 2022 were $24.3 billion. The System's investment portfolio is managed for the long term, in order to generate adequate returns to pay the benefits promised to members. In order to achieve that goal, the assets receive the benefit of a broadly diversified investment portfolio which includes domestic and non-U.S. stocks, bonds, real estate, timber, infrastructure, alternative investments, and cash equivalents.



BASIS OF PRESENTATION

The investment performance data is calculated by the Retirement System's custodial bank and prepared by the Retirement System's Investment Division staff. In Fiscal Year 2022, the System's custodial bank was State Street Bank and Trust. Performance calculations were prepared using time-weighted rates of return, gross of fees, unless otherwise indicated.

ASSET ALLOCATION

Portfolio investments are diversified among eight different asset classes for asset allocation and investment performance purposes, including: domestic equity; international (non-U.S.) equity; fixed income; "yield driven" assets; "real return" assets; real estate; alternative investments; and cash equivalents. *(NOTE: For financial reporting purposes, as reported in the Financial Section and the Investment Summary in the Investment Section, investments are categorized by the underlying security.)*

The Board of Trustees, working with the System's general investment consultant, Meketa Investment Group (MIG) and investment staff, completed an asset/liability study in January 2020. At the conclusion of the asset/liability study, the Board adopted a new set of long-term asset allocation targets. The risk philosophy implied by the asset allocation policy targets places significant emphasis on managing and improving the funded status of the Retirement System over time. The long term target asset mix is 23.5 percent domestic equity, 23.5 percent international equity, 10 percent fixed income, 6 percent yield driven assets, 11 percent real return assets, 13 percent real estate, 9 percent alternatives (private equity), and 4 percent cash equivalents. A three year implementation plan to achieve the new long term target asset mix is in progress.

The allocation to equity investments (primarily publicly-traded stocks) continues to comprise the largest portion of the Retirement System's investment portfolio. This allocation reflects the System's long-term investment orientation and the expectation that equities will provide attractive real returns over time. Equity investments allow the investment portfolio to participate in the investment returns produced by companies seeking to grow and profit from their business activities. Equity investments are made globally, sourcing investment return from both domestic and foreign companies, and diversifying the accompanying investment risk across a broad spectrum of economies, currencies, economic sectors, and industries. Fixed income investments are also an important component of the System's asset mix. Due to its relatively low correlation with equities, the fixed income portfolio serves to diversify the risk of equity investing.

The yield driven asset class is designed to house those assets which derive a significant part of their expected return from income and have moderate exposure to growth risk, but also provide a degree of diversification. The yield driven asset class consists of the System's strategic fixed income portfolios and investments in domestic Real Estate Investment Trusts (REITs).

The majority of the real return asset category is made up of Treasury Inflation Protected Securities (TIPS) and global inflation linked bonds (GILBs). These two portfolios are both managed passively. The real return asset class also houses the System's investments in infrastructure and timber assets.

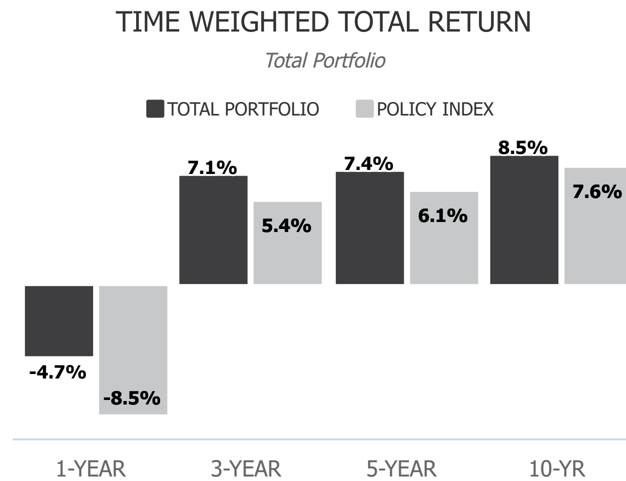
Real estate investments generate returns in a different manner than equities or fixed income investments, since real estate follows a different (and, typically, longer) market cycle. Because it moves in a different market cycle than publicly-traded stocks and bonds, real estate provides diversification advantages, as well as some inflation protection, to the investment portfolio. The System's real estate portfolio is heavily weighted to "core" real estate, which means that it also produces an attractive current income.

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

The System also holds cash equivalents investments, primarily to facilitate investment transactions and the cash flows needed to pay benefits. The cash equivalents portfolio is bifurcated, with a portion of the portfolio invested in a slightly longer duration strategy with daily liquidity, while the majority of the portfolio is invested as a STIF (short term investment fund).

INVESTMENT POLICY

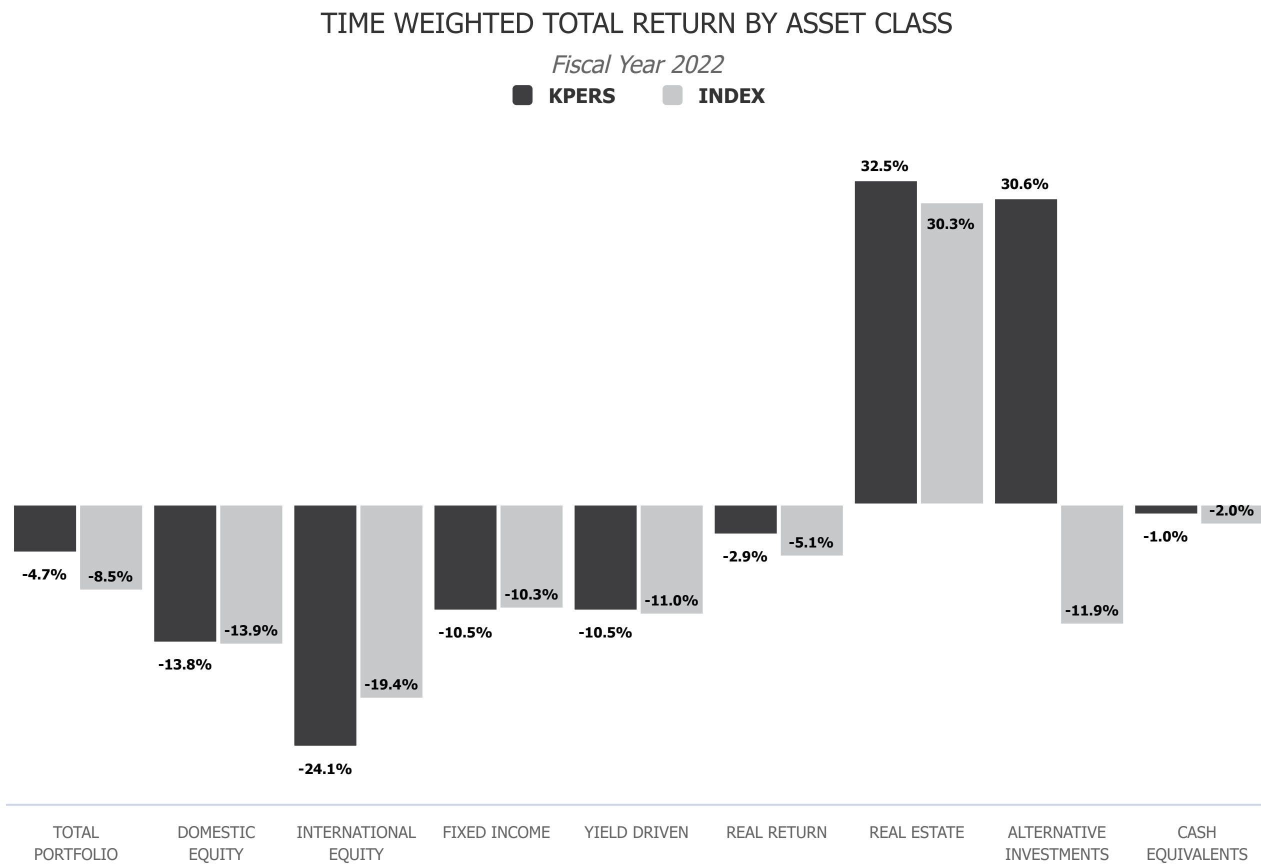
The Board of Trustees has adopted a Statement of Investment Policy, Objectives and Guidelines (the Statement), which serves as a guide to the implementation of the System's broad investment objectives. The Statement complements state statutes and documents the principles and standards that guide the management of the System's assets. It is binding upon all persons with authority over the assets, including investment managers, custodians, consultants, staff and the members of the Board of Trustees. The Statement is the product of the Board's careful and prudent study and is reviewed annually and updated as needed. It sets forth the investment policies, objectives, and guidelines which the Board of Trustees judges to be appropriate and prudent, in consideration of the needs of the System, and to comply with K.S.A. 74-4901 et seq., to direct the System's assets. Although the System is not subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA), the Board intends to abide by the provisions of ERISA to the greatest extent practicable. As such, this Statement is written to be consistent with ERISA. Among other things, the Statement establishes the criteria against which the System's investment managers are to be measured. In addition, it serves as a review document to guide ongoing oversight of the investment of the Fund as a yardstick of compliance with K.S.A 74-4901 et seq.



FISCAL YEAR 2022 INVESTMENT PERFORMANCE

The Retirement System's total investment portfolio experienced a negative 4.7 percent total return for the one year ending June 30, 2022. The negative 4.7 percent return outperformed the KPERS Policy Index by 3.8 percent for the fiscal year. For the three years ending June 30, 2022, the System's total investment portfolio has produced an average annualized return of 7.1 percent, which outperformed the Policy Index by 1.7 percent. The System's investment portfolio generated a 7.4 percent total return during the five years ending June 30, 2022, exceeding the Policy Index benchmark by 1.3 percent. For the ten-year period, total return has been 8.5 percent, and has exceeded the Policy Index by 0.9 percent, as of June 30, 2022.

For the 25-year period ending June 30, 2022, the System's assets have produced an average annualized total return of 7.3 percent, exceeding the current 7.0 percent actuarial return assumption. The System's Board of Trustees took action to reduce the actuarially assumed rate of return from 7.75 percent to 7.0 percent in May 2022.



FINANCIAL MARKET AND PERFORMANCE OVERVIEW

Fiscal Year 2022 was a very difficult year for investors. Inflation concerns, fear of a global recession and ongoing geo-political tensions remained core concerns. Central banks moved aggressively against decades high inflation rates. In the U.S. the Federal Reserve increased its Fed Funds rate target by 25 basis points in March, 50 basis points in May and by an additional 75 basis points in June. Russia invaded Ukraine in February and the war has continued with little prospect for a near term resolution. In response to the global sanctions placed on the country, Russia curtailed the flow of natural gas into Europe, heightening the risk of recession. China maintained its zero COVID policy, affecting growth expectations and global supply chains. These events resulted in negative returns across the System's public market assets for the fiscal year.

Public domestic equities and U.S. REITS declined over Fiscal Year 2022 with the Russell 3000 Index producing a negative 13.9 percent and the MSCI U.S. REITS Index producing a total return of negative 6.4 percent for investors. International equities also declined, as the MSCI ACWI ex U.S. index delivered a negative 19.4 percent return for the fiscal year.

Fixed income returns were negatively impacted by central bank rate increases and rising inflation expectations leading to rising U.S. Treasury yields. The Bloomberg Aggregate Bond Index produced a total return of negative 10.3 percent for the fiscal year. High yield bonds also delivered negative returns with the Bloomberg U.S. Corporate High Yield Index producing a negative 12.8 percent total return for the fiscal year.

Real yields moved higher over the fiscal year, weighing heavily on inflation-linked bonds with the Bloomberg U.S. TIPS Index posting a negative 5.1 percent total return for the fiscal year. Globally, inflation-linked bonds underperformed U.S. TIPS on a USD hedged basis, with the Bloomberg World Government Inflation-Linked Bond (Hedged) Index returning negative 7.7 percent for the fiscal year.

Lagged valuations benefitted the returns from private equity and private real assets during Fiscal Year 2022. Private real estate returns, as measured by the NCREIF ODCE Index, was 29.5 percent for the fiscal year. The System's private equity portfolio posted a 30.6 percent return for Fiscal Year 2022. Private market asset returns benefited from lagged quarterly valuations. This benefit is expected to wane as current market conditions are incorporated into future valuation.

INVESTMENT STAFF

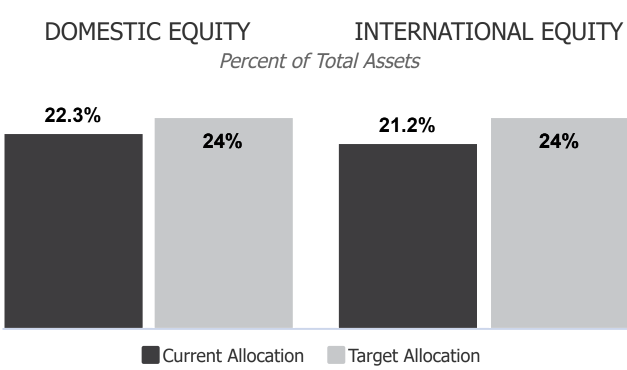
The System employs a staff of eleven investment professionals to provide oversight and management of the assets and external investment managers. Under the oversight of the Chief Investment Officer (CIO), responsibility for the portfolio is assigned to the respective investment teams. The Deputy CIO for Public Markets has oversight responsibility for the publicly-traded asset classes, and oversees the System's active international equity investment portfolios and the currency overlay strategies. The Investment Officer for Public Markets oversees the core fixed income portfolios and the yield driven investment portfolios. The Assistant Investment Officer for Public Markets has oversight responsibility for the passive domestic equity and international equity portfolios, the passive TIPS/GILB portfolios in the real return asset class, and the cash equivalents portfolios. The Deputy CIO for Private Markets and two Assistant Investment Officers for Private Markets manage the System's real estate and private equity investments, as well as the allocations to infrastructure and timber. The Chief Investment Officer and the six Investment Officers are supported by a team of four Investment Analysts who provide research support and assistance in managing the portfolios. Investment staff are focused on bringing a consistent, disciplined management process to all aspects of oversight of investment managers, compliance monitoring, and risk management.

PUBLIC EQUITY INVESTMENTS

Public equity investments represent the largest strategy allocation within the System's portfolio. As of June 30, 2022, the fair value of the System's global equity portfolio was $10.6 billion. The strategy is executed through external managers investing domestically and internationally. Active strategies are utilized for approximately 43.2 percent of the public equity portfolio, focusing entirely on international equities. The balance of the global equity portfolio is passively managed to replicate the return of broad market indices.

PORTFOLIO STRUCTURE

The following graphs describe the current and target allocations at June 30, 2022:



DOMESTIC EQUITY

Domestic equities represent 51.2 percent of the total public equity portfolio and 22.3 percent of total assets. Domestic equity investments are benchmarked against the Russell 3000 index. It is the System's view that consistent outperformance over time through active management is extremely difficult when investing in U.S. equities. Therefore, 100 percent of the domestic equity portfolio is passively managed in an index strategy. This passive exposure is designed to replicate the return on the Russell 3000 index and is implemented through two investment managers.

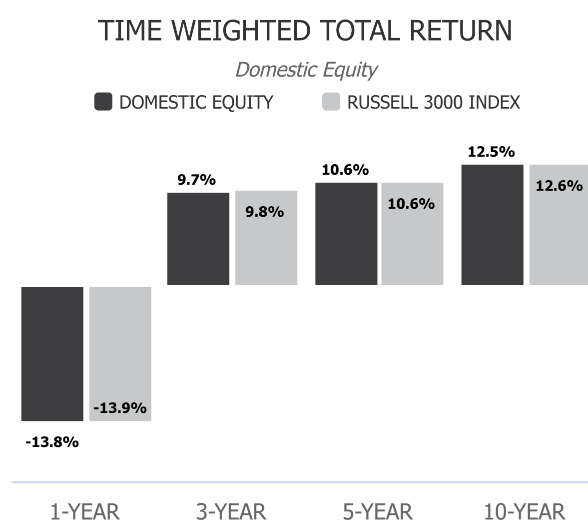
INTERNATIONAL EQUITY

International equities represent 48.8 percent of the total public equity portfolio and 21.2 percent of total assets. International equity investments are benchmarked against the MSCI All Country World – Ex U.S. Net Index. Equity investments in companies domiciled outside of the United States offer the potential to add value through prudent active management. Therefore, 90 percent of this portfolio is actively managed. The System has retained four active managers to invest across the non-U.S. developed markets and emerging markets. The balance of the international equity portfolio is invested to replicate the return on the MSCI All Country World – Ex U.S. Net Index.

PERFORMANCE

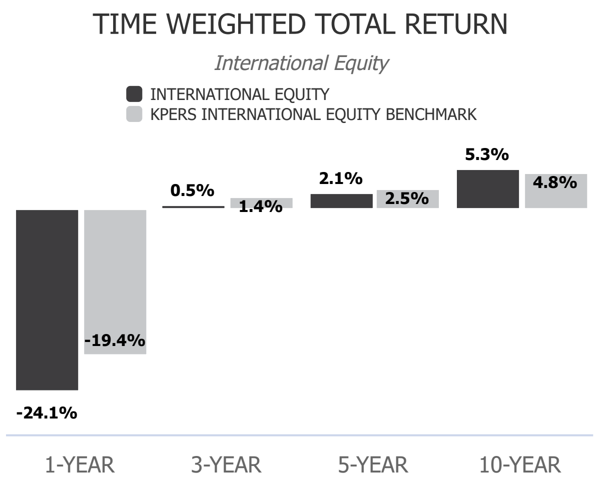
The return of the System's domestic equity portfolio was in line with the portfolio's benchmark during Fiscal Year 2022. The domestic equity portfolio produced a negative 13.8 percent total return during the fiscal year. Over longer time periods, the return on the domestic equity portfolio was also in line with its benchmark, as expected, given its purely passive approach.

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



The return of the international equity portfolio was negative and below the benchmark return during Fiscal Year 2022. The international equity portfolio produced a total return of negative 24.1 percent for the fiscal year, relative to the negative 19.4 percent return for the benchmark. The System's four active international equity managers underperformed the benchmark during Fiscal Year 2022. Over very long time periods, the international equity portfolio has produced positive relative returns, as active management has added value relative to the benchmark.

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

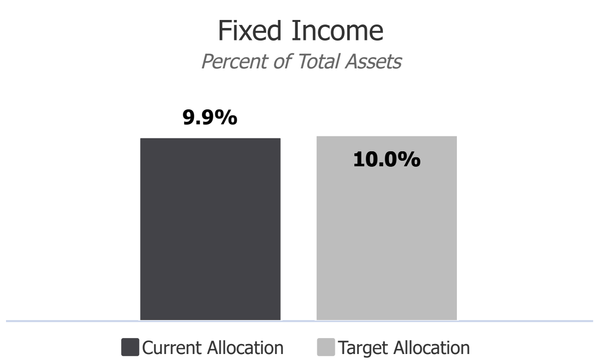


FIXED INCOME INVESTMENTS

As of June 30, 2022, the Retirement System's fixed income portfolio had a fair value of $2.4 billion, representing 9.9 percent of the total assets of the System. The portfolio is structured with external managers investing through an active core fixed income U.S. mandate. Two investment managers manage this strategy.

PORTFOLIO STRUCTURE

The following graph describes the current and target allocations at June 30, 2022:



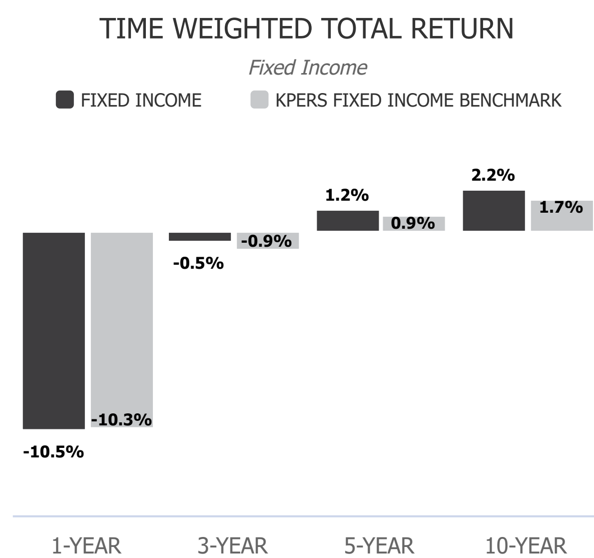
CORE U.S. FIXED INCOME

The fixed income portfolio is invested in core U.S. strategies through two active investment managers. The portfolio's objective is to provide diversification to other assets in the System's portfolio and to preserve capital while providing current income. The core fixed income U.S. strategies are primarily invested in traditional investment grade securities. The fixed income portfolio utilizes the Bloomberg U.S. Aggregate Index as the benchmark.

PERFORMANCE

The core U.S. fixed income portfolio produced a total return of negative 10.5 percent during Fiscal Year 2022, slightly underperforming the benchmark return of negative 10.3 percent. One investment manager underperformed the benchmark during the period, while the other investment manager performed in line with the benchmark. Over longer periods the fixed income portfolio has produced positive relative returns, as active management has added value.

The following chart reports the performance of the fixed income portfolio:

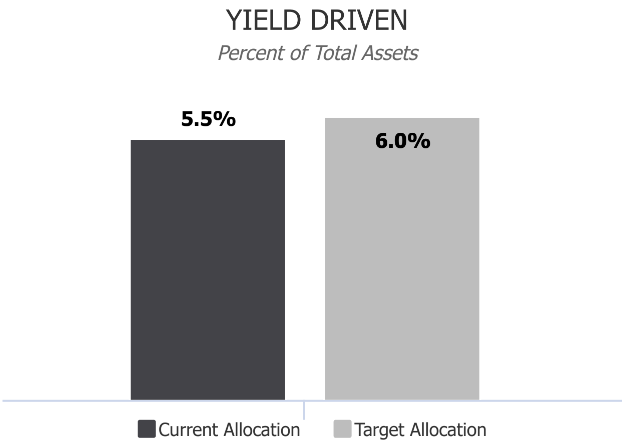


YIELD DRIVEN INVESTMENTS

As of June 30, 2022, the System's yield driven portfolio had a fair value of $1.3 billion representing 5.5 percent of total assets. The strategy is actively managed by two strategic fixed income managers and one REIT manager. The yield driven asset class is designed to produce current income and an element of diversification away from equity risk, while also maintaining some degree of correlation with equities.

PORTFOLIO STRUCTURE

The following graph describes the current and target allocations at June 30, 2022:



STRATEGIC FIXED INCOME

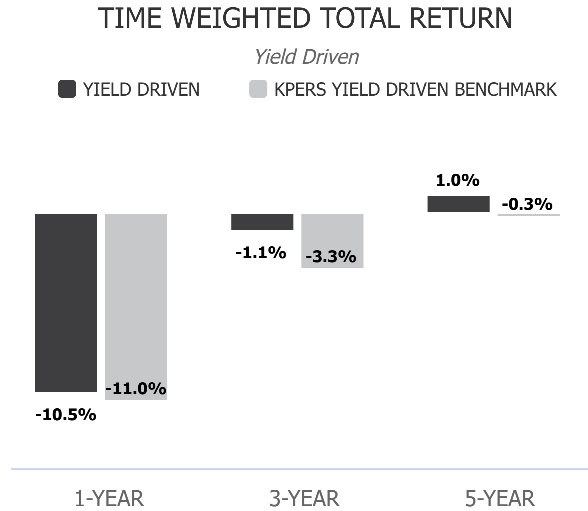
The strategic fixed income strategy represents approximately 73.6 percent of the total yield driven portfolio and 4.0 percent of total assets. Performance of the strategy is currently measured against the Bloomberg U.S. High Yield 2 percent Issuer Cap Index. The strategic fixed income portfolio maintains a minimum investment of 70 percent in high yield corporate debt securities. One of the System's two strategic fixed income managers produced positive relative returns, while the second manager underperformed the benchmark during Fiscal Year 2022.

REAL ESTATE INVESTMENT TRUSTS (REITS)

REITs represent 26.4 percent of the yield driven asset class and 1.5 percent of the System's total assets. This strategy is benchmarked against the MSCI U.S. REIT Index. The System's publicly-traded real estate securities portfolio is implemented through one manager that actively invests in domestic REITs, real estate operating companies (REOCs) and related investment vehicles. The REIT manager produced a negative total return but outperformed the benchmark during Fiscal Year 2022.

PERFORMANCE

The yield driven portfolio produced a total return of negative 10.5 percent in Fiscal Year 2022, slightly outperforming the asset class benchmark return of negative 11.0 percent. The yield driven portfolio has delivered positive relative returns over longer time periods.

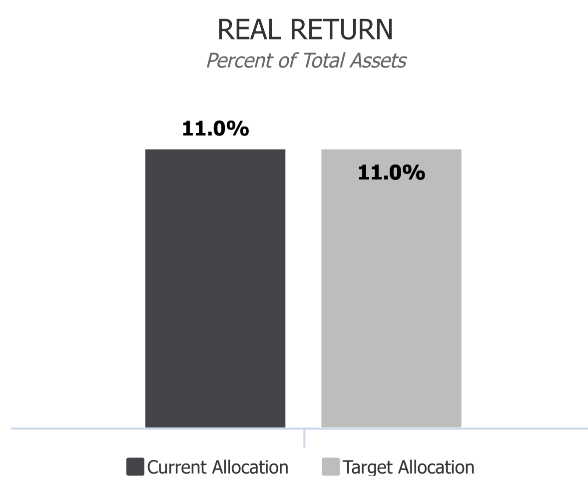


REAL RETURN INVESTMENTS

The real return portfolio is designed to provide the System with a hedge against future inflationary episodes. This strategy utilizes both public and private market investments. Public market exposure is global and achieved primarily through inflation linked fixed income securities issued by governments and their agencies in the U.S. as well as in developed countries around the world. Exposure in the private markets is currently achieved through investments in timber and infrastructure. The real return portfolio represents 11.0 percent of the System's total assets, and had a fair value of $2.7 billion as of June 30, 2022.

PORTFOLIO STRUCTURE

The following graph describes the current and target allocations at June 30, 2022:



U.S. TREASURY INFLATION LINKED BONDS (TIPS)

The TIPS portfolio represents 43.8 percent of the real return portfolio and is benchmarked against the Bloomberg U.S. TIPS Index. This passively managed exposure is designed to replicate the return on domestic inflation linked bonds. It is the System's view that the minimal excess return available through active management of TIPS is not sufficient to compensate for the incremental costs of active management fees. The TIPS portfolio performed in line with its benchmark during Fiscal Year 2022, as expected, producing a negative 5.1 percent total return.

GLOBAL INFLATION LINKED BONDS (GILBS)

The GILB portfolio represents 33.2 percent of the real return portfolio and is benchmarked against the Bloomberg World ILB Index (USD Hedged). The GILB portfolio provides global diversification by broadening the opportunity set to capture unexpected inflation within investment grade sovereign bonds. This portfolio was transitioned from active management to passive management during Fiscal Year 2019. Since the transition, performance of the GILB portfolio has been in line with the benchmark, as expected. In Fiscal Year 2022, the GILB portfolio produced a negative 7.7 percent total return.

TIMBER

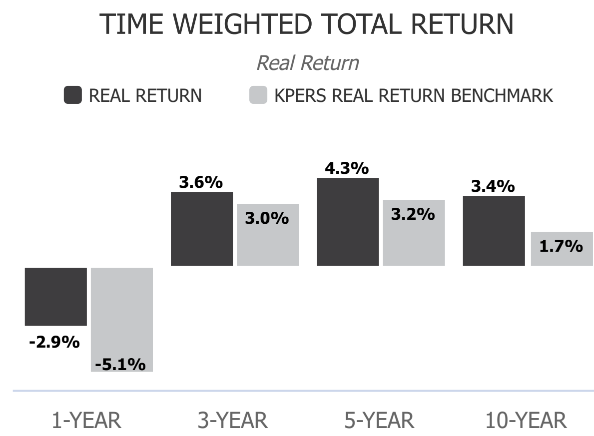
Timber investments are a component of the System's real return asset allocation due to their historically high correlation to inflation and comprised 5.7 percent of the real return portfolio. The System is diversified within timber markets located in Idaho and throughout eight states in the southern U.S. Over time, timber investments are expected to provide the System with current cash yields and modest capital appreciation. For Fiscal Year 2022, the System's timber investments produced an 8.8 percent total return, underperforming the strategy benchmark and outperforming the real return asset class benchmark.

INFRASTRUCTURE

The infrastructure portfolio represents 17.3 percent of the real return portfolio. The System's four infrastructure managers have been successful in operating their infrastructure investments. The System's infrastructure portfolio is well diversified, with investments in Australia, Europe, and throughout North and South America. It is invested across multiple sectors, including renewable power, toll roads, electric utilities, airports, seaports and energy. The infrastructure portfolio produced a total return of 10.3 percent for the fiscal year, underperforming the strategy benchmark by 2.7 percent and outperforming the real return asset class benchmark.

PERFORMANCE

The System's real return portfolio outperformed its benchmark in Fiscal Year 2022, producing a negative 2.9 percent total return against a benchmark return of negative 5.1 percent. Infrastructure was the strongest performing investment strategy in the asset class. The real return portfolio has outperformed its benchmark over the one, three, five, and ten year time periods ending June 30, 2022.

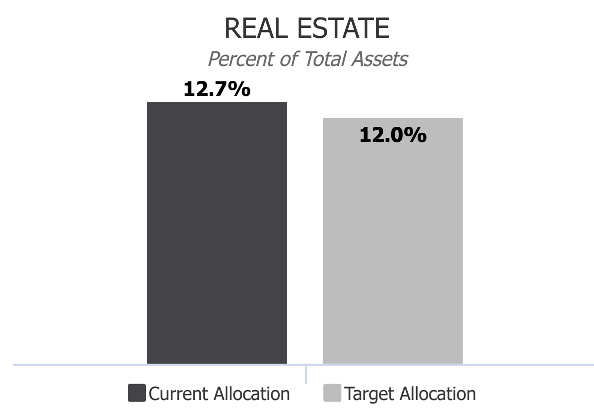


REAL ESTATE INVESTMENTS

As of June 30, 2022, the real estate portfolio had a fair value of $3.1 billion, representing 12.7 percent of the total fund. The real estate portfolio is primarily designed to provide diversification to the broader portfolio, while also providing a meaningful current income. Capital appreciation is a tertiary objective of current real estate investment activities.

PORTFOLIO STRUCTURE

The System's real estate portfolio is classified into two categories: "core" and "non-core." The "core" portion of the portfolio is targeted at a 75 percent allocation, while the "non-core" segment is targeted at a 25 percent allocation.



CORE REAL ESTATE

The largest segment of the real estate portfolio is "core" real estate. This portion of the portfolio is expected to produce steady current income in the form of investment yield while also providing portfolio diversification and serving as an inflation hedge. The Retirement System's core portfolio primarily consists of partial and full commitments to eight commingled funds.

The System continued to invest into pooled real estate investment funds during Fiscal Year 2022. This strategy is expected to result in improved liquidity, enhanced portfolio diversification, lower management fees and a reduction in the single event risk associated with owning individual real estate assets.

NON-CORE REAL ESTATE

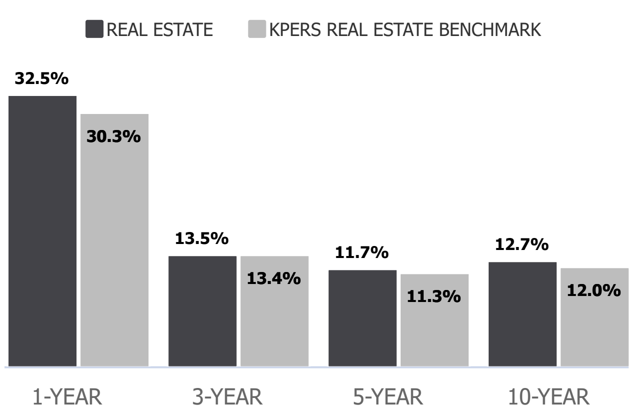
The "non-core" segment consists of investments that generally involve some element of property lifecycle risk (such as positioning, leasing and development) while also utilizing greater leverage (debt) than core strategies. While providing elements of inflation protection and a diversification benefit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

REAL ESTATE PERFORMANCE

The System's real estate portfolio outperformed its benchmark in Fiscal Year 2022. The core real estate portfolio produced a total return of 29.0 percent, underperforming the strategy benchmark by 0.5 percent, while the non-core real estate portfolio outperformed its benchmark by 15.1 percent, with a total return of 47.6 percent. In total, the System's real estate portfolio produced a total return of 32.5 percent, which outperformed the benchmark return by 2.2 percent. Overall, most of the System's real estate fund investments continued to benefit from an improving economic landscape, with the majority generating positive returns. Longer term results from the real estate asset class produced a 12.7 percent total return for the trailing ten years, exceeding the asset class benchmark total return of 12.0 percent.

TIME WEIGHTED TOTAL RETURN

Real Estate

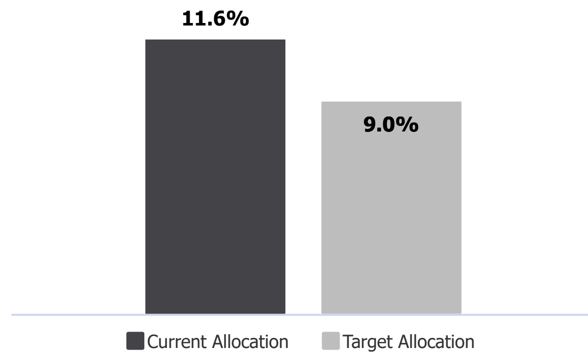


ALTERNATIVE INVESTMENTS

As of June 30, 2022, the System's alternative investment portfolio had a fair value of $2.8 billion, representing 11.6 percent of the total portfolio. Since the inception of the alternative investment program in 1997 through June 30, 2022, the System has committed $4.8 billion to 133 funds with 59 general partners.

ALTERNATIVES

Percent of Total Assets



PORTFOLIO STRUCTURE

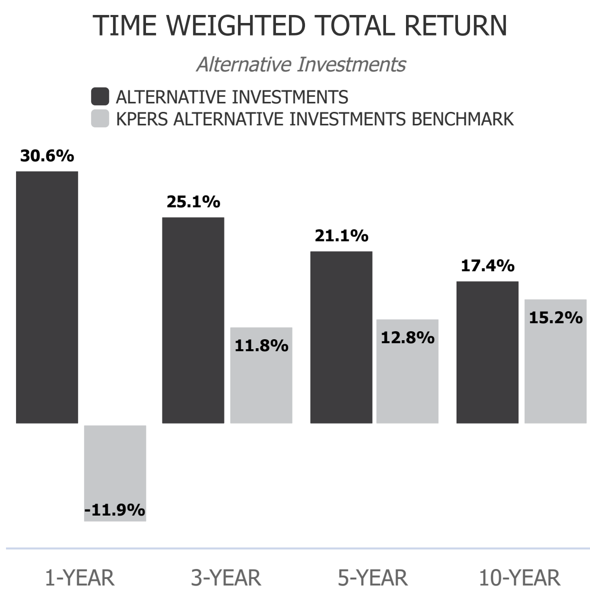
The alternative investment portfolio consists primarily of interests in private partnerships that provide equity and debt to companies. The portfolio contains two primary sub-portfolios based on investment period. Each portfolio has its own set of directives, guidelines, external fund managers and consultants who provide advice on investment strategy and investment selection during its investment period. The largest portfolio is the Private Equity Program (PEP), representing 99.9 percent of the market value of the asset class. The PEP portfolio actively seeks new commitments to private equity funds in three styles: buyout, venture capital/growth equity and special situations. Since the inception of PEP in 2007, the System has committed $3.7 billion to 79 funds with 28 general partners.

The second portfolio is the Alternative Investment Portfolio (AIP) which represents 0.1 percent of the market value of the asset class. From 1997 to 2001, AIP made commitments to 54 funds with 35 general partners across five styles: buyout, venture capital, mezzanine, distressed debt and natural resources. As this is a mature portfolio, the remaining funds in the AIP portfolio are currently pursuing exit strategies for their existing holdings.

ALTERNATIVE INVESTMENTS PERFORMANCE

The System's alternative investments portfolio outperformed its benchmark in Fiscal Year 2022, producing a 30.6 percent total return against a benchmark return of negative 11.9 percent.

Private equity investments typically span ten years or longer. Therefore, the longer term returns from this asset class are more relevant in assessing its success in adding value to the overall portfolio. The System's current long-term performance objective for alternative investments is to exceed the return of the Russell 3000 plus 2 percent. As the chart below shows, the alternative investments portfolio is outperforming this objective over the ten year time period, with a total return of 17.4 percent.



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

ALTERNATIVE INVESTMENTS INITIATED ON OR AFTER JULY 1, 1991 (1)

As of June 30, 2022

Description	Cost	Net Asset Value
Apax Europe IX, L.P.	$ 43,650,962	$ 99,837,694
Apax Europe X, L.P.	21,710,964	28,956,651
Apollo Investment Fund VII, L.P.	5,455,420	389,964
Apollo Investment Fund VIII, L.P.	29,895,719	31,630,837
Apollo Investment Fund IX, L.P.	33,734,671	49,944,147
Ares Corporate Opportunities Fund III, L.P.	3,369,921	577,453
Ares Corporate Opportunities Fund IV, L.P.	9,184,473	11,975,754
Ares Corporate Opportunities Fund V, L.P.	56,393,059	73,591,082
Ares Corporate Opportunities Fund VI, L.P.	24,000,205	26,583,371
Ares Special Situations Fund IV, L.P.	47,686,469	36,856,347
Audax Mezzanine Fund III, L.P.	2,205,661	991,822
Beacon Group Energy Fund II, L.P.	1,841,499	494,586
Capital Resource Partners IV, L.P.	1	-
CCMP Capital Investors III, L.P.	18,669,895	23,199,902
Centerbridge Capital Partners II, L.P.	16,361,208	3,200,007
Centerbridge Capital Partners III, L.P.	21,306,062	30,899,990
Clayton Dublier & Rice VI, L.P.	2,998,283	9,175
Consolidated Storage Company, Inc.	34,155	34,155
Crestview Partners III, L.P.	32,770,217	44,406,102
Cypress Merchant Banking II, L.P.	6,889,672	8,178
Encap Energy Capital VIII, L.P.	15,856,524	12,367,629
Encap Energy Capital IX, L.P.	26,619,166	20,457,175
Encap Energy Capital X, L.P.	37,362,146	52,806,014
First Reserve Fund XII, L.P.	17,254,620	897,913
FS Equity Partners VII, L.P.	35,500,632	48,044,354
FS Equity Partners VIII, L.P.	40,098,687	69,858,689
Green Equity Investors VII, L.P.	53,000,965	111,193,852
Green Equity Investors VIII, L.P.	38,446,768	41,456,419
GSO Capital Solutions Fund, L.P.	6,654,891	256,626
GSO Capital Solutions Fund II, L.P.	13,566,575	4,350,801
GSO Capital Solutions Fund III, L.P.	13,778,008	11,779,205
Halpern Denny Fund III, L.P.	1	-
HD Access, Inc.	180,137	105,395
Hellman & Friedman VII, L.P.	816,715	3,138,949
Hellman & Friedman VIII, L.P.	30,897,202	71,314,419
Hellman & Friedman IX, L.P.	66,776,443	92,426,477
Hellman & Friedman X, L.P.	38,485,171	41,768,302
JMI Equity Fund VII, L.P.	3,462,412	1,773,302
JMI Equity Fund X, L.P.	19,730,905	25,278,979
Montagu IV, L.P.	3,381,254	5,982,258
Montagu V, L.P.	41,586,708	65,975,404
Montagu VI, L.P.	14,933,457	16,040,109
New Enterprise Associates 13, L.P.	4,613,839	3,612,502
New Enterprise Associates 16, L.P.	43,801,308	65,801,260

ALTERNATIVE INVESTMENTS INITIATED ON OR AFTER JULY 1, 1991 [1] (CONTINUED)

As of June 30, 2022

Description	Cost	Net Asset Value
New Enterprise Associates 17, L.P.	32,252,096	45,482,294
New Enterprise Associates 18, L.P.	2,580,000	2,511,818
NEA 18 Venture Growth Equity	3,960,000	3,659,325
New Mountain Partners V, L.P.	41,226,613	91,708,477
New Mountain Partners VI, L.P.	20,802,299	23,381,472
OCM Opportunities Fund VIIb, L.P.	-	12,318
OneLiberty Fund IV, L.P.	273,798	67,830
OneLiberty Ventures 2000, L.P.	10,141,103	637,886
Pine Brook Capital Partners, L.P.	7,293,819	1,345,659
Pine Brook Capital Partners II, L.P.	40,530,870	58,102,948
Platinum Equity Capital Partners III, L.P.	9,563,932	10,993,922
Platinum Equity Capital Partners IV, L.P.	47,788,807	92,169,841
Platinum Equity Capital Partners V, L.P.	43,966,100	63,666,386
Quad-C Partners IX, L.P.	31,517,603	46,570,000
Quad-C Partners X, L.P.	9,217,787	10,119,996
Snow Phipps II, L.P.	12,616,430	15,128,803
Snow Phipps III, L.P.	22,229,658	32,742,507
TA XII, L.P.	41,516,819	85,849,557
TA XIII, L.P.	36,957,213	58,367,413
TA XIV, L.P.	20,250,000	19,377,205
TowerBrook Investors III, L.P.	3,982,077	140,038
TowerBrook Investors IV, L.P.	16,118,239	38,289,876
TowerBrook Investors V, L.P.	37,669,590	46,599,091
TPG Growth II, L.P.	3,432,724	914,395
TPG Growth III, L.P.	27,221,420	34,206,300
TPG Growth IV, L.P.	28,650,855	51,864,809
TPG Growth V, L.P.	21,110,555	27,736,905
TPG Partners VI, L.P.	7,629,609	1,469,165
TPG Partners VII, L.P.	35,274,117	51,555,591
TPG Partners VIII, L.P.	35,999,993	54,280,897
VantagePoint Venture Partners IV, L.P.	7,596,229	51,852
Vestar Capital Partners IV, L.P.	1,373,358	170,542
Vista Equity Partners Fund IV, L.P.	9,300,598	23,279,183
Vista Equity Partners Fund V, L.P.	44,583,487	105,324,609
Vista Equity Partners Fund VI, L.P.	57,696,950	112,836,598
Vista Equity Partners Fund VII L.P.	51,802,743	79,669,252
Warburg Pincus Equity Partners, L.P.	-	78,456
Warburg Pincus Global Growth, L.P.	62,952,369	87,987,519
Warburg Pincus Private Equity X, L.P.	161,377	1,088,297
Warburg Pincus Private Equity XI, L.P.	13,488,079	23,550,266
Warburg Pincus Private Equity XII, L.P.	42,740,821	87,293,682
Warburg Pincus Global 14, L.P.	3,639,897	3,639,897
Wellspring Capital Partners V, L.P.	8,782,634	8,008,480
Wellspring Capital Partners VI, L.P.	60,307,693	90,733,588
Windjammer Mezzanine & Equity Fund II, L.P.	-	84,494
	$ 1,961,163,411	$ 2,823,022,689

(1) Investment values quoted without spin-offs or distributions.

LIST OF LARGEST HOLDINGS [1]

As of June 30, 2022

EQUITIES			FIXED INCOME				
Shares	**Security**	**Fair Value ($)**	**Par Value**	**Security**		**Description**	**Fair Value ($)**
2,192,629	Apple Inc	$299,776,237	184,573,777	State Street TR		STIF FUND	$184,573,777
1,073,473	Microsoft Corp	275,700,071	148,265,000	US Treasury N/B	2.875%	30 Apr 2029	146,527,334
1,275,508	Amazon.com Inc	135,471,705	106,560,000	US Treasury N/B	3.250%	15 May 2042	103,996,166
8,842,400	AIA Group Ltd	95,839,290	84,565,000	US Treasury N/B	2.875%	15 May 2052	79,874,179
43,121	Alphabet Inc CL A	93,971,870	62,315,000	US Treasury N/B	2.750%	30 Apr 2027	61,472,501
760,805	Nestle SA Reg	88,561,246	58,935,000	US Treasury N/B	2.875%	15 May 2032	58,271,981
39,453	Alphabet Inc CL C	86,301,465	54,525,000	US Treasury N/B	0.125%	31 Jan 2023	53,756,198
121,710	Tesla Inc	81,961,948	50,000,000	Treasury Bill	0.010%	26 Jan 2023	49,293,000
1,740,259	Tencent Holdings LTD	78,597,135	44,015,000	US Treasury N/B	2.750%	15 May 2025	43,677,845
4,555,883	Taiwan Semiconductor Mfg	72,934,579	40,000,000	Treasury Bill	0.010%	23 Feb 2023	39,370,800

(1) A complete listing of the System's holdings is available at the Retirement System office.

CHANGES IN FAIR VALUE OF INVESTMENTS [1]

(In Thousands)

For the Fiscal Year Ended June 30, 2022

	June 30, 2021 Fair Value	Purchases and Other Increases	Sales and Other Decreases	June 30, 2022 Fair Value	Asset Mix Fair Value
Marketable Securities					
Domestic Equities	$ 7,709,569	$ 826,889	$ (2,420,781)	$ 6,115,677	25.11%
International Equities	5,737,807	3,873,767	(4,875,988)	4,735,586	19.44
Total Fixed	5,830,762	11,616,694	(11,323,927)	6,123,529	25.14
Temporary [2] Investments	352,284	28,076,335	(27,573,657)	854,962	3.51
Total Marketable Securities	19,630,422	44,393,685	(46,194,353)	17,829,754	73.20
Real Estate and Alternative Investments					
Real Estate	2,926,556	780,080	-	3,706,636	15.21
Alternatives	2,347,704	523,782	(48,454)	2,823,032	11.59
Total Real Estate and Alternative Investments	5,274,260	1,303,862	(48,454)	6,529,668	26.80
Total	$ 24,904,682	$ 45,697,547	$ (46,242,807)	$ 24,359,422	100.00%

(1) Amounts include changes in unrealized appreciation and exclude interest and dividend accruals.

(2) Temporary Investments include currencies, short term pools, and securities maturing within one year of purchase.

U.S. EQUITY COMMISSIONS

For the Fiscal Year Ended June 30, 2022

Broker Name	Commissions Paid	Shares	Commissions per Share	Percent of Total Commissions
JP Morgan Securities, LLC	$ 70,547	2,224,305	0.032	18.4%
Liquidnet, Inc	53,963	2,631,222	0.021	14.1
Wells Fargo Securities, LLC	46,108	1,840,057	0.025	12.0
Morgan Stanley Co., Inc	46,036	3,119,814	0.015	12.0
Bank of America Securities, Inc	35,080	2,591,065	0.014	9.1
Citigroup Global Markets, Inc	33,405	1,120,803	0.030	8.7
Goldman Sachs & Co., LLC	18,210	3,774,340	0.005	4.8
Raymond James & Associates, Inc	11,017	934,644	0.010	2.9
Stifel Nicolaus + Co., Inc	9,450	252,351	0.040	2.5
Barclays Capital	8,732	659,576	0.013	2.3
Evercore ISI	8,189	235,070	0.035	2.1
Pershing, LLC	7,086	885,789	0.010	1.9
RBC Capital Markets, LLC	5,189	197,709	0.030	1.4
Other	29,791	3,728,221	0.008	7.8
Total Broker Commissions	$ 382,803	24,194,966		100.0%

Actuarial
Section

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

September 2, 2022

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

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2021 for the purpose of determining contribution rates for Fiscal Year 2025 for the State and Schools (July 1, 2024 to June 30, 2025) and Fiscal Year 2024 for Local employers (calendar year 2024). The major findings of the valuation are contained in the December 31, 2021 valuation report, which reflects the plan provisions in place on December 31, 2021 and any legislative changes from the 2022 Session. Several bills impacting KPERS were passed by the 2022 Legislature and signed by the Governor, but only one had a financial impact on the valuation results. Senate Bill 421 provides for additional contributions, totaling $1.125 billion in four payments, to be deposited into the KPERS trust fund for the School group. The total amount includes $253.9 million for repayment of the delayed contributions from Fiscal Year 2017 and Fiscal Year 2019 in the first payment with additional contributions totaling $871.1 million. Although the payments occur after the valuation date (December 31, 2021), they are reflected in the projected unfunded actuarial liability (UAL) as of July 1, 2024 and, therefore, impact the UAL contribution rate and the actuarial contribution rate in the current valuation.

At their May 2022 meeting, the KPERS Board voted to lower the investment return assumption from 7.75 percent to 7.00 percent in the December 31, 2021 valuation. While the KPERS Board did not adopt the investment return assumption of 6.75 percent recommended by Cavanaugh Macdonald Consulting, it is our professional opinion that the 7.00 percent assumption is still reasonable and, therefore, complies with Actuarial Standard of Practice Number 27. Because the dividend rate for KPERS 3 members is tied to actual investment performance, the change in the expected investment return also impacts the assumption for future dividends. As a result, that assumption was lowered from 6.25 percent to 6.00 percent to maintain consistency in the economic assumptions. In addition, the interest rate used to convert the account balances for KPERS 3 members to monthly income is statutorily set at two percent less than the investment return assumption. Therefore, the KPERS 3 annuity interest rate for future retirements was lowered from 5.75 percent to 5.00 percent in this valuation.

The Board utilized re-amortization of the total amount of the unfunded actuarial liability as of December 31, 2021 to help mitigate the impact of the assumption changes on the employer contribution rates. The largest portion of the unfunded actuarial liability for each system had 11 years remaining on the original amortization schedule as of December 31, 2021. The new amortization periods vary by system, ranging from 17 to 22 years as of December 31, 2021, and were selected to meet the separate funding goals of each

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Board of Trustees
September 2, 2022
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system. In subsequent valuations, the amortization policy will revert to the layered amortization methodology with new bases due to actuarial gain/losses amortized over 20 years.

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

We certify that all costs, liabilities, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System. Nevertheless, the emerging costs of the System will vary from those presented herein 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 in Appendix C of our valuation report.

In order to prepare the results in the December 31, 2021 actuarial valuation report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. Future actuarial measurements may differ significantly from the current measurements presented in the December 31, 2021 valuation report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform a thorough analysis of the potential range of future measurements.

Actuarial computations presented in this section are for purposes of determining the actuarial recommended and statutory funding amounts for the System and have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results shown in the December 31, 2021 valuation report. Accordingly, additional determinations may be needed for other purposes.

Based upon the December 31, 2021 valuation results, annual projection forecasting and the presumption that future contributions will be made at the full actuarial contribution rate, it is our opinion that the current funding policy will systematically accumulate assets sufficient to fund all future benefits, if all of the current actuarial assumptions are met.

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

Actuarial Section

Schedule of Funding Progress
Summary of Change in Unfunded Actuarial Liability
Summary of Changes in Actuarial Contribution Rate

Board of Trustees
September 2, 2022
Page 3

Summary of Historical Changes to Total System UAL
Summary of Principal Results
Summary of Actuarial Assumptions and Methods
Summary of Membership Data

Actuarial computations, based on the actuarial valuation performed as of December 31, 2021, were also prepared as of June 30, 2022 for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards Board Statement Number 67 (GASB 67). KPERS' State/School, Local and Kansas Police and Fire plans are cost-sharing multiple employer plans while the Judges plan is a single employer plan. The assumptions used in the funding valuation were also used for GASB 67 reporting, including the use of a 7.00 percent discount rate for GASB 67 calculations (7.00 percent is the assumed rate of return used in the funding valuation). In addition, the entry age normal actuarial cost method, which is required to be used under GASB 67, is also used in the funding valuation. The actuarial assumptions and methods meet the parameters set by Actuarial Standards of Practice, as issued by the Actuarial Standards Board, and generally accepted accounting principles (GAAP) applicable in the United States of America as promulgated by the Governmental Accounting Standards Board. The Total Pension Liability was rolled forward from the valuation date of December 31, 2021 to June 30, 2022, based on standard actuarial formulae. Additional information related to GASB 67 can be found in the Financial Section.

Cavanaugh Macdonald Consulting, LLC provided the following supporting schedules:

Financial Section

Calculation of the Total Pension Liability and Net Pension Liability
Schedule of the Net Pension Liability
Sensitivity Analysis of the Net Pension Liability
Schedule of Changes in the Net Pension Liability

In addition, the Schedule of Employer Contributions which compares the actuarially determined employer contribution amounts and the actual contribution amounts is included in the Required Supplementary Information (RSI). Amounts in that schedule were provided by the System.

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

We certify that, to the best of our knowledge and belief, the December 31, 2021 actuarial valuation report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Sincerely,

Patrice Beckham

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

Brent A. Banister

Brent A. Banister, Ph.D., FSA, EA, FCA, MAAA
Chief Actuary

SECTION I BOARD SUMMARY OVERVIEW

The Kansas Public Employees Retirement System is an umbrella organization which administers the following three statewide pension groups: the Kansas Public Employees Retirement System (KPERS), the Kansas Police and Firemen's Retirement System (KP&F) and the Kansas Retirement System for Judges (Judges). This report presents the results of the December 31, 2021 actuarial valuations for each of the groups.

The primary purposes of performing actuarial valuations are to:

- determine the employer contribution rates required to fund each group on an actuarial basis,
- determine the statutory employer contribution rates for each group,
- disclose asset and liability measures as of the valuation date,
- evaluate and disclose key risks to funding the System pursuant to Actuarial Standard of Practice Number 51,
- compare the actual experience since the last valuation date to that expected, and
- analyze and report on trends in contributions, assets, and liabilities over the past several years.

There were several bills passed by the 2022 Legislature and signed into law by the Governor that impact KPERS including:

1. Senate Bill 421 (SB 421) provides for additional contributions, totaling $1.125 billion in four payments, to be deposited into the KPERS trust fund for the School group. The total amount includes $253.9 million for repayment of the delayed contributions from FY 2017 and FY 2019 in the first payment with additional contributions totaling $871.1 million. A payment of $553.9 million was received on May 19, 2022 and a second payment of $300 million was received by KPERS on June 1, 2022. An additional payment of $146.1 million is expected on August 1 and the last payment of $125 million is expected on December 1, assuming no action is taken by the State Finance Council to stop the transfers. Although the payments occur after the valuation date of December 31, 2021, they are reflected in the projected unfunded actuarial liability (UAL) as of July 1, 2024 and, therefore, impact the UAL contribution rate and the actuarial contribution rate in the current valuation. Typically, when additional contributions have been made by the State, the statutory employer contribution rates for the following two fiscal years have been recertified by the legislature, i.e., the revised contribution rates are lower, reflecting the impact of the additional funding. Such recertification has not yet occurred, so the employer contribution rates previously certified by the KPERS Board are reflected in the December 31, 2021 valuation report. If the recertification occurs in the future, the revised employer contribution rates would be 12.23 percent for FY2023 and 11.27 percent for FY 2024.
2. Substitute for Senate Bill 450 (Sub SB 450) eliminated the transfer of proceeds to KPERS from the sale of surplus real estate. There has been no assumption regarding future transfers from the sale of surplus real estate in the valuation, so this change had no impact on the December 31, 2021 valuation results.
3. House Bill 2481 permits members of the Kansas Police and Firemen's Retirement System (KP&F) to purchase certain years of service at the full actuarial cost. There is no assumption regarding service purchases in the valuation, so this change had no impact on the December 31, 2021 valuation.

Change in Actuarial Assumptions

In last year's report, we recommended that the KPERS Board review and reevaluate the investment return assumption of 7.75 percent used in the December 31, 2020 valuation. As a result, the Board engaged in a comprehensive study of the investment return assumption including input from KPERS' Chief Investment Officer, KPERS' investment consultant (Meketa) and KPERS' retained actuary (Cavanaugh Macdonald). After months of study, the KPERS Board of Trustees voted at their May 2022 meeting to lower the investment return assumption from 7.75 percent to 7.00 percent beginning with the December 31, 2021 valuation. While the KPERS Board did not adopt the investment return assumption of 6.75 percent recommended by Cavanaugh Macdonald Consulting, it is our professional opinion that the 7.00 percent assumption is still reasonable and, therefore, complies with Actuarial Standard of Practice Number 27.

Because the dividend rate for KPERS 3 members is tied to actual investment performance, the change in the expected investment return also impacts the expected future dividends. As a result, the interest crediting rate assumption (which includes dividends) was lowered from 6.25 percent to 6.00 percent to maintain internal consistency in the set of economic assumptions. In addition, the interest rate used to convert the account balances for KPERS 3 members to monthly income is statutorily set at two percent less than the investment return assumption. Therefore, the KPERS 3 annuity interest rate for future retirements was lowered from 5.75 percent to 5.00 percent in this valuation.

The Board utilized re-amortization of the total unfunded actuarial liability as of December 31, 2021 to help mitigate the impact of the assumption changes on the employer contribution rates. The largest portion of the unfunded actuarial liability for each system had 11 years remaining on the original amortization schedule as of December 31, 2021. The new amortization periods vary for each system, ranging from 17 to 22 years as of December 31, 2021, and were selected to meet the separate funding goals of each system. In subsequent valuations, the amortization policy will revert to the layered amortization methodology with new bases due to actuarial gain/losses amortized over 20 years.

In summary, the KPERS Board made a significant change to the investment return assumption by moving from 7.75 percent to 7.00 percent. While this change lowered the funded ratio and increased the amount of the unfunded actuarial liability and the actuarial contribution rate, it actually improves the long-term financial outlook of the system and decreases the likelihood and magnitude of actuarial losses from investment returns in the future. There is now a higher probability that future returns will meet or exceed the 7.00 percent assumption which will serve to stabilize the contribution rate, enhance the long-term funding of the system, and more equitably allocate the cost of benefits over generations of members and taxpayers. We commend the Board for its diligence in studying the investment return assumption and their ultimate action to materially lower the assumption.

Factors Impacting the December 31, 2021 Valuation

The valuation results provide a "snapshot" view of the System's financial condition on December 31, 2021. The net change in the unfunded actuarial liability for the total System was an increase of $1.3 billion due to multiple factors, the largest of which was the assumption change discussed above. The unfunded actuarial liability increased by $2.7 billion due to the impact of the assumption change. This increase was partially offset by actuarial gains, the largest being investment experience ($703 million) and pension funding bonds ($500 million). Other factors impacting the valuation results include:

- The net rate of return on the market value of assets in 2021 was 15.7 percent, as reported by KPERS. However, due to the use of an asset smoothing method, the net rate of return on the actuarial value of assets for 2021 was 10.9 percent, which was higher than the assumed return for 2021 of 7.75 percent (determined by the assumption used in the December 31, 2020 valuation). As a result of the favorable investment experience during 2021 and the scheduled recognition of past investment experience, there was an actuarial gain of $703 million. In addition, the net deferred investment gain of $930 million in the prior valuation increased to $2.088 billion in the current valuation (about 8 percent of market value).
- Liability experience for calendar year 2021 was a net actuarial liability loss (higher actuarial liabilities than expected) for all groups except Judges. In aggregate, the valuation results reflect a net actuarial liability loss of $147 million for the year, about 0.43 percent of the actuarial liability. The largest component of the actuarial liability loss was due to higher salaries than anticipated by the assumptions.
- House Bill 2405 in the 2021 legislative session provided for net proceeds of up to $500 million from bonds issued by the state of Kansas to be deposited into the trust fund for the School group. The bonds were issued and net proceeds of $500 million were received by KPERS on August 26, 2021. This additional contribution served to reduce the State/School unfunded actuarial liability by $500 million.
- KPERS 3 (Cash Balance members) refers to non-correction members who either began their participation or were rehired on or after January 1, 2015. KPERS 3 members receive guaranteed interest credits of 4.0 percent on their account balances, but additional interest credits may be granted depending on actual investment returns. The additional interest credits, referred to as "dividends", are equal to 75 percent of the five-year average net compound rate of return, as determined by the Board for the preceding calendar year and the prior four calendar years on the market value of assets, that is above 6.0 percent. The dividend for 2021 was dependent on the net rate of return on the market value of assets for calendar years 2017 through 2021. The average annualized net return for the five-year period was 10.7 percent so the statutory formula provided for a dividend of 3.525 percent for 2021. Dividend credits are expected to be paid periodically so they are included in the assumed total interest crediting rate of 6.25 percent (6.00 percent beginning December 31, 2021). Because the 2021 dividend was greater than the assumption of 2.25 percent, it created a small actuarial loss that was part of the net liability experience.
- The statutory contribution rate was first equal to the actuarial contribution rate in the December 31, 2017 valuation which set the employer contribution rate for Fiscal Year 2021 (July 1, 2020 to June 30, 2021). Therefore, for calendar year 2020 there was still a small contribution shortfall in the first half of the year. However, the full actuarial contribution rate was paid for the entire calendar year in 2021 so there was no contribution shortfall. As a result, the full UAL payment was received during 2021 and the unfunded actuarial liability decreased, as scheduled, by $283 million.

A detailed analysis of the components of the change in the unfunded actuarial liability from December 31, 2020, to December 31, 2021, can be found on page 77.

In KPERS, the State, School and Local employer contribution rates certified by the Board may not increase over the prior year by more than the statutory cap. The statutory cap has changed over time, but the current cap is 1.20 percent. Also, while separate valuations are performed for the State and School groups, the statutory contribution rate for the two groups is determined using their combined valuation results. Due to the statutory cap, the employer contribution rate was below the actuarial contribution for many years. However, the statutory State/School employer contribution rate has been equal to the actuarial required contribution rate since the December 31, 2017 valuation (Fiscal Year 2021 contribution rates). By statute, if the actuarial required contribution (ARC) for the State alone is less than the statutory contribution rate when the two groups are combined (as it is in this valuation), the excess of the statutory contribution rate over the actuarial required contribution rate for the State alone is allocated to the School to improve the funding of that group.

A summary of actuarial and statutory employer contribution rates for the Retirement System (excluding the statutory contribution for the Death and Disability Program) for this valuation and the prior valuation follows. The December 31, 2021 actuarial valuation is used to set the employer contribution rate for Fiscal Year 2025 for the State/School, State KP&F and Judges groups and calendar year 2024 for the Local and Local KP&F groups.

	December 31, 2021 Valuation		
System	Actuarial	Statutory	Difference
State(1)	10.66%	11.42%	(0.76%)
School(1)	11.60%	11.42%	0.18%
State/School(1)	11.42%	11.42%	0.00%
Local(1)	9.26%	9.26%	0.00%
Police & Fire - Uniform Rates(2)	23.10%	23.10%	0.00%
Judges	21.35%	21.35%	0.00%

	December 31, 2020 Valuation		
System	Actuarial	Statutory	Difference
State(1)	9.38%	12.57%	(3.19%)
School(1)	13.38%	12.57%	0.81%
State/School(1)	12.57%	12.57%	0.00%
Local(1)	8.43%	8.43%	0.00%
Police & Fire - Uniform Rates(2)	22.86%	22.86%	0.00%
Judges	16.48%	16.48%	0.00%

(1) By statute, rates are allowed to increase by a maximum of 1.2 percent, plus the cost of any benefit enhancements. The December 31, 2021 valuation sets the employer contribution rate for Fiscal Year 2025 for the State and School group and calendar year 2024 for the Local group.

(2) For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for both State and Local employers. The uniform rate does not include the payment required to amortize the unfunded past service liability determined separately for each employer.

Based on the results of this valuation, the statutory contribution rates for the State, State/School and Local groups continue to be at the actuarial required contribution rate. This is a key factor in reducing the unfunded actuarial liability and improving the funded ratio of each of the groups in the future.

Legislation passed in the 2017 session provided for the payment of the delayed contributions for the School group from Fiscal Year 2017 and Fiscal Year 2019 in level annual installments over 20-year periods commencing in Fiscal Year 2018 and Fiscal Year 2020, respectively. These installment payments were determined as an additional contribution rate for the School group and were added to the regular statutory contribution rate determined for the State/School group to determine the employer contribution rate for School employers. SB 421, passed in the 2022 legislative session, provided for additional contributions which included payment of the outstanding balance of the delayed contributions from Fiscal Year 2017 and Fiscal Year 2019 (payment received May 19, 2022). Consequently, there is no additional contribution rate for the School group, beginning with Fiscal Year 2023. The regular statutory State/School contribution rate will apply in all future years.

The change to the investment return assumption and other related changes was significant. The following table compares the results of the December 31, 2021 valuation (which sets the contribution rate for Fiscal Year 2025 for the State and calendar year 2024 for local employers) with no changes to the assumptions and methods to the revised assumptions with re-amortization, as adopted by the Board.

	Unfunded Actuarial Liability ($ Millions)		Funded Ratio		Employer Contribution Rate	
	Prior Assumptions	Current Assumptions	Prior Assumptions	Current Assumptions	Prior Assumptions	Current Assumptions
State/School	$5,050	$6,892	77%	71%	10.49%	11.42%
Local	$1,250	$1,784	80%	73%	8.03%	9.26%
KPF	$813	$1,141	79%	73%	21.84%	23.10%
Judges	$(3.5)	$10.2	102%	95%	13.01%	21.35%

EXPERIENCE - ALL SYSTEMS COMBINED

December 31, 2020 – December 31, 2021

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, 2021. 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 both the System's membership, assets and liabilities impacted the change in the actuarial contribution rates between the December 31, 2020 and December 31, 2021 actuarial valuations. On the following pages, each component is examined.

MEMBERSHIP

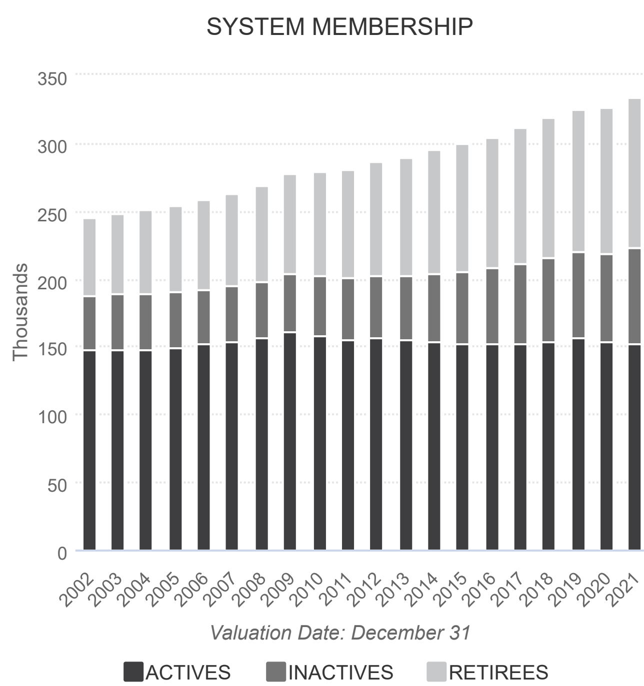
The following table contains a summary of the changes in the active membership between the December 31, 2020 and December 31, 2021 actuarial valuations.

	State	School	Local
12/31/2020 (Starting count)	20,796	87,660	37,424
New actives	2,356	11,607	5,766
Non-vested Terminations	(1,146)	(4,839)	(2,761)
Elected Refund	(634)	(1,099)	(1,057)
Vested Terminations	(625)	(2,776)	(1,673)
Total Withdrawals	(2,405)	(8,714)	(5,491)
Deaths	(49)	(109)	(76)
Disabilities	(27)	(56)	(42)
Retirements	(764)	(2,433)	(1,190)
Other/Transfer	10	(57)	45
12/31/2021 (Ending count)	19,917	87,898	36,436

	KP&F	Judges	Total
12/31/2020 (Starting count)	7,835	244	153,959
New actives	788	29	20,546
Non-vested Terminations	(444)	-	(9,190)
Elected Refund	(91)	(1)	(2,882)
Vested Terminations	(55)	(3)	(5,132)
Total Withdrawals	(590)	(4)	(17,204)
Deaths	(4)	-	(238)
Disabilities	(28)	-	(153)
Retirements	(224)	(11)	(4,622)
Other/Transfer	2	-	-
12/31/2021 (Ending count)	7,779	258	152,288

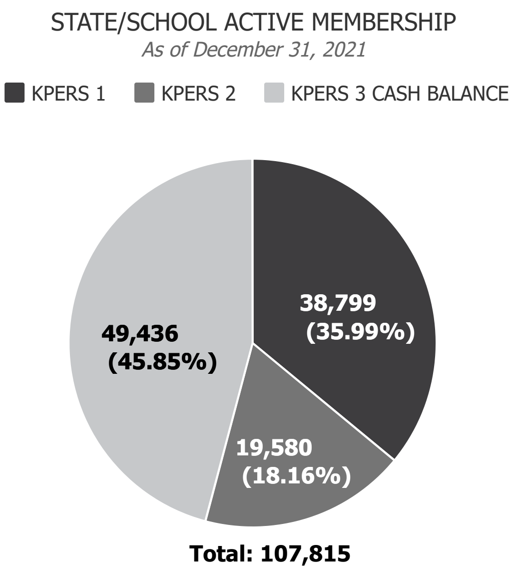
As can be seen from the table above, in total, KPERS experienced a net decrease in the number of active members with the largest decrease, as a percentage, occurring in the State group (negative 4.2 percent). As the following graph illustrates, active membership growth has been relatively stagnant overall for the past decade, with the active membership peaking in the December 31, 2009 valuation. While this pattern of low (or at times negative) active member growth has not been unusual in the public sector, a declining active membership has an adverse impact on the actuarial contribution rate. In general, fewer active members usually results in total active member payroll that does not increase as expected by the payroll growth assumption (3 percent per year). When this occurs, contribution dollars into the System for that plan year are lower so the unfunded actuarial liability does not decrease as scheduled. In addition, the unfunded actuarial liability contribution rate increases because the dollar amount of the amortization payment is divided by a smaller amount of payroll.

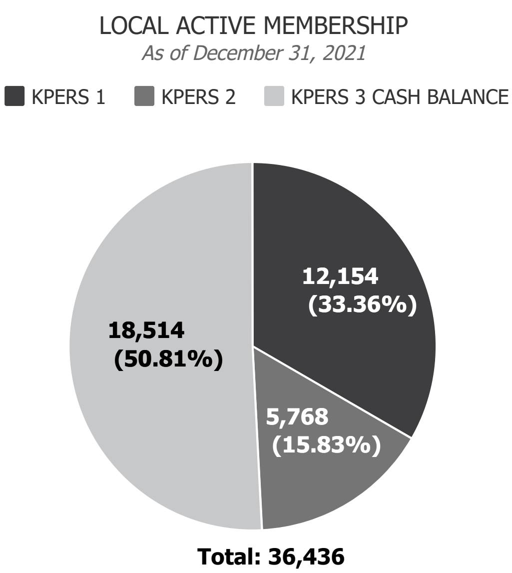
The following graph shows the number of active members and retirees and beneficiaries in the last 20 valuations. The number of retirees and beneficiaries has grown significantly more than active members over this period.



KPERS currently has three different benefit structures. The most recent tier, KPERS 3 (Cash Balance members), covers non-corrections members who either began their participation or were rehired on or after January 1, 2015. KPERS 2 includes members who either began their participation or were rehired on or after July 1, 2009, but before January 1, 2015. Of the 144,251 active KPERS members, 25,348 (about 18 percent) are KPERS 2 members and 67,950 (about 47 percent) are KPERS 3 members as of the valuation date. The remaining actives (about 35 percent) are KPERS 1 members, who became participants prior to July 1,

2009. Beginning with the December 31, 2020 valuation, KPERS 3 members have represented the largest group of active members. The split of KPERS members in the State/School group and Local group, by benefit tier, is shown in the following charts.





Because KPERS 3 is a relatively new group, the members are younger and have lower service. Therefore, the liability for KPERS 3 members is relatively small so the valuation results are more significantly affected by what happens to members of KPERS 1 and KPERS 2. As time passes and more active members are in KPERS 3, the cash balance benefit structure will have an increasing impact on the overall valuation results. One aspect of this change is that total valuation results are expected to have less volatility since KPERS 3 has certain risk sharing features built into the interest crediting rate on account balances. For example, lower actual investment returns will translate into lower dividends, smaller account balances and, therefore, smaller benefit amounts, mitigating the growth in the KPERS 3 actuarial liability.

ASSETS

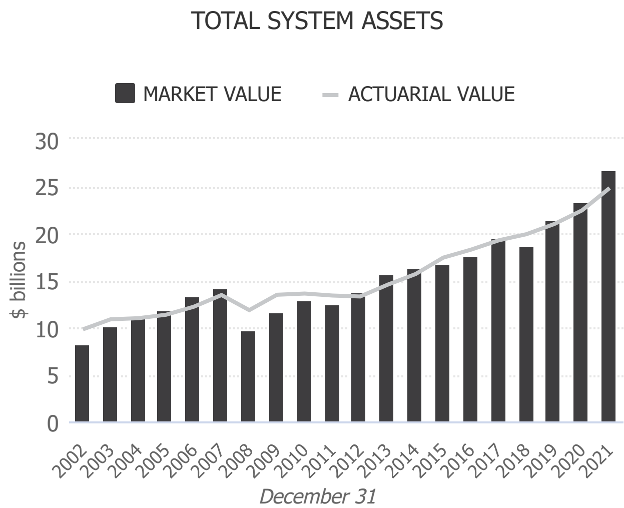
As of December 31, 2021, the System had total funds of $26.9 billion on a market value basis, excluding assets held for the Group Insurance and Optional Life reserves. This was an increase of $3.5 billion from the December 31, 2020 fund balance of $23.4 billion.

Due to the volatility in the market value of assets, it is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The smoothing method calculates the difference between the actual dollar amount of investment return and the expected return (using the assumed rate of return) on the market value of assets each year. The dollar amount of the difference is recognized equally over a five-year period (20 percent per year).

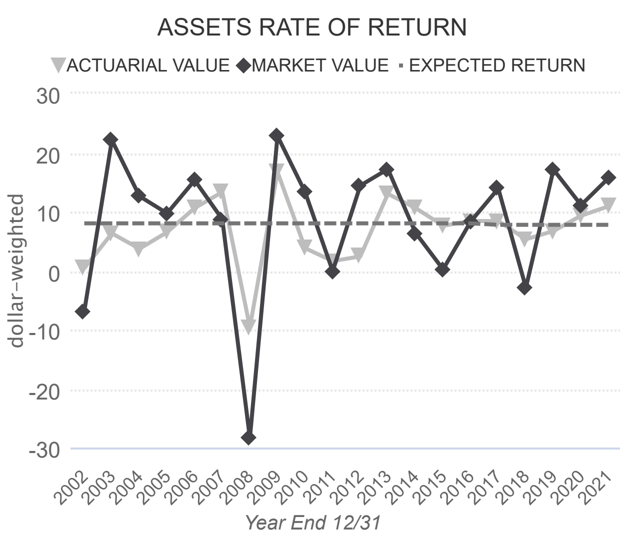
The components of the change in the total market value and actuarial value of assets for the Retirement System (in millions) are set forth in the following table.

	Market Value $ (millions)	Actuarial Value $ (millions)
Assets, December 31, 2020	$ 23,353	$ 22,422
· Employer and Member Statutory Contributions	1,520	1,520
· Additional Contributions	500	500
· Benefit Payments	(2,057)	(2,057)
· Administrative Expenses	(21)	(21)
· Investment Income, Net of Investment Expenses	3,597	2,440
Assets, December 31, 2021	$ 26,892	$ 24,804
Net Rate of Return	15.7%	10.9%

Due to the use of an asset smoothing method, there is a net deferred investment gain of $2.088 billion that has not yet been recognized, i.e. the market value of assets is greater than the actuarial value. This deferred investment gain will be recognized in the actuarial value of assets over the next four years but may be offset by actual investment experience if it is less favorable than assumed.



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



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

LIABILITIES

The actuarial liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial liability. The unfunded actuarial liability will be reduced if employer contributions exceed the employer normal cost for the year, after allowing for interest 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.

The unfunded actuarial liability by group is summarized below (in millions):

	State	School	Local
Actuarial Liability	$ 5,081	$18,458	$ 6,684
Actuarial Value of Assets	3,992	12,655	4,900
Unfunded Actuarial Liability*	$ 1,089	$ 5,804	$ 1,784
Funded Ratio	78.6%	68.6%	73.3%

	KP&F	Judges	Total*
Actuarial Liability	$ 4,190	$ 217	$34,631
Actuarial Value of Assets	3,050	207	24,804
Unfunded Actuarial Liability*	$ 1,141	$ 10	$ 9,827
Funded Ratio	72.8%	95.3%	71.6%

** May not add due to rounding.*

The unfunded actuarial liability has been amortized using a "layered" approach since the December 31, 2016 valuation. However, with the reduction in the investment return assumption in the December 31, 2021 valuation, the Board elected to reset the unfunded actuarial liability and amortize the entire amount over a new amortization period. For the State/School and Local groups, the amortization period was set to 17 years. For KP&F, the amortization period was set to 22 years. All of these groups will continue to utilize the level-percent-of-payroll methodology for determining the payments. The amortization period for the Judges is 20 years with payments determined as level dollar payments. In subsequent valuations, KPERS will return to the layered amortization methodology. New amortization bases for actuarial gains/losses will be established each year with an amortization period of 20 years. Changes in the UAL resulting from assumption changes will be amortized over an appropriate period after consultation with KPERS' actuary. With the full actuarial contribution rate being contributed for all groups, the UAL is expected to decrease absent other factors such as actual experience that is different than expected based on the actuarial assumptions (on both assets and liabilities), changes in actuarial assumptions, procedures, methods, or changes in benefit provisions.

The actual experience measured in this valuation is that which occurred during the prior plan year (calendar year 2021). For State/School, Local and KP&F, the valuation results reflect a net actuarial liability loss for the year (which increases the unfunded actuarial liability), largely due to salary increases that were higher than expected. In contrast, there was a small net actuarial liability gain for Judges during 2021. In aggregate, the net actuarial liability loss for the entire System was $147 million, about 0.43 percent of the actuarial liability. In addition, the System experienced a return of 10.9 percent on the actuarial value of assets, which is above the assumed return of 7.75 percent for 2021, resulting in an experience gain of $703 million. Therefore, the net combined experience (asset and liability) in 2021 for all groups was an experience gain for the total System of $556 million.

Between December 31, 2020, and December 31, 2021, the change in the unfunded actuarial liability for the System, in total, was as follows (in millions):

	$ millions
Unfunded Actuarial Liability, December 31, 2020	$8,488
· effect of contribution cap	-
· expected decrease due to amortization method	(283)
· (gain)/loss from investment return on actuarial assets	(703)
· demographic experience (1)	147
· bond proceeds	(500)
· all other experience	(40)
Unfunded Actuarial Liability, December 31, 2021 (2) Prior to Assumption Changes	$7,109
· change in actuarial assumptions	$2,718
Unfunded Actuarial Liability, December 31, 2021	$9,827

(1) Liability loss is about 0.43 percent of total actuarial liability.

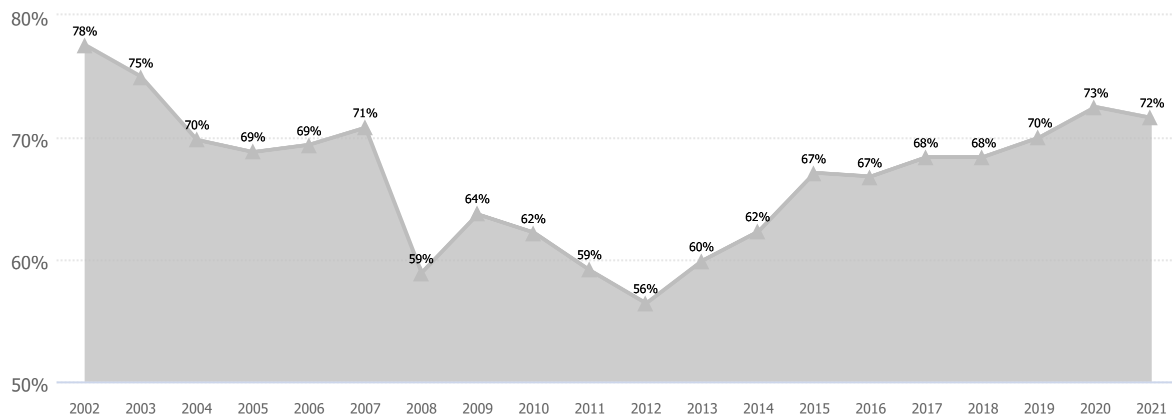
(2) May not add due to rounding.

An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial liability. The funded ratio does not necessarily indicate whether or not additional funding is needed, nor does it indicate whether or not the plan could settle all liabilities with current assets. The funded status information for the total System is shown in the following table (in millions).

	12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21
Using Actuarial Value of Assets:						
Funded Ratio (AVA/AL)	67%	68%	68%	70%	73%	72%
Unfunded Actuarial Liability (AL-AVA)	$9,061	$8,907	$9,202	$9,007	$8,488	$9,827
Using Market Value of Assets:						
Funded Ratio (MVA/AL)	65%	70%	64%	72%	76%	78%
Unfunded Actuarial Liability (AL-MVA)	$9,627	$8,569	$10,430	$8,439	$7,558	$7,739

Note: comparability of results is limited for certain years as assumption changes occurred. In particular, the investment return assumption was lowered from 7.75% to 7.00% in the 2021 valuation.

FUNDED RATIO – ACTUARIAL VALUE



Changes in actuarial assumptions and methods, coupled with investment returns below the assumed rate and contributions below the actuarial rate significantly reduced the funded ratio over the first part of this period. The funded ratio is expected to increase steadily in the future assuming assumptions are met and scheduled contributions are made.

Given the current funded status of the System, the deferred investment experience, the amortization method and amortization periods, and the scheduled employer contribution rates, the dollar amount of the unfunded actuarial liability for the entire System is expected to decrease over the next few years as the unrecognized investment experience flows through the asset smoothing method. Over the longer term, the funded ratio is expected to improve, but will continue to be heavily dependent on actual investment returns in the future.

CONTRIBUTION RATES

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

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

- a "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date and an expense load for administrative expenses for the year,
- an "unfunded actuarial liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

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

In KPERS, State, School and Local employers do not necessarily contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. The statutory cap, which has been changed by the Legislature periodically, is currently 1.20 percent for all three groups. In the 2022 session, Senate Bill 421 was passed and signed by the governor. It provided for additional contributions to KPERS totaling $1.125 billion in four payments during 2022 to be deposited into the trust fund for the School group. Although the payments occur after the valuation date of December 31, 2021, they are reflected in the projected unfunded actuarial liability (UAL) as of July 1, 2024 and the corresponding UAL contribution rate.

The results of the December 31, 2021 valuation are used to set employer contribution rates for Fiscal Year 2025 for the State and School (July 1, 2024 to June 30, 2025) and Fiscal Year 2024 for Local employers (calendar year 2024). The unfunded actuarial liability is amortized as a level-percentage of payroll for all groups except the Judges where a level-dollar payment is used. The payroll growth assumption is 3.00 percent, so the dollar amount of the annual amortization payments will increase 3.00 percent each year. As a result, if total payroll grows 3.00 percent per year, as assumed, the amortization payment will remain level as a percentage of total payroll. However, if actual payroll growth is less than 3.00 percent, the unfunded actuarial liability contribution rate will increase.

A summary of the actuarial and statutory employer contribution rates for the System is shown below:

DECEMBER 31, 2021 VALUATION

System	Actuarial	Statutory	Difference
State (1)	10.66%	11.42%	(0.76%)
School (1)	11.60%	11.42%	0.18%
State/School (1)	11.42%	11.42%	0.00%
Local (1)	9.26%	9.26%	0.00%
Police & Fire - Uniform Rates (2)	23.10%	23.10%	0.00%
Judges	21.35%	21.35%	0.00%

(1) By statute, rates are allowed to increase by a maximum of 1.2 percent, plus the cost of any benefit enhancements. The December 31, 2021 valuation sets the employer contribution rate for Fiscal Year 2025 for the State and School group and calendar year 2024 for the Local group.

(2) For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for both State and Local employers. The uniform rate does not include the payment required to amortize the unfunded past service liability determined separately for each employer.

As mentioned earlier, due to statutory caps the full actuarial contribution rate is not necessarily contributed for all KPERS groups. The State and Local groups reached the actuarial required contribution (ARC) date (the year in which the statutory contribution rate is equal to or greater than the ARC rate) in the 2010 and 2012 valuations, respectively, and remain at the ARC rate in this valuation. However, due to the lag between the valuation date and the applicable fiscal year for the contribution rate, the State group did not actually contribute the full ARC until Fiscal Year 2014 and the Local group until Calendar Year 2015. Based on the current valuation, there is a small difference (shortfall) between the actuarial and statutory contribution rates of 0.18 percent for the School group. However, the statutory contribution rate is set for the combined State/School group and the ARC date occurred in Fiscal Year 2021 at a rate of 14.23 percent of pay, based on the December 31, 2017 valuation. The statutory and actuarial required contribution rates have remained equal since then, including in the current valuation.

Separate employer contribution rates are calculated for two subgroups of the State: Correctional Employee Groups with a normal retirement age of 55 (C55) and a normal retirement age of 60 (C60). The contribution rates are calculated by increasing the state statutory contribution rate by the difference in the normal cost rate for the C55 and C60 groups over the normal cost rate for regular state members, but not to exceed the statutory cap on contribution increases. The higher contribution rates are intended to finance the earlier normal retirement age. The resulting contribution rates for the Correctional Employee Groups for Fiscal Year 2025 are shown in the following table.

Corrections Group	Statutory Rate
Retirement Age 55:	12.34%
Retirement Age 60:	13.13%

The change in the employer actuarial contribution rate from December 31, 2020 to December 31, 2021 and the primary components thereof are shown in the table on page 87. Adopting a lower investment return assumption had a significant impact on all groups and was the primary factor for the increase in the employer contribution rates for the Local, KP&F and Judges groups. However, the employer contribution rate for the State/School group decreased from last year's valuation because the combined impact of favorable investment experience during 2021, additional contributions to the School group and the re-amortization of the UAL was greater than the impact of lowering the investment return assumption.

COMMENTS

The two key factors that impacted the December 31, 2021 valuation were (1) lowering the investment return assumption from 7.75 percent to 7.00 percent and (2) additional contributions totaling $1.125 billion, provided in Senate Bill 421. Based on our recommendation in the last valuation, the KPERS Board engaged in a comprehensive study of the investment return assumption including input from their Chief Investment Officer, KPERS' investment consultant (Meketa) and KPERS' retained actuary (Cavanaugh Macdonald). At the May 2022 meeting, the KPERS Board of Trustees voted to lower the investment return assumption from 7.75 percent to 7.00 percent in the December 31, 2021 valuation. Because the dividend rate for KPERS 3 members is tied to actual investment performance, the change in the expected investment return also impacted the assumption for future dividends. Therefore, that assumption was lowered from 6.25 percent to 6.00 percent to maintain consistency in the set of economic assumptions. In addition, the interest rate used to convert the account balances for KPERS 3 members to monthly income is statutorily set at two percent less than the investment return assumption. Therefore, the KPERS 3 annuity interest rate for future retirements was lowered to 5.00 percent in this valuation. The change in assumptions increased the unfunded actuarial liability by $2.7 billion, decreased the funded ratio and increased the actuarial contribution rates. In order to mitigate the impact of the assumption changes on the employer contribution rates, the Board utilized re-amortization of the December 31, 2021 unfunded actuarial liability. The amortization periods vary for each system (17 years for State/School and Local, 22 years for KP&F and 20 years for Judges) and were selected to meet the separate funding goals of each system. In subsequent valuations, the amortization policy will revert to the layered amortization methodology with new bases for actuarial gains/losses amortized over 20 years.

Under SB 421, additional contributions of $1.125 billion are to be deposited into the KPERS trust fund for the School group (two have been received to date and two additional contributions are expected in August and December of this year). The additional contributions increase the value of assets and, therefore, the system's funded status. SB 421 reflects the continued efforts of the Kansas Legislature and Governors in recent years to make incremental progress toward a stronger financial position.

Like most public retirement systems, KPERS uses an asset smoothing method to average the actual investment experience above and below the assumed net rate of return. Under the asset smoothing method, the difference between the dollar amount of the actual and assumed investment experience is recognized equally over a five-year period. While the return on the market value of assets for 2021 was 15.7 percent, only a portion of the favorable experience is recognized in the current valuation. Due to the asset smoothing method, the return on the actuarial value of assets in 2021 was 10.9 percent. This generated an experience gain on assets because the actual return was above the assumed return for 2021 (7.75 percent which was used in the December 31, 2020 valuation). As of the current valuation date, the market value of assets exceeds the actuarial value of assets by about 8.4 percent or $2.088 billion. This deferred experience will flow through the asset smoothing method in the next four years and be recognized in the valuation process. However, it may be offset if future investment experience is below the assumed rate of return in future years (7.00 percent). As the deferred investment experience is recognized, the funded ratio can be expected to increase and the actuarial contribution rate to decrease.

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

	State/School		KP&F	
	Actuarial	Market	Actuarial	Market
Actuarial Liability	$23,540	$23,540	$4,190	$4,190
Asset Value	16,647	18,027	3,050	3,313
Unfunded Actuarial Liability*	$6,892	$5,512	$1,141	$877
Funded Ratio	71%	77%	73%	79%
Contribution Rate:				
Normal Cost Rate	8.89%	8.89%	17.53%	17.53%
UAL Payment	8.53%	6.15%	12.72%	9.37%
Actuarial Contribution Rate	17.42%	15.04%	30.25%	26.90%
Employee Rate	6.00%	6.00%	7.15%	7.15%
Employer Rate	11.42%	9.04%	23.10%	19.75%

** May not add due to rounding*

Future investment experience will impact the extent to which the deferred investment experience (which is currently a net gain) will be recognized. The ultimate impact of the deferred experience on the employer contribution rate would be similar to the column shown above based on the market value of assets, if all actuarial assumptions are met including the 7.00 percent return in future years. Also, please refer to the graphs later in this section that show the projected contribution rates assuming a 7.00 percent net rate of return in all future years.

LEGISLATIVE HISTORY

Over the last two decades, a comprehensive plan has been developed to address the long-term funding of KPERS and significant changes have occurred. HB 2014, which was passed by the 2003 Legislature, increased the statutory cap on the State/School employer contribution rate from 0.20 percent to 0.40 percent in Fiscal Year 2006, 0.50 percent in Fiscal Year 2007 and 0.60 percent in Fiscal Year 2008 and beyond. It also authorized the issuance of up to $500 million in pension obligation bonds

(POBs). The POBs were sold and proceeds of $440.2 million were received on March 10, 2004. The debt service payments on the bonds are paid by the State in addition to the regular KPERS employer contribution rate.

The 2004 Legislature passed SB 520, which continued to address issues related to the long-term funding of the System. It gave the KPERS Board of Trustees the authority to establish the actuarial cost method and amortization method/period. With this authority, the Board changed both the actuarial cost method and the asset valuation method with the December 31, 2003 actuarial valuation. SB 520 also increased the statutory cap for Local employers from 0.15 percent to 0.40 percent in Fiscal Year 2006, 0.50 percent in Fiscal Year 2007 and 0.60 percent in Fiscal Year 2008 and beyond.

The 2007 Legislature passed SB 362 which created a new benefit structure for members first employed on or after July 1, 2009 (KPERS 2). The change was made partially due to long term funding considerations, but also in response to demographic changes in the membership.

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

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

- Increased the statutory cap on employer contribution rates to 0.9 percent in Fiscal Year 2014, 1.0 percent in Fiscal Year 2015, 1.1 percent in Fiscal Year 2016 and 1.2 percent in Fiscal Year 2017 and beyond.

- Contingent upon IRS approval, established an election by KPERS 1 members between different contribution rate and benefit levels. The legislation provided that, if the IRS rejected or did not take action to approve the election, KPERS 1 members would default to an increase in their employee contributions to 5 percent of compensation effective January 1, 2014, and 6 percent effective January 1, 2015, with an increase in the benefit multiplier to 1.85 percent beginning January 1, 2014, for future years of service only. Subsequently, the IRS issued a private letter ruling stating that the election granted to KPERS 1 members under 2012 HB 2333 was impermissible.

- For KPERS 2 members retiring after July 1, 2012, the cost of living adjustment (COLA) was eliminated, but members received a 1.85 percent multiplier for all years of service.

- Created a Cash Balance Plan for new hires beginning January 1, 2015. A cash balance plan is a type of defined benefit plan that includes some elements of a defined contribution plan and shares risk between the employer and employee. Each member has a hypothetical account that is credited with employee contributions, employer pay credits and interest credits. At retirement, the account balance is annuitized to create a guaranteed monthly benefit payable for the member's lifetime. Up to 30 percent of the account value at retirement may be paid as a lump sum.

- Beginning in Fiscal Year 2014, provided for the state to make additional contributions to help pay down KPERS' unfunded actuarial liability until the State/School group reaches a funded ratio of at least 80 percent. The revenue was to come from the Expanded Lottery Act Revenues Fund (ELARF). However, for Fiscal Year 2014 through 2017, the ELARF funds were appropriated as a partial funding source to meet the statutory contribution requirements for the School group rather than contributed in addition to the statutory contributions. Therefore, no additional funding of the unfunded actuarial liability has occurred. As a result, projections assume there will not be any additional payments to the unfunded actuarial liability from the ELARF funds.

- If the State of Kansas sells surplus real estate, 80 percent of the proceeds is to be used to pay down KPERS' unfunded actuarial liability until the System reaches an 80 percent funded ratio. However, 2016 SB 249 suspended this provision with respect to any sales of surplus real estate during Fiscal Year 2017 (subsequently removed by the 2022 legislature).

The 2014 Legislature passed HB 2533 which made changes to the KPERS 3 benefit structure, generally decreasing the portion of the benefit that is guaranteed, thereby increasing the risk-sharing portion of the benefit. The changes in House Bill 2533 were designed to further improve KPERS long term funding and to better manage investment risk.

The 2015 Legislature passed SB 4 which revised the State/School employer contribution rate from 11.27 percent to 8.65 percent for the last half of Fiscal Year 2015 to correspond with the Governor's allotment. In addition, 2015 SB 228 provided for bonds to be issued to improve the funded status of the State/School group and also reduced the previously certified employer contribution rates for Fiscal Year 2016 and 2017. The following provisions were included in SB 228:

- Net proceeds of up to $1.0 billion from bonds issued by the state of Kansas were to be deposited into the KPERS trust fund for the State/School group, subject to certain criteria. The bonds had to be issued at an interest rate no greater than 5.0 percent and approved by the State Finance Council (approval received July 2, 2015).

- Revised the previously certified State/School employer contribution rate from 12.37 percent to 10.91 percent for Fiscal Year 2016 and from 13.57 percent to 10.81 percent for Fiscal Year 2017. The statutory cap of 1.2 percent per year still applied to employer contribution rates in Fiscal Year 2018 and beyond.

The 2015 Legislature also passed House Bill 2095 that contained changes to the working after retirement provisions and implemented a pilot program in KP&F for a Deferred Option Retirement Plan for the Kansas Highway Patrol. Neither of these provisions had a significant impact on the long term funding of the System.

The 2016 Legislature passed House Sub for SB 168 which revised the rules pertaining to working after retirement. The bill also made technical and clarifying amendments to statutes related to death and disability contributions, KPERS 3 members, and the Deferred Retirement Option Program (DROP) for certain members of KP&F. None of these provisions had an impact on the December 31, 2015 valuation results. The 2016 Legislature also passed House Sub for SB 161 which provided for the delay of up to $100 million in State and School contributions for Fiscal Year 2016. House Sub for SB 249 provided that the delayed contributions would be repaid in full, with interest at 8 percent, by June 30, 2018. The Governor used this allotment authority to delay payments of $97.4 million for the State/School group and KP&F State contributions during the final quarter of Fiscal Year 2016. However, S Sub for Sub HB 2052, passed in the 2017 session, provided that the repayment of these contributions would not be paid (subsequent legislation passed by the 2019 Legislature repaid these delayed contributions).

The 2017 Legislature passed several bills that impacted the provisions and funding of KPERS:

- Senate Substitute for Substitute HB 2052 (S Sub for Sub HB 2052) provided that a portion of the contributions for the School group for Fiscal Year 2017 would be delayed so the total State/School contribution was $64.13 million less than the scheduled statutory contributions. The delayed employer contributions for Fiscal Year 2017 are repaid in level-dollar annual installments of $6.4 million over twenty years beginning in Fiscal Year 2018. These payments are determined as a contribution rate for School employers to be paid in addition to the statutory State/School contribution rate. Further, S Sub for Sub HB 2052 provided that the repayment of the contribution reduction from Fiscal Year 2016 with interest ($115 million), scheduled in Fiscal Year 2018, would not be paid (subsequent legislation passed by the 2019 Legislature repaid these delayed contributions).

- Senate Substitute for HB 2002 contained KPERS funding provisions for Fiscal Year 2018 and Fiscal Year 2019, including the following:

  - **Fiscal Year 2018:** The contribution for the State/School group for Fiscal Year 2018 was made at the scheduled statutory rate of 12.01 percent. In addition, the first installment of $6.4 million on the 20-year amortization of the delayed contributions for Fiscal Year 2017 was included.

  - **Fiscal Year 2019:** A portion of the employer contributions for School employers within the State/School group for Fiscal Year 2019 were delayed so the total employer contribution was $420 million, including the second installment of $6.4 million on the delayed contribution for Fiscal Year 2017. This resulted in an expected delay of $194 million to be repaid by the School group, as a level dollar amount over 20 years beginning in Fiscal Year 2020.

  - **Fiscal Year 2020:** The current statutory cap of 1.2 percent per year applied in determining the statutory contribution rate for the State/School group for Fiscal Year 2020. The certified statutory rate from Fiscal Year 2019 of 13.21 percent, without inclusion of the $6.4 million amortization of the delayed contributions in Fiscal Year 2017 and $19.4 million amortization of the delayed contributions in Fiscal Year 2019, was increased by 1.2 percent, resulting in a statutory contribution rate for Fiscal Year 2020 of 14.41 percent. The current statutory cap of 1.2 percent per year applies for all subsequent years.

- SB 205 changed the duty-related death benefit for KP&F members to the greater of 50 percent of Final Average Salary and the member's accrued retirement benefit under the 100 percent joint and survivor option, payable to the member's spouse. Including any benefits that may be due to child beneficiaries, the total monthly benefits may not exceed 90 percent of the member's Final Average Salary. Prior to this bill, the duty-related death benefit for a KP&F member was 50 percent of Final Average Salary, and the maximum available to the family was 75 percent of the member's Final Average Salary.

- House Substitute for SB 21 included changes to the working after retirement rules for members who retire on or after January 1, 2018. The key provisions of the bill were to lengthen the waiting period for KPERS members to return to work from 60 days to 180 days for members who retire before attaining age 62, remove the earnings limitation for all retirees, and establish a single employer contribution schedule for all retirees.

The 2018 Legislature passed House Substitute for Senate Bill 109 that provided for the following additional funding to the KPERS School group:

- An additional payment of $82 million in July 2018 (received by KPERS).
- A contingent additional payment of up to $56 million to be paid in Fiscal Year 2018, if actual Fiscal Year 2018 receipts exceed the consensus revenue estimates (full amount received in June, 2018).
- A contingent additional payment of up to $56 million to be paid in Fiscal Year 2019, if actual Fiscal Year 2019 receipts exceed the consensus revenue estimates (this payment was changed by the 2019 Legislature to a transfer of $51 million in Fiscal Year 2020 which was received by KPERS on July 1, 2019).

The 2019 Legislature passed two pieces of legislation that impacted the contributions to KPERS. Senate Bill 9 provided for a transfer of $115 million from the State General Fund to KPERS in March, 2019. This payment covered the $97 million in missed KPERS School contributions for Fiscal Year 2016 plus interest. The additional contribution lowered the State/School actuarial contribution rate by 0.29 percent. The 2019 Legislature also passed House Substitute for Senate Bill 25. This legislation repealed the actions of the 2018 Legislature which provided for a contingent payment of up to $56 million in Fiscal Year 2019, if actual Fiscal Year 2019 receipts exceeded the consensus revenue estimates. Instead, this legislation directly transferred $51 million to the KPERS Trust Fund in Fiscal Year 2020 (received by KPERS on July 1, 2019). The net reduction of $5 million did not have a significant impact on the valuation results.

The 2021 Legislature passed HB 2405, which provided for bonds to be issued to improve the funded status of the School group. As a result, net proceeds of up to $500 million from bonds issued by the state of Kansas are to be deposited into the KPERS trust fund for the School group, subject to certain criteria. The bonds must be issued at an interest rate no greater than 4.3 percent and approved by the State Finance Council. Due to the passage of HB 2405, SB 159, which was the 2021 legislative session's omnibus budget bill, included a provision to reduce the previously certified State/School employer contribution rates from 14.09 percent to 13.33 percent for Fiscal Year 2022 and from 13.86 percent to 13.11 percent for Fiscal Year 2023.

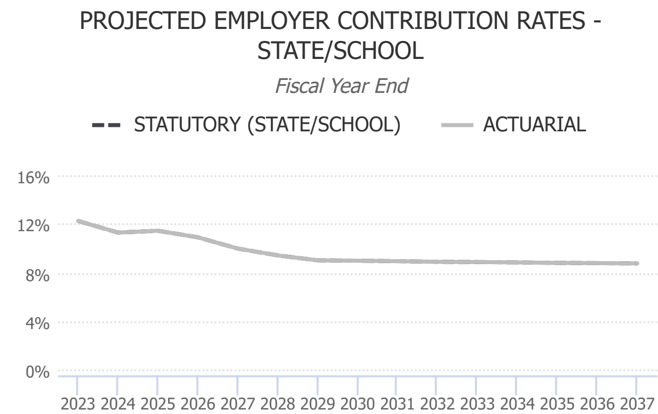
The 2022 legislature passed Senate Bill 421, which provided for additional contributions to KPERS during 2022, totaling $1.125 billion in four payments. The additional contributions provided in SB 421 are to be deposited into the KPERS trust fund for the School group (two received in May and June of 2022 and two additional contributions to be paid in August and December of 2022). SB 421 reflects the continued efforts of the Kansas Legislature and Governors in recent years to make incremental progress toward a stronger financial position.

The Board utilized re-amortization of the December 31, 2021 unfunded actuarial liability to help mitigate the impact of the assumption change on the employer contribution rates. The amortization periods vary for each system and were selected to meet the funding goals of each system. In subsequent valuations, the amortization policy will revert to the layered amortization methodology with new bases amortized over 20 years. While all of the groups (State/School, Local, KP&F, and Judges) are projected to reach a funded ratio of 100 percent, the actual funding progress will be heavily dependent on the actual investment experience of the System in future years, the continuation of the current statutory funding policy for the State/School group, and actual contributions at the statutory rate. Any material extension of the amortization periods will delay funding progress by reducing contributions in the short term and increasing them over the long term.

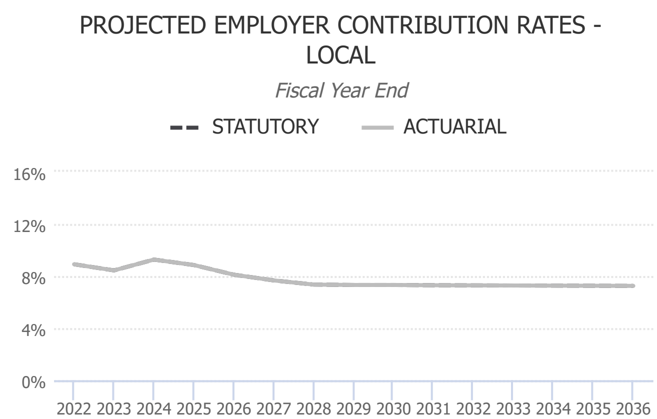
PROJECTED AND HISTORICAL EMPLOYER CONTRIBUTION RATES

The following graphs show the preliminary projected employer contribution rates assuming all actuarial assumptions are met in the future, including a 7.00 percent net rate of return on the market value of assets in all years, and that the current statutory funding policy for the State/School group (including the amortization policy) continues and contributions are made as scheduled. Note that we have not reflected any possible impact of the global pandemic upon either investment return or mortality experience because the significance of these impacts, if any, cannot be reasonably assessed at this time.

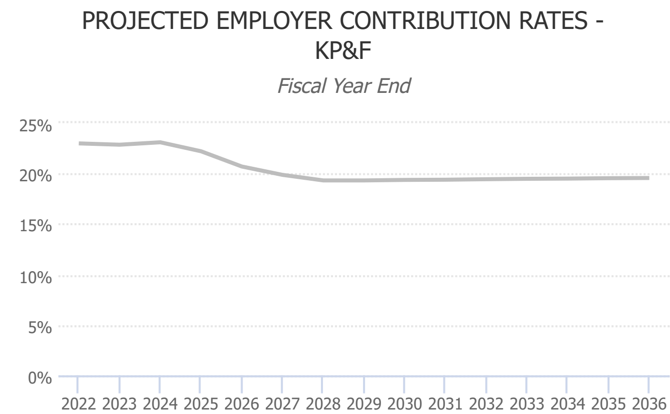
Note that although separate valuations are performed for the State and School groups, the statutory contribution rate for the two is determined using the combined valuation results for the two groups. Contributions which result from the excess of the statutory contribution rate over the actuarial required contribution rate for the State are allocated to the School to improve the funding of that group.



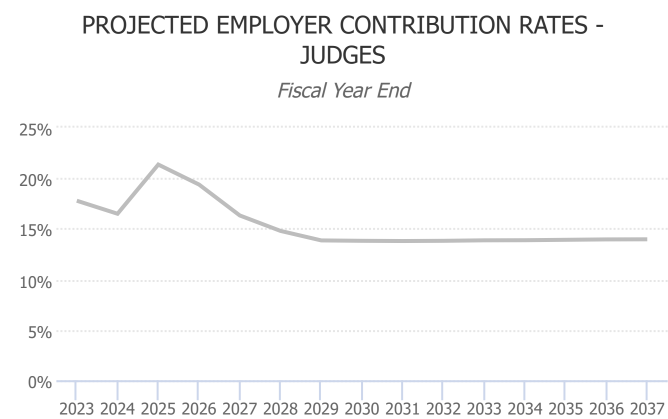
The State/School group reached the ARC date in the 2017 valuation (Fiscal Year 2021) at an ARC rate of 14.23 percent. Given the deferred investment experience, the contribution rate is expected to decrease from the current rate of 11.42 percent to around 9 percent and then remain steady. During the entire projection period, the statutory rate is expected to be equal to the ARC rate. Actual experience in future years, particularly investment returns, will significantly impact future actuarial and statutory rates.



The Local group reached the ARC date in the 2012 valuation at an ARC rate of 9.48 percent. The projected contribution rate is expected to decrease from the current rate of 8.90 percent to around 7.3 percent over the long term. Actual experience in future years, particularly investment returns, will significantly impact future actuarial and statutory rates.



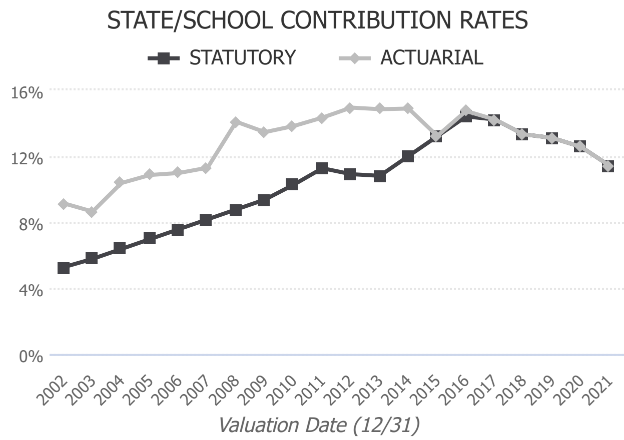
The projected employer contribution rate for KP&F is expected to remain steady around 20 percent after the deferred investment experience has been recognized through the asset smoothing method. However, actual experience in future years, particularly investment returns, will significantly impact future contribution rates.



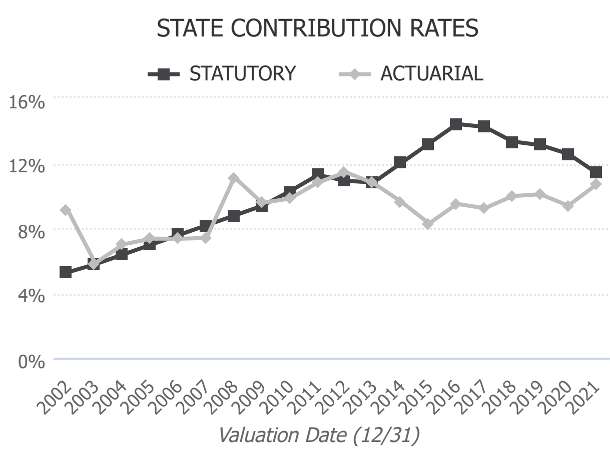
The employer contribution rate for Fiscal Year 2025 increased due to the assumption changes. The projected employer contribution rate is expected to decrease as the deferred investment experience is recognized through the asset smoothing method and the system moves toward full funding. Actual experience in future years, particularly investment returns, will significantly impact future employer contribution rates.

Historical contribution rates for each group are shown on the following pages. Please note that prior to the December 31, 2003 valuation, one contribution rate was developed for the State and School together as one group. Legislation passed in 2004 split the actuarial valuations into two separate groups, although the statutory contribution rate has still been determined on a combined basis. By statute, any excess of the statutory contribution over the actuarial required contribution for the State is allocated to the School group.

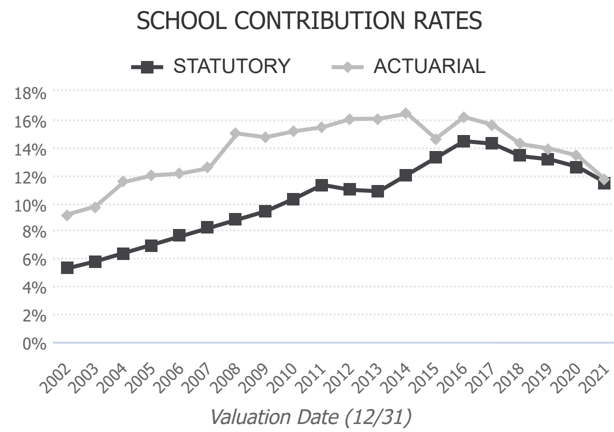
Significant changes to funding methods occurred in 2003, and the System received bond proceeds in 2004, 2015 and 2021. Also, additional contributions of $1.125 billion are to be contributed during 2022 for the School group. Actuarial assumptions were changed in the 2004, 2007, 2010, 2013, 2016, 2019 and 2021 valuations. These changes impact the comparability of contribution rates between various valuation dates.



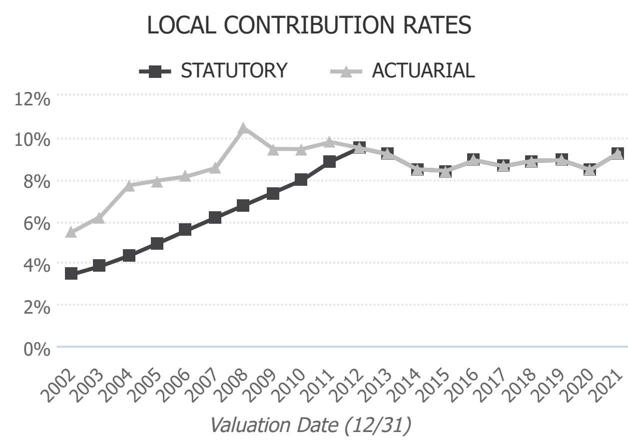
Numerous factors have contributed to the increase in the ARC rate for the State/School group over much of this period including investment experience, changes in actuarial assumptions, and contributions significantly below the actuarial rate. Due to favorable investment experience during 2021 and re-amortization of the UAL in conjunction with lowering the assumed rate of return, the ARC rate decreased.



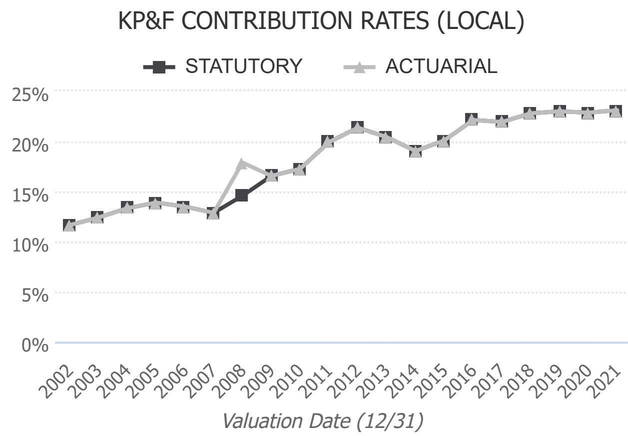
The split of the State group into a separate group with the 2003 valuation, coupled with the bond issue, lowered the State ARC rate. The State reached the full ARC rate in the 2010 valuation and has remained at ARC except for the recertification of the statutory contribution rate for Fiscal Year 2017 from 12.37 percent to 10.91 percent. In this valuation, the State's ARC rate increased to 10.66 percent, due to assumption changes adopted since last year.



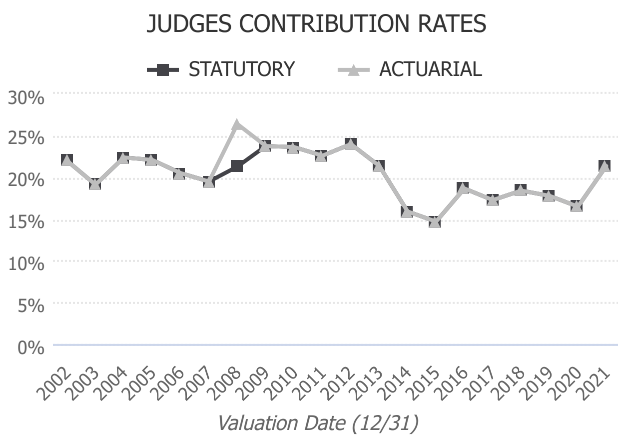
Due to investment experience, changes in actuarial assumptions, and the magnitude of the difference between the actuarial and statutory contribution rates, the ARC rate increased during the early part of this period. Increases to the statutory contribution rate, contribution sharing from the State group and additional contributions have helped to stabilize the ARC rate.



The Local contribution rate has also been impacted by changes in actuarial assumptions and methods as well as investment performance. With the significant changes in 2012 Sub House Bill 2333 and favorable investment returns, the statutory contribution rate was equal to the ARC rate in the 2012 valuation. In this valuation, the Local group's ARC rate increased to 9.26 percent, due to the change in assumptions.



Investment experience in 2008, 2011, and 2018 resulted in higher contribution rates in the latter part of the period. The assumption changes reflected in the 2016 valuation also increased the contribution rate. Favorable investment experience during 2021 and re-amortization of the increase in the unfunded actuarial liability due to the change in assumptions resulted in a small increase in the ARC rate for the KP&F System.



Investment experience in 2008 and 2011 resulted in higher contribution rates in the middle of the period. The assumption changes reflected in the 2016 valuation increased the contribution rate, but assumption changes in the 2019 valuation decreased the contribution rate. Favorable investment experience during 2021 and re-amortization of the unfunded actuarial liability were insufficient to fully mitigate the impact of the assumption change and the contribution rate increased.

SUMMARY OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY BY SYSTEM

December 31, 2021 Valuation ($ Millions)

	State	School	State/ School	Local	KP&F	Judges	Total
UAL in 12/31/2020 Valuation Report	**$ 886.1**	**$ 5,257.3**	**$ 6,143.4**	**$ 1,419.6**	**$ 918.6**	**$ 6.5**	**$ 8,488.0**
· Effect of Contribution Cap	-	-	-	-	-	-	-
· Expected Decrease Due to UAL Amortization	(23.2)	(173.7)	(196.9)	(60.7)	(23.8)	(1.2)	(282.6)
· Actual vs. Expected Experience							
Investment Return	(122.1)	(343.3)	(465.4)	(145.4)	(86.8)	(5.8)	(703.4)
Demographic Experience	(16.5)	123.9	107.4	37.8	4.8	(2.9)	147.1
All Other Experience	(1.6)	(36.8)	(38.4)	(1.4)	0.1	(0.1)	(39.8)
· Change in Actuarial Assumptions	366.2	1,476.2	1,842.4	533.8	327.8	13.7	2,717.7
· Bond Proceeds	-	(500.0)	(500.0)	-	-	-	(500.0)
UAL in 12/31/2021 Valuation Report	**$ 1,088.9**	**$ 5,803.6**	**$ 6,892.5**	**$ 1,783.7**	**$ 1,140.7**	**$ 10.2**	**$ 9,827.0**

Note: Numbers may not add due to rounding.

SUMMARY OF CHANGES IN EMPLOYER ACTUARIAL CONTRIBUTION RATE BY SYSTEM

As Of December 31, 2021

Percentage of Payroll	State	School	State/ School	Local	KP&F (1)	Judges
Actuarial Contribution Rate in 12/31/2020 Valuation	**9.38%**	**13.38%**	**12.57%**	**8.43%**	**22.86%**	**16.48%**
Change Due to Amortization of UAL						
· Effect of Contribution Cap	-	-	-	-	-	-
· UAL Amortization	-	-	-	-	-	(0.05)
· Investment Experience	(0.99)	(0.66)	(0.72)	(0.60)	(1.17)	(2.06)
· Liability Experience	(0.13)	0.24	0.17	0.16	0.06	(1.03)
· All Other Experience	-	(0.20)	(0.17)	(0.09)	(0.12)	(0.44)
· Payroll Growth	0.38	(0.13)	-	0.19	0.20	-
· Additional Contributions in Upcoming Year	-	(1.63)	(1.30)	-	-	-
· Change in Assumptions	2.42	2.31	2.33	1.74	3.55	3.79
· UAL Reamortization	(1.38)	(2.89)	(2.61)	(1.46)	(4.79)	1.70
Change in Employer Normal Cost Rate						
· Benefit Changes	-	-	-	-	-	-
· Change in Assumptions	1.02	1.25	1.21	0.95	2.50	2.85
· All Other Experience	(0.04)	(0.07)	(0.06)	(0.06)	0.01	0.11
Actuarial Contribution Rate in 12/31/2021 Valuation	**10.66%**	**11.60%**	**11.42%**	**9.26%**	**23.10%**	**21.35%**

(1) Contribution rate for Local employers only.

Note: Numbers may not add due to rounding.

SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL

As of December 31, 2021 Valuation

	As Reported on Valuation Date							
$(millions)	6/30/94	6/30/95	6/30/96	6/30/97	6/30/98	6/30/99	6/30/00	12/31/00
Actual Experience vs. Assumed								
· Investment	$ (102)	$ (143)	$ (280)	$ (323)	$ (413)	$ (369)	$ (441)	$ (23)
· Other	320	72	136	157	104	46	99	84
Assumption Changes	-	(96)	-	-	350	-	-	(206)
Changes in Data/Procedures	244	-	-	-	-	21	71	145 **
Change in Cost Method	-	-	-	-	-	-	-	-
Effect of Contribution Cap/Lag	*	95	70	63	54	78	66	60
Amortization Method	*	47	38	35	32	30	22	12
Change in Benefit Provisions	75	-	-	-	88	-	19	-
Change in Actuarial Firm/Software	-	-	-	-	-	-	-	-
Bond Issue	-	-	-	-	-	-	-	-
Non-Collectible Pension Contributions	-	-	-	-	-	-	-	-
Additional Contributions	-	-	-	-	-	-	-	-
Total	$ 537	$ (25)	$ (36)	$ (68)	$ 215	$ (194)	$ (164)	$ 72

$(millions)	12/31/01	12/31/02	12/31/03	12/31/04	12/31/05	12/31/06	12/31/07	12/31/08
Actual Experience vs. Assumed								
· Investment	$ 350	$ 644	$ 140	$ 456	$ 167	$ (293)	$ (626)	$ 2,332
· Other	(9)	68	(32)	16	(84)	140	99	78
Assumption Changes	-	-	-	437	(5)	-	384	-
Changes in Data/Procedures	5	177 **	(286)***	-	-	-	-	-
Change in Cost Method	-	-	1,147	-	-	-	-	-
Effect of Contribution Cap/Lag	115	143	178	179	247	258	251	246
Amortization Method	14	21	47	68	84	83	78	71
Change in Benefit Provisions	-	37	3	1	-	24	2	-
Change in Actuarial Firm/Software	-	-	-	-	-	-	-	-
Bond Issue	-	(41)	(440)	-	-	-	-	-
Non-Collectible Pension Contributions	-	-	-	-	-	-	-	-
Additional Contributions	-	-	-	-	-	-	-	-
Total	$ 475	$ 1,049	$ 757	$ 1,157	$ 409	$ 212	$ 188	$ 2,727

Unfunded actuarial liability 6/30/93: $968 million

Unfunded actuarial liability 12/31/21: $9,827 million

** 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 in actuarial procedures is included.*

****Change in asset valuation method.*

Note: Although a total column is shown, the amounts in each year are not additive because they are calculated on each valuation date and, therefore, represent values at different points in time.

SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL

As of December 31, 2021 Valuation (continued)

As Reported on Valuation Date

$(millions)	12/31/09	12/31/10	12/31/11	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16
Actual Experience vs. Assumed								
· Investment	$ (1,011)	$ 560	$ 852	$ 732	$ (653)	$ (368)	$ 52	$ (59)
· Other	(70)	(334)	(190)	(78)	(125)	(78)	(130)	(144)
Assumption Changes	-	-	(64)	-	-	(50)	-	593
Changes in Data/Procedures	-	-	-	-	-	-	-	-
Change in Cost Method	-	-	-	-	-	-	-	-
Effect of Contribution Cap/Lag	383	320	289	303	246	178	160	70
Amortization Method	96	68	62	49	46	18	(11)	(38)
Change in Benefit Provisions	-	-	15	19	-	1	-	1
Change in Actuarial Firm/Software	-	(27)	-	-	-	-	-	-
Bond Issue	-	-	-	-	-	-	(1,000)	-
Non-Collectible Pension Contributions	-	-	-	-	-	-	-	99
Additional Contributions	-	-	-	-	-	-	-	-
Total	$ (602)	$ 587	$ 964	$ 1,025	$ (487)	$ (298)	$ (929)	$ 522

$(millions)	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21	Total
Actual Experience vs. Assumed						
· Investment	$ (117)	$ 476	$ 210	$ (316)	$ (703)	$ 731
· Other	(50)	69	32	14	107	317
Assumption Changes	-	-	(51)	-	2,718	4,010
Changes in Data/Procedures	-	-	(60)	-	-	317
Change in Cost Method	-	-	-	-	-	1,147
Effect of Contribution Cap/Lag	149	64	18	8	-	4,291
Amortization Method	(136)	(171)	(169)	(225)	(283)	(12)
Change in Benefit Provisions	-	-	-	-	-	285
Change in Actuarial Firm/Software	-	-	-	-	-	(27)
Bond Issue	-	-	-	-	(500)	(1,981)
Non-Collectible Pension Contributions	-	-	-	-	-	99
Additional Contributions	-	(143)	(175)	-	-	(318)
Total	$ (154)	$ 295	$ (195)	$ (519)	$ 1,339	$ 8,859

Unfunded actuarial liability 6/30/93: $968 million

Unfunded actuarial liability 12/31/21: $9,287 million

** 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 in actuarial procedures is included.*

****Change in asset valuation method.*

Note: Although a total column is shown, the amounts in each year are not additive because they are calculated on each valuation date and, therefore, represent values at different points in time.

SUMMARY OF PRINCIPAL RESULTS – KPERS (STATE)

	12/31/2021 Valuation	12/31/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	19,917	20,796	(4.2%)
Retired Members and Beneficiaries	21,245	21,006	1.1%
Inactive Members	10,420	9,767	6.7%
Total Members	51,582	51,569	0.0%
Projected Annual Salaries of Active Members	$ 986,319,991	$ 1,010,938,843	(2.4%)
Annual Retirement Payments for Retired Members and Beneficiaries	$ 326,991,078	$ 316,931,099	3.2%
2. ASSETS AND LIABILITIES			
a. Total Actuarial Liability	$ 5,081,356,586	$ 4,675,069,483	8.7%
b. Assets for Valuation Purposes	$ 3,992,460,657	$ 3,788,989,089	5.4%
c. Unfunded Actuarial Liability (a) - (b)	$ 1,088,895,929	$ 886,080,394	22.9%
d. Funded Ratio (b) / (a)	78.6%	81.0%	(3.0%)
e. Market Value of Assets	$ 4,346,193,928	$ 3,950,313,620	10.0%
f. Funded Ratio on Market Value (e) / (a)	85.5%	84.5%	1.2%
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost			
Total	8.37%	7.39%	
Member	6.00	6.00	
Employer	2.37	1.39	
Amortization of Unfunded Actuarial Liability	8.29	7.99	
Actuarial Contribution Rate	10.66	9.38	
Statutory Employer Contribution Rate*	11.42%	12.57%	

**The rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.20 percent for Fiscal Year 2017 and later. This rate excludes the contribution rate for the Death and Disability Program. Any excess of the statutory over actuarial contribution rates applied to actual State payroll is deposited to the School assets.*

SUMMARY OF PRINCIPAL RESULTS – KPERS (SCHOOL)

		12/31/2021 Valuation		12/31/2020 Valuation	% Change
1. PARTICIPANT DATA					
Number of:					
Active Members		87,898		87,660	0.3%
Retired Members and Beneficiaries		59,421		57,933	2.6%
Inactive Members		35,672		33,215	7.4%
Total Members		182,991		178,808	2.3%
Projected Annual Salaries of Active Members	$	4,171,847,937	$	3,994,624,047	4.4%
Annual Retirement Payments for Retired Members and Beneficiaries	$	977,887,263	$	936,499,764	4.4%
2. ASSETS AND LIABILITIES					
a. Total Actuarial Liability	$	18,458,327,614	$	16,384,616,149	12.7%
b. Assets for Valuation Purposes	$	12,654,731,986	$	11,127,320,391	13.7%
c. Unfunded Actuarial Liability (a) - (b)	$	5,803,595,628	$	5,257,295,758	10.4%
d. Funded Ratio (b) / (a)		68.6%		67.9%	1.0%
e. Market Value of Assets	$	13,681,117,891	$	11,582,439,853	18.1%
f. Funded Ratio on Market Value (e) / (a)		74.1%		70.7%	4.8%
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL					
Normal Cost					
Total		9.01%		7.83%	
Member		6.00		6.00	
Employer		3.01		1.83	
Amortization of Unfunded Actuarial Liability		8.59		11.55	
Actuarial Contribution Rate		11.60		13.38	
Statutory Employer Contribution Rate*		11.42%		12.57%	

**The rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.20 percent for Fiscal Year 2017 and later. This rate excludes the contribution rate for the Death and Disability Program.*

SUMMARY OF PRINCIPAL RESULTS – KPERS (STATE/SCHOOL)

	12/31/2021 Valuation	12/31/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	107,815	108,456	(0.6%)
Retired Members and Beneficiaries	80,666	78,939	2.2%
Inactive Members	46,092	42,982	7.2%
Total Members	234,573	230,377	1.8%
Projected Annual Salaries of Active Members	$ 5,158,167,928	$ 5,005,562,890	3.0%
Annual Retirement Payments for Retired Members and Beneficiaries	$ 1,304,878,341	$ 1,253,430,863	4.1%
2. ASSETS AND LIABILITIES			
a. Total Actuarial Liability	$ 23,539,684,200	$ 21,059,685,632	11.8%
b. Assets for Valuation Purposes	$ 16,647,192,643	$ 14,916,309,480	11.6%
c. Unfunded Actuarial Liability (a) - (b)	$ 6,892,491,557	$ 6,143,376,152	12.2%
d. Funded Ratio (b) / (a)	70.7%	70.8%	(0.1%)
e. Market Value of Assets	$ 18,027,311,819	$ 15,532,753,473	16.1%
f. Funded Ratio on Market Value (e) / (a)	76.6%	73.8%	3.8%
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost			
Total	8.89%	7.74%	
Member	6.00	6.00	
Employer	2.89	1.74	
Amortization of Unfunded Actuarial Liability	8.53	10.83	
Actuarial Contribution Rate	11.42	12.57	
Statutory Employer Contribution Rate*	11.42%	12.57%	

**The rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.20 percent for Fiscal Year 2017 and later. This rate excludes the contribution rate for the Death and Disability Program.*

SUMMARY OF PRINCIPAL RESULTS – KPERS (LOCAL)

	12/31/2021 Valuation	12/31/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	36,436	37,424	(2.6%)
Retired Members and Beneficiaries	23,546	22,702	3.7%
Inactive Members	21,817	19,795	10.2%
Total Members	81,799	79,921	2.3%
Projected Annual Salaries of Active Members	$ 1,904,813,147	$ 1,901,233,030	0.2%
Annual Retirement Payments for Retired Members and Beneficiaries	$ 327,292,961	$ 304,535,627	7.5%
2. ASSETS AND LIABILITIES			
a. Total Actuarial Liability	$ 6,683,865,360	$ 5,928,449,959	12.7%
b. Assets for Valuation Purposes	$ 4,900,179,034	$ 4,508,889,608	8.7%
c. Unfunded Actuarial Liability (a) - (b)	$ 1,783,686,326	$ 1,419,560,351	25.7%
d. Funded Ratio (b) / (a)	73.3%	76.1%	(3.7%)
e. Market Value of Assets	$ 5,326,275,739	$ 4,699,700,683	13.3%
f. Funded Ratio on Market Value (e) / (a)	79.7%	79.3%	0.5%
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost			
Total	8.15%	7.26%	
Member	6.00	6.00	
Employer	2.15	1.26	
Amortization of Unfunded Actuarial Liability	7.11	7.17	
Actuarial Contribution Rate	9.26	8.43	
Statutory Employer Contribution Rate*	9.26%	8.43%	

**The Statutory Employer Contribution Rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.20 percent for Fiscal Year 2017 and later. This rate excludes the contribution rate for the Death and Disability Program.*

SUMMARY OF PRINCIPAL RESULTS – KPERS (TOTAL KPERS)

	12/31/2021 Valuation	12/31/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	144,251	145,880	(1.1%)
Retired Members and Beneficiaries	104,212	101,641	2.5%
Inactive Members	67,909	62,777	8.2%
Total Members	316,372	310,298	2.0%
Projected Annual Salaries of Active Members	$ 7,062,981,075	$ 6,906,795,920	2.3%
Annual Retirement Payments for Retired Members and Beneficiaries	$ 1,632,171,302	$ 1,557,966,490	4.8%
2. ASSETS AND LIABILITIES			
a. Total Actuarial Liability	$ 30,223,549,560	$ 26,988,135,591	12.0%
b. Assets for Valuation Purposes	$ 21,547,371,677	$ 19,425,199,088	10.9%
c. Unfunded Actuarial Liability (a) - (b)	$ 8,676,177,883	$ 7,562,936,503	14.7%
d. Funded Ratio (b) / (a)	71.3%	72.0%	(1.0%)
e. Market Value of Assets	$ 23,353,587,558	$ 20,232,454,156	15.4%
f. Funded Ratio on Market Value (e) / (a)	77.3%	75.0%	3.1%

SUMMARY OF PRINCIPAL RESULTS – KANSAS POLICE AND FIREMEN'S RETIREMENT SYSTEM

	12/31/2021 Valuation	12/31/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	7,779	7,835	(0.7%)
Retired Members and Beneficiaries	6,055	5,890	2.8%
Inactive Members	2,304	2,007	14.8%
Total Members	16,138	15,732	2.6%
Projected Annual Salaries of Active Members	$ 579,152,470	$ 570,630,955	1.5%
Annual Retirement Payments for Retired Members and Beneficiaries	$ 221,834,375	$ 210,666,075	5.3%
2. ASSETS AND LIABILITIES			
a. Total Actuarial Liability	$ 4,190,420,489	$ 3,721,643,474	12.6%
b. Assets for Valuation Purposes	$ 3,049,754,807	$ 2,803,042,592	8.8%
c. Unfunded Actuarial Liability (a) - (b)	$ 1,140,665,682	$ 918,600,882	24.2%
d. Funded Ratio (b) / (a)	72.8%	75.3%	(3.3%)
e. Market Value of Assets	$ 3,313,453,368	$ 2,918,249,554	13.5%
f. Funded Ratio on Market Value (e) / (a)	79.1%	78.4%	0.9%
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost			
Total	17.53%	15.02%	
Member	7.15	7.15	
Employer	10.38	7.87	
Amortization of Unfunded Actuarial and Supplemental Liability	12.72	14.99	
Actuarial Contribution Rate (Local Employers)	23.10	22.86	
Statutory Employer Contribution Rate*	23.10%	22.86%	

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

SUMMARY OF PRINCIPAL RESULTS – KANSAS RETIREMENT SYSTEM FOR JUDGES

	12/31/2021 Valuation	12/31/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	258	244	5.7%
Retired Members and Beneficiaries	319	319	0.0%
Inactive Members	11	9	22.2%
Total Members	588	572	2.8%
Projected Annual Salaries of Active Members	$ 30,258,777	$ 28,471,730	6.3%
Annual Retirement Payments for Retired Members and Beneficiaries	$ 13,983,420	$ 13,783,400	1.5%
2. ASSETS AND LIABILITIES			
a. Total Actuarial Liability	$ 216,826,355	$ 200,523,122	8.1%
b. Assets for Valuation Purposes	$ 206,666,420	$ 194,057,436	6.5%
c. Unfunded Actuarial Liability (a) - (b)	$ 10,159,935	$ 6,465,686	57.1%
d. Funded Ratio (b) / (a)	95.3%	96.8%	(1.5%)
e. Market Value of Assets	$ 224,787,235	$ 201,931,613	11.3%
f. Funded Ratio on Market Value (e) / (a)	103.7%	100.7%	3.0%
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost			
Total	23.28%	20.32%	
Member	5.62	5.63	
Employer	17.66	14.69	
Amortization of Unfunded Actuarial and Supplemental Liability	3.69	1.79	
Actuarial Contribution Rate	21.35	16.48	
Statutory Employer Contribution Rate*	21.35%	16.48%	

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

SUMMARY OF PRINCIPAL RESULTS – ALL SYSTEMS COMBINED

	12/31/2021 Valuation	12/31/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	152,288	153,959	(1.1%)
Retired Members and Beneficiaries	110,586	107,850	2.5%
Inactive Members	70,224	64,793	8.4%
Total Members	333,098	326,602	2.0%
Projected Annual Salaries of Active Members	$ 7,672,392,322	$ 7,505,898,605	2.2%
Annual Retirement Payments for Retired Members and Beneficiaries	$ 1,867,989,097	$ 1,782,415,965	4.8%
2. ASSETS AND LIABILITIES			
a. Total Actuarial Liability	$ 34,630,796,404	$ 30,910,302,187	12.0%
b. Assets for Valuation Purposes	$ 24,803,792,904	$ 22,422,299,116	10.6%
c. Unfunded Actuarial Liability (a) - (b)	$ 9,827,003,500	$ 8,488,003,071	15.8%
d. Funded Ratio (b) / (a)	71.6%	72.5%	(1.2%)
e. Market Value of Assets	$ 26,891,828,161	$ 23,352,635,323	15.2%
f. Funded Ratio on Market Value (e) / (a)	77.7%	75.5%	2.9%

SUMMARY OF PLAN PROVISIONS

PLAN MEMBERSHIP

The Kansas Public Employees Retirement System (the Retirement System, or, the System), is an umbrella organization administering three statewide retirement systems: the Kansas Public Employees Retirement System (KPERS), the Kansas Police and Firemen's Retirement System (KP&F), and the Kansas Retirement System for Judges. All three systems are defined benefit, contributory plans that cover nearly all public employees in Kansas. The Kansas Retirement System for Judges is a single employer plan, while the other two are cost-sharing, multiple employer plans. Participation by the State of Kansas is mandatory, whereas participation by local political subdivisions is optional, but irrevocable once elected. Benefit payments are also provided for a certain group of legislative employees.

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

SUMMARY OF PLAN PROVISIONS

KPERS 1 refers to members before July 1, 2009. KPERS 2 refers to members who either began their participation or rehired on or after July 1, 2009, but before January 1, 2015. KPERS 3 refers to non-corrections members who either began their participation or rehired on or after January 1, 2015. Corrections members do not participate in KPERS 3.

This valuation reflects the benefit structure in place as of December 31, 2021.

EMPLOYEE MEMBERSHIP

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

NORMAL RETIREMENT

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

KPERS 2 & 3: (a) Age 65 with 5 years of credited service or (b) age 60 with 30 years of credited service.

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

KPERS 3: KPERS 3 members participate in a cash balance plan with benefits based on the Annuity Savings Account balance, the Retirement Annuity Account balance, and an annuity factor. The member's annuity factor at retirement is based on the member's age and benefit payment form. The current annuity factors were adopted by the Board upon recommendation of the actuary. They are expected to be updated periodically. The interest rate used to calculate the current annuity factors is 5.00 percent (7.00 percent assumed investment return, minus 2.00 percent), and the mortality table used is a set of blended mortality rates from the current post-retirement mortality assumptions for KPERS members. The blended mortality rates are projected to 2030 using improvement scale MP-2016. The weighting used to blend the mortality rates is shown in the following table:

	Members	Beneficiaries
State – Males	17.5%	42.5%
State – Females	42.5%	17.5%
School – Males	7.5%	8.5%
School – Females	8.5%	7.5%
Local – Males	12.5%	11.5%
Local– Females	11.5%	12.5%

A member's Annuity Savings Account balance is the sum of mandatory member contributions plus the interest credits and dividends on those contributions. A member's Retirement Annuity Account is the sum of all employer retirement credits to the account plus the interest credits and dividends on those credits.

Mandatory member contributions are 6 percent of compensation. The employer retirement credits schedule follows:

Years of Service	Retirement Credit Rate
Less than 5	3%
5 – 11	4%
12 – 23	5%
24 or more	6%

Interest credits are 4 percent per annum, paid quarterly. The interest credits are based on the account balances as of the last day of the preceding quarter. There is also a possibility of additional interest credits, depending on KPERS' investment return. These additional interest credits are called "dividends" and are equal to 75 percent of the five-year average net compound rate of return, as determined by the Board, for the preceding calendar year and the previous four calendar years on the market value of assets that is above 6.0 percent. A schedule of historical dividend rates is contained in the following table:

Year	Applicable Rate of Return	Compound Average	Dividend
2017	14.0%	7.4%	1.100%
2018	(2.9%)	4.7%	0.000%
2019	17.1%	7.1%	0.825%
2020	11.1%	9.3%	2.475%
2021	15.7%	10.7%	3.525%

Prior Service Credit – Prior service credit is 0.75 percent or 1.00 percent of final average salary per year [School employees receive 0.75 percent of final average salary for each year of prior service that is not credited under the former Kansas School Retirement System (KSRS)].

PARTICIPATING SERVICE CREDIT

KPERS 1: Participating service credit is 1.75 percent of final average salary for years of service prior to January 1, 2014. Participating service credit is 1.85 percent of final average salary for years of service after December 31, 2013.

KPERS 2: For those retiring on or after January 1, 2012, participating service credit is 1.85 percent for all years of service.

KPERS 3: Not applicable for the Cash Balance Plan.

EARLY RETIREMENT

Eligibility – Eligibility is age 55 and 10 years of credited service.

Benefit – KPERS 1: The normal retirement benefit is reduced 0.2 percent per month for each month between the ages of 60 and 62, and 0.6 percent for each month between the ages of 55 and 60.

KPERS 2: The normal retirement benefit is reduced actuarially for early commencement. The reduction factor is 35.0 percent at age 60 and 57.5 percent at age 55. If the member has 30 years of credited service, the early retirement reduction is less (50 percent of regular reduction).

KPERS 3: The early retirement benefit is determined in the same manner as a normal retirement benefit, but is based on the account balances and annuity factor at the member's retirement age.

VESTING REQUIREMENTS

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

Benefit – KPERS 1 & 2: 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.

KPERS 3: Retirement benefits are payable when the vested member meets the retirement eligibility requirements and is based on the member's account balances at retirement. The member's vested account will be granted interest credits and dividends during the deferral period between termination of employment and retirement.

OTHER BENEFITS

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

Disability Benefit – KPERS 1 & 2: Members receiving disability benefits under the KPERS Death and Disability Benefits Program continue to receive service credit under KPERS. If a disabled member retires after receiving disability benefits for at least five years immediately preceding retirement, the member's final average salary is adjusted by the actuarial salary increase assumption rates in existence during the member's period of disability prior to July 1, 1993, 5 percent per year to July 1998 and the change in CPI-U less 1 percent, not to exceed 4 percent after July 1998.

KPERS 3: For any KPERS 3 member who becomes disabled, such member's Annuity Savings Account and Retirement Annuity Account will be credited with employee contributions, employer retirement credits, interest credits and dividends for the entire period of disability, but no later than the member's normal retirement age. The salary upon which credits are based shall be the employee's salary at the time of disability. After five years of disability, the underlying salary shall be increased by the lesser of (a) the percentage increase in CPI-U, minus 1 percent, and (b) 4 percent per annum.

Death Benefits – Pre-retirement death (non-service connected) – KPERS 1 & 2: The member's accumulated contributions plus interest are paid in a lump sum to the designated beneficiary. In lieu of receiving the member's accumulated contributions, the surviving spouse of a member who is eligible to retire at death may elect to receive benefits under any survivor option. The spouse must be the member's sole designated beneficiary to exercise this option. If the member had at least 10 years of credited service, but had not reached retirement age, the spouse may elect to leave the member's contributions on deposit with the System and receive a monthly benefit to begin on the date the member would have been eligible to retire.

KPERS 3: If a vested member dies before attaining normal retirement age, the member's surviving spouse shall receive an annuity on the date the member would have attained normal retirement age had such member not died. The benefit is based upon the member's Annuity Savings Account and Retirement Annuity Account, and is payable as a single life annuity with 10-year certain.

Service-Connected Accidental Death – The member's accumulated contributions plus interest, plus lump sum amount of $50,000, plus annual benefit based on 50 percent of final average salary; reduced by Workers' Compensation benefits and subject to a minimum benefit of $100 a month; are payable to a spouse, minor children or dependent parents, for life, or until the youngest child reaches age 18 (or up to age 23 if they are full-time students), in this order of preference. The monthly accidental death benefit is in lieu of any joint/survivor benefit for which the surviving spouse would have been eligible. For KPERS 3 members, final average salary equals the average of the three final years of salary.

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

MEMBER CONTRIBUTIONS

KPERS 1: Prior to January 1, 2014, member contributions were 4 percent of compensation for KPERS 1. 2012 HB 2333 established an election by KPERS 1 members, contingent upon IRS approval, between different contribution rate and benefit levels. The legislation provided that, if the IRS rejected or did not take action to approve the election, KPERS 1 members would default to an increase in their employee contributions to 5 percent of compensation effective January 1, 2014, and 6 percent effective January 1, 2015, with an increase in the benefit multiplier to 1.85 percent beginning January 1, 2014, for future years of service only. Subsequently, the IRS issued a private letter ruling stating that the election granted to KPERS 1 members under 2012 HB 2333 was impermissible.

KPERS 2: The member contribution rate for KPERS 2 is 6 percent of compensation.

KPERS 3: The member contribution rate for KPERS 3 is 6 percent of compensation.

INTEREST ON MEMBER CONTRIBUTIONS

KPERS 1: Interest is credited to members' contribution accounts on June 30 each year, based on the account balance as of the preceding December 31. Those who became members prior to July 1, 1993, have interest credited to their accounts at the rate of 7.75 percent per year. Those who become members on and after July 1, 1993, have interest credited to their accounts at the rate of 4 percent per year.

KPERS 2: Interest is credited to members' contribution accounts on June 30 each year, based on the account balance as of the preceding December 31, at the rate of 4 percent per year.

KPERS 3: Interest credited varies by years of service. Please refer to the KPERS 3 Benefit section under Normal Retirement in these Plan Provisions.

EMPLOYER CONTRIBUTIONS

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

BOARD OF REGENTS PLAN MEMBERS (TIAA AND EQUIVALENTS)

Board of Regents plan members (TIAA and equivalents) do not make contributions to KPERS.

Group A: Joined the Board of Regents prior to January 1, 1962. These members receive prior service benefits for service before 1962. The benefit is 1.00 percent of final average salary for each year of credited prior service. The final average salary is calculated using current pay as a member of the Board of Regents, if higher than pay received under KPERS. Service after 1961 is counted for purposes of determining eligibility for vesting.

Group B: Joined the Board of Regents after January 1, 1962, but prior to July 1, 1998. These members receive prior service benefits for service credited under KPERS. The benefit is 1.75 percent of final average salary for each year of credited prior service. The final average salary is calculated using current pay as a member of the Board of Regents, if higher than pay received under KPERS. Service after joining the Board of Regents is counted for purposes of determining eligibility for vesting.

Group C: Joined the Board of Regents after July 1, 1998. These members receive prior service benefits for service credited under KPERS. The benefit is 1.75 percent or 1.85 percent (as applicable under the KPERS 1 and KPERS 2 benefit provisions) of final average salary for each year of credited prior service. The final average salary is calculated using current pay as a member of the Board of Regents, if higher than pay received under KPERS. Service after 1961 is counted for purposes of determining eligibility for vesting.

CORRECTIONAL MEMBERS

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

KPERS 1: For groups (a) and (b) with at least 3 consecutive years of credited service in such positions immediately preceding retirement, normal retirement age is 55 or Rule of 85; and early retirement requirements are age 50 with 10 years of credited service. For groups (c), (d), (e) and (f) with at least 3 consecutive years of service in such positions immediately preceding retirement, normal retirement age is 60 or Rule of 85, and early retirement requirements are 55 with 10 years of credited service.

KPERS 2: For groups (a) and (b) with at least 3 consecutive years of credited service in such positions immediately preceding retirement, normal retirement age is 55 with 10 years of credited service, and early retirement requirements are age 50 with 10 years of credited service. For groups (c), (d), (e) and (f) with at least 3 consecutive years of service in such positions immediately preceding retirement, normal retirement age is 60 with 10 years of credited service, and early retirement requirements are 55 with 10 years of credited service.

COST-OF-LIVING ADJUSTMENTS (COLAS)

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

KPERS 3: Upon retirement, the benefit option selected by the member may include a self-funded cost of living adjustment feature, in which the account value is converted to a benefit amount that increases by a fixed percentage over time.

KANSAS POLICE & FIREMEN'S RETIREMENT SYSTEM

NORMAL RETIREMENT

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

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

Benefits – Benefits are based on the member's final average salary. For those who were hired prior to July 1, 1993, final average salary equals the average of the highest three of the last five years of credited participating service, including add-ons, such as sick and annual leave. For those who are hired on or after July 1, 1993, final average salary equals the average of the highest three of the last five years of participating service, excluding add-ons, such as sick and annual leave. Benefits are based on a member's years of credited service and a multiplier of 2.5 percent of final average salary for each year of credited service, to a maximum of 90 percent of final average salary (first effective July 1, 2013).

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

EARLY RETIREMENT

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

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

VESTING REQUIREMENTS

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

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

OTHER BENEFITS

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

DISABILITY BENEFITS

Tier I: Service-connected disability – There are no age or service requirements to be eligible for this benefit. There is an annual benefit of 50 percent of final average salary, plus 10 percent of final average salary for each dependent child under age 18 (or up to age 23 for full-time students), to a maximum of 75 percent of final average salary. If dependent child benefits aren't payable, the benefit is 50 percent of final average salary or 2.5 percent for each year of credited service up to a maximum of 90 percent of final average salary. Upon the death of a member after two years from the proximate cause of death which is the original service-connected disability, the same benefits are payable. Upon the death of a member after two years from a cause different than the disability for which the member is receiving service-connected disability benefits, the surviving spouse receives a lump sum payment of 50 percent of final average salary. Additionally, a pension benefit of one-half the member's benefit is payable to either the spouse or to the dependent children.

Tier I: Non-Service-connected disability – An annual benefit of 2.5 percent times years of credited service times final average salary with a minimum of 25 percent of final average salary and a maximum of 90 percent of final average salary.

Tier II: Service-connected disability – The annual benefit is 50 percent of final average salary. Service Credit is granted during the period of disability. Disability benefits convert to age and service retirement at the earliest date the member is eligible for full retirement benefits. If the member is disabled for at least five years immediately preceding retirement, the member's final average salary is adjusted during the period of disability. If the member dies prior to the conversion of the disability benefit to a service retirement benefit, the spouse's benefit will be:

- 50 percent of the member's final average salary; or
- If there are no dependent children, the benefit the member would have been entitled to if they had retired on the date of death.

In addition, an annual benefit of 10 percent of the member's final average salary would be paid for each of the member's dependent children until the earlier of age 18 (or 23 if a full-time student) or death. However, in no case would the total of benefits payable exceed 75 percent of the member's final average salary.

Tier II: Non-Service-connected disability – The annual benefit is 50 percent of final average salary. Service Credit is granted during the period of disability. Disability benefits convert to age and service retirement at the earliest date the member is eligible for full retirement benefits. If the member is disabled for at least five years immediately preceding retirement, the member's final average salary is adjusted during the period of disability. If the member dies prior to the conversion of the disability benefit to a service retirement benefit, the member's spouse will receive a lump sum benefit equal to 50 percent of the member's final average salary at the time the member was disabled.

DEATH BENEFITS (TIER I AND TIER II)

Active Member Service Connected Death – There is no age or service requirement. An annual benefit equal to the greater of the accrued retirement benefit under the 100 percent joint and survivor option and 50 percent of final average salary is payable to the spouse, plus 10 percent of final average salary for each dependent child under age 18 (or up to age 23 for full-time students), to a maximum of 90 percent of final average salary.

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

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

Post-Retirement Death – There is a lump sum amount of $4,000 payable, less any death benefit payable under local plan provisions. If the member has selected a retirement option, benefits are paid to the joint annuitant or the designated beneficiary. Under joint and survivor options, if the joint annuitant predeceases the retired member, the benefit is increased to the amount the retired member would have received if no option had been selected. Benefits payable to the joint annuitant cease when the joint annuitant dies. If no option is selected, the designated beneficiary receives the excess, if any, of the member's accumulated contributions over total benefits paid to the date of death. The surviving spouse of a transfer member (who was covered by local plan on the employer's entry date, who dies after retirement, and who has not elected a retirement benefit option) receives a lump sum payment of 50 percent of final average salary. Additionally, a pension benefit of three-fourths of the member's benefit is payable either to the spouse or dependent children.

CLASSIFICATIONS

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

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

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

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

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

MEMBER CONTRIBUTIONS

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

Brazelton members contribute 0.008 percent with a Social Security offset. Benefits payable to these members are reduced by one-half of original Social Security benefits accruing from employment with the participating employer.

EMPLOYER CONTRIBUTIONS

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

DEFERRED RETIREMENT OPTION PROGRAM (DROP)

Upon attaining normal retirement age, members of the Kansas Highway Patrol (KHP) and Kansas Bureau of Investigation (KBI) have the option of participating in the DROP plan for a minimum of three years and no more than five years. After electing to participate, a member's monthly retirement benefit is deposited into the member's DROP account for the duration of the DROP period. The DROP account accrues interest on an annual basis, equaling either 0.0 percent or 3.0 percent. Employer and employee contributions continue to be made to the System, but the member does not earn any additional service credit after the effective date of the DROP election. At the end of the DROP period, a member is entitled to a distribution from the DROP account.

KANSAS JUDGES RETIREMENT SYSTEM

NORMAL RETIREMENT

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

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

EARLY RETIREMENT

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

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

VESTING REQUIREMENTS

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

Benefit – Normal benefit accrued at termination is payable at age 62 or in reduced amount at age 55, provided the member has 10 years of credited service. Otherwise, benefits are not payable until age 65.

OTHER BENEFITS

Disability Benefits – These benefits are payable if a member is defined as totally and permanently disabled as certified by the Supreme Court. The disability benefit, payable until age 65, is 3.5 percent of final average salary for each year of service (minimum of 50 percent and maximum of 70 percent of final average salary). Benefits are recalculated when the member reaches retirement age based on participating service credit for the period of disability. If a judge is disabled for at least five years immediately preceding retirement, the judge's final average salary is adjusted.

Withdrawal Benefit – Members who terminate employment may withdraw contributions with interest, but they will forfeit any right to a future benefit if they do.

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

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

MEMBER CONTRIBUTIONS

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

EMPLOYER CONTRIBUTIONS

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

ASSUMPTIONS AND METHODS – KPERS

Rate of Investment Return	7.00 percent
Price Inflation	2.75 percent
Payroll Growth	3.00 percent
KPERS 3 Interest Crediting Rate, Including Dividends	6.00 percent per annum
Administrative Expenses	0.18 percent of covered payroll
Rates of Mortality	The RP-2014 Healthy Annuitant table was first adjusted by an age setback or set forward.
Post-retirement	Rates were further adjusted to fit actual experience. Rates are projected into the future using Scale MP-2016.

Starting Table

School Males:	RP-2014 M White Collar Healthy	+0
School Females:	RP-2014 F White Collar Healthy	+0
State Males:	RP-2014 M Healthy	+2
State Females:	RP-2014 F Healthy	+1
Local Males:	RP-2014 M Healthy	+2
Local Females:	RP-2014 F Healthy	+1

Sample Rates (2014)

	School		State		Local	
Age	Male	Female	Male	Female	Male	Female
50	0.310%	0.172%	0.462%	0.332%	0.532%	0.276%
55	0.438%	0.225%	0.635%	0.397%	0.732%	0.367%
60	0.585%	0.323%	0.868%	0.582%	1.001%	0.536%
65	0.849%	0.544%	1.267%	0.909%	1.461%	0.838%
70	1.389%	0.876%	1.974%	1.460%	2.276%	1.346%
75	2.383%	1.459%	3.208%	2.381%	3.699%	2.196%
80	4.520%	3.192%	5.255%	4.249%	6.163%	3.939%
85	8.618%	6.444%	9.025%	7.662%	10.674%	7.119%
90	15.900%	11.824%	15.570%	13.531%	18.416%	12.573%
95	26.671%	20.501%	23.721%	22.137%	28.057%	20.570%
100	39.563%	31.961%	32.978%	32.888%	39.006%	30.559%

Pre-retirement

School Males:	80% of RP-2014 M White Collar	+0
School Females:	80% of RP-2014 F White Collar	+0
State Males:	90% of RP-2014 M Total Dataset	+2
State Females:	90% of RP-2014 F Total Dataset	+1
Local Males:	90% of RP-2014 M Total Dataset	+2
Local Females:	90% of RP-2014 F Total Dataset	+1

Disabled Life Mortality RP-2014 Disabled Life Table with same age adjustments as used for pre-retirement mortality tables.

Rates of Salary Increase

	Rate of Increase*		
Years of Service	School	State	Local
1	11.50%	10.00%	10.00%
5	6.05%	5.10%	5.70%
10	4.60%	4.40%	4.70%
15	4.10%	3.90%	4.30%
20	3.60%	3.60%	4.10%
25	3.50%	3.50%	3.60%
30	3.50%	3.50%	3.50%

**Includes general wage increase assumption of 3.50 percent (composed of 2.75 percent inflation and 0.75 percent productivity)*

Load for Pre-1993 Hires

State: 2.5 percent

School: 0.5 percent

Local: 2.0 percent

KPF: 7.5 percent

C55/C60: 2.5 percent

Rates of Termination

	School		State		Local	
Duration	Male	Female	Male	Female	Male	Female
0	20.75%	23.00%	21.00%	21.50%	23.00%	25.00%
1	17.25%	18.00%	18.00%	19.00%	19.00%	22.00%
2	13.75%	14.50%	15.25%	16.50%	16.50%	19.00%
3	10.75%	11.25%	13.50%	14.00%	13.50%	15.75%
4	8.75%	9.75%	12.00%	12.00%	11.75%	13.50%
5	7.50%	8.25%	10.75%	10.00%	10.00%	12.10%
6	6.75%	7.25%	9.50%	9.00%	9.00%	10.25%
7	6.00%	6.50%	8.50%	8.25%	8.00%	9.30%
8	5.25%	5.50%	7.50%	7.50%	7.00%	8.50%
9	5.00%	5.00%	6.50%	7.00%	6.30%	7.50%
10	4.60%	4.50%	5.50%	6.50%	5.60%	6.70%
11	4.30%	4.00%	5.00%	6.00%	5.20%	6.25%
12	4.00%	3.50%	4.50%	5.50%	4.90%	5.75%
13	3.75%	3.25%	4.25%	5.00%	4.60%	5.25%
14	3.50%	3.00%	4.00%	4.60%	4.00%	4.75%
15	3.25%	2.75%	3.80%	4.20%	3.80%	4.50%
16	3.00%	2.50%	3.60%	3.90%	3.60%	4.25%
17	2.75%	2.25%	3.40%	3.70%	3.40%	4.00%
18	2.50%	2.00%	3.20%	3.20%	3.20%	3.80%
19	2.25%	1.90%	3.00%	3.00%	3.00%	3.60%
20	2.00%	1.80%	2.80%	2.80%	2.80%	3.40%
21	1.75%	1.70%	2.60%	2.60%	2.60%	3.20%
22	1.50%	1.60%	2.40%	2.40%	2.40%	3.00%
23	1.25%	1.50%	2.20%	2.20%	2.20%	2.70%
24	1.00%	1.40%	2.00%	2.00%	2.00%	2.40%
25	1.00%	1.30%	1.80%	1.80%	1.80%	2.00%
26	1.00%	1.20%	1.60%	1.60%	1.60%	1.75%
27	1.00%	1.10%	1.40%	1.40%	1.40%	1.50%
28	1.00%	1.00%	1.20%	1.20%	1.20%	1.25%
29	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
30	1.00%	1.00%	0.80%	0.80%	0.80%	0.80%
30+	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Retirement Rates

School Members:

Age	Early Retirement Tier 1	Early Retirement Tier 2	Early Retirement Tier 3	Normal Retirement Tier 1	Normal Retirement Tier 2	Normal Retirement Tier 3	Rule of 85 (Tier 1 Only) 1st Year With 85 Points	Rule of 85 (Tier 1 Only) After 1st Year With 85 Points
53	-	-	-	-	-	-	20.0%	-
54	-	-	-	-	-	-	20.0%	15.0%
55	3.0%	3.0%	3.0%	-	-	-	20.0%	15.0%
56	3.0%	3.0%	3.0%	-	-	-	22.0%	15.0%
57	3.0%	3.0%	3.0%	-	-	-	24.0%	15.0%
58	3.0%	3.0%	3.0%	-	-	-	26.0%	15.0%
59	5.0%	5.0%	5.0%	-	-	-	28.0%	20.0%
60	10.0%	10.0%	5.0%	-	35.0%	20.0%	35.0%	22.0%
61	15.0%	15.0%	5.0%	-	22.0%	15.0%	25.0%	22.0%
62	-	25.0%	5.0%	25.0%	25.0%	15.0%	-	25.0%
63	-	22.0%	5.0%	22.0%	22.0%	15.0%	-	22.0%
64	-	22.0%	5.0%	22.0%	22.0%	15.0%	-	22.0%
65	-	-	-	35.0%	35.0%	30.0%	-	35.0%
66	-	-	-	35.0%	35.0%	30.0%	-	35.0%
67-74	-	-	-	30.0%	30.0%	35.0%	-	30.0%
75	-	-	-	100.0%	100.0%	100.0%	-	100.0%

State Members:

Age	Early Retirement Tier 1	Early Retirement Tier 2	Early Retirement Tier 3	Normal Retirement Tier 1	Normal Retirement Tier 2	Normal Retirement Tier 3	Rule of 85 (Tier 1 Only) 1st Year With 85 Points	Rule of 85 (Tier 1 Only) After 1st Year With 85 Points
53	-	-	-	-	-	-	18.0%	-
54	-	-	-	-	-	-	18.0%	10.0%
55	4.0%	4.0%	3.0%	-	-	-	18.0%	10.0%
56	4.0%	4.0%	3.0%	-	-	-	18.0%	10.0%
57	4.0%	4.0%	3.0%	-	-	-	18.0%	10.0%
58	5.0%	5.0%	3.0%	-	-	-	18.0%	10.0%
59	5.0%	5.0%	5.0%	-	-	-	18.0%	10.0%
60	5.0%	5.0%	5.0%	-	18.0%	15.0%	18.0%	10.0%
61	10.0%	10.0%	5.0%	-	18.0%	10.0%	18.0%	15.0%
62	-	15.0%	5.0%	18.0%	18.0%	10.0%	-	18.0%
63	-	15.0%	5.0%	18.0%	18.0%	10.0%	-	18.0%
64	-	15.0%	5.0%	18.0%	18.0%	10.0%	-	18.0%
65	-	-	-	30.0%	30.0%	25.0%	-	30.0%
66	-	-	-	30.0%	30.0%	25.0%	-	30.0%
67-72	-	-	-	27.0%	27.0%	25.0%	-	27.0%
73	-	-	-	20.0%	20.0%	25.0%	-	20.0%
74	-	-	-	20.0%	20.0%	25.0%	-	20.0%
75	-	-	-	100.0%	100.0%	100.0%	-	100.0%

Local Members:

	Early Retirement			Normal Retirement			Rule of 85 (Tier 1 Only)	
Age	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	1st Year With 85 Points	After 1st Year With 85 Points
53	-	-	-	-	-	-	15.0%	-
54	-	-	-	-	-	-	15.0%	8.0%
55	3.0%	3.0%	3.0%	-	-	-	15.0%	8.0%
56	3.0%	3.0%	3.0%	-	-	-	15.0%	8.0%
57	3.0%	3.0%	3.0%	-	-	-	15.0%	8.0%
58	3.0%	3.0%	3.0%	-	-	-	15.0%	10.0%
59	6.0%	6.0%	5.0%	-	-	-	15.0%	10.0%
60	6.0%	6.0%	5.0%	-	15.0%	15.0%	15.0%	10.0%
61	10.0%	10.0%	5.0%	-	20.0%	10.0%	25.0%	20.0%
62	-	20.0%	5.0%	20.0%	20.0%	10.0%	-	20.0%
63	-	20.0%	5.0%	20.0%	20.0%	10.0%	-	20.0%
64	-	20.0%	5.0%	20.0%	20.0%	10.0%	-	20.0%
65	-	-	-	30.0%	30.0%	25.0%	-	30.0%
66	-	-	-	30.0%	30.0%	25.0%	-	30.0%
67-70	-	-	-	30.0%	30.0%	30.0%	-	30.0%
71-74	-	-	-	22.0%	22.0%	30.0%	-	22.0%
75	-	-	-	100.0%	100.0%	100.0%	-	100.0%

Inactive vested members: Earliest unreduced retirement age.

Correctional employees with an age 55 normal retirement date:

Age	Rate
55-59	10%
60	15%
61-63	20%
64	35%
65	100%

Correctional employees with an age 60 normal retirement date:

Age	Rate
60	20%
61	20%
62	35%
63	20%
64	20%
65	45%
66	45%
67	45%
68	100%

TIAA employees: Age 66

Rates of Disability

Age	School	State	Local
25	0.017%	0.015%	0.015%
30	0.019%	0.043%	0.033%
35	0.023%	0.067%	0.049%
40	0.039%	0.130%	0.072%
45	0.075%	0.195%	0.126%
50	0.123%	0.260%	0.182%
55	0.166%	0.325%	0.217%
60	0.238%	0.358%	0.266%

Indexation of Final Average Salary for Disabled Members: 1.75 percent per year

Probability of Vested Members Leaving Contributions With System

KPERS 1:

Age	School	State	Local
25	80%	65%	60%
30	80%	65%	70%
35	80%	65%	70%
40	80%	65%	70%
45	82%	75%	70%
50	87%	85%	74%
55	100%	100%	100%

KPERS 2: Members are assumed to elect to take a refund if it is more valuable than the deferred annuity. The comparison is based on 7.00 percent interest and a 50 percent Male/50 percent Female blend of the RP-2014 Mortality Table, projected to 2045 (static).

KPERS 3: 100 percent of vested members are assumed to leave their contributions with the System.

Marriage Assumption

70 percent of all members are assumed married with male spouse assumed to be three years older than the female.

Partial Lump Sum Option (PLSO)

40 percent of KPERS 1 and KPERS 2 members are assumed to take a PLSO equal to 30 percent of the value of their benefit upon retirement. 100 percent of KPERS 3 members are assumed to take a PLSO equal to 30 percent of the value of their benefit upon retirement.

PLSO Factors

Interest Rate: 7.00 percent

Mortality: SOA 1983 Group Annuity Mortality Table, blended 50 percent male and 50 percent female.

ASSUMPTIONS AND METHODS – KP&F

Rate of Investment Return	7.00 percent
Price Inflation	2.75 percent
Payroll Growth	3.00 percent
Administrative Expenses	0.18 percent of covered payroll
Rates of Mortality	Mortality rates are projected into the future using Scale MP-2016
Post-retirement	RP-2014 Total Dataset Table, set forward one year
Pre-retirement	90 percent of the RP-2014 Total Dataset Table, set forward one year*

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

Disabled Life Mortality RP-2014 Disabled Life Table, set forward one year

Rates of Salary Increase

Years of Service	Rate of Increase*
1	12.0%
5	6.5%
10	4.4%
15	3.8%
20	3.5%
25	3.5%

**Includes general wage increase assumption of 3.50 percent (composed of 2.75 percent inflation and 0.75 percent productivity)*

Rates of Termination

Years of Service	Rate
1	11.0%
5	6.0%
10	2.8%
15	1.8%
20	1.1%
25	0.0%

Retirement Rates

Tier 1:

Early Retirement		Normal Retirement	
Age	Rate	Age	Rate
50	5%	55	35%
51	7%	56	30%
52	7%	57	30%
53	15%	58	35%
54	30%	59	30%
		60	30%
		61	35%
		62	100%

Tier 2:

Early Retirement		Normal Retirement	
Age	Rate	Age	Rate
50	10%	50	30%
51	10%	51	25%
52	10%	52	25%
53	10%	53	25%
54	20%	54	25%
		55	25%
		56	25%
		57	25%
		58	20%
		59	30%
		60	25%
		61	25%
		62	30%
		63	30%
		64	30%
		65	100%

Inactive Vested

Earliest unreduced retirement age.

Rates of Disability

Age	Rate*
22	0.04%
27	0.07%
32	0.15%
37	0.35%
42	0.56%
47	0.76%
52	0.96%
57	1.00%

**90 percent assumed to be service-connected.*

Marriage Assumption

80 percent of all members are assumed married with male spouse assumed to be three years older than female. When an active member dies, they have no child beneficiaries.

Partial Lump Sum Option (PLSO)

40 percent of KPERS 1 and KPERS 2 members are assumed to take a PLSO equal to 30 percent of the value of their benefit upon retirement. 100 percent of KPERS 3 members are assumed to take a PLSO equal to 30 percent of the value of their benefit upon retirement.

PLSO Factors

Interest Rate: 7.00 percent

Mortality: SOA 1983 Group Annuity Table, blended 50 percent male and 50 percent female.

DROP Election

75 percent of Kansas Highway Patrol and Kansas Bureau of Investigation members are assumed to enter DROP for the maximum DROP period.

It is assumed that no members enter DROP with less than 25 years of service.

Interest Credited on DROP Accounts

3 percent, compounded annually.

ASSUMPTIONS AND METHODS – JUDGES

Rate of Investment Return	7.00 percent
Price Inflation	2.75 percent
Administrative Expenses	0.18 percent of covered payroll
Rates of Mortality	Mortality rates are projected into the future using Scale MP-2016.
Post-retirement	RP-2014 Total Dataset Table, set back two years
Pre-retirement	80 percent of RP-2014 Total Dataset Table, set back two years
Disabled Life Mortality	RP-2014 Disabled Retiree Table, set back two years
Rates of Salary Increase	4.00 percent
Rates of Termination	None assumed
Rates of Disability	None assumed

Retirement Rates

Age	Rate
62	15%
63-64	10%
65-66	33%
67-69	15%
70+	100%

Marriage Assumption

70 percent of all members are assumed married with male spouse assumed to be three years older than female.

Partial Lump Sum Option (PLSO)

40 percent of KPERS 1 and KPERS 2 members are assumed to take a PLSO equal to 30 percent of the value of their benefit upon retirement. 100 percent of KPERS 3 members are assumed to take a PLSO equal to 30 percent of the value of their benefit upon retirement.

PLSO Factors

Interest Rate: 7.00 percent

Mortality: SOA 1983 Group Annuity Mortality Table, blended 50 percent male and 50 percent female.

TECHNICAL VALUATION PROCEDURES

DATA PROCEDURES

In-pay members: If a birth date is not available, the member is assumed to have retired at 62. If a retirement date is also not available, the member is assumed to be 75.

If a beneficiary birth date is needed but not supplied, males are assumed to be three years older than females.

Not in-pay members: If a birth date is not available, it is assigned according to the following schedule:

System	Active member age at hire	Inactive member age at valuation
KPERS	34.7	50
KPF	27.5	49
Judges	43.4	54

If gender is not provided, it is assigned randomly with a 40 percent probability of being male and 60 percent probability of being female.

If salary information is not available for an active record, it is assigned according to the following schedule:

System		Salary
KPERS	$	24,700
KPF	$	36,100
Judges	$	79,100

Salaries for first year members are annualized.

OTHER VALUATION PROCEDURES

No actuarial accrued liability in excess of the unclaimed member contribution balance is held for nonvested, inactive members. A reserve is also held for accounts that have been forfeited but could be reclaimed in the future.

Benefits above the projected IRC Section 415 limit for active participants are assumed to be immaterial for the valuation. The compensation limitation under IRC Section 401(a) (17) is considered in this valuation. On a projected basis, the impact of this limitation is insignificant.

Salary increases are assumed to apply to annual amounts.

Decrements are assumed to occur mid-year, except that immediate retirement is assumed for those who are at or above the age at which retirement rates are 100 percent. Standard adjustments are made for multiple decrements. Withdrawal does not operate once early or unreduced retirement eligibility is met.

KPERS 3 employees who transfer employment to a non-KPERS covered position are treated as actives who are not accruing benefits.

ACTUARIAL METHODS

1. Funding Method

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

   There is currently a lag between the valuation date in which the employer contribution rates are determined and the effective date of those contribution rates, i.e., a two year lag for Local employers and a two and one-half year lag for the State/School group. The unfunded actuarial liability (UAL) is projected from the valuation date to the first day of the fiscal year in which the contribution rate will apply based on the scheduled statutory contribution rates and expected payroll in the intervening years.

   For valuations beginning with December 31, 2016 and following, the unfunded actuarial liability is amortized using a "layered" approach. The unfunded actuarial liability in the December 31, 2015 valuation, which was projected to June 30, 2018 for the State/School and Judges groups and to December 31, 2017 for the Local and KP&F groups, served as the initial or "legacy" amortization base. In the December 31, 2021 valuation, the outstanding unfunded actuarial liability bases were combined and the total balance was re-amortized over a closed 17-year period for State/School and Local, a closed 22-year period for KP&F, and a closed 20-year period for Judges. The change in the unfunded actuarial liability, resulting from the assumption changes reflected in the 2016 and 2019 valuations, was amortized over a closed 25-year period. Changes in the unfunded actuarial liability that result from actuarial experience each year (gains and losses) are amortized over a closed 20-year period that begins with the fiscal year in which the contribution rates will apply.

   The UAL is amortized as a level percentage of payroll for all groups except Judges, who use a level dollar payment. The payroll growth assumption is 3 percent so the annual amortization payments will increase 3 percent each year. As a result, if total payroll grows 3 percent per year, as assumed, the amortization payment will remain level as a percentage of total current payroll.

2. 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 net rate of return) on the market value of assets is calculated each year and recognized equally over a five-year period.

SCHEDULE OF FUNDING PROGRESS

Last Ten Years as of December 31 (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)
12/31/12	$ 13,278,490	$ 23,531,423	$ 10,252,933	56%	$ 6,498,962	158%
12/31/13	14,562,765	24,328,670	9,765,906	60	6,509,809	150
12/31/14	15,662,010	25,130,467	9,468,457	62	6,560,105	144
12/31/15	17,408,578	25,947,781	8,539,203	67	6,603,613	129
12/31/16	18,256,373	27,317,754	9,061,381	67	6,650,451	136
12/31/17	19,246,613	28,153,827	8,907,214	68	6,744,301	132
12/31/18	19,898,330	29,100,136	9,201,806	68	7,048,621	131
12/31/19	20,975,535	29,982,337	9,006,802	70	7,336,004	123
12/31/20	22,422,299	30,910,302	8,488,003	73	7,505,899	113
12/31/21	24,803,793	34,630,796	9,827,004	72	7,672,392	128

SHORT TERM SOLVENCY TEST

Last Ten Years as of December 31

Valuation Date	Member Contributions	Retirants and Beneficiaries	Active Member Employer Financed Portion	Actuarial Value of Assets	Portions of Accrued Liabilities Covered by Assets		
	(A)	(B)	(C)		(A)	(B)	(C)
12/31/12	$ 5,448,296,911	$ 10,585,891,383	$ 7,497,235,156	$ 13,278,490,294	100%	74%	-%
12/31/13	5,636,937,795	11,298,180,557	7,393,551,786	14,562,764,625	100	79	-
12/31/14	5,791,313,287	12,361,327,805	6,977,825,595	15,662,009,783	100	80	-
12/31/15	5,942,762,790	13,095,276,871	6,909,740,897	17,408,577,508	100	88	-
12/31/16	6,008,633,568	14,095,278,126	7,213,842,679	18,256,373,273	100	87	-
12/31/17	6,008,405,879	14,751,711,502	7,393,709,608	19,246,613,272	100	90	-
12/31/18	6,132,527,315	15,401,874,720	7,565,734,390	19,898,329,527	100	89	-
12/31/19	6,298,997,993	15,982,142,480	7,701,196,138	20,975,535,342	100	92	-
12/31/20	6,440,728,342	16,664,329,950	7,805,243,895	22,422,299,116	100	96	-
12/31/21	6,558,938,055	18,409,538,578	9,662,319,771	24,803,792,904	100	99	-

SCHEDULE OF ACTIVE MEMBER VALUATION DATA[1]

Last Ten Years as of December 31

Valuation Date	Number of Active Members	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll (in millions)	Average Payroll	Percentage Increase in Average Payroll
12/31/12	156,053	0.60%	1,506	0.10%	$ 6,499	$ 41,646	0.90%
12/31/13	155,446	(0.40)	1,508	0.10	6,510	41,878	0.60
12/31/14	154,203	(0.80)	1,518	0.70	6,560	42,542	1.60
12/31/15	152,175	(1.30)	1,517	(0.10)	6,603	43,395	2.00
12/31/16	152,119	(0.04)	1,515	(0.10)	6,650	43,719	0.80
12/31/17	151,687	(0.30)	1,523	0.50	6,744	44,462	1.70
12/31/18	154,055	1.60	1,526	0.20	7,048	45,754	2.90
12/31/19	156,253	1.43	1,534	0.52	7,336	46,950	2.61
12/31/20	153,959	(1.47)	1,536	0.13	7,506	48,753	3.84
12/31/21	152,288	(1.09)	1,500	(2.34)	7,672	50,381	3.34

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

MEMBERSHIP PROFILE

Last Ten Years as of December 31

Valuation Date	Active	Inactive	Retirees & Beneficiaries	Total Membership
12/31/12	156,053	45,969	84,318	286,340
12/31/13	155,446	47,484	87,670	290,600
12/31/14	154,203	50,255	90,907	295,365
12/31/15	152,175	53,159	94,333	299,667
12/31/16	152,119	55,755	97,547	305,421
12/31/17	151,687	59,966	100,575	312,228
12/31/18	154,055	61,495	103,216	318,766
12/31/19	156,253	63,257	106,058	325,568
12/31/20	153,959	64,793	108,400	327,152
12/31/21	152,288	70,224	111,269	333,781

RETIRANTS, BENEFICIARIES - CHANGES IN ROLLS – ALL SYSTEMS

Last Ten Fiscal Years

		Additions		Deletions						
Year	Number at Beginning of Year	Number Added	Annual Allowances	Number Removed	Annual Allowances	Number at End of Year	Percentage Change in Number of Retirants	Percentage Change in Additions Allowances	Average Annual Allowance	Year-End Annual Allowances
6/30/13	82,711	6,071	$ 97,203,958	2,707	$ 24,577,721	86,075	4.10%	(15.90%)	$ 14,975	$ 1,288,986,517
6/30/14	86,075	6,022	99,401,460	2,793	26,057,706	89,304	3.80	2.50	15,298	1,366,173,782
6/30/15	89,304	6,419	108,490,198	2,981	29,617,203	92,742	3.80	9.10	15,634	1,449,898,078
6/30/16	92,742	6,494	110,741,918	3,055	30,319,950	96,150	3.70	2.10	16,104	1,548,362,854
6/30/17	96,150	6,252	108,364,288	3,203	32,500,089	99,199	3.20	3.70	16,179	1,604,984,334
6/30/18	99,199	6,164	108,928,173	4,788	36,466,045	100,575	1.42	3.20	16,700	1,679,587,567
6/30/19	100,575	6,180	112,564,089	3,371	37,385,700	103,384	2.82	1.42	16,904	1,747,623,791
6/30/20	103,384	5,946	113,015,303	3,241	39,376,802	106,058	2.59	2.79	17,242	1,828,655,721
6/30/21	106,058	6,810	127,741,773	4,171	48,133,609	108,697	2.49	2.59	17,632	1,916,524,189
6/30/22	108,697	6,923	139,793,363	4,142	50,297,855	111,478	2.56	2.49	18,008	2,007,550,258

SUMMARY OF MEMBERSHIP DATA

Retiree and Beneficiary Member Valuation Data (1)		12/31/21		12/31/20
KPERS				
Number		104,212		101,641
Average Benefit	$	15,662	$	15,328
Average Age		73.08		72.79
Police & Fire				
Number		6,055		5,890
Average Benefit	$	36,636	$	35,767
Average Age		66.37		66.24
Judges				
Number		319		319
Average Benefit	$	43,835	$	43,208
Average Age		75.82		75.24
System Total				
Number		110,586		107,850
Average Benefit	$	16,892	$	16,527
Average Age		72.72		72.56

Active Member Valuation Data (1)		12/31/21		12/31/20
KPERS				
Number		144,251		145,880
Average Current Age		44.90		44.95
Average Service		10.84		10.92
Average Pay	$	48,963	$	47,346
Police & Fire				
Number		7,779		7,835
Tier I		17		24
Tier II		7,710		7,775
DROP		52		36
Average Current Age		38.69		38.73
Average Service		10.84		10.88
Average Pay	$	74,451	$	72,831
Judges				
Number		258		244
Average Current Age		57.21		57.41
Average Service		10.06		10.52
Average Pay	$	117,282	$	116,687
System Total				
Number		152,288		153,959
Average Current Age		44.60		44.66
Average Service		10.84		10.92
Average Pay	$	50,381	$	48,753

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

SCHEDULE OF EMPLOYER CONTRIBUTION RATES

Last Ten Fiscal Years (1)

KPERS State/School

Fiscal Year	Actuarial Rate	Actual Rate
2013	13.46%	9.37%
2014	13.83	10.27
2015[(2)]	14.34	11.27/8.65
2016	14.95	10.91
2017	14.85	10.81
2018	14.89	12.01
2019	13.23	13.21
2020	14.74	14.41
2021	14.23	14.23
2022[(3)]	13.33	13.33

KPERS Local

Fiscal Year	Actuarial Rate	Actual Rate
2013	9.43%	7.94%
2014	9.77	8.84
2015	9.48	9.48
2016	9.18	9.18
2017	8.46	8.46
2018	8.39	8.39
2019	8.89	8.89
2020	8.61	8.61
2021	8.87	8.87
2022	8.90	8.90

KP&F Uniform Rate

Fiscal Year	Actuarial Rate	Actual Rate
2013	17.26%	17.26%
2014	19.92	19.92
2015	21.36	21.36
2016	20.42	20.42
2017	19.03	19.03
2018	20.09	20.09
2019	22.13	22.13
2020	21.93	21.93
2021	22.80	22.80
2022	22.99	22.99

Judges

Fiscal Year	Actuarial Rate	Actual Rate
2013	23.75%	23.75%
2014	23.62	23.62
2015	22.59	22.59
2016	23.98	23.98
2017	21.36	21.36
2018	15.89	15.89
2019	14.68	14.68
2020	18.65	18.65
2021	17.26	17.26
2022	18.40	18.40

(1) Rates shown for KPERS State/School, and Judges represent the rates for the fiscal years ending June 30. KPERS Local and KP&F rates are reported for the calendar years. Rates have been restated to exclude Group Life and Disability insurance premiums.

(2) Due to budget constraints, the Governor used the allotment procedure and reduced the State/School KPERS employer combined contribution rate to 8.65 percent for the second half of the 2015 fiscal year.

Statistical
Section

STATISTICAL HIGHLIGHTS OF THE SYSTEM'S FINANCIAL TRENDS

The Statistical Section presents several schedules that provide financial trend analysis of the Retirement System's overall financial health and additional analytical information on employers' membership data and retirement benefits. The schedules beginning on this page through page 122 provide revenues, expenses and funding status information for the past ten years for the pension plan. On page 123, a schedule shows the total benefits and type of refunds that were paid.

On pages 124 through 128, various schedules are presented to depict the level of monthly benefits by number of retirees, retirement type and options and years of service. Starting on page 129, information is provided showing the top ten participating employers determined by number of covered active employees. The source of the information in these schedules is derived from the annual comprehensive financial reports, unless otherwise indicated.

REVENUES BY SOURCE

Last Ten Fiscal Years

	Contributions				
Fiscal Year	Member	Employer	Miscellaneous	Net Investment Income	Total
2013	300,471,480	617,925,370	537,741	1,747,230,627	2,666,165,218
2014	332,163,439	701,818,160	241,743	2,553,842,632	3,588,065,974
2015	382,057,886	690,564,482	1,076,946	561,194,353	1,634,893,667
2016 (1)	404,856,265	1,739,183,965	2,906,188	49,169,897	2,196,116,315
2017	414,537,657	761,610,061	1,071,115	2,060,925,477	3,238,144,310
2018	420,284,941	887,734,800	5,733,655	1,516,929,281	2,830,682,677
2019	437,352,839	1,138,895,032	5,488,299	1,216,685,443	2,798,421,613
2020	451,568,458	1,059,543,667	20,699,113	347,463,816	1,879,275,054
2021	459,313,973	1,007,571,241	19,967,235	5,185,033,888	6,671,886,337
2022 (2)	481,840,395	2,125,927,718	37,474,396	(1,295,608,395)	1,349,634,114

(1) The State of Kansas issued $1 billion in pension obligation bonds, Series 2015H, in August 2015.

(2) 2022 School Employer Contributions include POB Series 2021K proceeds of $500.0M; and receipt of $600.0M per SB 421. The payments, in full or in part, to be applied to the unfunded actuarial liability of participating employers under K.S.A. 74-4931 (School Employers).

BENEFITS BY TYPE

Last Ten Fiscal Years

Fiscal Year	Monthly Retirement Benefits	Retirement Dividend	Death Benefits	Refund of Contributions Separations	Refund of Contributions Deaths
2013	$ 1,286,133,859	$ 2,852,658	$ 9,458,321	$ 48,265,870	$ 5,633,961
2014	1,363,636,798	2,536,984	9,702,485	49,947,483	7,023,286
2015	1,447,659,817	2,238,261	10,019,588	57,187,901	7,274,097
2016	1,546,424,413	1,938,441	10,545,850	62,141,534	5,981,201
2017	1,603,302,992	1,681,412	11,210,914	63,915,235	6,565,825
2018	1,678,136,889	1,450,678	11,299,715	58,339,135	6,627,827
2019	1,746,382,699	1,241,092	11,357,122	68,199,860	6,116,462
2020	1,827,588,769	1,066,952	11,263,225	58,076,648	8,851,960
2021	1,915,616,690	907,500	13,809,622	68,143,781	8,503,793
2022	2,006,800,102	750,157	13,831,599	80,771,303	10,502,089

EXPENSES BY TYPE

Last Ten Fiscal Years

		Refund of Contributions				
Fiscal Year	Benefits	Separations	Death	Administration	Uncollectable Pension Contributions (1)	Total
2013	$ 1,298,444,838	$ 48,265,870	$ 5,633,961	$ 10,426,813	$ -	$ 1,362,771,482
2014	1,375,876,267	49,947,483	7,023,286	9,703,808	-	1,442,550,844
2015	1,459,917,666	57,187,901	7,274,097	10,789,271	-	1,535,168,935
2016	1,558,908,704	62,141,534	5,981,201	12,171,633	-	1,639,203,072
2017	1,616,195,248	63,915,235	6,565,825	11,116,172	98,943,780	1,796,736,260
2018	1,690,887,282	58,339,135	6,627,827	12,459,619	-	1,768,313,863
2019	1,758,980,913	68,199,860	6,116,462	13,279,726	-	1,846,576,961
2020	1,839,918,946	58,076,648	8,851,960	13,607,382	-	1,920,454,936
2021	1,930,333,812	68,143,781	8,503,793	17,183,637	-	2,024,165,023
2022	2,021,381,857	80,771,303	10,502,089	19,498,079	-	2,132,153,328

(1) In the 2017 Legislative session, Sub for HB 2052 eliminated the repayment of delayed Fiscal Year 2016 contributions. The receivable was written off in Fiscal Year 2017. In the 2019 Legislative session, legislation was passed to pay the Fiscal Year 2016 contributions with interest, $115 million was received.

CHANGES IN NET POSITION

Last Ten Fiscal Years

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions										
Contributions										
Member Contributions	$ 481,840,395	$ 459,313,973	$ 451,568,458	$ 437,352,839	$ 420,284,941	$ 414,537,657	$ 404,856,265	$ 382,057,886	$ 332,163,439	$ 300,501,667
Employer Contributions	2,125,927,718	1,007,571,241	1,059,543,667	1,138,895,032	887,734,800	761,610,061	1,739,183,965	690,564,482	701,818,160	617,925,370
Total Contributions	2,607,768,113	1,466,885,214	1,511,112,125	1,576,247,871	1,308,019,741	1,176,147,718	2,144,040,230	1,072,622,368	1,033,981,599	918,427,037
Investments										
Net Appreciation (Depreciation) in Fair Value of Investments	(1,625,408,068)	4,865,677,791	(9,577,522)	798,206,290	1,145,750,895	1,708,585,923	(267,355,951)	263,094,676	2,267,287,461	1,490,141,704
Interest	134,630,290	133,831,909	152,608,428	162,200,077	143,874,114	125,024,597	137,732,569	132,688,575	104,382,643	100,530,311
Dividends	234,760,510	195,697,077	206,409,770	240,616,896	219,737,719	196,065,374	160,160,990	140,607,740	165,226,153	153,201,135
Real Estate Income, Net of Operating Expenses	111,257,792	101,335,088	93,651,199	106,326,053	94,853,455	91,728,610	79,977,708	75,353,304	62,989,928	39,973,754
Other Investment Income	45,341,926	33,153,081	17,622,755	16,525,693	14,706,420	13,394,069	9,562,040	10,573,421	-	-
	(1,099,417,550)	5,329,694,946	460,714,630	1,323,875,009	1,618,922,603	2,134,798,573	120,077,356	622,317,716	2,599,886,185	1,783,846,904
Less Investment Expense	(196,190,845)	(144,661,058)	(113,250,814)	(107,189,566)	(101,993,321)	(73,873,096)	(70,907,459)	(65,240,875)	(51,653,134)	(42,584,786)
Net Investment Income	(1,295,608,395)	5,185,033,888	347,463,816	1,216,685,443	1,516,929,282	2,060,925,477	49,169,897	557,076,841	2,548,233,051	1,741,262,118
From Securities Lending Activities										
Securities Lending Income	-	-	-	-	-	-	-	3,932,462	5,255,071	4,827,054
Securities Lending Expenses										
Borrower Rebates	-	-	-	-	-	-	-	648,826	1,501,910	2,450,894
Management Fees	-	-	-	-	-	-	-	(463,776)	(1,147,400)	(1,309,439)
Total Securities Lending Activities Expense	-	-	-	-	-	-	-	185,050	354,510	1,141,455
Net Income from Security Lending Activities	-	-	-	-	-	-	-	4,117,512	5,609,581	5,968,509
Total Net Investment Income	(1,295,608,395)	5,185,033,888	347,463,816	1,216,685,443	1,516,929,282	2,060,925,477	49,169,897	561,194,353	2,553,842,632	1,747,230,627
Other Miscellaneous Income	37,474,396	19,967,235	20,699,113	5,488,299	5,733,655	1,071,115	2,904,581	1,076,391	241,438	533,842
Total Additions Plan Net Position	1,349,634,114	6,671,886,337	1,879,275,054	2,798,421,613	2,830,682,678	3,238,144,310	2,196,114,708	1,634,893,112	3,588,065,668	2,666,191,506
Deductions										
Monthly Retirement Benefits	(2,007,550,258)	(1,916,524,189)	(1,828,655,721)	(1,747,623,791)	(1,679,587,567)	(1,604,984,334)	(1,548,362,854)	(1,449,898,078)	(1,366,173,782)	(1,288,986,517)
Refunds of Contributions	(91,273,393)	(76,647,575)	(66,928,608)	(74,316,322)	(64,966,962)	(70,481,060)	(68,122,735)	(64,461,998)	(56,970,769)	(53,899,831)
Death Benefits	(13,831,599)	(13,809,622)	(11,263,225)	(11,357,122)	(11,299,715)	(11,210,914)	(10,545,850)	(10,019,588)	(9,702,485)	(9,458,321)
Administrative Expenses	(19,498,079)	(17,183,637)	(13,607,382)	(13,279,726)	(12,459,620)	(11,116,172)	(12,171,633)	(10,789,271)	(9,634,863)	(10,426,813)
Uncollectable Pension Contributions	-	-	-	-	-	(98,943,780)	-	-	-	-
Total Deductions to Plan Net Position	(2,132,153,329)	(2,024,165,023)	(1,920,454,936)	(1,846,576,961)	(1,768,313,864)	(1,796,736,260)	(1,639,203,072)	(1,535,168,935)	(1,442,481,899)	(1,362,771,482)
Change in Net Position	$ (782,519,215)	$ 4,647,721,314	$ (41,179,882)	$ 951,844,652	$ 1,062,368,814	$ 1,441,408,050	$ 556,911,636	$ 99,724,177	$ 2,145,583,769	$ 1,303,420,023

BENEFIT AND REFUND DEDUCTIONS FROM NET POSITION BY TYPE

Last Ten Fiscal Years

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Type of Benefit										
Age and Service Benefits:										
Retirees	$ 1,915,554,369	$ 1,829,040,388	$ 1,745,041,997	$ 1,667,501,420	$ 1,602,718,657	$ 1,531,384,982	$ 1,478,101,413	$ 1,383,140,272	$ 1,302,838,465	$ 1,228,537,001
Survivors	91,995,889	87,483,802	83,613,724	80,122,371	76,868,910	73,599,352	70,261,441	66,757,806	63,335,317	60,449,516
Death in Service Benefits	13,831,599	13,809,622	11,263,225	11,357,122	11,299,715	11,210,914	10,545,850	10,019,588	9,702,485	9,458,321
Total Benefits	$ 2,021,381,857	$ 1,930,333,812	$ 1,839,918,946	$ 1,758,980,913	$ 1,690,887,282	$ 1,616,195,248	$ 1,558,908,704	$ 1,459,917,666	$ 1,375,876,267	$ 1,298,444,838
Type of Refund										
Death	$ 10,502,090	$ 8,503,794	$ 8,851,960	$ 6,116,462	$ 6,627,827	$ 6,643,401	$ 5,981,201	$ 7,274,097	$ 7,023,286	$ 5,633,961
Separation	80,771,303	68,143,781	58,076,648	68,199,860	58,339,135	63,837,659	62,141,534	57,187,901	49,947,483	48,265,870
Total Refunds	$ 91,273,393	$ 76,647,575	$ 66,928,608	$ 74,316,322	$ 64,966,962	$ 70,481,060	$ 68,122,735	$ 64,461,998	$ 56,970,769	$ 53,899,831

HIGHLIGHT OF OPERATIONS

Last Ten Fiscal Years

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Membership Composition										
Number of Retirants	102,014	99,617	97,570	94,869	92,101	89,284	87,103	83,911	80,900	77,727
Number of Survivors (1)	8,572	8,233	8,050	7,864	7,706	7,490	7,230	6,996	6,770	6,591
New Retirants During the Fiscal Year	6,124	5,583	5,584	5,548	5,534	4,277	6,494	6,419	6,022	6,071
Active and Inactive Members (2)	222,512	218,752	219,510	215,550	211,653	207,874	205,334	204,458	202,930	202,022
Participating Employers	1,541	1,536	1,534	1,526	1,523	1,515	1,517	1,518	1,508	1,506
Financial Results (in millions)										
Member Contributions	$ 482	$ 459	$ 452	$ 437	$ 420	$ 415	$ 405	$ 382	$ 332	$ 301
Employer Contributions (3)	2,126	1,008	1060	1,139	888	762	1,781	691	702	617
Retirement/Death Benefits	2,008	1,930	1,840	1,759	1,691	1,616	1,559	1,460	1,376	1,298
Investment Income	(1,296)	5,185	347	1,217	1,517	2,061	49	561	2,554	1,747
Employer Contribution Rate										
KPERS–State/School	13.33%	14.23%	14.41%	13.21%	12.01%	10.81%	10.91%	11.27% 8.65%	10.27%	9.37%
KPERS–Local (4)	8.90	8.87	8.61	8.89	8.39	8.46	9.18	9.48	8.84	7.94
KP&F (Uniform Participating) (4)	22.99	22.80	21.93	22.13	20.09	19.03	20.42	21.36	19.92	17.26
Judges	18.40	17.26	18.65	14.68	15.89	21.36	23.98	22.59	23.62	23.75
Unfunded Actuarial Liability (in millions)										
KPERS–State/School	$ 6,892	$ 6,143	$ 6,545	$ 6,756	$ 6,581	$ 6,690	$ 6,276	$ 7,244	$ 7,351	$ 7,658
KPERS–Local	1,784	1,420	1,502	1,502	1,458	1,515	1,486	1,488	1,590	1,699
KP&F	1,141	919	949	933	860	846	772	726	803	866
Judges	10	6	10	11	8	11	6	11	21	29
Funding Ratios (5)										
KPERS–State/School	70.70%	70.80%	68.10%	66.10%	66.00%	64.50%	65.20%	58.80%	57.00%	53.90%
KPERS–Local	73.30	76.10	73.70	72.70	72.50	70.30	69.10	67.40	63.70	59.50
KP&F	72.80	75.30	73.50	73.00	74.10	73.40	74.00	74.10	70.30	66.50
Judges	95.30	96.80	94.70	94.40	95.90	93.90	96.40	93.50	86.90	81.40

(1) This is the number of joint annuitants as of December 31st, per the System's records.

(2) Membership information taken from System's actuarial valuation.

(3) The State of Kansas issued pension obligation bonds, Series 2015H, in August 2015.

(4) KPERS Local and KP&F contribution rates are reported on a calendar year basis.

(5) The funding percentage indicates the actuarial soundness of the System. Generally, the greater the percentage, the stronger the System.

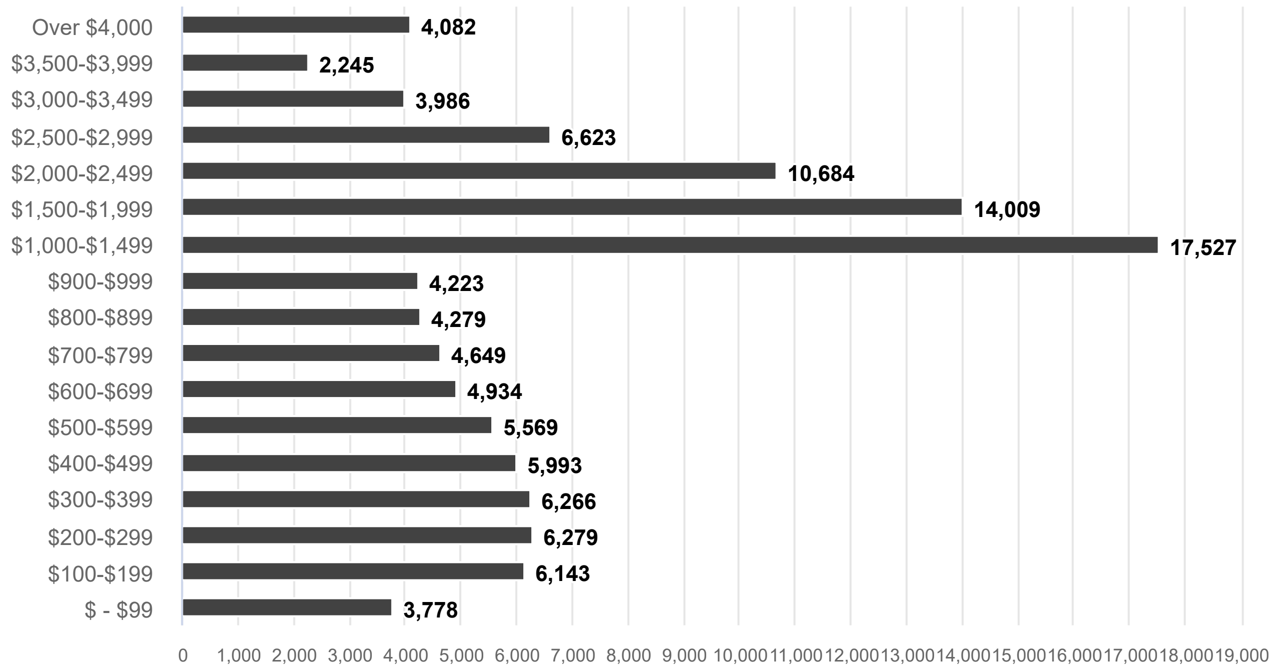
NUMBER OF RETIRED MEMBERS AND SURVIVORS BY TYPE OF BENEFIT

as of December 31, 2021

Monthly Benefit	Number of Retirees	Normal Retirement	Early Retirement	Service-Connected Death or Disability	Nonservice-Connected Death or Disability
$ - 99	3,778	3,269	505	1	3
$100-199	6,143	4,310	1,810	14	9
$200-299	6,279	4,164	2,102	7	6
$300-399	6,266	4,077	2,159	15	15
$400-499	5,993	4,068	1,890	18	17
$500-599	5,569	3,829	1,700	23	17
$600-699	4,934	3,502	1,397	15	20
$700-799	4,649	3,411	1,209	20	9
$800-899	4,279	3,204	1,028	38	9
$900-999	4,223	3,321	852	28	22
$1,000-1,499	17,527	14,959	2,373	130	65
$1,500-1,999	14,009	13,087	748	100	74
$2,000-2,499	10,684	10,355	262	37	30
$2,500-2,999	6,623	6,483	97	22	21
$3,000-3,499	3,986	3,898	60	18	10
$3,500-3,999	2,245	2,194	30	13	8
$4,000 or More	4,082	4,019	50	10	3
Totals	111,269	92,150	18,272	509	338

NUMBER OF RETIRED MEMBERS AND SURVIVORS BY MONTHLY BENEFIT AMOUNT

As of December 31, 2021



NUMBER OF RETIRED MEMBERS AND SURVIVORS BY TYPE OF PAYMENT OPTION

as of December 31, 2021

Monthly Benefit	Maximum No Survivor	Joint 1/2 to Survivor	Joint Same to Survivor	Life Certain w/10 Yrs	Joint 3/4 to Survivor	Widowed Children Survivor	Life Certain w /5 Yrs	Life Certain w /15 Yrs	Lump Sum Acc Contr
$ - 99	2,708	255	473	142	39	4	47	110	-
$100-199	4,194	580	913	143	126	23	42	121	1
$200-299	4,226	645	1,016	96	130	12	36	118	-
$300-399	4,274	657	930	81	170	29	26	99	-
$400-499	4,007	732	889	90	149	35	28	63	-
$500-599	3,719	691	801	55	171	40	30	62	-
$600-699	3,236	607	756	59	167	34	14	61	-
$700-799	3,025	626	662	53	184	28	21	50	-
$800-899	2,738	624	603	47	170	44	15	38	-
$900-999	2,621	676	613	42	174	48	18	31	-
$1,000-1,499	10,733	2,782	2,516	172	967	181	51	125	-
$1,500-1,999	8,689	2,351	1,772	97	827	180	32	61	-
$2,000-2,499	6,867	1,839	1,142	64	607	112	21	32	-
$2,500-2,999	4,265	1,143	685	42	380	72	20	16	-
$3,000-3,499	2,590	666	405	16	247	45	4	13	-
$3,500-3,999	1,402	387	252	10	155	30	4	5	-
$4,000 or More	2,198	940	544	22	347	18	2	11	-
Totals	71,492	16,201	14,972	1,231	5,010	935	411	1,016	1

AVERAGE BENEFIT BY YEARS OF SERVICE - FIVE YEAR SUMMARY

New Retirees by Calendar Year

Service Credit		2017	2018	2019	2020	2021
Less Than 5	Retired Members	365	408	521	610	865
	Average FAS*	$ 33,846.93	$ 34,306.65	$ 34,717.32	$ 32,598.61	$ 33,346.59
	Average Benefit	$ 283.62	$ 322.15	$ 382.91	$ 371.67	$ 440.44
	Average Years	2.85	2.70	2.61	2.30	1.88
5-9.99	Retired Members	828	822	849	854	950
	Average FAS*	$ 37,992.46	$ 37,193.02	$ 38,845.72	$ 40,334.48	$ 43,278.03
	Average Benefit	$ 497.32	$ 507.31	$ 571.28	$ 678.27	$ 815.98
	Average Years	7.29	7.33	7.38	7.27	7.32
10-14.99	Retired Members	832	847	947	977	1,023
	Average FAS*	$ 39,212.18	$ 41,189.43	$ 42,358.16	$ 43,788.04	$ 46,920.34
	Average Benefit	$ 761.52	$ 820.14	$ 907.08	$ 995.85	$ 1,138.02
	Average Years	12.43	12.41	12.44	12.44	12.41
15-19.99	Retired Members	882	926	923	958	1,110
	Average FAS*	$ 46,143.88	$ 46,008.60	$ 48,170.28	$ 49,126.55	$ 55,529.49
	Average Benefit	$ 1,228.16	$ 1,244.67	$ 1,381.52	$ 1,509.56	$ 1,850.96
	Average Years	17.38	17.34	17.37	17.44	17.31
20-24.99	Retired Members	1,084	1,049	1,026	1,044	1,153
	Average FAS*	$ 53,412.30	$ 54,313.03	$ 57,724.11	$ 60,576.34	$ 66,701.97
	Average Benefit	$ 1,856.53	$ 1,939.82	$ 2,141.85	$ 2,369.88	$ 2,726.40
	Average Years	22.45	22.46	22.41	22.45	22.42
25-29.99	Retired Members	928	905	808	687	645
	Average FAS*	$ 61,798.08	$ 62,292.51	$ 66,556.55	$ 66,454.21	$ 69,658.43
	Average Benefit	$ 2,546.49	$ 2,642.76	$ 2,941.62	$ 2,897.55	$ 3,156.21
	Average Years	27.18	27.10	27.04	27.06	27.16
30-34.99	Retired Members	411	387	347	322	296
	Average FAS*	$ 64,043.08	$ 63,627.78	$ 65,555.78	$ 67,355.53	$ 67,280.42
	Average Benefit	$ 3,021.72	$ 3,059.22	$ 3,204.28	$ 3,281.49	$ 3,448.54
	Average Years	32.18	32.21	32.32	32.29	32.19
35-39.99	Retired Members	167	166	142	112	73
	Average FAS*	$ 64,763.50	$ 65,925.81	$ 64,734.42	$ 66,267.26	$ 70,516.90
	Average Benefit	$ 3,253.21	$ 3,333.23	$ 3,425.34	$ 3,549.21	$ 3,789.17
	Average Years	36.91	36.82	36.81	36.64	36.59
40-44.99	Retired Members	40	31	19	13	9
	Average FAS*	$ 68,167.31	$ 65,221.88	$ 57,189.40	$ 67,785.50	$ 69,896.39
	Average Benefit	$ 3,810.83	$ 3,513.57	$ 3,602.29	$ 3,941.62	$ 4,086.19
	Average Years	41.41	41.02	41.62	41.81	41.56
45-49.99	Retired Members	7	6	2	4	-
	Average FAS*	$ 71,886.65	$ 70,200.30	$ 79,448.46	$ 70,960.18	$-
	Average Benefit	$ 4,424.05	$ 4,111.87	$ 4,608.91	$ 4,848.39	$-
	Average Years	46.46	46.54	46.50	46.56	-
50 and Over	Retired Members	3	1	-	2	-
	Average FAS*	$ 50,134.77	$ 61,330.24	$ -	$ 112,775.69	$-
	Average Benefit	$ 3,517.13	$ 5,182.41	$ -	$ 7,795.94	$-
	Average Years	54.00	55.00	-	52.75	-
Total Number	Retired Members	5,547	5,548	5,584	5,583	6,124
	Average FAS*	$ 49,197.83	$ 49,293.86	$ 50,471.05	$ 50,471.05	$ 53,416.89
	Average Benefit	$ 1,548.03	$ 1,567.82	$ 1,624.10	$ 1,624.10	$ 1,777.98
	Average Years	18.72	18.38	17.48	17.48	15.75

**Average "Final Average Salary"*

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

PRINCIPAL PARTICIPATING EMPLOYERS

Last Ten Calendar Years

	2021			2020		
Participating Government	Covered Employees	Rank	% of Total System	Covered Employees	Rank	% of Total System
State of Kansas	20,889	1	13.72 %	22,955	1	14.91 %
USD 259 Wichita	7,317	2	4.80	7,596	2	4.93
USD 233 Olathe	4,839	3	3.18	5,076	3	3.30
USD 500 Kansas City	3,608	4	2.37	3,628	4	2.36
USD 512 Shawnee Mission	3,399	5	2.23	3,502	5	2.28
Johnson County	3,171	6	2.08	3,228	6	2.10
USD 229 Blue Valley	3,160	7	2.08	3,222	7	2.09
Sedgwick County	2,436	8	1.60	2,484	8	1.61
USD 501 Topeka Public Schools	2,187	9	1.44	2,344	9	1.52
Unified Government of Wyandotte County	1,933	10	1.27	1,985	10	1.29
All Other (1)	99,349		65.23	97,939		63.61
Total (1,541 employers)	**152,288**		**100.00 %**	**153,959**		**100.00 %**

	2019			2018		
Participating Government	Covered Employees	Rank	% of Total System	Covered Employees	Rank	% of Total System
State of Kansas	23,237	1	14.87 %	22,872	1	14.70 %
USD 259 Wichita	7,386	2	4.73	7,051	2	4.53
USD 233 Olathe	4,802	3	3.07	4,611	3	2.96
USD 500 Kansas City	3,668	4	2.35	3,678	4	2.36
USD 512 Shawnee Mission	3,471	5	2.22	3,424	5	2.20
USD 229 Blue Valley	3,355	6	2.15	3,295	6	2.12
Johnson County	2,626	7	1.68	3,202	7	2.06
Sedgwick County	2,347	8	1.50	2,521	8	1.62
Unified Government of Wyandotte Co	1,758	10	1.13	2,009	10	1.29
USD 501 Topeka Public Schools	2,069	9	1.32	2,403	9	1.54
All Other	98,106		64.98	98,989		64.60
Total	**152,825**		**100.00 %**	**154,055**		**100.00 %**

(1) In 2021, "All Other" consisted of:

Type	Number	Covered Employees
School Districts	280	52,971
Cities and Counties	586	25,289
Post Secondary Education (2)	41	10,417
Other	624	10,672
	1,531	**99,349**

(2) Not Including State Board of Regents institutions

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

PRINCIPAL PARTICIPATING EMPLOYERS

Last Ten Calendar Years

	2017			2016		
Participating Government	Covered Employees	Rank	% of Total System	Covered Employees	Rank	% of Total System
State of Kansas	23,215	1	15.19 %	23,577	1	15.50 %
USD 259 Wichita	6,903	2	4.52	6,820	2	4.48
USD 233 Olathe	4,441	3	2.91	4,233	3	2.78
USD 500 Kansas City	3,558	4	2.33	3,488	4	2.29
USD 512 Shawnee Mission	3,385	5	2.22	3,315	5	2.18
USD 229 Blue Valley	3,200	6	2.09	3,118	6	2.05
Johnson County	3,162	7	2.07	3,065	7	2.01
Sedgwick County	2,514	8	1.65	2,488	8	1.64
USD 501 Topeka Public Schools	2,373	9	1.55	2,374	9	1.56
Unified Government of Wyandotte Co	2,048	10	1.34	2,029	10	1.33
All Other	96,888		64.14	97,612		64.17
Total	**151,687**		**100.00 %**	**152,119**		**100.00 %**

	2015			2014		
Participating Government	Covered Employees	Rank	% of Total System	Covered Employees	Rank	% of Total System
State of Kansas	23,748	1	15.49 %	24,389	1	15.82 %
USD 259 Wichita	6,926	2	4.52	6,921	2	4.49
USD 233 Olathe	4,225	3	2.76	4,310	3	2.80
USD 500 Kansas City	3,493	5	2.28	3,544	5	2.30
USD 512 Shawnee Mission	3,337	4	2.18	3,428	4	2.22
USD 229 Blue Valley	3,100	6	2.02	3,106	6	2.01
Johnson County	3,067	7	2.00	3,052	7	1.98
Sedgwick County	2,490	8	1.62	2,536	8	1.64
USD 501 Topeka Public Schools	2,351	9	1.53	2,408	9	1.56
USD 497 Lawrence	1,757	10	1.15	1,784	10	1.16
All Other	98,843		64.46	98,725		64.02
Total	**153,337**		**100.00 %**	**154,203**		**100.00 %**

PRINCIPAL PARTICIPATING EMPLOYERS

Last Ten Calendar Years

	2013			2012		
Participating Government	Covered Employees	Rank	% of Total System	Covered Employees	Rank	% of Total System
State of Kansas	24,631	1	15.78 %	25,293	1	16.21 %
USD 259 Wichita	6,861	2	4.40	6,709	2	4.30
USD 233 Olathe	4,293	3	2.75	4,274	3	2.74
USD 500 Kansas City	3,392	5	2.17	3,287	5	2.11
USD 512 Shawnee Mission	3,621	4	2.32	3,678	4	2.36
USD 229 Blue Valley	3,130	6	2.01	3,088	6	1.98
Johnson County	3,099	7	1.99	3,065	7	1.96
Sedgwick County	2,535	8	1.62	2,549	8	1.63
USD 501 Topeka Public Schools	2,387	9	1.53	2,339	9	1.50
USD 497 Lawrence	1,733	10	1.11	1,697	10	1.09
All Other	100,375		64.32	100,074		64.13
Total	**155,446**		**100.00 %**	**156,053**		**100.00 %**

Being their fiduciary
means we put members
first in all that we do.

Annual Comprehensive Financial Report
For the Fiscal Year Ended June 30, 2022

Kansas Public Employees Retirement System
a component unit of the State of Kansas

Prepared by KPERS Staff
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KPERS