KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM



GASB STATEMENT
NO. 67 REPORT

PREPARED FOR JUNE 30, 2024
FINANCIAL REPORTING





October 1, 2024

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

Dear Members of the Board:

Presented in this report is information to assist the Kansas Public Employees Retirement System in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67 for the June 30, 2024 Measurement Date. The calculations in this report have been made on a basis that is consistent with our understanding of this accounting standard (GASB 67).

The annual funding actuarial valuation, performed as of December 31, 2023, was used as the basis for much of the information presented as of June 30, 2024, the Measurement Date, in this report. The valuation was based upon data, furnished by the Executive Director and KPERS staff, concerning active, inactive and retired members along with pertinent financial information. This information was reviewed for completeness and internal consistency but was not audited by us. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete our results may be different, and our calculations may need to be revised. Please see the actuarial valuation report, dated July 15, 2024, for additional details on the funding requirements for the System including actuarial assumptions and methods and the funding policy for the System.

To the best of our knowledge, the information contained in this report is complete and accurate. The calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. In order to prepare the results in this 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.



The calculations are based on the current provisions of the System, and on actuarial assumptions that are internally consistent and individually reasonable based on the actual experience of the System. In addition, the calculations were completed in compliance with applicable law and, in our opinion, meet the requirements of GASB 67.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

We, Patrice A. Beckham, FSA, Brent A. Banister, FSA, and Bryan K. Hoge, FSA, are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. We are available to answer any questions on the material contained in this report or to provide explanations or further details as may be appropriate.

Respectfully submitted,

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TABLE OF CONTENTS



Section 1	Summary of Principal Results	1
Section 2	Introduction	2
Section 3	Notes to Financial Statements	4
Section 4	Required Supplemental Information	11
Appendix	A – Required Supplemental Information Tables Exhibit A – Schedule of Changes in the Net Pension Liability Exhibit B – Schedule of Employer Contributions	23
	B – Summary of Main Benefit Provisions	26
	C – Statement of Actuarial Assumptions	39







REPORT OF THE ANNUAL GASB STATEMENT NO. 67

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

Valuation Date (VD):	December 31, 2023
Prior Measurement Date:	June 30, 2023
Measurement Date (MD):	June 30, 2024
Membership Data:	
Retirees and Beneficiaries	116,007
Inactive Vested Members	33,005
Inactive Nonvested Members	43,381
Active Employees	<u>153,948</u>
Total	346,341
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.00%
Municipal Bond Index Rate at Prior Measurement Date	3.66%
Municipal Bond Index Rate at Measurement Date	3.94%
Fiscal Year in which Fiduciary Net Position is Projected to be Depleted	N/A
Single Equivalent Interest Rate at Prior Measurement Date	7.00%
Single Equivalent Interest Rate at Measurement Date	7.00%
Net Pension Liability:	
Total Pension Liability (TPL)	\$37,765,312,229
Fiduciary Net Position (FNP)	27,474,446,420
Net Pension Liability (NPL = TPL – FNP)	\$10,290,865,809
FNP as a percentage of TPL	72.75%



SECTION 2 – INTRODUCTION



The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "Financial Reporting for Pension Plans", in June 2012. The effective date for reporting under GASB 67 for the Kansas Public Employees Retirement System (KPERS) was fiscal year-end June 30, 2014. Based on the provisions of GASB 67, KPERS is a cost-sharing multiple employer defined benefit pension plan.

This report, prepared as of June 30, 2024 (the Measurement Date), presents information to assist KPERS in meeting the requirements of GASB 67 for fiscal year 2024. Much of the material provided in this report is based on the data, assumptions and results of the annual funding valuation of the System performed as of December 31, 2023 (the Valuation Date). The results of the funding valuation were detailed in a report dated July 15, 2024.

A major item to be reported in GASB 67 is the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial cost method. If the valuation date at which the TPL is determined is before the Measurement Date, as is the case here, the TPL must be rolled forward to the Measurement Date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the fair (market) value of assets). The benefit provisions recognized in the calculation of the TPL are summarized in Appendix B.

Among the items needed for the liability calculation is the discount rate, or Single Equivalent Interest Rate (SEIR), as described by GASB 67. To determine the SEIR, the FNP must be projected using GASB 67 guidelines into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the members and beneficiaries of the System on the Measurement Date. If the FNP is not projected to be depleted at any point in the future, the long-term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted at a future measurement date, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long-term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the monthly average of the Bond Buyers General Obligation 20-year Municipal Bond Index Rate (formerly published monthly by the Board of Governors of the Federal Reserve System).

Our calculations indicate that the FNP is not projected to be depleted, so the Municipal Bond Index Rate is not used in the determination of the SEIR for either the calculation of the TPL at June 30, 2023 or June 30, 2024. The SEIR at both the Prior Measurement Date and the current Measurement Date is 7.00%, the long-term assumed rate of return on investments. Please see Paragraph 31.b.(1) for more explanation of the development of the SEIR.



SECTION 2 – INTRODUCTION



The FNP projections are based upon the Kansas Public Employees Retirement System's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 67. As such, the FNP projections are not reflective of the expected cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the System, or the System's ability to make benefit payments in future years.

The sections that follow provide the results of all of the necessary calculations, presented in the order laid out in GASB 67, for note disclosure and Required Supplementary Information (RSI).





The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30.a. (1)-(3): This information will be supplied by the System.

Paragraph 30.a. (4): The data required regarding the membership of the System were furnished by the System. The following table summarizes the membership of the System as of December 31, 2023, the Valuation Date, which was used to develop the June 30, 2024 TPL.

Membership

	Inactive Members Or Their Beneficiaries Currently Receiving Benefits	Inactive Vested Members Entitled To But Not Yet Receiving Benefits	Inactive Nonvested Members	Active Members	Total
State	21,747	5,709	5,390	20,527	53,373
School	62,491	17,761	21,755	87,148	189,155
Local	25,060	9,020	14,187	37,703	85,970
KP&F	6,382	505	2,049	8,284	17,220
Judges	327	10	0	286	623
Total	116,007	33,005	43,381	153,948	346,341

Paragraphs 30.a. (5)-(6) and Paragraphs 30.b.-f.: This information will be supplied by the System.

Paragraph 31.a. (1)-(4): As stated earlier, the NPL is equal to the TPL minus the FNP. That result, as of June 30, 2024, is presented in the following table.







Fiscal Year Ending	June 30, 2024	4
Total Pension Liability State School Local KP&F Judges	\$	5,445,875,792 19,801,414,421 7,508,529,336 4,774,062,664 235,430,016
Total Pension Liability	\$	37,765,312,229
Fiduciary Net Position	_	27,474,446,420
Net Pension Liability	\$	10,290,865,809
Ratio of Fiduciary Net Position to Total Pension Liability		72.75%

Paragraph 31.b.: This paragraph requires information to be disclosed regarding the actuarial assumptions and other inputs used to measure the TPL. The complete set of actuarial assumptions and other inputs utilized in developing the TPL are outlined in Appendix C. The TPL as of June 30, 2024 was determined based on an actuarial valuation prepared as of December 31, 2023 rolled forward six months to June 30, 2024, using the following actuarial assumptions and other inputs:

Price Inflation	2.75 percent
Salary increases, including price inflation	3.50 to 15.50 percent
Long-term Rate of Return, net of investment expense, including price inflation	7.00 percent
Municipal Bond Index Rate	
Prior Measurement Date	3.66 percent
Measurement Date	3.94 percent
Year FNP is projected to be depleted	N/A
Single Equivalent Interest Rate, net of plan	
investment expense, including price inflation	
Prior Measurement Date	7.00 percent
Measurement Date	7.00 percent





Mortality

Mortality rates were based on the Pub 2010 Mortality Tables, with age setbacks and age set forwards based on different membership groups. Future mortality improvements are anticipated using Scale MP-2021. See Appendix C for more detailed descriptions.

The actuarial assumptions used in the valuation are based on the results of the most recent actuarial experience study, which covered the four-year period of January 1, 2019 through December 31, 2022. The experience study report is dated January 29, 2024.

Paragraph 31.b.(1)

- (a) Discount rate (SEIR): The discount rate used to measure the TPL at June 30, 2024 was 7.00 percent. There was no change in the discount rate from the Prior Measurement Date.
- **(b) Projected cash flows:** 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 employers 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% for fiscal year 2014, 1.0% for fiscal year 2015, 1.1% for fiscal year 2016 and 1.2% for fiscal year 2017. In addition, the statutory contribution rate for the State and School groups is determined using the combined results of the two groups.

In the recent past, the Legislature has made several changes to the statutory rates that deviated from the scheduled contribution increases set under the caps established in 2012. Under 2015 SB 4, the previously certified State/School statutory rate for FY 2015 of 11.27% was reduced to 8.65% for the last half of FY 2015 as part of the Governor's allotment. That same session, SB 228 recertified statutory rates for the State/School group to 10.91% for FY 2016 and 10.81% for FY 2017 in anticipation of the issuance of \$1 billion in 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 FY 2016. Concurrently, 2016 House Sub for SB 249 provided that the delayed contributions would be repaid in full, with interest at 8%, by June 30, 2018. However, legislation passed by the 2017 Legislature removed the repayment provision. In addition, 2017 S Sub for Sub HB 2052 delayed \$64 million in FY 2017 contributions, to be repaid over 20 years in level dollar installments. The first two years of the \$6.4 million payment were paid in full, as scheduled. In addition, appropriations for FY 2018 fully funded the State/School group statutory contribution rate of 12.01% 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% in the State/School contributions for FY 2019. Like





the FY 2017 reduction, it was scheduled to be paid back over a 20-year period, beginning in FY 2020. Therefore, both reductions were accounted for as long-term receivables.

The 2018 Legislature passed House Substitute for Senate Bill 109 that provided additional contributions to KPERS of \$82 million and \$56 million. The \$56 million was received June 30, 2018 and was accounted for as FY 2018 contributions. The \$82 million was received the first week of July 2018 and was accounted for as FY 2019 contribution. A contingent payment of up to \$56 million was to be paid on June 30, 2019 for FY 2019, dependent on actual FY 2019 receipts exceeding the consensus revenue estimates.

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 FY 2016, plus interest. House Substitute for Senate Bill 25 repealed the actions of the 2018 Legislature which provided for a contingent payment of up to \$56 million in FY 2019, if actual FY 2019 receipts exceeded the consensus revenue estimates. Instead, this legislation directly transferred \$51 million to the KPERS Trust Fund in FY 2020 (received by KPERS on July 1, 2019).

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, assuming certain criteria are met. As a result, the State/School contribution rates for FY 2022 were recertified from 14.09% to 13.33% and for FY 2023 from 13.86% to 13.11%. The bond proceeds were received by KPERS on August 26, 2021 and are accounted for as FY 2022 contributions.

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 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.

Based on the results of the December 31, 2023 actuarial valuation, the statutory contribution rate for the State/School group is equal to the actuarially required rate (ARC





rate) in FY 2027 with an ARC rate of 11.32% (statutory contribution rate was first equal to the ARC rate in FY 2021 at 14.23%). Projections based on the same valuation, and assuming annual returns of 7.00%, indicate that the contribution rate will increase for a few years while deferred losses are recognized and then remain fairly stable until 2040.

The Local group of KPERS is currently contributing the full actuarial contribution rate. Employers also contribute the full actuarial contribution rate for KP&F and Judges. The expected employer actuarial contribution rate was modeled for future years for these groups, assuming all actuarial assumptions are met in future years, and the full actuarial contribution rate was assumed to be paid.

For KPERS, member contributions are 6% of compensation. For KP&F, member contributions are 7.15% of compensation. For Judges, member contributions are 6% of compensation; however, upon reaching the maximum retirement benefit level of 70% of Final Average Salary, the contribution rate is reduced to 2%. The blended member contribution rate for Judges used in the projection of cash flows was 5.63%.

The FNP projections are based upon the System's financial status on the Valuation Date, the indicated set of methods and assumptions, and the requirements of GASB 67. As such, the FNP projections are not reflective of the expected cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether the fund will actually run out of money, the financial condition of the System, or the System's ability to make benefit payments in future years.

(c) Long-term rate of return: The long-term expected rate of return on plan investments is reviewed regularly as part of the experience study prepared for the System. Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation), along with estimates of variability and correlations for each asset class, were developed by the System's investment consultant. These ranges were combined to develop the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by some investment consultants are often intended for use over a 10-year investment horizon and are not always useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The long-term rate of return assumption is intended to be a long-term assumption (30 to 50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.





- **(d) Municipal bond rate:** The discount rate determination does not use a municipal bond rate. If it were required, the rate would be 3.94% on the Measurement Date.
- **(e) Periods of projected benefit payments:** Projected future benefit payments for all current plan members were projected through 2123.
- **(f) Assumed asset allocation**: The target asset allocation and best estimates of arithmetic real rates of return for each major asset class as of the most recent experience study, dated January 29, 2024, as provided by KPERS investment consultant, Meketa, are summarized in the following table:

Asset Class	Long-Term Target Allocation	Long-Term Expected Real Rate of Return*
Global Equities	43.0%	8.2%
Private Equity	11.0%	12.0
Real Estate	15.0%	5.7
Yield Driven	12.0%	5.3
Infrastructure	3.0%	6.8
Core Fixed Income	13.0%	2.2
Cash	3.0%	0.3
Total	100.0%	

^{*}Arithmetic mean





(g): Sensitivity analysis: This paragraph requires disclosure of the sensitivity of the NPL to changes in the discount rate. The following presents the NPL of the membership groups, along with the total for the entire System, calculated using the discount rate of 7.00 percent, as well as the NPL if it were calculated using a discount rate that is one percentage-point lower (6.00 percent) or one percentage-point higher (8.00 percent) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
All Membership Groups			
Total Pension Liability	\$42,416,664,071	\$37,765,312,229	\$33,871,171,791
Fiduciary Net Position	27,474,446,420	27,474,446,420	27,474,446,420
Net Pension Liability	\$14,942,217,651	\$10,290,865,809	\$6,396,725,371
State/School			
Total Pension Liability	\$28,338,528,114	\$25,247,290,213	\$22,657,969,243
Fiduciary Net Position	18,710,873,937	18,710,873,937	18,710,873,937
Net Pension Liability	\$9,627,654,177	\$6,536,416,276	\$3,947,095,306
Local			
Total Pension Liability	\$8,459,603,167	\$7,508,529,336	\$6,713,691,340
Fiduciary Net Position	5,384,299,797	<u>5,384,299,797</u>	5,384,299,797
Net Pension Liability	\$3,075,303,370	\$2,124,229,539	\$1,329,391,543
Police and Fire			
Total Pension Liability	\$5,360,912,688	\$4,774,062,664	\$4,283,290,618
Fiduciary Net Position	3,180,051,299	3,180,051,299	3,180,051,299
Net Pension Liability	\$2,180,861,389	\$1,594,011,365	\$1,103,239,319
Judges			
Total Pension Liability	\$257,620,102	\$235,430,016	\$216,220,590
Fiduciary Net Position	<u>199,221,387</u>	<u>199,221,387</u>	<u>199,221,387</u>
Net Pension Liability	\$58,398,715	\$36,208,629	\$16,999,203

Paragraph 31.c.: The actuarial valuation upon which the TPL is based was performed as of December 31, 2023. The valuation results were used to determine the TPL on the Measurement Date by rolling the liabilities forward six months to June 30, 2024 using standard actuarial techniques. The roll-forward begins with the actuarial liability at December 31, 2023, adds half the annual normal cost (also called Service Cost), subtracts the actual benefit payments and refunds for the six month period and then applies interest to June 30, 2024 using the discount rate as of the Measurement Date.





There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32.a.-c.: The required tables of schedules are provided in Appendix A.

Paragraph 32.d.: The required schedule presenting the annual money-weighted rates of return is to be supplied by the System.

Paragraph 34: The following information should be noted regarding the RSI, particularly for the *Schedule of Employer Contributions*:

Changes of benefit and funding terms: The following changes to the plan provisions were made as identified below. Legislative changes are typically reflected in the prior December 31 valuation.

2024: The 2024 Legislature passed House Bill 2711 that included the following changes to the provisions and funding of KPERS:

The lump sum retiree death benefit was increased from \$4,000 to \$6,000. The employer contribution rates for State/School for FY 2025 and FY 2026 and for Local employers for CY 2025 were increased to reflect the additional contribution required to fund this benefit improvement.

The employer contribution threshold for the 30% Working After Retirement (WAR) rate increased from \$25,000 to \$40,000, the earnings limit for KP&F retirees increased from \$25,000 to \$40,000, and an exemption from employer contributions was created for nurses and direct support workers at Community Development Disability Organizations (CDDOs). These changes had no impact on the valuation because specific assumptions for these occurrences are not used in the valuation.

HB 2711 also increased the alternative investment cap from 15% to 25% and requires the System to divest all publicly traded securities held in funds by countries of concern, as defined by the bill. These changes had no impact on the valuation, because they are not expected to materially affect the asset allocation.

2023: The 2023 Legislature passed two bills that impacted the provisions and funding of KPERS:

House Bill 2196 expands the Deferred Retirement Option Plan (DROP) in KP&F to all employers as of April 27, 2023. Prior to this change, only members employed by the Kansas Highway Patrol and Kansas Bureau of Investigation were eligible.





Under HB 2196, the Kansas Department of Wildlife and Parks (KDWP) became an affiliated KP&F employer and certain law enforcement positions at the KDWP are eligible for KP&F participation as of July 1, 2023. The affiliation with KP&F is for future service only, so the valuation results were not impacted.

House Bill 2100 defines environmental, social and governance factors and establishes limits on the consideration of those factors when entering into contracts (including investment contracts) and when making proxy votes on behalf of the System. This change had no impact on the valuation results, because it was not expected to materially affect the asset allocation.

2022: The 2022 Legislature passed several bills that impacted the provisions and funding of KPERS:

Senate Bill 421 provided \$253.9 million for repayment of the delayed contributions from FY 2017 and FY 2019 and additional contributions of \$871.1 million for the School group. \$253.9 million for the repayment of delayed contributions and additional contributions of \$300 million were received May 19, 2022. Additional contributions of \$300 million were received June 1, 2022 and \$146.1 million was received August 1, 2022. An additional contribution of \$125 million is expected December 1, 2022. Although these 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 remain in place. If the recertification occurs in the future, the revised employer contribution rates would be 12.23% for FY 2023 and 11.27% for FY 2024.

Senate Bill 450 eliminated the transfer of proceeds to KPERS from the sale of surplus real estate. This change did not have a material impact on the valuation results.

House Bill 2481 permits members of the Kansas Police and Firemen's Retirement System to purchase certain years of service at the full actuarial cost. This change did not have a material impact on the valuation results.





2021: The 2021 Legislature passed several bills that impacted the provisions and funding of KPERS:

House Bill 2405 provided for net proceeds of up to \$500 million from bonds issued by the State to be deposited into the KPERS trust fund for the School group, provided that the bonds must be issued at an interest rate no greater than 4.3% and approved by the State Finance Council. (Bond proceeds received August 26, 2021).

Due to the passage of HB 2045, Senate Bill 159 included a provision to reduce the previously certified State/School employer contribution rate from 14.09% to 13.33% for FY 2022 and from 13.86% to 13.11% for FY 2023.

House Bill 2063 provides an increased benefit for disabled members who pass away prior to retirement if the disability was service-connected. The monthly benefit is equal to 50% of the member's final average salary at disability plus 10% for each dependent child up to a maximum of 75% or the retirement benefit the member would have received if the member had retired on the date of death if there are no dependent children.

House Bill 2064 allows certain members who initially elected to participate in the Deferred Retirement Option Program (DROP) for less than the maximum five years to later extend their DROP period up to the maximum of five years. This change did not have a material impact on the valuation results.

- 2020: The Deferred Retirement Option Program (DROP) was previously only available to Kansas Highway Patrol members, but as of July 1, 2019 members of the Kansas Bureau of Investigation can also participate in DROP. This change did not have a material impact on the valuation results.
- 2019: The 2019 Legislature passed two pieces of legislation that impacted the contribution 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 FY 2016, plus interest.

House Substitute for Senate Bill 25 repealed the actions of the 2018 Legislature which provided for a contingent payment of up to \$56 million in FY 2019, if actual FY 2019 receipts exceeded the consensus revenue estimates. Instead, this legislation directly transferred \$51 million to the KPERS Trust Fund in FY 2020 (received by KPERS on July 1, 2019).





2018: 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 FY 2018, if actual FY 2018 receipts exceed the consensus revenue estimates (full amount received by KPERS on June 30, 2018).
- A contingent additional payment of up to \$56 million to be paid in FY 2019, if actual FY 2019 receipts exceed the consensus revenue estimates.

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

Senate Substitute for Substitute for HB 2052 (S Sub for Sub HB 2052) provides that the contributions for the School group for fiscal year 2017 (FY 2017) will be reduced so the total State/School contribution will be \$64.13 million less than the scheduled statutory contributions. This reduction in employer contributions for fiscal year 2017 will be 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. These payments are treated as a long-term receivable by KPERS. S Sub for Sub HB 2052 provides that the repayment of the contribution reduction from FY 2016 with interest (\$115 million), scheduled in FY 2018, will not be made.

Senate Substitute for HB 2002 (S Sub for HB 2002) contains KPERS funding provisions for FY 2018 and FY 2019, including the following:

- **FY 2018**: The contributions for the State/School group for fiscal year 2018 will be made at the currently scheduled statutory rate of 12.01%. In addition, the first installment of \$6.4 million on the 20-year amortization of the contribution reduction for FY 2017 will be paid.
- **FY 2019**: The contributions for School employers within the State/School group for fiscal year 2019 will be reduced so the total State/School employer contribution is \$420 million, including the second installment of \$6.4 million on the contribution reduction for FY 2017. This results in an expected reduction of \$194 million that will be repaid by the School group as a level dollar amount over 20 years beginning in FY 2020.





• FY 2020: The current statutory cap of 1.2% per year will apply in determining the statutory contribution rate for the State/School group for FY 2020. The certified statutory rate from FY 2019 of 13.21%, without inclusion of the \$6.4 million amortization of the contribution reduction for FY 2017 and \$19.4 million amortization of the contribution reduction for FY 2019, will be increased by 1.2%, resulting in a statutory contribution rate for FY 2020 of 14.41%. The current statutory cap of 1.2% per year will apply for all subsequent years.

SB 205 changed the duty-related death benefit for KP&F members to the greater of 50% of Final Average Salary and the member's accrued retirement benefit under the 100% 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% of the member's Final Average Salary. Prior to this bill, the duty-related spousal death benefit for a KP&F member was 50% of Final Average Salary, and the maximum available to the family was 75% of the member's Final Average Salary.

House Substitute for SB 21 (H Sub for SB21) 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.

2016: The 2016 Legislature passed two bills that impacted the provisions and funding of KPERS:

House Substitute for SB 168 (KPERS Omnibus Bill) included changes to the working after retirement rules, technical changes to the DROP program for the Kansas Highway Patrol, and technical changes to KPERS and the KPERS 457 plans. The provisions of the bill tighten the requirement that there be no pre-arrangement for a retired member to return to work. It also extends from July 1, 2017 to July 1, 2020, the grandfather provisions for those retirees in a licensed school position who retired before May 1, 2015 and establishes a 30% employer contribution rate, subject to actuarial review by the Board every three years, for retirees working in positions that are exempt from the general working after retirement rules. The bill also increased the earnings limitation for KP&F retirees from \$15,000 to \$25,000.

The valuation process does not include an assumption regarding the reemployment of retirees so the working after retirement provisions in House Sub for SB 168 did not have an impact on the valuation results. The technical changes to





the DROP program and other KPERS provisions also did not have an impact on the valuation results.

House Sub for SB 161 provided for the delay of up to \$100 million in State and School contributions to the Retirement System for fiscal year 2016. House Sub for SB 249 provided that the delayed contributions would be repaid in full, with interest at 8%, by June 30, 2018. In the December 31, 2015 valuation, the delayed contributions with interest were treated as a long-term receivable.

2015: The 2015 Legislature passed four bills that impacted the provisions of KPERS and KP&F:

House Bill 2095 (HB 2095) contained both working after retirement provisions and a new DROP pilot program for the Kansas Highway Patrol. The working after retirement provisions change the existing policy governing retirees returning to work starting July 1, 2016. Most new retirees will be subject to an annual \$25,000 earnings limitation if they return to work for any KPERS affiliated employer. Employers contribute the statutory employer contribution rate on all wages paid to the retirees. There are exceptions to the general rule for special education teachers, hard-to-fill positions, and instances of a hardship. State hospital nurses, Kansas Law Enforcement Training Center instructors, legislative staff, and elected city and county officials are exempted from the earnings limitation. The valuation process does not include an assumption regarding the re-employment of retirees so the working after retirement provisions of HB 2095 did not have an impact on the valuation results. While the cost impact of working after retirement cannot be reliably determined, the new working after retirement rules appear to have fewer incentives for members to retire when first eligible and return to work. If the new rules change retirement patterns in the future, resulting in later retirement ages, it will have a favorable impact on plan liabilities.

HB 2095 also created a Deferred Retirement Option Plan (DROP) for the Kansas Highway Patrol members of KP&F. Members are eligible for the DROP at normal retirement age, must select a period of three to five years to continue working, during which time their benefit is deposited into a DROP account. At ultimate retirement, the member receives the balance of the DROP account as a lump sum and continues to receive the monthly benefit. The DROP sunsets in 2020. The addition of the DROP to the KP&F benefit structure only for members of the Kansas Highway Patrol had a small impact on the overall valuation results because there were only about 450 active members impacted out of a total of 7,200. The TPL increased \$1.4 million, the normal cost rate increased 0.01%, and the total KP&F employer actuarial contribution rate increased 0.03%.





Late in CY 2014, the State/School employer contribution rate was reset for the last half of FY 2015 as a part of a state budget allotment implemented by the Governor. Senate Bill 4, as amended by Senate Substitute for HB 2094 (SB 4) reduced the previously certified FY 2015 employer contribution rate of 11.27% to 8.65% to correspond with the Governor's allotment.

Senate Bill 228 (SB 228) authorized the issuance of \$1.0 billion in bonds, net of fees, to be used to reduce the unfunded actuarial accrued liability of the State/School group. The interest rate on the bonds can be no greater than 5% and the State Finance Council must approve any bond issue before the bonds are sold (approval received July 2, 2015). The debt service on the bonds is subject to State General Fund appropriation and is not an obligation of the System. Due to the uncertainty surrounding the timing and issuance of the bonds at the time of the valuation was performed, no bond proceeds were reflected in the December 31, 2014 valuation. The bonds were issued in August, 2015 (after the valuation report was issued) and net proceeds of \$1.0 billion were deposited in the KPERS trust fund. SB 228 also reset the employer contribution rate for the State/School group for FY 2016 from 12.37% to 10.91% and for FY 2017 rate from 13.57% to 10.81%.





Changes in actuarial assumptions and methods:

12/31/2023 valuation:

KPERS

- The mortality assumption was changed to the Pub-2010 family of mortality tables, with different groups using different tables and age adjustments, projected generationally using MP-2021.
- Retirement rates for the C60 group were adjusted to partially reflect observed experience.
- Disability rates were reduced.
- The probability of KPERS 1 members leaving their contributions with the System were modified to better reflect observed experience.
- Factors for the State and Local groups that are used to anticipate higher liabilities due to higher final average salary at retirement for pre-1993 hires were modified to better reflect actual experience.
- The administrative expense component of the actuarial required contribution rate was increased from 0.18% to 0.23%.
- The merit salary increase assumption was increased for the School and Local groups.

KP&F

- The mortality assumption was changed to the Pub-2010 Above Median Safety Mortality Tables with a two-year age set forward, projected generationally using MP-2021.
- Retirement rates were adjusted to partially reflect observed experience.
- Disability rates were reduced.
- Termination rates were increased.
- The administrative expense component of the actuarial required contribution rate was increased from 0.18% to 0.23%.
- The merit salary increase assumption was increased.

Judges

- The mortality assumption was changed to the Pub-2010 Above Median General Mortality Tables with a one-year age setback, projected generationally using MP-2021.
- Retirement rates were adjusted to partially reflect observed experience.
- The administrative expense component of the actuarial required contribution rate was increased from 0.18% to 0.23%.





12/31/2021 valuation:

All Groups

Investment return assumption was lowered from 7.75% to 7.00%. (7.25% to 7.00% for purposes of valuing the TPL)

KPERS

- Interest crediting rate assumption for KPERS 3 members was lowered from 6.25% to 6.00%.
- Annuity interest rate assumption for KPERS 3 members was lowered from 5.75% to 5.00%.

In addition to the changes pertaining to actuarial assumptions, the Board also reamortized the total unfunded actuarial liability (UAL). The UAL 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 20year period for Judges.

12/31/2020 valuation:

All Groups

Investment return assumption was lowered from 7.75% to 7.25%. (7.50% to 7.25% for purposes of valuing the TPL)

The change listed above was not adopted by the Board for the actuarial funding valuation. In order to comply with Actuarial Standard of Practice Number 27, this new assumption was used to develop the TPL as of June 30, 2021 in the GASB 67 report.

12/31/2019 valuation:

All Groups

- Investment return assumption was lowered from 7.75% to 7.50%.
- General wage growth assumption was lowered from 3.50% to 3.25%.
- Payroll growth assumption was lowered from 3.00% to 2.75%.

The changes listed above that were recommended for all groups were not adopted by the Board for the actuarial funding valuation. In order to comply with Actuarial Standard of Practice Number 27, these new assumptions were used to develop the TPL as of June 30, 2020 in the GASB 67 report.

KPERS

- Retirement rates were adjusted to partially reflect observed experience.
- Termination rates were increased for most KPERS groups.
- Disability rates were reduced.





- Factors for the State group that are used to anticipate higher liabilities due to higher final average salary at retirement for pre-1993 hires were modified to better reflect actual experience.
- The administrative expense load for contribution rates was increased from 0.16% to 0.18%.

KP&F

- Retirement rates were adjusted to partially reflect observed experience.
- Factors for the KP&F group that are used to anticipate higher liabilities due to higher final average salary at retirement for pre-1993 hires were modified to better reflect actual experience.
- The administrative expense load for contribution rates was increased from 0.16% to 0.18%.

Judges

- Retirement rates were adjusted to partially reflect observed experience.
- The administrative expense load for contribution rates was increased from 0.16% to 0.18%.

12/31/2016 valuation:

All Groups

- Price inflation assumption was lowered from 3.00% to 2.75%.
- Investment return assumption was lowered from 8.00% to 7.75%.
- General wage growth assumption was lowered from 4.00% to 3.50%.
- Payroll growth assumption was lowered from 4.00% to 3.00%.

In addition to the changes pertaining to actuarial assumptions, the Board has also adopted a new method for paying off the unfunded actuarial liability (UAL). Under the new method, the UAL is amortized using a "layered" approach, where the December 31, 2015 UAL serves as the initial (legacy) base and is amortized over a period originally set at 40 years beginning July 1, 1993. As of December 31, 2016, sixteen years remain in that period. The change to the UAL as of December 31, 2016 that resulted from the assumption changes is amortized over a closed 25-year period. Any change to the UAL that results from actuarial experience is amortized over closed 20-year periods.

KPERS

The post-retirement healthy mortality assumption was changed to the RP-2014
Mortality Table, with adjustments to better fit the observed experience for the
various KPERS groups. The most recent mortality improvement scale, MP2016, is used to anticipate future mortality improvements in the valuation
process through the next experience study.





- The active member mortality assumption was modified to also be based on the RP-2014 Employee Mortality Table with adjustments.
- The retirement rates for the select period (when first eligible for unreduced benefits under Rule of 85) were increased, but all other retirement rates were decreased.
- Disability rates were decreased for all three groups.
- The termination of employment assumption was increased for all three groups.
- The interest crediting rate assumption for KPERS 3 members was lowered from 6.50% to 6.25%.

KP&F

- The post-retirement healthy mortality assumption was changed to the RP-2014 Mortality Table with 1-year age set forward and the MP-2016 Scale is used to anticipate future mortality improvements.
- The mortality assumption for disabled members was changed to the RP-2014
 Disabled Lives Table (generational using MP-2016) with a one-year age set
 forward.
- The active member mortality assumption was modified to the RP-2014 Employee Mortality Table with a 1-year age set forward with a 90% scaling factor.
- The retirement rates for Tier I were lowered and the ultimate assumed retirement age was changed from 63 to 65 for Tier II.
- The termination of employment rates for Tier II were increased to better match the observed experience.

Judges

- The post-retirement healthy mortality assumption was changed to the RP-2014 Mortality Table with a 2-year age setback and the MP-2016 Scale is used to anticipate future mortality improvements.
- The active member mortality assumption was modified to the RP-2014 Employee Mortality Table with a 2-year age setback with an 80% scaling factor.
- The retirement rates were modified with increases at some ages and decreases at others.





Method and assumptions used in calculations of actuarially determined contributions.

The actuarially determined contribution rates in the schedule of employer contributions are calculated annually on each valuation date (December 31). There is a lag between the valuation date and the effective date of the application of the contribution rates. The lag for the State, School, Judges and KP&F (State) is two and a half years. The lag for Local employers (KPERS and KP&F) is two years. For example, the results of the December 31, 2023 valuation set employer contribution rates for fiscal year 2027 for the State (July 1, 2026 to June 30, 2027) and 2026 for Local employers (calendar year 2026). The following actuarial methods and assumptions were used to determine actuarial contribution rates reported in the December 31, 2023 actuarial valuation:

Actuarial cost method Entry age normal

Amortization method Level percentage of payroll, closed (Level dollar

for Judges)

Remaining amortization period Layered bases varying from 15 to 20 years

Asset valuation method 5-year smoothed value

Price Inflation 2.75 percent

Salary increase, including price

inflation

3.50 to 15.50 percent

Long-term Rate of Return, net of investment expense, including

price inflation

7.00 percent

Please see the information presented earlier in regard to Paragraph 34 for detailed information on the benefit changes and assumption changes that may have impacted the Actuarially Determined Contributions shown in the *Schedule of Employer Contributions*.







Exhibit A

GASB 67 Paragraph 32(a) SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY (\$ in Thousands)

		<u> </u>	Tilououii						
2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
\$748,384	710,959	666,910	608,798	581,722	563,297	552,423	570,703	571,263	571,944
2,476,240	2,380,618	2,321,174	2,257,132	2,217,512	2,146,531	2,084,822	2,046,674	1,985,329	1,926,405
0	26,651	0	101	0	0	0	713	0	1,467
	,	- , -	-, -	-,	,	,		, ,	(135,542)
, ,	-	,		,	-	-	,	-	(53,014)
, , , ,	,		,	,	, , ,	, , ,	, , ,	,	(1,459,918)
(93,620)	(92,056)	(91,273)	(76,648)	(66,929)	(74,316)	(64,967)	(70,481)	(68,123)	<u>(64,462)</u>
\$1,271,652	1,409,103	2,030,512	1,973,607	1,531,751	951,972	834,247	1,351,932	796,067	786,880
\$36,493,661	35,084,557	33,054,046	31,080,439	29,548,688	28,596,716	27,762,469	26,410,538	25,614,471	24,827,591
\$37,765,312	36,493,661	35,084,557	33,054,046	31,080,439	29,548,688	28,596,716	27,762,469	26,410,538	25,614,471
\$1,095,564	1,062,707	1,025,928	1,007,571	1,008,544	925,352	831,735	761,610	739,184	690,564
534,682	508,218	481,840	459,314	451,568	437,353	420,285	414,538	404,856	382,058
0	271,134	1,100,000	0	51,000	213,543	56,000	0	1,000,000	0
2,343,614	1,698,368	(1,295,608)	5,185,034	347,464	1,216,685	1,516,929	2,060,925	49,171	561,174
(2,182,485)	(2,096,426)	,	(1,930,334)	(1,839,919)	(1,758,981)	(1,690,887)	(1,616,195)	,	(1,459,918)
\ , , ,	` ' '	` ' '	(17,184)	(13,607)	` ' '	` ' '	` ' '	` ' '	(10,768)
			` ' '	, ,	, ,		` ' '		(64,462)
<u>802</u>	<u>890</u>	<u>37,474</u>	<u> 19,967</u>	20,699	<u>5,488</u>	<u>5,734</u>	<u>(97,873)</u>	<u>2,905</u>	<u>1,076</u>
\$1,673,787	1,328,584	(782,519)	4,647,721	(41,180)	951,845	1,062,369	1,441,408	556,912	99,724
\$25,800,660	24,472,076	25,254,595	20,606,874	20,648,054	19,696,209	18,633,840	17,192,432	16,635,521	16,535,797
27,474,446	25,800,660	24,472,076	25,254,595	20,606,874	20,648,054	19,696,209	18,633,840	17,192,432	16,635,521
\$10,290,866	10,693,001	10,612,481	7,799,451	10,473,565	8,900,634	8,900,507	9,128,629	9,218,106	8,978,950
	\$748,384 2,476,240 0 522,106 (198,974) (2,182,485) (93,620) \$1,271,652 \$36,493,661 \$37,765,312 \$1,095,564 534,682 0 2,343,614 (2,182,485) (24,770) (93,620) 802 \$1,673,787 \$25,800,660 27,474,446	\$748,384 710,959 2,476,240 2,380,618 0 26,651 522,106 479,358 (198,974) 0 (2,182,485) (2,096,426) (93,620) (92,056) \$1,271,652 1,409,103 \$36,493,661 35,084,557 \$37,765,312 36,493,661 \$1,095,564 1,062,707 534,682 508,218 0 271,134 2,343,614 1,698,368 (2,182,485) (24,770) (24,253) (93,620) (92,056) 802 890 \$1,673,787 1,328,584 \$25,800,660 24,472,076 27,474,446 25,800,660	\$748,384 710,959 666,910 2,476,240 2,380,618 2,321,174 0 26,651 0 0 \$522,106 479,358 192,192 (198,974) 0 962,890 (2,182,485) (2,096,426) (2,021,382) (93,620) (92,056) (91,273) \$1,271,652 1,409,103 2,030,512 \$36,493,661 35,084,557 33,054,046 \$37,765,312 36,493,661 35,084,557 \$34,682 508,218 481,840 0 271,134 1,100,000 2,343,614 1,698,368 (1,295,608) (2,182,485) (2,096,426) (2,021,382) (24,770) (24,253) (19,498) (93,620) (92,056) (91,273) 802 890 37,474 \$1,673,787 1,328,584 (782,519) \$25,800,660 24,472,076	\$748,384	\$748,384	2024 2023 2022 2021 2020 2019 \$748,384 710,959 666,910 608,798 581,722 563,297 2,476,240 2,380,618 2,321,174 2,257,132 2,217,512 2,146,531 0 26,651 0 101 0 0 522,106 479,358 192,192 113,131 110,055 75,441 (198,974) 0 962,890 1,001,426 529,310 0 (2,182,485) (2,096,426) (2,021,382) (1,930,334) (1,839,919) (1,758,981) (93,620) (92,056) (91,273) (76,648) (66,929) (74,316) \$1,271,652 1,409,103 2,030,512 1,973,607 1,531,751 951,972 \$36,493,661 35,084,557 33,054,046 31,080,439 29,548,688 28,596,716 \$37,765,312 36,493,661 35,084,557 33,054,046 31,080,439 29,548,688 \$1,095,564 1,062,707 1,025,928 1,007,571 1,008,544	2024 2023 2022 2021 2020 2019 2018 \$748,384 710,959 666,910 608,798 581,722 563,297 552,423 2,476,240 2,380,618 2,321,174 2,257,132 2,217,512 2,146,531 2,084,822 0 26,651 0 101 0 0 0 0 522,106 479,358 192,192 113,131 110,055 75,441 (47,143) (198,974) 0 962,890 1,001,426 529,310 0 0 (2,182,485) (2,096,426) (2,021,382) (1,930,334) (1,839,919) (1,758,981) (1,690,887) (93,620) (92,056) (91,273) (76,648) (66,929) (74,316) (64,967) \$1,271,652 1,409,103 2,030,512 1,973,607 1,531,751 951,972 834,247 \$36,493,661 35,084,557 33,054,046 31,080,439 29,548,688 28,596,716 27,762,469 \$1,095,564 1,062,707	2024 2023 2022 2021 2020 2019 2018 2017 \$748,384 710,959 666,910 608,798 581,722 563,297 552,423 570,703 2,476,240 2,380,618 2,321,174 2,257,132 2,217,512 2,146,531 2,084,822 2,046,674 0 26,651 0 101 0 0 0 0 713 522,106 479,358 192,192 113,131 110,055 75,441 (47,143) (154,326) (198,974) 0 962,890 1,001,426 529,310 0 0 574,844 (2182,485) (2,096,426) (2,021,382) (1,930,334) (1,839,919) (1,758,981) (1,690,887) (1,616,195) (93,620) (92,056) (91,273) (76,648) (66,929) (74,316) (64,967) (70,481) \$1,271,652 1,409,103 2,030,512 1,973,607 1,531,751 951,972 834,247 1,351,932 \$36,493,661 35,084,557 3	2024 2023 2022 2021 2020 2019 2018 2017 2016 \$748,384 710,959 666,910 608,798 581,722 563,297 552,423 570,703 571,263 2,476,240 2,380,618 2,321,174 2,257,132 2,217,512 2,146,531 2,084,822 2,046,674 1,985,329 0 26,651 0 101 0 0 0 0 713 0 522,106 479,358 192,192 113,131 110,055 75,441 (47,143) (154,326) (133,493) (188,974) 0 96,880 1,001,426 529,310 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 574,844 0 0 <td< td=""></td<>

Numbers may not add due to rounding.

In 2022, there was \$500 million in bond proceeds and \$300 million in additional contributions paid on both May 19 and June 1.



^{*} Bond proceeds for 2016, additional contributions for 2018, 2019, 2020 and 2023.





Exhibit A (Continued)

GASB 67 Paragraph 32(b) SCHEDULE OF THE NET PENSION LIABILITY (\$ in Thousands)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total Pension Liability Plan Fiduciary Net Position	\$37,765,312 27,474,446	\$36,493,661 25,800,660	\$35,084,557 24,472,076	\$33,054,046 25,254,595	\$31,080,439 20,606,874	\$29,548,688 20,648,054	\$28,596,716 19,696,209	\$27,762,469 18,633,840	\$26,410,538 17,192,432	\$25,614,471 16,635,521
Net Pension Liability	\$10,290,866	\$10,693,001	\$10,612,481	\$7,799,451	\$10,473,565	\$8,900,634	\$8,900,507	\$9,128,629	\$9,218,106	\$8,978,950
Ratio of Plan Fiduciary Net Position to Total Pension Liability	72.75%	70.70%	69.75%	76.40%	66.30%	69.88%	68.88%	67.12%	65.10%	64.95%
Covered payroll*	\$8,747,170	\$8,299,627	\$7,837,185	\$7,547,246	\$7,411,388	\$7,168,557	\$6,824,710	\$6,715,593	\$6,388,450	\$6,635,196
Net Pension Liability as a percentage of covered payroll	117.65%	128.84%	135.41%	103.34%	141.32%	124.16%	130.42%	135.93%	144.29%	135.32%

^{*} Provided by the System







Exhibit B

GASB 67 Paragraph 32.c. SCHEDULE OF EMPLOYER CONTRIBUTIONS (\$ in Thousands)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Actuarially determined employer contribution	\$1,058,065	\$1,050,427	\$1,015,599	\$1,029,106	\$1,022,243	\$921,045	\$937,808	\$920,789	\$891,638	\$908,019
Contractually required contribution Actual employer contributions	1,076,590 1,076,590	1,046,681 1,046,681	1,009,751 1,009,751	993,216 993,216	992,099 992,099	908,931 <u>908,931</u>	817,653 817,653	745,021 <u>745,021</u>	721,313 <u>721,313</u>	676,173 <u>676,173</u>
Annual contribution deficiency (excess)	<u>(18,525)</u>	<u>3,746</u>	<u>5,848</u>	<u>35,890</u>	<u>30,144</u>	<u>12,114</u>	<u>120,155</u>	<u>175,768</u>	<u>170,325</u>	<u>231,846</u>
Covered payroll	\$8,747,170	\$8,299,627	\$7,837,185	\$7,547,246	\$7,411,388	\$7,168,557	\$6,824,710	\$6,715,593	\$6,388,450	\$6,635,196
Actual contributions as a percentage of covered payroll	12.31%	12.61%	12.88%	13.16%	13.39%	12.70%	11.98%	11.09%	11.29%	10.19%

Note: the information presented in this table was provided by the System.

Actuarial valuations are prepared annually for the System with separate contribution rates determined for the KPERS State/School group, KPERS Local group, Kansas Police and Fire Retirement System, and the Retirement System for Judges. The results of the annual actuarial valuation, performed as of the last day of each calendar year, sets the employer contribution rates for the fiscal year ending four years later than the year of the valuation for local employers. The Board certifies the employer contribution rates each year based on the results of the actuarial valuation. However, the full actuarial contribution rate is not necessarily contributed for all KPERS groups. Based on state statutes, the employer contribution rates certified by the Board for KPERS (State, School, Local) may not increase by more than the statutory cap which has been changed periodically, most recently in 2012. The recent history of the statutory cap was 0.9% for fiscal year 2014, 1.0% for fiscal year 2015, 1.1% for fiscal year 2016, and 1.2% for fiscal year 2017 and beyond. The full actuarial contribution rate, without regard to any caps, is paid by all employers who participate in KP&F and by the state of Kansas for the Judges System.





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 Provisions *

* 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, 2023.

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% (7.00% assumed investment return, minus 2.00%), 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:

	<u>Members</u>	<u>Beneficiaries</u>
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% of compensation. The employer retirement credits follow the schedule below:

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







Interest credits are 4% 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% 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%. A schedule of historical dividend rates is contained in the following table:

	Applicable	Compound	
	Rate of	<u>Average</u>	
<u>Yea</u>	<u>Return</u>		<u>Dividend</u>
2019	17.1%	7.1%	0.825%
2020	11.1%	9.3%	2.475%
2021	15.7%	10.7%	3.525%
2022	(9.8%)	5.7%	0.000%
2023	10.6%	8.5%	1.875%

Prior Service Credit – Prior service credit is 0.75% or 1.00% of Final Average Salary per year [School employees receive 0.75% 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% of Final Average Salary for years of service prior to January 1, 2014. Participating service credit is 1.85% 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% 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% per month for each month between the ages of 60 and 62, and 0.6% 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% at age 60 and 57.5% at age 55. If the member has 30 years of credited service, the early retirement reduction is less (50% 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% per year to July, 1998 and the change in CPI-U less 1%, not to exceed 4% 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%, and (b) 4% 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% 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 \$6,000 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% 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% of compensation effective January 1, 2014, and 6% effective January 1, 2015, with an increase in the benefit multiplier to 1.85% 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% of compensation.





KPERS 3: The member contribution rate for KPERS 3 is 6% 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 assumed investment rate of return. Those who become members on and after July 1, 1993, have interest credited to their accounts at the rate of 4% 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% 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% 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% 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% or 1.85% (as applicable under 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% 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% of Final Average Salary for each year of credited service, to a maximum of 90% 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% 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% of Final Average Salary, plus 10% 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% of Final Average Salary. If dependent child benefits aren't payable, the benefit is 50% of Final Average Salary or 2.5% for each year of credited service up to a maximum of 90% 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% 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% times years of credited service times Final Average Salary with a minimum of 25% of FAS and a maximum of 90% of FAS.

Tier II: Service-connected disability – The annual benefit is 50% 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% 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% 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% of the member's Final Average Salary.

Tier II: Non-Service-connected disability – The annual benefit is 50% 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% 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% joint and survivor option and 50% of Final Average Salary is payable to the spouse, plus 10% 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% of Final Average Salary Active Member.

Active Member Non-Service Connected Death – A lump sum of 100% of Final Average Salary and a pension of 2.5% of Final Average Salary per year of credited service (to a maximum of 50%) 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% 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 \$6,000 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% 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% of compensation, effective July 1, 2013.

Brazelton members contribute 0.008% 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, all KP&F members 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% or 3.0%. 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% of Final Average Salary for each year of service up to ten years, plus 3.5% for each year of service greater than ten, to a maximum of 70% of Final Average Salary. For those who became members on or after July 1, 1987, the formula is 3.5% for each year, to a maximum benefit of 70% 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% per month for each month between the ages of 60 and 62, and 0.6% 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% of Final Average Salary for each year of service (minimum of 50% and maximum of 70% 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 \$6,000 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% of compensation. Upon reaching the maximum retirement benefit level of 70% of Final Average Salary, the contribution rate is reduced to 2%.

Employer Contributions

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





KPERS

Rate of Investment Return: 7.00%

Price Inflation: 2.75%

Payroll Growth: 3.00%

KPERS 3 Interest Crediting Rate,

Including dividends: 6.00% per annum

Administrative Expenses: 0.23% of covered payroll

Rate of Mortality: The Pub-2010 Tables adjusted by an age setback or

set forward. Rates are projected into the future using

Scale MP-2021.

Post-retirement School Males: Teachers Below Median Retirees +1

School Females: Teachers Below Median Retirees +1 State Males: General Below Median Retirees -1 State Females: Safety Median Retirees +1 Local Males: General Below Median Retirees +0 Local Females: General Below Median Retirees +1

Pre-retirement School Males: Teachers Below Median Retirees +1

School Females: Teachers Below Median Retirees +1 State Males: General Below Median Retirees -1 State Females: Safety Median Retirees +1 Local Males: General Below Median Retirees +0 Local Females: General Below Median Retirees +1

Beneficiary Mortality School Males: Below Median Contingent Survivors +1

School Females: Below Median Contingent Survivors +1
State Males: Below Median Contingent Survivors -1
State Females: Median Contingent Survivors +1
Local Males: Below Median Contingent Survivors +0
Local Females: Below Median Contingent Survivors +1

Disabled Life Mortality School Males: Non-Safety Disabled Retirees +1

School Females: Non-Safety Disabled Retirees +1 State Males: Non-Safety Disabled Retirees -1 State Females: Safety Disabled Retirees +1 Local Males: Non-Safety Disabled Retirees +0 Local Females: Non-Safety Disabled Retirees +1







Rates of Salary Increase: Total salary increase includes merit plus general wage increase.

	Merit Increase*				
Years of Service	<u>School</u>	<u>State</u>	Local		
1	8.15%	6.50%	6.80%		
5	2.70%	1.60%	2.50%		
10	1.25%	0.90%	1.50%		
15	0.75%	0.40%	1.10%		
20	0.25%	0.05%	0.85%		
25	0.00%	0.00%	0.40%		
30	0.00%	0.00%	0.00%		

^{*} General wage increase assumption of 3.50% (composed of 2.75% inflation and 0.75% productivity).

Load for Pre-1993 Hires:State: 2.70%
School: 0.50%
Local: 2.25%
KPF: 7.50%

C55/C60: 2.50%







Rates of Termination:

	Sch	iool	St	<u>ate</u>	Lo	<u>cal</u>
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

	<u>Earl</u>	y Retireme	<u>ent</u>	Normal Retirement			(Tier 1 Only)	
۸۵۵	Tior 1	Tion 2	Tion 2	Tior 1	Tion 2	Tion 2	1 St Year With	After 1st Year
<u>Age</u>	Tier 1	Tier 2	Tier 3	<u>Tier 1</u>	Tier 2	Tier 3	85 Points	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

	<u>Ear</u>	ly Retirem	Retirement		nal Retirer	<u>nent</u>	Rule of 85	(Tier 1 Only)
<u>Age</u>	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	1 St Year With <u>85 Points</u>	After 1 st 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

	Ear	ly Retireme	<u>ent</u>	Norn	nal Retirer	<u>nent</u>	Rule of 85 (Tier 1 Only)	
							1 St Year With	After 1 st Year
<u>Age</u>	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	85 Points	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:

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

Correctional employees with an age 60 normal retirement date:

<u>Age</u>	<u>Rate</u>
60	20%
61	20%
62	25%
63	20%
64	20%
65	35%
66	35%
67	35%
68	100%





TIAA employees: Age 66

Rates of Disability:

<u>Age</u>	<u>School</u>	<u>State</u>	<u>Local</u>
25	0.013%	0.011%	0.012%
30	0.014%	0.032%	0.026%
35	0.017%	0.050%	0.039%
40	0.029%	0.098%	0.058%
45	0.056%	0.146%	0.101%
50	0.092%	0.195%	0.146%
55	0.124%	0.244%	0.174%
60	0.179%	0.268%	0.213%

Indexation of Final Average

Salary for Disabled Members: 1.75% per year.

Probability of Vested Members Leaving Contributions with System:

KPERS 1

<u>Age</u>	<u>School</u>	<u>State</u>	<u>Local</u>
25	90%	65%	60%
30	90%	65%	70%
35	90%	70%	80%
40	90%	80%	90%
45	90%	85%	90%
50	90%	90%	90%
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% interest and the Pub-2010 General Below Median Retiree Mortality Table projected generationally using Scale MP-2021.

KPERS 3

100% of vested members are assumed to leave their contributions with the System.

Marriage Assumptions:

70% of all members are assumed married with male spouse assumed 3 years older than the female.

Partial Lump Sum Option

(PLSO):

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





PLSO Factors: Interest Rate: 7.00%

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

KPERS 3 Annuity Factors: Interest Rate: 7.00%

Mortality: Same as post-retirement mortality assumption for

each group.





KPF

Rate of Investment Return: 7.00%

Price Inflation: 2.75%

Payroll Growth: 3.00%

Administrative Expenses: 0.23% of covered payroll

Rates of Mortality: Mortality rates are projected into the future

using Scale MP-2021.

Post-retirement Pub-2010 Safety Above Median Retiree Table,

set forward two years

Pre-retirement Pub-2010 Safety Above Median Employee

Table, set forward two years *

* 70% of preretirement deaths assumed to be service-related.

Beneficiary Mortality Pub-2010 Above Median Contingent Survivor

Table, set forward two years

Disabled Life Mortality Pub-2010 Safety Disabled Retiree Table, set

forward two years

Rates of Salary Increase: Total salary increase includes merit plus

general wage increase.

Rate of
Increase*
8.50%
3.25%
1.15%
0.55%
0.00%
0.00%

^{*} General wage increase assumption of 3.50% (composed of 2.75% inflation and 0.75% productivity)







Rates of Termination:

Years of	
<u>Service</u>	<u>Rate</u>
1	12.1%
5	6.6%
10	3.1%
15	2.0%
20	1.2%
25	0.0%

Retirement Rates:

Tier 1

Early Retirement		Normal F	<u>Retirement</u>
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
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

<u>etirement</u>	Normal F	Retirement
<u>Rate</u>	<u>Age</u>	<u>Rate</u>
10%	50	30%
10%	51	25%
10%	52	25%
10%	53	25%
20%	54	25%
	55	25%
	56	25%
	57	25%
	58	20%
	59	30%
	60	30%
	61	30%
	62	30%
	63	30%
	64	30%
	65	100%
	Rate 10% 10% 10% 10%	Rate Age 10% 50 10% 51 10% 52 10% 53 20% 54 55 56 57 58 59 60 61 62 63 64

Inactive Vested Earliest unreduced retirement age







Rates of Disability:

<u>Age</u>	Rate*
22	0.035%
27	0.063%
32	0.135%
37	0.315%
42	0.504%
47	0.684%
52	0.864%
57	0.900%

^{* 90%} of disabilities are assumed to be service-connected.

Marriage Assumption: 80% of all members 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% of members are assumed to take a PLSO equal to 30%

of the value of their benefit upon retirement.

PLSO Factors: Interest Rate: 7.00%

Mortality: SOA 1983 Group Annuity Mortality Table, blended

50% male and 50% female.

DROP Election: KP&F members are assumed to enter DROP for the

maximum DROP period if it is more favorable than entering

standard retirement.

Interest Credited on

DROP Accounts: 3.00%, compounded annually.





Judges

Rate of Investment Return: 7.00%

Price Inflation: 2.75%

Administrative Expenses: 0.23% of covered payroll

Rates of Mortality: Mortality rates are projected into the future using

Scale MP-2021

Post-retirement Pub-2010 General Above Median Retiree Table,

set back one year

Pre-retirement Pub-2010 General Above Median Employee

Table, set back one year

Beneficiary Mortality Pub-2010 Above Median Contingent Survivor

Table, set back one year

Disabled Life Mortality Pub-2010 Non-Safety Disabled Retiree Table, set

back one year

Rates of Salary Increase: 4.00%

Rates of Termination: None assumed

Rates of Disability: None assumed

Retirement Rates:

<u>Age</u>	<u>Rate</u>
62	20%
63-65	10%
66	33%
67-69	20%
70+	100%

Marriage Assumption: 70% of all members are assumed married with

male spouse assumed 3 years old than female.

Partial Lump Sum Option (PLSO): 40% of members are assumed to take a PLSO

equal to 30% of the value of their benefit upon

retirement.

PLSO Factors: Interest Rate: 7.00%

Mortality: SOA 1983 Group Annuity Mortality

Table, blended 50% male and 50% 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 3 years older than females.

Not in-pay members:

If a birth date is not available, it is assigned according to the following schedule:

<u>System</u>	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% probability of being male and 60% probability of being female.

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

<u>System</u>	<u>Salary</u>
KPERS	\$29,400
KPF	\$47,600
Judaes	\$89,000

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%. 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.

