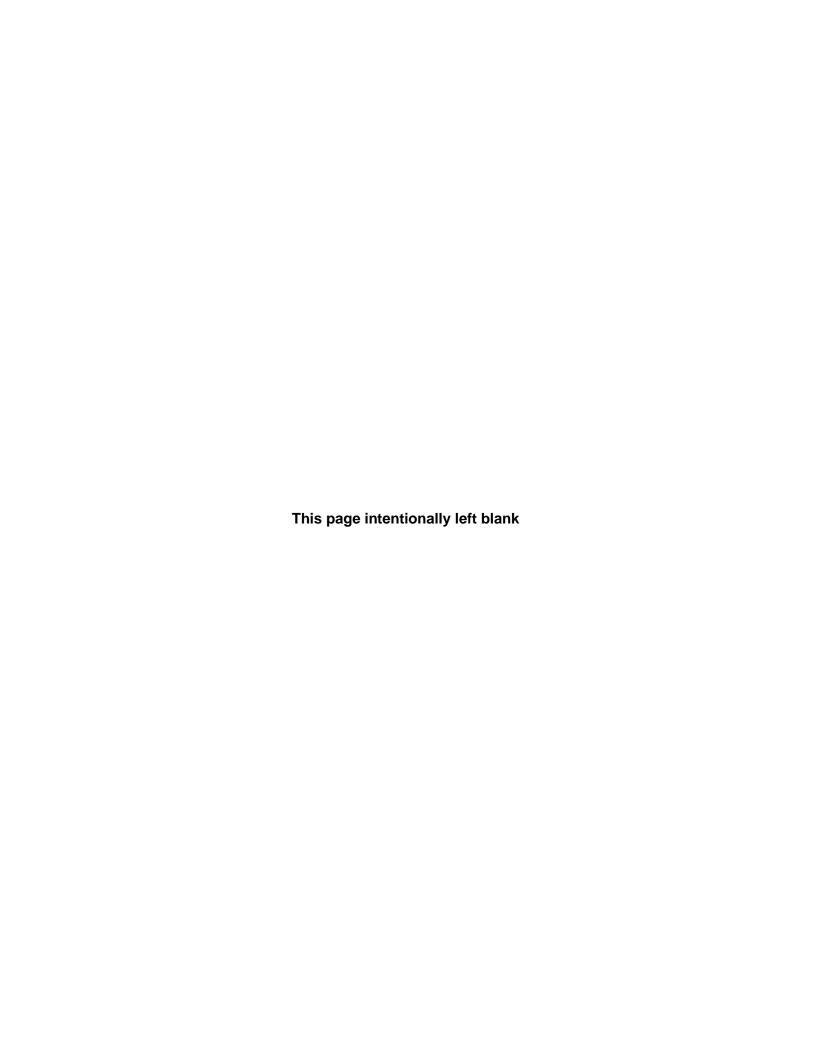
# KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM



# ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2024

SUBMITTED: JULY 11, 2025



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July 11, 2025

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

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2024 for the purpose of determining contribution rates for FY 2028 for the State and Schools (July 1, 2027 to June 30, 2028) and FY 2027 for Local employers (calendar year 2027). The major findings of the valuation are contained in this report, which reflects the plan provisions in place on December 31, 2024 and any legislative changes from the 2025 Session. There have been no changes to the benefit provisions or actuarial assumptions and methods since the prior valuation.

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

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

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. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and
- changes in plan provisions or applicable law.

The actuarial computations presented in this report are for the purpose of determining the actuarial recommended and statutory funding amounts for the System. Actuarial computations for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standard Number 67 and computations for financial reporting by employers under Governmental Accounting Standard Number 68 are provided in separate reports. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for other purposes may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. The consultants who worked on this assignment are pension actuaries. CavMac's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We 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 questions or provide additional information, if needed.

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

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

Sincerely,

Patrice A. Beckham, FSA, EA, FCA, MAAA

Consulting Actuary

Patrice Beckham

Bryan K. Hoge, FSA, EA, FCA, MAAA

Principal and Consulting Actuary

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

Chief Actuary



#### **OVERVIEW**

The Kansas Public Employees Retirement System is an umbrella organization which administers the following three statewide pension groups: the Kansas Public Employees Retirement System (KPERS), the Kansas Police and Firemen's Retirement System (KP&F) and the Kansas Retirement System for Judges (Judges). This report presents the results of the December 31, 2024 actuarial valuations for each of the groups.

The primary purposes of performing actuarial valuations are to:

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

#### Factors Impacting the December 31, 2024 Valuation

The valuation results provide a "snapshot" view of the System's financial condition on December 31, 2024. The net change in the unfunded actuarial liability for the total System was an increase of \$363 million due to multiple factors, the largest of which was unfavorable liability experience primarily due to salary increases that were larger than expected based on the actuarial assumptions.

The key factors impacting the valuation results include:

- The net rate of return on the market value of assets for calendar year 2024 was 8.8%, as reported by KPERS. However, due to the use of an asset smoothing method, the net rate of return on the actuarial value of assets for 2024 was 6.2%. The net result of the favorable investment experience during calendar year 2024 and the scheduled recognition of past investment experience was an actuarial loss of \$227 million. In addition, the net deferred investment loss of \$1.2 billion last year is now a net deferred investment loss of \$0.5 billion in the current valuation (about 2% of market value).
- Liability experience for calendar year 2024 was a net liability loss (higher actuarial liability than expected) for all of the groups except Judges. In aggregate, the valuation results reflect a net loss of \$367 million for the year, about 0.95% of the total actuarial liability. The largest component of the liability loss was due to higher salaries than expected based on the actuarial assumptions.





- KPERS 3 (Cash Balance members) refers to non-correction members who either began their participation or were rehired on or after January 1, 2015. KPERS 3 members receive guaranteed interest credits of 4.0% on their account balances, but additional interest credits (called dividends) may be granted depending on actual investment returns. The dividends are equal to 75% of the five-year average net compound rate of return, as determined by the Board, that is above 6.0%. The dividend for 2024 was dependent on the net rate of return on the market value of assets for calendar years 2020 through 2024. The average annualized net return for the five-year period was 6.9% so the statutory formula provided for a dividend of 0.675% for 2024. Because the 2024 dividend was less than the assumption of 2.00%, there was an actuarial gain that was part of the net liability experience.
- The statutory contribution rate for the State/School group was first equal to the actuarial required contribution rate in the December 31, 2017 valuation which set the employer contribution rate for FY 2021 (July 1, 2020 to June 30, 2021). Therefore, the full actuarial required contribution rate was paid for the entire calendar year in 2024, and there was no contribution shortfall. As a result, the full UAL payment was received during calendar year 2024, and the unfunded actuarial liability decreased, as scheduled, by \$227 million.

A detailed analysis of the components of the change in the unfunded actuarial liability from December 31, 2023 to December 31, 2024 can be found on page 9.

#### **Summary Results**

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

A summary of actuarial and statutory employer contribution rates for the Retirement System (excluding the statutory contribution for the Death and Disability Program) for this valuation and the prior valuation follows. The December 31, 2024 actuarial valuation is used to set the employer contribution rate for FY 2028 for the State/School, State KP&F and Judges groups and calendar year 2027 for the Local and Local KP&F groups.







	December 31, 2024 Valuation				
System	Actuarial	Statutory	Difference		
State <sup>1</sup>	10.84%	11.38%	(0.54%)		
School <sup>1</sup>	11.52%	11.38%	0.14%		
State/School <sup>1</sup>	11.38%	11.38%	0.00%		
Local <sup>1</sup>	9.44%	9.44%	0.00%		
Police & Fire - Uniform Rates <sup>2</sup>	24.51%	24.51%	0.00%		
Judges	20.42%	20.42%	0.00%		

	December 31, 2023 Valuation					
System	Actuarial	Statutory	Difference			
State <sup>1</sup>	10.98%	11.32%	(0.34%)			
School <sup>1</sup>	11.41%	11.32%	0.09%			
State/School <sup>1</sup>	11.32%	11.32%	0.00%			
Local <sup>1</sup>	9.59%	9.59%	0.00%			
Police & Fire - Uniform Rates <sup>2</sup>	24.00%	24.00%	0.00%			
Judges	21.29%	21.29%	0.00%			
-						

<sup>&</sup>lt;sup>1</sup> By statute, rates are allowed to increase by a maximum of 1.20%, plus the cost of any benefit enhancements. The December 31, 2024 valuation sets the employer contribution rate for FY 2028 for the State and School groups and calendar year 2027 for the Local group.

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

#### **EXPERIENCE - ALL SYSTEMS COMBINED**

#### December 31, 2023 - December 31, 2024

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is December 31, 2024. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and employers in the future to balance the System assets and liabilities.



<sup>&</sup>lt;sup>2</sup> For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for Local employers. The rate for State employers is 24.53% for FY 2028 and 24.02% for FY 2027. The uniform rate does not include the payment required to amortize the unfunded past service liability determined separately for each employer (Table 16).



Changes in both the System's membership, assets and liabilities impacted the change in the actuarial required contribution rates between the December 31, 2023 and December 31, 2024 actuarial valuations. On the following pages, each component is examined.

#### **MEMBERSHIP**

The following table contains a summary of the changes in the active membership between the December 31, 2023 and December 31, 2024 actuarial valuations.

	State	School	Local	KP&F	Judges	Total
12/31/2023 (Starting count)	20,527	87,148	37,703	8,284	286	153,948
New actives	2,982	11,203	6,064	1,005	5	21,259
Nonvested Terminations	(1,031)	(4,516)	(2,529)	(364)	0	(8,440)
Elected Refund	(512)	(1,112)	(930)	(91)	0	(2,645)
Vested Terminations	<u>(542)</u>	<u>(2,650)</u>	<u>(1,189)</u>	<u>(42)</u>	<u>0</u>	(4,423)
Total Withdrawals	(2,085)	(8,278)	(4,648)	(497)	0	(15,508)
Deaths	(41)	(91)	(50)	(3)	(1)	(186)
Disabilities	(25)	(26)	(20)	(29)	0	(100)
Retirements	(579)	(2,095)	(897)	(141)	(13)	(3,725)
Other/Transfer	<u>138</u>	(227)	<u>89</u>	<u>0</u>	<u>0</u>	<u>0</u>
Change from prior year	390	486	538	335	(9)	1,740
12/31/2024 (Ending count)	20,917	87,634	38,241	8,619	277	155,688
Change from prior year (%)	1.9%	0.6%	1.4%	4.0%	(3.1%)	1.1%

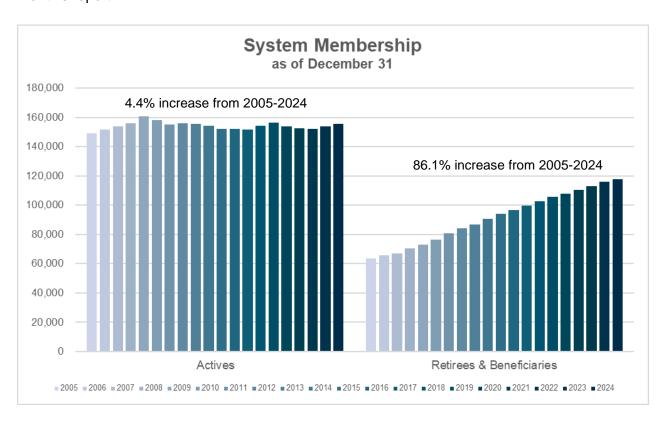
As can be seen from the table above, in total, KPERS experienced a net increase in the total number of active members, despite a small decrease in the Judges group. As the following graph illustrates, active membership growth has been relatively stagnant overall for the past 10 to 15 years, with the active membership peaking in the December 31, 2009 valuation. While this pattern of low (or at times negative) active member growth has not been unusual in the public sector, a declining active membership has an adverse impact on the actuarial required contribution rate. Usually, fewer active members result in total active member payroll that does not increase as expected by the payroll growth assumption (3% per year). When this occurs, contribution dollars into the System for that plan year are lower than anticipated so the unfunded actuarial liability does not decrease as scheduled. In addition, the unfunded actuarial liability contribution rate increases because the dollar amount of the amortization payment is divided by a smaller amount of payroll.

The following graph shows the number of active members and retirees and beneficiaries in the last 20 valuations. The number of retirees and beneficiaries has grown significantly more than active members over this period, which is not unusual or unexpected for a mature retirement





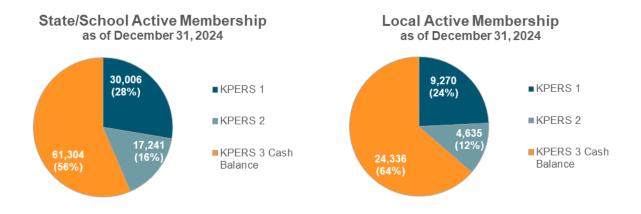
system. Such trends do have an impact on the System's contribution risk, as discussed in Section 7 of this report.



KPERS currently has three different benefit structures. The most recent tier, KPERS 3 (Cash Balance members), covers non-corrections members who either began their participation or were rehired on or after January 1, 2015. KPERS 2 includes members who either began their participation or were rehired on or after July 1, 2009 but before January 1, 2015 and correctional members. Of the 146,792 total active KPERS members, 21,876 (about 15%) are KPERS 2 members and 85,640 (about 58%) are KPERS 3 members as of the valuation date. The remaining actives (about 27%) are KPERS 1 members, who became participants prior to July 1, 2009. Beginning with the December 31, 2020 valuation, KPERS 3 members have represented the largest group of active members. The split of KPERS members in the State/School group and Local group, by benefit tier, is shown in the following charts.







Total: 108,551 Total: 38,241

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

#### **ASSETS**

As of December 31, 2024, the System had total funds of \$28.0 billion on a market value basis, excluding assets held for the Group Insurance and Optional Life reserves. This was an increase of \$1.6 billion from the December 31, 2023 fund balance of \$26.4 billion.

Due to the volatility in the market value of assets, it is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The smoothing method calculates the difference between the actual dollar amount of investment return and the expected return (using the assumed rate of return) on the market value of assets each year. The dollar amount of the difference is recognized equally over a five-year period (20% per year). See Tables 3A through 3F and 4 for the detailed development of the actuarial value of assets as of December 31, 2024 for each group.

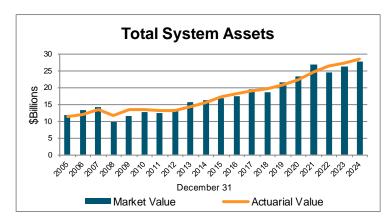




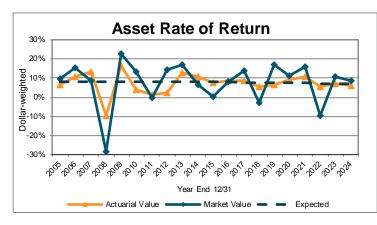
The components of the change in the total market value and actuarial value of assets for the Retirement System (in millions) are set forth in the following table.

	Market Value \$ (millions)	Actuarial Value \$ (millions)
Assets, December 31, 2023	\$26,412	\$27,583
- Employer and Member Statutory Contributions	1,651	1,651
- Benefit Payments	(2,319)	(2,319)
- Administrative Expenses	(29)	(29)
- Investment Income, Net of Investment Expenses	2,307	1,680
Assets, December 31, 2024	\$28,022	\$28,566
Net Rate of Return	+8.8%	+6.2%

Due to the use of an asset smoothing method, there is a net deferred investment loss of \$544 million that has not yet been recognized, i.e., the actuarial value of assets is greater than the market value. This deferred investment loss will be recognized in the actuarial value of assets over the next four years but may be impacted by future investment experience.



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



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





#### **LIABILITIES**

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

	State	School	Local	KP&F	Judges	Total*
Actuarial Liability	\$5,542	\$20,132	\$7,715	\$4,989	\$236	\$38,614
Actuarial Value of Assets	<u>4,174</u>	<u>15,158</u>	<u>5,541</u>	<u>3,467</u>	<u>225</u>	<u>28,566</u>
Unfunded Actuarial Liability*	\$1,368	\$4,974	\$2,173	\$1,522	\$11	\$10,049
Funded Ratio	75.3%	75.3%	71.8%	69.5%	95.4%	74.0%

<sup>\*</sup> May not add due to rounding.

See Table 7 for the detailed development of the actuarial liability by group. The calculation of the unfunded actuarial liability by group is shown in Table 11.

With the material reduction in the investment return assumption in the December 31, 2021 valuation, the Board elected to reset the unfunded actuarial liability and amortize the entire amount over a new amortization period. For the State/School and Local groups, the amortization period was set to 17 years. For KP&F, the amortization period was set to 22 years. All groups utilize the level-percent-of-payroll methodology to determine payment amounts, other than Judges which uses level dollar payments over a 20-year period for the initial base. New amortization bases due to actuarial gains/losses, established in each valuation after 2021, are amortized over a closed period of 20 years. Changes in the UAL resulting from assumption changes are amortized over an appropriate period as determined by the Board of Trustees. Because the full actuarial required contribution rate is currently contributed for all of the groups, the UAL is expected to decrease absent other factors such as actual experience that is different than expected based on the actuarial assumptions (on both assets and liabilities), changes in actuarial assumptions, procedures, methods, or changes in benefit provisions.

The actual experience measured in this valuation is that which occurred during the prior plan year (calendar year 2024). For all groups other than Judges, the valuation results reflect a net liability loss for the year (which increases the unfunded actuarial liability), largely due to salary increases that were higher than expected based on actuarial assumptions. The net liability loss for the entire System was \$367 million, about 0.95% of the total actuarial liability. In addition, the System experienced a return of 6.2% on the actuarial value of assets, which is below the assumed return of 7.00%, resulting in an experience loss on actuarial assets of \$227 million. Therefore, the combined experience (asset and liability) for calendar year 2024 was an experience loss of \$594 million.





Between December 31, 2023 and December 31, 2024 the change in the unfunded actuarial liability for the System, in total, was as follows (in millions):

	\$ millions
Unfunded Actuarial Liability, December 31, 2023	\$ 9,686
effect of contribution cap	0
expected decrease due to amortization method	(227)
(gain)/loss from investment return on actuarial assets	227
demographic experience <sup>1</sup>	367
additional contributions	0
assumption changes	0
all other experience	(4)
Unfunded Actuarial Liability, December 31, 2024	\$10,049

<sup>&</sup>lt;sup>1</sup>Liability loss is 0.95% of total actuarial liability.

A detailed summary of the change in the unfunded actuarial liability by group is shown on page 16.

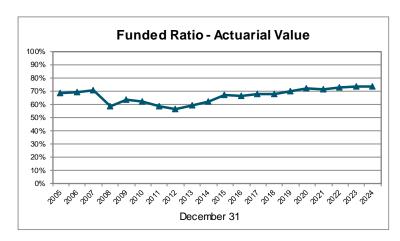
An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial liability and the progress made in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

	12/31/19	12/31/20	12/31/21	12/31/22	12/31/23	12/31/24
Using Actuarial Value of Assets:						
Funded Ratio (AVA/AL) Unfunded Actuarial	70%	73%	72%	73%	74%	74%
Liability (AL-AVA)	\$9,007	\$8,488	\$9,827	\$9,567	\$9,686	\$10,049
Using Market Value of Assets:						
Funded Ratio (MVA/AL)	72%	76%	78%	68%	71%	73%
Unfunded Actuarial Liability (AL-MVA)	\$8,439	\$7,558	\$7,739	\$11,500	\$10,856	\$10,592

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







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

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

#### **CONTRIBUTION RATES**

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

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

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

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

In KPERS, State, School and Local employers do not necessarily contribute the full actuarial required contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. The statutory cap, which has been increased by the Legislature periodically, is currently 1.20% for all three groups.





The results of the December 31, 2024 valuation are used to set employer contribution rates for Fiscal Year 2028 for the State/School, State KP&F and Judges groups (July 1, 2027 to June 30, 2028) and Fiscal Year 2027 for the Local and Local KP&F groups (calendar year 2027). The unfunded actuarial liability is amortized as a level-percentage of payroll for all groups except for Judges where a level-dollar payment is used. The payroll growth assumption is 3.00%, so the dollar amount of the annual amortization payments will increase 3.00% each year if all assumptions are met. As a result, if total payroll grows 3.00% per year, as assumed, the amortization payment will remain level as a percentage of total payroll. However, if actual payroll growth is more/less than 3.00%, the unfunded actuarial liability contribution rate will decrease/increase.

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

	December 31, 2024 Valuation					
System	Actuarial	Statutory	Difference			
State <sup>1</sup>	10.84%	11.38%	(0.54%)			
School <sup>1</sup>	11.52%	11.38%	0.14%			
State/School <sup>1</sup>	11.38%	11.38%	0.00%			
Local <sup>1</sup>	9.44%	9.44%	0.00%			
Police & Fire – Uniform Rates <sup>2</sup>	24.51%	24.51%	0.00%			
Judges	20.42%	20.42%	0.00%			

<sup>&</sup>lt;sup>1</sup> By statute, rates are allowed to increase by a maximum of 1.20%, plus the cost of any benefit enhancements. The December 31, 2024 valuation sets the employer contribution rate for FY 2028 for the State and School groups and calendar year 2027 for the Local group.

As mentioned earlier, due to statutory caps the full actuarial required contribution rate is not necessarily contributed for all KPERS groups. The State and Local groups reached the actuarial required contribution (ARC) date (the year in which the statutory contribution rate is equal to or greater than the ARC rate) in the 2010 and 2012 valuations, respectively, and remain at the ARC rate in this valuation. However, due to the lag between the valuation date and the applicable fiscal year for the contribution rate, the State group did not actually contribute the full ARC until FY 2014 and the Local group until CY 2015. Based on the current valuation, there is a small difference (shortfall) between the actuarial and statutory contribution rates of 0.14% for the School group. However, the statutory contribution rate is set for the combined State/School group and the ARC date occurred in FY 2021 at a rate of 14.23% of pay, based on the December 31, 2017 valuation. The statutory and actuarial required contribution rates have remained equal since then, including in the current valuation.



For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for Local employers. The rate for State employers is 24.53% for FY 2028 and 24.02% for FY 2027. The uniform rate does not include the payment required to amortize the unfunded past service liability determined separately for each employer (Table 16).





Separate employer contribution rates are calculated for two subgroups of the State: Correctional Employee Groups with a normal retirement age of 55 (C55) and a normal retirement age of 60 (C60). The contribution rates are calculated by increasing the State statutory contribution rate by the difference in the normal cost rate for the C55 and C60 groups over the normal cost rate for regular State members, but not to exceed the statutory cap on contribution increases. The higher contribution rates are intended to finance the earlier normal retirement age. The resulting contribution rates for the Correctional Employee Groups for FY 2028 are shown in the following table.

Corrections Group	Statutory Rate
Retirement Age 55:	12.41%
Retirement Age 60:	12.78%

The change in the employer actuarial required contribution rate from December 31, 2023 to December 31, 2024 and the primary components thereof are shown in the table on page 17. Unfavorable experience on the System's liabilities during 2024 had a significant impact and increased the employer contribution rates for all groups except Judges. However, payroll growth that was higher than expected based on the actuarial assumptions offset the unfavorable experience for the State and Local groups and was the primary factor for the decrease in the employer contribution rates for these groups.

#### COMMENTS

The key factors that impacted the results of the December 31, 2024 valuation were (1) unfavorable liability experience during calendar year 2024 and (2) unfavorable experience on the actuarial value of assets that both increased the unfunded actuarial liability. The combined result was an increase in the System's unfunded actuarial liability of \$363 million.

Like most public retirement systems, KPERS uses an asset smoothing method to average the actual investment experience above and below the assumed net rate of return. Under the asset smoothing method, the difference between the dollar amount of the actual and assumed investment experience is recognized equally over a five-year period. While the return on the market value of assets was 8.8% for calendar year 2024, only a portion of the favorable experience is recognized in the current valuation. Due to the asset smoothing method, the return on the actuarial value of assets in 2024 was 6.2%. This generated an experience loss on assets because the actual return was below the assumed return of 7.00% for 2024. As of the current valuation date, the actuarial value of assets exceeds the market value of assets by about 1.9% or \$544 million. This deferred investment experience will flow through the asset smoothing method over the next four years and be recognized in the actuarial value of assets, resulting in a decrease in the funded ratio and an increase in the actuarial required contribution rate. However, these trends may be reversed or mitigated if investment returns are above the assumed rate of return (7.00%) in future years.





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

	December 31, 2024					
	State/S	School	KP	<b>§</b> F		
	<u>Actuarial</u>	<u>Market</u>	<u>Actuarial</u>	<u>Market</u>		
Actuarial Liability	\$25,674	\$25,674	\$4,989	\$4,989		
Asset Value	<u>19,332</u>	<u> 18,976</u>	<u>3,467</u>	<u>3,397</u>		
Unfunded Actuarial Liability*	\$ 6,343	\$ 6,698	\$1,522	\$1,592		
Funded Ratio	75%	74%	69%	68%		
Contribution Rate:						
Normal Cost Rate	8.62%	8.62%	17.81%	17.81%		
UAL Payment	<u>8.76%</u>	9.24%	<u>13.85%</u>	<u>14.57%</u>		
Actuarial Required Contribution	17.38%	17.86%	31.66%	32.38%		
Employee Rate	<u>6.00%</u>	6.00%	<u>7.15%</u>	<u>7.15%</u>		
Employer Rate	11.38%	11.86%	24.51%	25.23%		

<sup>\*</sup> May not add due to rounding

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

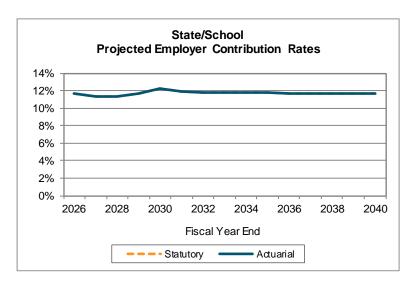




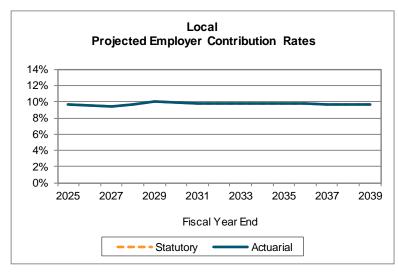
#### **Projected Employer Contribution Rates**

The following graphs show the preliminary projected employer contribution rates <u>assuming all</u> <u>actuarial assumptions are met in the future, including a 7.00% net rate of return on the market value of assets in all years, and the current statutory funding policy for the State/School group (including the amortization policy) continues and contributions are made as scheduled.</u>

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



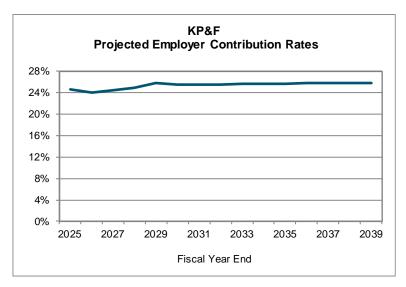
The State/School group reached the ARC date in the 2017 valuation (FY 2021) at an ARC rate of 14.23%. Given the deferred investment experience, the contribution rate is expected to increase from the current rate of 11.38% to around 12.0% and then remain steady. During the entire projection period, the statutory rate is expected to be equal to the ARC rate. Actual experience in future years, particularly investment returns, will significantly impact future actuarial and statutory rates.



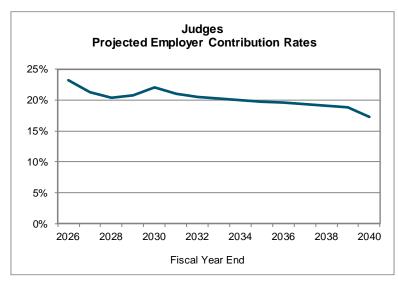
The Local group reached the ARC date in the 2012 valuation at an ARC rate of 9.48%. The projected contribution rate is expected to increase from the current rate of 9.44% to around 10.0% over the long term. Actual experience in future years, particularly investment returns, will significantly impact future actuarial and statutory rates.







The projected employer contribution rate for KP&F is expected to increase from its current level at 24.51% of pay to around 26% after the deferred investment experience has been recognized through the asset smoothing method. However, actual experience in future years, particularly investment returns, will significantly impact future contribution rates.



The projected employer contribution rate for Judges is expected to fluctuate as the deferred investment experience is recognized through the asset smoothing method, and then start to decrease because the Judges group is funded on a level-dollar amortization basis. Actual experience in future years, particularly investment returns, will significantly impact future employer contribution rates.





# SUMMARY OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY BY SYSTEM DECEMBER 31, 2024 VALUATION

(\$ millions)

	State	School	State/School	Local	KP&F	Judges	Total
UAL in 12/31/2023 Valuation Report	\$1,301.9	\$4,899.1	\$6,200.9	\$2,089.6	\$1,381.8	\$13.4	\$9,685.7
· Effect of contribution cap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expected decrease due to UAL amortization	(22.1)	(139.0)	(161.1)	(51.8)	(14.3)	(0.1)	(227.2)
· Actual vs. expected experience							
Investment return	30.9	123.4	154.4	43.9	27.4	1.8	227.5
Demographic experience	65.0	83.8	148.8	94.4	127.6	(4.2)	366.6
All other experience	(7.3)	7.0	(0.3)	(2.8)	(0.9)	(0.1)	(4.1)
UAL in 12/31/2024 Valuation Report	\$1,368.4	\$4,974.3	\$6,342.7	\$2,173.3	\$1,521.6	\$10.9	\$10,048.5

Note: Numbers may not add due to rounding.





# SUMMARY OF CHANGES IN EMPLOYER ACTUARIAL REQUIRED CONTRIBUTION RATE BY SYSTEM AS OF DECEMBER 31, 2024

Percentage of Payroll	State	School	State/School	Local	KP&F <sup>1</sup>	Judges
Actuarial Required Contribution Rate in 12/31/2023 Valuation	10.98%	11.41%	11.32%	9.59%	24.00%	21.29%
Change Due to Amortization of UAL						
· effect of contribution cap	0.00	0.00	0.00	0.00	0.00	0.00
· UAL amortization method	0.00	0.00	0.00	0.00	0.00	(0.10)
· investment experience	0.18	0.20	0.19	0.13	0.26	0.49
liability experience	0.38	0.13	0.19	0.29	1.21	(1.13)
all other experience	(0.19)	(0.05)	(0.08)	(0.14)	(0.13)	(0.10)
payroll growth	(0.42)	(0.07)	(0.14)	(0.32)	(0.96)	0.00
Change in Employer Normal Cost Rate						
· benefit changes	0.00	0.00	0.00	0.00	0.00	0.00
· assumption changes	0.00	0.00	0.00	0.00	0.00	0.00
· all other experience	(0.09)	(0.10)	(0.10)	(0.11)	0.13	(0.03)
Actuarial Required Contribution Rate in 12/31/2024 Valuation	10.84%	11.52%	11.38%	9.44%	24.51%	20.42%

<sup>&</sup>lt;sup>1</sup> Contribution rate for Local employers only. For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate for State employers is 24.53% for FY 2028 and 24.02% for FY 2027. The uniform rate does not include the payment required to amortize the unfunded past service liability determined separately for each employer (Table 16).





## SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UNFUNDED ACTUARIAL LIABILITY as of DECEMBER 31, 2024 VALUATION

			As R	Reported or	<b>Valuation</b>	Date		
%(millions)	6/30/94	6/30/95	6/30/96	6/30/97	6/30/98	6/30/99	6/30/00	12/31/00
Actual Experience vs. Assumed								
Investment	\$(102)	\$(143)	\$(280)	\$(323)	\$(413)	\$(369)	\$(441)	\$(23)
Other	320	72	136	157	104	46	99	84
Assumption Changes	0	(96)	0	0	350	0	0	(206)
Changes in Data/Procedures	244	0	0	0	0	21	71	145**
Change in Cost Method	0	0	0	0	0	0	0	0
Effect of Contribution Cap/Lag	*	95	70	63	54	78	66	60
Amortization Method	*	47	38	35	32	30	22	12
Change in Benefit Provisions	75	0	0	0	88	0	19	0
Change in Actuarial Firm/Software	0	0	0	0	0	0	0	0
Bond Issue	0	0	0	0	0	0	0	0
Non-Collectible Pension Contributions	0	0	0	0	0	0	0	0
Additional Contributions	0	0	0	0	0	0	0	0
Total	\$537	\$(25)	\$(36)	\$(68)	\$215	\$(194)	\$(164)	\$72

<sup>\*</sup> Not calculated for this year.

Unfunded actuarial liability 6/30/93: \$ 968 million Unfunded actuarial liability 12/31/24: \$ 10,049 million



<sup>\*\*</sup> Reflects the impact of re-establishing the KP&F Supplemental Actuarial Liability at December 31, 2002. The additional unfunded actuarial liability as of December 31, 2000 for the State/School and Local groups not recognized in the prior valuation due to the phase-in of the change in actuarial procedures is included.



# SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UNFUNDED ACTUARIAL LIABILITY as of DECEMBER 31, 2024 VALUATION (continued)

			As F	Reported or	<b>Valuation</b>	Date		
%(millions)	12/31/01	12/31/02	12/31/03	12/31/04	12/31/05	12/31/06	12/31/07	12/31/08
Actual Experience vs. Assumed								
Investment	\$350	\$644	\$140	\$456	\$167	\$(293)	\$(626)	\$2,332
Other	(9)	68	(32)	16	(84)	140	99	78
Assumption Changes	0	0	0	437	(5)	0	384	0
Changes in Data/Procedures	5	177**	(286)***	0	0	0	0	0
Change in Cost Method	0	0	1,147	0	0	0	0	0
Effect of Contribution Cap/Lag	115	143	178	179	247	258	251	246
Amortization Method	14	21	47	68	84	83	78	71
Change in Benefit Provisions	0	37	3	1	0	24	2	0
Change in Actuarial Firm/Software	0	0	0	0	0	0	0	0
Bond Issue	0	(41)	(440)	0	0	0	0	0
Non-Collectible Pension Contributions	0	0	0	0	0	0	0	0
Additional Contributions	0	0	0	0	0	0	0	0
Total	\$475	\$1,049	\$757	\$1,157	\$409	\$212	\$188	\$2,727

<sup>\*\*</sup> Reflects the impact of re-establishing the KP&F Supplemental Actuarial Liability at December 31, 2002. The additional unfunded actuarial liability as of December 31, 2000 for the State/School and Local groups not recognized in the prior valuation due to the phase-in of the change in actuarial procedures is included.

Unfunded actuarial liability 6/30/93: \$ 968 million Unfunded actuarial liability 12/31/24: \$ 10,049 million



<sup>\*\*\*</sup> Change in asset valuation method.



# SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UNFUNDED ACTUARIAL LIABILITY as of DECEMBER 31, 2024 VALUATION (continued)

			As F	Reported on	Valuation	Date		
\$(millions)	12/31/09	12/31/10	12/31/11	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16
Actual Experience vs. Assumed								
Investment	\$(1,011)	\$560	\$852	\$732	\$(653)	\$(368)	\$52	\$(59)
Other	(70)	(334)	(190)	(78)	(125)	(78)	(130)	(144)
Assumption Changes	0	0	(64)	0	0	(50)	0	593
Changes in Data/Procedures	0	0	0	0	0	0	0	0
Change in Cost Method	0	0	0	0	0	0	0	0
Effect of Contribution Cap/Lag	383	320	289	303	246	178	160	70
Amortization Method	96	68	62	49	46	18	(11)	(38)
Change in Benefit Provisions	0	0	15	19	0	1	0	1
Change in Actuarial Firm/Software	0	(27)	0	0	0	0	0	0
Bond Issue	0	0	0	0	0	0	(1,000)	0
Non-Collectible Pension Contributions	0	0	0	0	0	0	0	99****
Additional Contribution	0	0	0	0	0	0	0	0
Total	\$(602)	\$587	\$964	\$1,025	\$(487)	\$(298)	\$(929)	\$522

<sup>\*\*\*\*</sup> Non-collectible pension contributions were part of a budget allotment in 2016. 2019 SB 9 added \$115 million in additional contributions and interest for the allotted contributions, but they are reflected in the Additional Contributions row.

Unfunded actuarial liability 6/30/93: \$ 968 million Unfunded actuarial liability 12/31/24: \$ 10,049 million





# SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UNFUNDED ACTUARIAL LIABILITY as of DECEMBER 31, 2024 VALUATION (continued)

					As Report	ted on Val	uation Dat	е	
\$(millions)	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21	12/31/22	12/31/23	12/31/24	Total
Actual Experience vs. Assumed									
Investment	\$(117)	\$476	\$210	\$(316)	\$(703)	\$340	\$38	\$227	\$1,336
Other	(50)	69	32	14	107	444	485	363	1,609
Assumption Changes	0	0	(51)	0	2,718	0	(192)	0	3,818
Changes in Data/Procedures	0	0	(60)	0	0	0	0	0	317
Change in Cost Method	0	0	0	0	0	0	0	0	1,147
Effect of Contribution Cap/Lag	149	64	18	8	0	0	0	0	4,291
Amortization Method	(136)	(171)	(169)	(225)	(283)	(168)	(212)	(227)	(619)
Change in Benefit Provisions	0	0	0	0	0	25	0	0	310
Change in Actuarial Firm/Software	0	0	0	0	0	0	0	0	(27)
Bond Issue	0	0	0	0	(500)	0	0	0	(1,981)
Non-Collectible Pension Contributions	0	0	0	0	0	0	0	0	99
Additional Contributions****	0	(143)	(175)	0	0	(901)	0	0	(1,219)
Total	\$(154)	\$295	\$(195)	\$(519)	\$1,339	\$(260)	\$119	\$363	\$9,081

<sup>\*\*\*\*</sup> Non-collectible pension contributions were part of a budget allotment in 2016. 2019 SB 9 added \$115 million in additional contributions and interest for the allotted contributions, but they are reflected in the Additional Contributions row.

Unfunded actuarial liability 6/30/93: \$ 968 million Unfunded actuarial liability 12/31/24: \$ 10,049 million

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





### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (STATE)

			12/31/2024 Valuation		12/31/2023 Valuation	% Change
1.	PARTICIPANT DATA					- 3
	Number of:     Active Members     KPERS 1     KPERS 2     KPERS 3     Total     Retired Members and Beneficiaries     Inactive Members	_	5,631 4,083 <u>11,203</u> 20,917 21,838 11,311	_	6,172 4,115 <u>10,240</u> 20,527 21,747 11,099	(8.8%) (0.8%) 9.4% 1.9% 0.4% 1.9%
	Total Members	_	54,066	: =	53,373	1.3%
	Projected Annual Salaries of Active Members	\$	1,261,465,294	\$	1,167,829,251	8.0%
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	353,595,702	\$	346,272,521	2.1%
2.	ASSETS AND LIABILITIES					
	a. Total Actuarial Liability	\$	5,542,177,347	\$	5,411,907,687	2.4%
	b. Assets for Valuation Purposes	\$	4,173,796,416	\$	4,110,027,649	1.6%
	c. Unfunded Actuarial Liability (a) - (b)	\$	1,368,380,931	\$	1,301,880,038	5.1%
	d. Funded Ratio (b) / (a)		75.3%		75.9%	(0.8%)
	e. Market Value of Assets	\$	4,090,196,875	\$	3,930,137,577	4.1%
	f. Funded Ratio on Market Value (e) / (a)		73.8%		72.6%	1.7%
3.	EMPLOYER CONTRIBUTION RATES AS A PE	RCEN	T OF PAYROLL			
	Normal Cost Total Member Employer		8.19% <u>6.00%</u> 2.19%		8.28% <u>6.00%</u> 2.28%	
	Amortization of Unfunded Actuarial Liability		<u>8.65%</u>		<u>8.70%</u>	
	Actuarial Required Contribution Rate		10.84%		10.98%	
	Statutory Employer Contribution Rate*	=	11.38%	. =	11.32%	

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





### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (SCHOOL)

			12/31/2024 Valuation	12/31/2023 Valuation	% Change
1.	PARTICIPANT DATA				70 G.I.a.i.go
	Number of:     Active Members     KPERS 1     KPERS 2     KPERS 3     Total     Retired Members and Beneficiaries     Inactive Members		24,375 13,158 <u>50,101</u> 87,634 63,619 39,702	26,381 13,798 <u>46,969</u> 87,148 62,491 39,516	(7.6%) (4.6%) 6.7% 0.6% 1.8% 0.5%
	Total Members	_	190,955	 189,155	1.0%
	Projected Annual Salaries of Active Members	\$	4,638,795,755	\$ 4,467,144,262	3.8%
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	1,100,438,256	\$ 1,064,401,792	3.4%
2.	ASSETS AND LIABILITIES				
	a. Total Actuarial Liability	\$	20,132,218,465	\$ 19,543,715,902	3.0%
	b. Assets for Valuation Purposes	\$	15,157,876,479	\$ 14,644,664,325	3.5%
	c. Unfunded Actuarial Liability (a) - (b)	\$	4,974,341,986	\$ 4,899,051,577	1.5%
	d. Funded Ratio (b) / (a)		75.3%	74.9%	0.5%
	e. Market Value of Assets	\$	14,885,830,324	\$ 14,035,243,402	6.1%
	f. Funded Ratio on Market Value (e) / (a)		73.9%	71.8%	2.9%
3.	EMPLOYER CONTRIBUTION RATES AS A PI	ERCEN	IT OF PAYROLL		
	Normal Cost Total Member Employer		8.73% <u>6.00%</u> 2.73%	8.83% <u>6.00%</u> 2.83%	
	Amortization of Unfunded Actuarial Liability		<u>8.79%</u>	<u>8.58%</u>	
	Actuarial Required Contribution Rate		11.52%	11.41%	
	Statutory Employer Contribution Rate*	_	11.38%	 11.32%	

<sup>\*</sup> The rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.20% for FY 2017 and later. This rate excludes the contribution rate for the Death and Disability Program.





### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (STATE/SCHOOL)

			12/31/2024 Valuation		12/31/2023 Valuation	% Change
1.	PARTICIPANT DATA					- 3
	Number of:     Active Members     KPERS 1     KPERS 2     KPERS 3     Total     Retired Members and Beneficiaries     Inactive Members  Total Members	-	30,006 17,241 <u>61,304</u> 108,551 85,457 51,013		32,553 17,913 <u>57,209</u> 107,675 84,238 50,615	(7.8%) (3.8%) 7.2% 0.8% 1.4% 0.8%
		=	245,021	=	242,320	1.076
	Projected Annual Salaries of Active Members	\$	5,900,261,049	\$	5,634,973,513	4.7%
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	1,454,033,958	\$	1,410,674,313	3.1%
2.	ASSETS AND LIABILITIES					
	a. Total Actuarial Liability	\$	25,674,395,812	\$	24,955,623,589	2.9%
	b. Assets for Valuation Purposes	\$	19,331,672,895	\$	18,754,691,974	3.1%
	c. Unfunded Actuarial Liability (a) - (b)	\$	6,342,722,917	\$	6,200,931,615	2.3%
	d. Funded Ratio (b) / (a)		75.3%		75.2%	0.1%
	e. Market Value of Assets	\$	18,976,027,199	\$	17,965,380,979	5.6%
	f. Funded Ratio on Market Value (e) / (a)		73.9%		72.0%	2.6%
3.	EMPLOYER CONTRIBUTION RATES AS A PER	CEN	IT OF PAYROLL			
	Normal Cost Total Member Employer		8.62% <u>6.00%</u> 2.62%		8.72% <u>6.00%</u> 2.72%	
	Amortization of Unfunded Actuarial Liability		<u>8.76%</u>		<u>8.60%</u>	
	Actuarial Required Contribution Rate		11.38%		11.32%	
	Statutory Employer Contribution Rate*	=	11.38%	=	11.32%	

<sup>\*</sup> The rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.20% for FY 2017 and later. This rate excludes the contribution rate for the Death and Disability Program.





# SUMMARY OF PRINCIPAL RESULTS KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (LOCAL)

			12/31/2024 Valuation		12/31/2023 Valuation	% Change
1.	PARTICIPANT DATA					
	Number of:     Active Members     KPERS 1     KPERS 2     KPERS 3     Total     Retired Members and Beneficiaries Inactive Members	_	9,270 4,635 <u>24,336</u> 38,241 25,584 23,414	_	10,110 4,936 <u>22,657</u> 37,703 25,060 23,207	(8.3%) (6.1%) 7.4% 1.4% 2.1% 0.9%
	Total Members	=	87,239	: =	85,970	1.5%
	Projected Annual Salaries of Active Members	\$	2,385,045,053	\$	2,219,587,861	7.5%
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	386,155,404	\$	368,220,327	4.9%
2.	ASSETS AND LIABILITIES					
	a. Total Actuarial Liability	\$	7,714,740,168	\$	7,393,131,430	4.4%
	b. Assets for Valuation Purposes	\$	5,541,408,303	\$	5,303,548,760	4.5%
	c. Unfunded Actuarial Liability (a) - (b)	\$	2,173,331,865	\$	2,089,582,670	4.0%
	d. Funded Ratio (b) / (a)		71.8%		71.7%	0.1%
	e. Market Value of Assets	\$	5,428,458,982	\$	5,074,469,885	7.0%
	f. Funded Ratio on Market Value (e) / (a)		70.4%		68.6%	2.6%
3.	EMPLOYER CONTRIBUTION RATES AS A PER	RCEN	T OF PAYROLL			
	Normal Cost Total Member Employer		8.00% <u>6.00%</u> 2.00%		8.11% <u>6.00%</u> 2.11%	
	Amortization of Unfunded Actuarial Liability		7.44%		<u>7.48%</u>	
	Actuarial Required Contribution Rate		9.44%		9.59%	
	Statutory Employer Contribution Rate*	_	9.44%	_	9.59%	

<sup>\*</sup> The Statutory Employer Contribution Rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.20% for FY 2017 and later. This rate excludes the contribution rate for the Death and Disability Program.





### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (TOTAL KPERS)

1.	PARTICIPANT DATA		12/31/2024 Valuation	12/31/2023 Valuation	% Change
	Number of:  Active Members  KPERS 1  KPERS 2  KPERS 3  Total  Retired Members and Beneficiaries Inactive Members  Total Members	- -	39,276 21,876 <u>85,640</u> 146,792 111,041 74,427	 42,663 22,849 <u>79,866</u> 145,378 109,298 73,822 328,498	(7.9%) (4.3%) 7.2% 1.0% 1.6% 0.8%
	Projected Annual Salaries of Active Members	\$	8,285,306,102	\$ 7,854,561,374	5.5%
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	1,840,189,362	\$ 1,778,894,640	3.4%
2.	ASSETS AND LIABILITIES				
	a. Total Actuarial Liability	\$	33,389,135,980	\$ 32,348,755,019	3.2%
	b. Assets for Valuation Purposes	\$	24,873,081,198	\$ 24,058,240,734	3.4%
	c. Unfunded Actuarial Liability (a) - (b)	\$	8,516,054,782	\$ 8,290,514,285	2.7%
	d. Funded Ratio (b) / (a)		74.5%	74.4%	0.1%
	e. Market Value of Assets	\$	24,404,486,181	\$ 23,039,850,864	5.9%
	f. Funded Ratio on Market Value (e) / (a)		73.1%	71.2%	2.7%





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

			12/31/2024 Valuation		12/31/2023 Valuation	% Change
1.	PARTICIPANT DATA					J
	Number of: Active Members Retired Members and Beneficiaries Inactive Members	_	8,619 6,495 2,618	_	8,284 6,382 2,554	4.0% 1.8% 2.5%
	Total Members		17,732	_	17,220	3.0%
	Projected Annual Salaries of Active Members: State Local	_	83,524,841 690,012,759	_	71,672,497 630,938,308	16.5% 9.4%
	Total	\$	773,537,600	\$	702,610,805	10.1%
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	246,870,394	\$	240,300,026	2.7%
2.	ASSETS AND LIABILITIES					
	a. Total Actuarial Liability	\$	4,988,710,400	\$	4,688,715,519	6.4%
	b. Assets for Valuation Purposes	\$	3,467,143,937	\$	3,306,906,794	4.8%
	c. Unfunded Actuarial Liability (a) - (b)	\$	1,521,566,463	\$	1,381,808,725	10.1%
	d. Funded Ratio (b) / (a)		69.5%		70.5%	(1.4%)
	e. Market Value of Assets	\$	3,396,851,579	\$	3,164,498,352	7.3%
	f. Funded Ratio on Market Value (e) / (a)		68.1%		67.5%	0.9%
3.	EMPLOYER CONTRIBUTION RATES AS A PE	RCEN	T OF PAYROLL			
	Normal Cost Total Member Employer		17.81% <u>7.15%</u> 10.66%		17.68% <u>7.15%</u> 10.53%	
	Amortization of Unfunded Actuarial Liability		<u>13.85%</u>		<u>13.47%</u>	
	Actuarial Required Contribution (Local Employers)		24.51%		24.00%	
	Statutory Employer Contribution Rate*	_	24.51%	_	24.00%	

<sup>\*</sup> The Statutory Employer Contribution Rate is equal to the Actuarial Required Contribution Rate. This is referred to as the "Uniform" rate and varies for State and Local employers. The rate shown is for Local employers, and the rate for State employers is 24.53% this year. The total contribution is equal to the appropriate uniform rate plus the payment required to amortize any unfunded past service liability, determined separately for each employer.





### SUMMARY OF PRINCIPAL RESULTS KANSAS RETIREMENT SYSTEM FOR JUDGES

1.	PARTICIPANT DATA		12/31/2024 Valuation		12/31/2023 Valuation	% Change	
١.							
	Number of:     Active Members     Retired Members and Beneficiaries     Inactive Members	_	277 334 10		286 327 10	(3.1%) 2.1% 0.0%	
	Total Members	=	621	. =	623	(0.3%)	
	Projected Annual Salaries of Active Members	\$	37,337,213	\$	37,911,625	(1.5%)	
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	14,790,542	\$	14,398,204	2.7%	
2.	ASSETS AND LIABILITIES						
	a. Total Actuarial Liability	\$	236,225,511	\$	231,058,874	2.2%	
	b. Assets for Valuation Purposes	\$	225,345,118	\$	217,633,425	3.5%	
	c. Unfunded Actuarial Liability (a) - (b)	\$	10,880,393	\$	13,425,449	(19.0%)	
	d. Funded Ratio (b) / (a)		95.4%		94.2%	1.3%	
	e. Market Value of Assets	\$	220,589,542	\$	207,925,959	6.1%	
	f. Funded Ratio on Market Value (e) / (a)		93.4%		90.0%	3.8%	
3.	. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL						
	Normal Cost Total Member Employer		23.62% <u>5.62%</u> 18.00%		23.65% <u>5.63%</u> 18.02%		
	Amortization of Unfunded Actuarial Liability		<u>2.42%</u>		3.27%		
	Actuarial Required Contribution Rate		20.42%		21.29%		
	Statutory Employer Contribution Rate*	=	20.42%		21.29%		

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





### SUMMARY OF PRINCIPAL RESULTS ALL SYSTEMS COMBINED

1.	PARTICIPANT DATA		12/31/2024 Valuation	12/31/2023 Valuation	% Change
	Number of: Active Members Retired Members and Beneficiaries Inactive Members	_	155,688 117,870 77,055	 153,948 116,007 76,386	1.1% 1.6% 0.9%
	Total Members	=	350,613	 346,341	1.2%
	Projected Annual Salaries of Active Members	\$	9,096,180,915	\$ 8,595,083,804	5.8%
	Annual Retirement Payments for Retired Members and Beneficiaries	\$	2,101,850,298	\$ 2,033,592,870	3.4%
2.	ASSETS AND LIABILITIES				
	a. Total Actuarial Liability	\$	38,614,071,891	\$ 37,268,529,412	3.6%
	b. Assets for Valuation Purposes	\$	28,565,570,253	\$ 27,582,780,953	3.6%
	c. Unfunded Actuarial Liability (a) - (b)	\$	10,048,501,638	\$ 9,685,748,459	3.7%
	d. Funded Ratio (b) / (a)		74.0%	74.0%	0.0%
	e. Market Value of Assets	\$	28,021,927,302	\$ 26,412,275,175	6.1%
	f. Funded Ratio on Market Value (e) / (a)		72.6%	70.9%	2.4%





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### **SECTION 2 – SCOPE OF THE REPORT**



This report presents the actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2024. This valuation was prepared at the request of the System's Board of Trustees.

The reader is encouraged to review the actuarial certification letter, where the guidelines employed in the preparation of this report are outlined. Also included in this letter are comments on the sources and reliability of both the data and the actuarial assumptions upon which our findings are based. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the System. Sections 4 and 5 describe how the obligations of the System are to be met under the actuarial cost method in use. Section 6 provides other historical information about the System. Section 7 discusses risks, related to funding, for the System to consider.

This report includes several appendices:

- Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on December 31, 2024, as amended by legislation in the 2025 Session.
- Appendix C A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- Appendix D A glossary of actuarial terms.





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### **SECTION 3 – ASSETS**



### **Market Value of Assets**

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, the market value of assets provides a basis for measuring investment performance from time to time. At December 31, 2024, the market value of assets for the Retirement System was \$28.022 billion. Table 1 shows the market value of assets as of December 31, 2024 in total and by investment category. Table 2 summarizes the change in the market value of assets, from December 31, 2023 to December 31, 2024, by group.

### **Actuarial Value of Assets**

Neither the market value of assets, representing a "cash-out" value of System assets, nor the book value of assets, representing the cost of investments, may be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. The current asset smoothing method was implemented with the December 31, 2003 actuarial valuation.

Under the asset smoothing method, the difference between the actual return and the expected return (based on the actuarial assumed rate of return) on the market value of assets is calculated each year and recognized equally over a five-year period.

Tables 3A through 3F and Table 4 show the development of the actuarial value of assets (AVA) as of December 31, 2024. Table 5 shows the deferred asset experience and how it will be recognized during the following four years.





### TABLE 1 ANALYSIS OF NET ASSETS AT MARKET VALUE

	·=	December 31, 2024					
		Amount (\$ Millions)	% of <u>Total</u>				
Cash & Equivalents	\$	604	2.2	%			
Alternative Investments		2,834	10.1				
Real Estate		3,427	12.2				
Fixed Income		7,127	25.4				
Domestic Equity		8,764	31.3				
International Equity	-	5,266	18.8				
Net Assets	\$	28,022	100.0	%			
Allocation of Net Assets on December 31,	2024:						
State School Local KP&F Judges Total Net Assets*	\$	4,090 14,886 5,428 3,397 221					
I OTAI NET ASSETS"	\$	28,022					

<sup>\*</sup> May not add due to rounding





TABLE 2 SUMMARY OF CHANGES IN TOTAL SYSTEM ASSETS DURING PERIOD ENDED DECEMBER 31, 2024

(Market Value)

		State		School		State/School		Local
Market Value of Assets a	s of January 1, 2024	\$ 3,930,137,577	\$	14,035,243,402	\$	17,965,380,979	\$	5,074,469,885
Contributions:								
Employ	yee	75,008,523		272,443,110		347,451,633		141,412,890
Employ	yee service purchases	455,230		2,802,992		3,258,222		703,799
Statuto	ory Employer	133,230,755		565,104,742		698,335,497		220,940,523
Additio	nal Employer	0		0		0		0
Miscell	laneous	42,501		431,364		473,865		262,739
Tota	al Contributions	 208,737,009	_	840,782,208	-	1,049,519,217	_	363,319,951
Total Investment Income		346,663,467		1,226,135,720		1,572,799,187		440,491,919
Tota	al Income	 555,400,476	_	2,066,917,928	-	2,622,318,404		803,811,870
Less Benefits:								
Annuit	y Retirement Benefits	(349, 123, 939)		(1,081,589,187)		(1,430,713,126)		(376,188,065)
Partial	Lump Sum Benefits	(23,175,054)		(70,069,603)		(93,244,657)		(33,565,189)
Retirar	nt Dividends	(29,945)		(59,177)		(89,122)		(20,959)
Withdra	awals	(15,763,189)		(41,751,906)		(57,515,095)		(30,946,617)
Death	Benefits	(2,956,211)		(7,677,518)		(10,633,729)		(3,647,196)
Tota	al Benefits	 (391,048,338)	_	(1,201,147,391)	-	(1,592,195,729)		(444,368,026)
Administrative Expenses		(4,292,840)		(15,183,615)		(19,476,455)		(5,454,747)
Net Increase in Assets		160,059,298		850,586,922		1,010,646,220		353,989,097
Market Value of Assets a	s of December 31, 2024	\$ 4,090,196,875	\$	14,885,830,324	\$	18,976,027,199	\$	5,428,458,982





### TABLE 2 (cont.) SUMMARY OF CHANGES IN TOTAL SYSTEM ASSETS DURING PERIOD ENDED DECEMBER 31, 2024

(Market Value)

		KPERS		KP&F	Judges	Total
Market Value of Assets as of January 1, 2024	\$	23,039,850,864	\$	3,164,498,352	\$ 207,925,959	\$ 26,412,275,175
Contributions:						
Employee		488,864,523		53,745,192	2,075,637	544,685,352
Employee service purchases		3,962,021		952,424	57,634	4,972,079
Statutory Employer		919,276,020		174,556,507	7,054,840	1,100,887,367
Additional Employer		0		0	0	0
Miscellaneous		736,604		151,597	1,033	889,234
Total Contributions	_	1,412,839,168	_	229,405,720	9,189,144	1,651,434,032
Total Investment Income		2,013,291,106		274,732,848	18,190,229	2,306,214,183
Total Income	_	3,426,130,274		504,138,568	 27,379,373	 3,957,648,215
Less Benefits:						
Annuity Retirement Benefits		(1,806,901,191)		(247,727,379)	(14,307,270)	(2,068,935,840)
Partial Lump Sum Benefits		(126,809,846)		(12,551,316)	(150,543)	(139,511,705)
Retirant Dividends		(110,081)		(341,855)	0	(451,936)
Withdrawals		(88,461,712)		(7,378,795)	0	(95,840,507)
Death Benefits		(14,280,925)		(383,895)	(32,722)	(14,697,542)
Total Benefits	_	(2,036,563,755)	_	(268,383,240)	 (14,490,535)	 (2,319,437,530)
Administrative Expenses		(24,931,202)		(3,402,101)	(225,255)	(28,558,558)
Net Increase in Assets		1,364,635,317		232,353,227	12,663,583	1,609,652,127
Market Value of Assets as of December 31, 2024	\$	24,404,486,181	\$	3,396,851,579	\$ 220,589,542	\$ 28,021,927,302





### TABLE 3A CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR ACTUARIAL VALUE OF NET ASSETS State

Plan Year End 12/31/2021 12/31/2023 12/31/2024 12/31/2022 1. Market Value of Assets, beginning of year 3,950,313,620 4,346,193,928 3,735,276,243 3,930,137,577 Contributions during year 161,855,106 180,430,979 190,122,086 208,737,009 Benefits paid during year (362,861,831)(369,731,755)(379,685,735)(391,048,338)4. Administrative expenses paid during year (3,475,347)(2,991,154)(3,920,663)(4,292,840)5. Assumed Rate of Return 7.75% 7.00% 7.00% 7.00% 6. Expected investment income 298,373,471 297,617,186 254,811,920 268,688,946 Expected Value of Assets, end of year 4,044,205,019 4,451,519,184 3,796,603,851 4,012,222,354 Market Value of Assets, end of year 4,346,193,928 3,735,276,243 3,930,137,577 4,090,196,875 77,974,521 Excess (shortfall) of net investment income 301,988,909 (716,242,941) \$ 133,533,726 \$





### TABLE 3B CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR ACTUARIAL VALUE OF NET ASSETS School

Plan Year End 12/31/2021 12/31/2022 12/31/2023 12/31/2024 13,681,117,891 1. Market Value of Assets, beginning of year 11,582,439,853 12,975,465,123 14,035,243,402 Contributions during year 1,378,989,900 1,732,002,567 874,925,123 840,782,208 Benefits paid during year (1,058,691,237)(1,093,400,155)(1,153,773,167)(1,201,147,391)3. Administrative expenses paid during year (10,354,532)(9,536,798)(13,652,344)(15,183,615)5. Assumed Rate of Return 7.75% 7.00% 7.00% 7.00% Expected investment income 6. 909,425,326 979,323,169 898,218,193 969,545,139 Expected Value of Assets, end of year 12,801,809,310 15,289,506,674 13,581,182,928 14,629,239,743 Market Value of Assets, end of year 8. 13,681,117,891 12,975,465,123 14,035,243,402 14,885,830,324 Excess (shortfall) of net investment income \$ (2,314,041,551) \$ 879,308,581 454,060,474 256,590,581





### TABLE 3C CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR ACTUARIAL VALUE OF NET ASSETS State/School

Plan Year End 12/31/2021 12/31/2022 12/31/2023 12/31/2024 Market Value of Assets, beginning of year 15,532,753,473 18,027,311,819 16,710,741,366 17,965,380,979 Contributions during year 2. 1,540,845,006 1,912,433,546 1,065,047,209 1,049,519,217 Benefits paid during year (1,421,553,068)(1,463,131,910)(1,533,458,902)(1,592,195,729)Administrative expenses paid during year 4. (13,829,879)(12,527,952)(17,573,007)(19,476,455)5. Assumed Rate of Return 7.75% 7.00% 7.00% 7.00% Expected investment income 1,207,798,797 1,276,940,355 1,153,030,113 1,238,234,085 Expected Value of Assets, end of year 16,846,014,329 19,741,025,858 17,377,786,779 18,641,462,097 Market Value of Assets, end of year 18,027,311,819 16,710,741,366 17,965,380,979 18,976,027,199 Excess (shortfall) of net investment income 1,181,297,490 (3,030,284,492)\$ 587,594,200 \$ 334,565,102





## TABLE 3D CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR ACTUARIAL VALUE OF NET ASSETS Local

Plan Year End 12/31/2021 12/31/2022 12/31/2023 12/31/2024 Market Value of Assets, beginning of year 4,699,700,683 \$ 5,326,275,739 4,696,616,653 \$ 5,074,469,885 Contributions during year 2. 296,334,261 308,020,169 320,278,839 363,319,951 3. Benefits paid during year (391,862,858)(414,802,438)(426,675,022) (444,368,026)Administrative expenses paid during year 4. (4,204,415)(3,709,541)(4,938,749)(5,454,747)5. Assumed Rate of Return 7.75% 7.00% 7.00% 7.00% Expected investment income 360,434,258 369,037,495 324,932,349 352,236,499 Expected Value of Assets, end of year 4,960,401,929 5,584,821,424 4,910,214,070 5,340,203,562 Market Value of Assets, end of year 8. 5,326,275,739 4,696,616,653 5,074,469,885 5,428,458,982 Excess (shortfall) of net investment income 164,255,815 \$ 365,873,810 \$ (888,204,771)\$ \$ 88,255,420





### TABLE 3E CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR ACTUARIAL VALUE OF NET ASSETS KP&F

Plan Year End 12/31/2021 12/31/2022 12/31/2023 12/31/2024 Market Value of Assets, beginning of year 2,918,249,554 3,313,453,368 2,913,418,901 3,164,498,352 Contributions during year 2. 175,589,772 190,918,899 209,712,099 229,405,720 Benefits paid during year (228, 233, 187)(266, 154, 307)(259,989,191)(268,383,240)Administrative expenses paid during year 4. (2,607,570)(2,304,282)(3,073,467)(3,402,101)5. Assumed Rate of Return 7.75% 7.00% 7.00% 7.00% Expected investment income 224,063,313 229,273,747 202,103,635 220,056,685 Expected Value of Assets, end of year 3,087,061,882 3,465,187,425 3,062,171,977 3,342,175,416 Market Value of Assets, end of year 3,313,453,368 2,913,418,901 3,164,498,352 3,396,851,579 Excess (shortfall) of net investment income \$ 226,391,486 \$ (551,768,524)\$ 102,326,375 \$ 54,676,163





TABLE 3F
CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR
ACTUARIAL VALUE OF NET ASSETS
Judges

Plan Year End 12/31/2024 12/31/2021 12/31/2022 12/31/2023 Market Value of Assets, beginning of year \$ 201,931,613 \$ 224,787,235 \$ 195,146,068 \$ 207,925,959 Contributions during year 7,679,406 2. 7,137,556 8,390,696 9,189,144 3. Benefits paid during year (14,920,803)(15,412,058)(15,446,674)(14,490,535)Administrative expenses paid during year (178,393)(202,301)4. (155,430)(225,255)Assumed Rate of Return 5. 7.75% 7.00% 7.00% 7.00% Expected investment income 15,346,943 15,463,693 13,410,482 14,364,656 Expected Value of Assets, end of year 209,316,916 232,362,846 201,298,271 216,763,969 Market Value of Assets, end of year 8. 224,787,235 195,146,068 207,925,959 220,589,542 (37,216,778)3,825,573 Excess (shortfall) of net investment income \$ 15,470,319 \$ \$ 6,627,688 \$





TABLE 4
DEVELOPMENT OF ACTUARIAL VALUE OF NET ASSETS

			State		School		State/School		Local	Total KPERS
1.	Excess (shortfall) of investment income a. Year ending 12/31/24 b. Year ending 12/31/23 c. Year ending 12/31/22 d. Year ending 12/31/21	\$	77,974,521 133,533,726 (716,242,941) 301,988,909	\$	256,590,581 454,060,474 (2,314,041,551) 879,308,581	\$	334,565,102 587,594,200 (3,030,284,492) 1,181,297,490	\$	88,255,420 164,255,815 (888,204,771) 365,873,810	\$ 422,820,522 751,850,015 (3,918,489,263) 1,547,171,300
2.	Deferral of excess (shortfall) of investment income a. Year ending 12/31/24 (80%) b. Year ending 12/31/23 (60%) c. Year ending 12/31/22 (40%) d. Year ending 12/31/21 (20%) e. Total	<b>\$</b>	62,379,617 80,120,236 (286,497,176) 60,397,782 (83,599,541)	- \$	205,272,465 272,436,284 (925,616,620) 175,861,716 (272,046,155)	- \$	267,652,082 352,556,520 (1,212,113,796) 236,259,498 (355,645,696)	- \$	70,604,336 98,553,489 (355,281,908) 73,174,762 (112,949,321)	\$ 338,256,418 451,110,009 (1,567,395,704) 309,434,260 (468,595,017)
3.	Market Value of Assets, end of year	\$	4,090,196,875	\$	14,885,830,324	\$	18,976,027,199	\$	5,428,458,982	\$ 24,404,486,181
4.	Actuarial Value of Assets, end of year (3) - (2e)	\$	4,173,796,416	\$	15,157,876,479	\$	19,331,672,895	\$	5,541,408,303	\$ 24,873,081,198
5.	Actuarial Value divided by market value (4)/(3)		102.0%		101.8%		101.9%		102.1%	101.9%





### TABLE 4 (cont.) DEVELOPMENT OF ACTUARIAL VALUE OF NET ASSETS

		Total KPERS	KP&F	Judges	Total
1.	Excess (shortfall) of investment income				
	a. Year ending 12/31/24	\$ 422,820,522	\$ 54,676,163	\$ 3,825,573	\$ 481,322,258
	b. Year ending 12/31/23	751,850,015	102,326,375	6,627,688	860,804,078
	c. Year ending 12/31/22	(3,918,489,263)	(551,768,524)	(37,216,778)	(4,507,474,565)
	d. Year ending 12/31/21	1,547,171,300	226,391,486	15,470,319	1,789,033,105
2.	Deferral of excess (shortfall) of investment income				
۷.	a. Year ending 12/31/24 (80%)	338,256,418	43,740,930	3,060,458	385,057,806
	b. Year ending 12/31/23 (60%)	451,110,009	61,395,825	3,976,613	516,482,447
	c. Year ending 12/31/22 (40%)	(1,567,395,704)	(220,707,410)	(14,886,711)	(1,802,989,825)
	d. Year ending 12/31/21 (20%)	309,434,260	45,278,297	3,094,064	357,806,621
	e. Total	\$ (468,595,017)	\$ (70,292,358)	\$ (4,755,576)	\$ (543,642,951)
3.	Market Value of Assets, end of year	\$ 24,404,486,181	\$ 3,396,851,579	\$ 220,589,542	\$ 28,021,927,302
4.	Actuarial Value of Assets, end of year (3) - (2e)	\$ 24,873,081,198	\$ 3,467,143,937	\$ 225,345,118	\$ 28,565,570,253
5.	Actuarial Value divided by Market Value (4)/(3)	101.9%	102.1%	102.2%	101.9%





TABLE 5
SCHEDULE OF DEFERRED ACTUARIAL VALUE OF ASSETS EXPERIENCE

Plan Year	Gain/(Loss) Deferred to	Gain	/(Los	ss) to be Recogr	nized	l in Plan Year Er	nding	g
Ended	<b>Future Years</b>	 2025		2026		2027		2028
 12/31/2021	\$ 357,806,621	\$ 357,806,621						
12/31/2022	(1,802,989,825)	(901,494,913)		(901,494,912)				
12/31/2023	516,482,447	172,160,816		172,160,816		172,160,815		
12/31/2024	385,057,806	96,264,452		96,264,452		96,264,452		96,264,450
 Total	\$ (543,642,951)	\$ (275,263,024)	\$	(633,069,644)	\$	268,425,267	\$	96,264,450





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### SECTION 4 - SYSTEM LIABILITIES



In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the System as of the valuation date, December 31, 2024. In this section, the discussion will focus on the benefit obligations of the System, which are referred to as its liabilities.

Table 6 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries. The analysis is provided for each group.

The liabilities summarized in Table 6 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits expected to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and, if an optional form of benefit is chosen, for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of the last Actuarial Experience Study performed in 2023 and are disclosed in Appendix C of this report.

The liabilities reflect the benefit structure in place as of December 31, 2024, as amended by any legislation in the 2025 Session.

### **Actuarial Liabilities**

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to "breakdown" the present value of future benefits into two components:

- (1) that attributable to the past and
- (2) that attributable to the future.

Actuarial terminology calls the part attributable to the past the "past service liability" or the "actuarial liability". The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the "normal cost". Table 7 contains the calculation of actuarial liabilities for all groups.





TABLE 6
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF DECEMBER 31, 2024

		State	School	State/School		Local
1. Active employees						
<ul><li>a. Retirement Benefits</li><li>b. Pre-Retirement Death Benefits</li><li>c. Termination Benefits</li><li>d. Disability Benefits</li><li>e. Total</li></ul>	\$	2,405,050,075 38,923,973 246,984,062 49,746,446 2,740,704,556	\$ 11,235,993,960 149,978,109 785,911,871 116,236,834 12,288,120,774	\$ 13,641,044,035 188,902,082 1,032,895,933 165,983,280 15,028,825,330	\$	4,301,459,205 92,651,737 484,584,754 67,387,152 4,946,082,848
2. Inactive Vested Members		268,782,027	732,311,870	1,001,093,897		451,452,050
3. Inactive Nonvested Members		17,545,845	50,692,266	68,238,111		45,069,507
4. Disabled Members		47,258,506	67,997,592	115,256,098		51,895,272
5. Retirees		3,038,425,239	10,202,394,267	13,240,819,506		3,488,657,440
6. Beneficiaries		169,488,498	264,854,562	434,343,060		170,705,993
7. Unclaimed Account Reserve	-	668,200	 1,331,800	 2,000,000	. <u>-</u>	500,000
8. Total PVFB	\$	6,282,872,871	\$ 23,607,703,131	\$ 29,890,576,002	\$_	9,154,363,110





# TABLE 6 (cont.) KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM PRESENT VALUE OF FUTURE BENEFITS (PVFB) AS OF DECEMBER 31, 2024

	Total KPERS		KP&F		Judges		Total
1. Active employees							
<ul><li>a. Retirement Benefits</li><li>b. Pre-Retirement Death Benefits</li><li>c. Termination Benefits</li><li>d. Disability Benefits</li><li>e. Total</li></ul>	\$ 17,942,503,240 281,553,819 1,517,480,687 233,370,432 19,974,908,178	\$	2,992,198,877 35,104,055 140,766,991 285,003,321 3,453,073,244	\$	160,041,457 1,496,464 0 0 161,537,921	\$	21,094,743,574 318,154,338 1,658,247,678 518,373,753 23,589,519,343
2. Inactive Vested Members	1,452,545,947		68,091,214		1,061,869		1,521,699,030
3. Inactive Nonvested Members	113,307,618		34,874,876		0		148,182,494
4. Disabled Members	167,151,370		142,054,205		0		309,205,575
5. Retirees	16,729,476,946		2,325,699,188		120,910,090		19,176,086,224
6. Beneficiaries	605,049,053		186,175,481		16,074,849		807,299,383
7. Unclaimed Account Reserve	2,500,000	-	0	-	0	-	2,500,000
8. Total PVFB	\$ 39,044,939,112	\$	6,209,968,208	\$	299,584,729	\$	45,554,492,049





## TABLE 7 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTUARIAL LIABILITIES AS OF DECEMBER 31, 2024

	State	School	State/School	Local
1. Present Value of Future Benefits	\$ 6,282,872,871	\$ 23,607,703,131	\$ 29,890,576,002	\$ 9,154,363,110
Present Value of Future Normal Costs for Active Members				
<ul><li>a. Retirement Benefits</li><li>b. Pre-Retirement Death Benefits</li><li>c. Termination Benefits</li><li>d. Disability Benefits</li><li>e. Total</li></ul>	\$ 454,511,050 12,956,678 251,922,517 21,305,279 740,695,524	\$ 2,537,392,228 53,360,589 839,546,745 45,185,104 3,475,484,666	\$ 2,991,903,278 66,317,267 1,091,469,262 66,490,383 4,216,180,190	\$ 875,310,903 32,330,320 506,045,448 25,936,271 1,439,622,942
3. Total Actuarial Liability (1) - (2e)	\$ 5,542,177,347	\$ 20,132,218,465	\$ 25,674,395,812	\$ 7,714,740,168





# TABLE 7 (cont.) KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTUARIAL LIABILITIES AS OF DECEMBER 31, 2024

	Total KPERS	KP&F	Judges	Total
1. Present Value of Future Benefits	\$ 39,044,939,112	\$ 6,209,968,208	\$ 299,584,729	\$ 45,554,492,049
Present Value of Future Normal     Costs for Active Members				
<ul><li>a. Retirement Benefits</li><li>b. Pre-Retirement Death Benefits</li><li>c. Termination Benefits</li><li>d. Disability Benefits</li><li>e. Total</li></ul>	\$ 3,867,214,181 98,647,587 1,597,514,710 92,426,654 5,655,803,132	\$ 895,180,200 23,902,884 130,125,486 172,049,238 1,221,257,808	\$ 62,555,906 803,312 0 0 63,359,218	\$ 4,824,950,287 123,353,783 1,727,640,196 264,475,892 6,940,420,158
3. Total Actuarial Liability (1) - (2e)	\$ 33,389,135,980	\$ 4,988,710,400	\$ 236,225,511	\$ 38,614,071,891





## TABLE 8 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 2024

		State	School		State/School		Local
<u>ASSETS</u>							
Actuarial Value of Assets	\$	4,173,796,416	\$ 15,157,876,479	\$	19,331,672,895	\$	5,541,408,303
Present Value of Future Normal Costs		740,695,524	3,475,484,666		4,216,180,190		1,439,622,942
Unfunded Actuarial Liability	-	1,368,380,931	 4,974,341,986	-	6,342,722,917		2,173,331,865
Total Net Assets	\$	6,282,872,871	\$ 23,607,703,131	\$	29,890,576,002	\$	9,154,363,110
<u>LIABILITIES</u>							
Present Value of Future Benefits							
Active employees	\$	2,740,704,556	\$ 12,288,120,774	\$	15,028,825,330	\$	4,946,082,848
Inactive Members *		286,996,072	784,335,936		1,071,332,008		497,021,557
In-pay Members	_	3,255,172,243	 10,535,246,421	-	13,790,418,664	. <u>-</u>	3,711,258,705
Total Liabilities	\$	6,282,872,871	\$ 23,607,703,131	\$	29,890,576,002	\$	9,154,363,110

<sup>\*</sup>Includes Unclaimed Account Reserves





## TABLE 8 (cont.) KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 2024

	Total KPERS		KP&F		Judges		Total
<u>ASSETS</u>							
Actuarial Value of Assets	\$ 24,873,081,198	\$	3,467,143,937	\$	225,345,118	\$	28,565,570,253
Present Value of Future Normal Costs	5,655,803,132		1,221,257,808		63,359,218		6,940,420,158
Unfunded Actuarial Liability	8,516,054,782	· -	1,521,566,463	•	10,880,393	, ,	10,048,501,638
Total Net Assets	\$ 39,044,939,112	\$	6,209,968,208	\$	299,584,729	\$	45,554,492,049
<u>LIABILITIES</u>							
Present Value of Future Benefits							
Active employees	\$ 19,974,908,178	\$	3,453,073,244	\$	161,537,921	\$	23,589,519,343
Inactive Members *	1,568,353,565		102,966,090		1,061,869		1,672,381,524
In-pay Members	17,501,677,369	. <u>-</u>	2,653,928,874		136,984,939		20,292,591,182
Total Liabilities	\$ 39,044,939,112	\$	6,209,968,208	\$	299,584,729	\$	45,554,492,049

<sup>\*</sup>Includes Unclaimed Account Reserves





TABLE 9
ANALYSIS OF ACTUARIAL GAIN OR LOSS

		State	School	State/School	Local
1. Expected Actuarial Liability					
a. Actuarial liability at 12/31/23	\$	5,411,907,687	\$ 19,543,715,902	\$ 24,955,623,589	\$ 7,393,131,430
b. Normal cost during 2024		85,012,673	354,316,013	439,328,686	158,257,189
c. Benefit payments for plan year ending 12/31/24		(391,048,338)	(1,201,147,391)	(1,592,195,729)	(444,368,026)
d. Interest on (a), (b), and (c)	_	371,329,217	1,351,533,103	1,722,862,320	 513,307,369
e. Expected actuarial liability as of 12/31/24	\$	5,477,201,239	\$ 20,048,417,627	\$ 25,525,618,866	\$ 7,620,327,962
2. Actuarial Liability at 12/31/24	\$	5,542,177,347	\$ 20,132,218,465	\$ 25,674,395,812	\$ 7,714,740,168
3. Actuarial Liability Gain/(Loss) (1e) - (2)	\$	(64,976,108)	\$ (83,800,838)	\$ (148,776,946)	\$ (94,412,206)
4. Expected Actuarial Value of Assets					
a. Actuarial value of assets at 12/31/23	\$	4,110,027,649	\$ 14,644,664,325	\$ 18,754,691,974	\$ 5,303,548,760
b. Contributions for plan year ending 12/31/24		208,737,009	840,782,208	1,049,519,217	363,319,951
c. Benefit payments and expenses for plan year ending 12/31/24		(395,341,178)	(1,216,331,006)	(1,611,672,184)	(449,822,773)
d. Interest on (a), (b) and (c)	_	281,281,251	1,012,204,603	1,293,485,854	 368,272,020
e. Expected actuarial value of assets as of 12/31/24	\$	4,204,704,731	\$ 15,281,320,130	\$ 19,486,024,861	\$ 5,585,317,958
5. Actuarial Value of Assets as of 12/31/24	\$	4,173,796,416	\$ 15,157,876,479	\$ 19,331,672,895	\$ 5,541,408,303
6. Actuarial Value of Assets Gain/(Loss) (5) - (4e)	\$	(30,908,315)	\$ (123,443,651)	\$ (154,351,966)	\$ (43,909,655)
7. Net Actuarial Gain/(Loss) (3) + (6)	\$	(95,884,423)	\$ (207,244,489)	\$ (303,128,912)	\$ (138,321,861)





### TABLE 9 (cont.) ANALYSIS OF ACTUARIAL GAIN OR LOSS

		Total KPERS	KP&F		Judges	Total
1. Expected Actuarial Liability						
a. Actuarial liability at 12/31/23	\$	32,348,755,019	\$ 4,688,715,519	\$	231,058,874	\$ 37,268,529,412
b. Normal cost during 2024		597,585,875	113,868,408		7,626,149	719,080,432
c. Benefit payments for plan year ending 12/31/24		(2,036,563,755)	(268,383,240)		(14,490,535)	(2,319,437,530)
d. Interest on (a), (b), and (c)	,	2,236,169,689	 326,946,333	. <u> </u>	16,209,361	 2,579,325,383
e. Expected actuarial liability as of 12/31/24	\$	33,145,946,828	\$ 4,861,147,020	\$	240,403,849	\$ 38,247,497,697
2. Actuarial Liability at 12/31/24	\$	33,389,135,980	\$ 4,988,710,400	\$	236,225,511	\$ 38,614,071,891
3. Actuarial Liability Gain/(Loss) (1e) - (2)	\$	(243,189,152)	\$ (127,563,380)	\$	4,178,338	\$ (366,574,194)
4. Expected Actuarial Value of Assets						
a. Actuarial value of assets at 12/31/23	\$	24,058,240,734	\$ 3,306,906,794	\$	217,633,425	\$ 27,582,780,953
b. Contributions for plan year ending 12/31/24		1,412,839,168	229,405,720		9,189,144	1,651,434,032
c. Benefit payments and expenses for plan year ending 12/31/24		(2,061,494,957)	(271,785,341)		(14,715,790)	(2,347,996,088)
d. Interest on (a), (b) and (c)		1,661,757,874	 230,025,276	. <u> </u>	15,044,179	 1,906,827,329
e. Expected actuarial value of assets as of 12/31/24	\$	25,071,342,819	\$ 3,494,552,449	\$	227,150,958	\$ 28,793,046,226
5. Actuarial Value of Assets as of 12/31/24	\$	24,873,081,198	\$ 3,467,143,937	\$	225,345,118	\$ 28,565,570,253
6. Actuarial Value of Assets Gain/(Loss) (5) - (4e)	\$	(198,261,621)	\$ (27,408,512)	\$	(1,805,840)	\$ (227,475,973)
7. Net Actuarial Gain/(Loss) (3) + (6)	\$	(441,450,773)	\$ (154,971,892)	\$	2,372,498	\$ (594,050,167)





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### **SECTION 5 – EMPLOYER CONTRIBUTIONS**



The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 4 and 7 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a fully closed fund, where no further contributions are anticipated.

In an active system, there will almost always be a difference between the actuarial value of assets and total liabilities. This deficiency has to be made up by future contributions and investment returns. An actuarial valuation sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method, the contributions required to meet the difference between current assets and current liabilities are allocated each year between two elements: (1) the normal cost and (2) the payment on the unfunded actuarial liability.

The term "fully funded" is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded and/or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial liability exists.

### **Description of Rate Components**

The actuarial cost method for all three systems is the traditional Entry Age Normal (EAN) – level percent of pay cost method. Under the EAN cost method, the actuarial present value of each member's projected benefits is funded on a level basis over the member's compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial liability. The unfunded actuarial liability represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. The unfunded actuarial liability is calculated each year and reflects experience gains/losses.

The contribution rates based on the December 31, 2024 actuarial valuation will be used to determine employer contribution rates to the Kansas Public Employees Retirement System for fiscal years beginning in 2027 (July 1, 2027 to June 30, 2028 for the State and calendar year 2027 for Local employers).

### **KPERS**

The law provides for the calculation of separate employer contribution rates for three groups: State, School and Local (for all other covered employers). Over the past ten years, numerous



### **SECTION 5 – EMPLOYER CONTRIBUTIONS**



changes to KPERS funding have occurred which resulted in additional contributions to the School group. Please see the outline of legislative history contained in Section 6 of this report for a detailed discussion.

The total unfunded actuarial liability of the State/School and Local groups as of December 31, 2021 was reset and amortized over a closed 17 year period. In subsequent valuations, new bases due to actuarial gain/losses will be established and amortized over closed 20-year periods.

The unfunded actuarial liability is amortized as a level-percent of payroll using a payroll growth assumption of 3.0%. Therefore, the dollar amount of the annual amortization payment will increase 3.0% each year. As a result, if all assumptions are met in the future (including a 3.0% payroll growth), the amortization payment will remain level as a percentage of total payroll. If payroll increases less/more than 3.0% each year, the amortization payment will increase/decrease as a percentage of total payroll.

The actuarial required contribution rate for KPERS is comprised of the normal cost rate (including administrative expenses) and a contribution toward the unfunded actuarial liability. Local employers who affiliate with KPERS for prior service on or after January 1, 1999 pay an additional employer contribution to finance the unfunded actuarial liability as of their affiliation date.

### KP&F

The actuarial required contribution rates for employers in KP&F are comprised of:

- (a) a "uniform" rate, determined separately for State and Local employers, which includes the normal cost (and administrative expenses) and an unfunded actuarial liability payment for the entire group, plus
- (b) any payment required to amortize the unfunded past service liability or any 15% excess benefit liability, which is determined separately for each participating employer.

For Local employers who enter KP&F for future service only, the total cost is the uniform contribution rate.

The total amount of the unfunded actuarial liability as of December 31, 2021 was reset and amortized over 22 years. In subsequent valuations, new bases due to actuarial gain/losses will be established and amortized over closed 20-year periods.

The unfunded actuarial liability is amortized as a level-percent of payroll using a payroll growth assumption of 3.0%. Therefore, the dollar amount of the annual amortization payment will increase 3.0% each year. As a result, if all assumptions are met in the future (including a 3.0% payroll growth), the amortization payment will remain level as a percentage of total payroll. If payroll increases less/more than 3.0% each year, the amortization payment will increase/decrease as a percentage of total payroll.



### **SECTION 5 – EMPLOYER CONTRIBUTIONS**



### **Judges**

The actuarial required contribution rate for the Judges is composed of the normal cost rate (including administrative expenses) and a contribution toward the unfunded actuarial liability. The total amount of the unfunded actuarial liability as of December 31, 2021 was reset and amortized over a closed 20-year period. In subsequent valuations, new amortization bases due to actuarial gain/losses will be established and amortized over closed 20-year periods. The unfunded actuarial liability is amortized with payments determined as level-dollar amounts.

### **Contribution Rate Summary**

The normal cost rate for each group is shown in Table 10. The unfunded actuarial liability for each group is shown in Table 11. Tables 12A and 12B project each group's unfunded actuarial liability to the beginning of the fiscal year in which the contribution rates from the December 31, 2024 actuarial valuation will be applied. Tables 13A-F develop the actuarial required contribution rates for the unfunded actuarial liability using the projected unfunded actuarial liability amounts from Tables 12A and 12B. The total actuarial required contribution rates determined as of December 31, 2024 are presented in Table 14. The contribution rates for local employers who affiliated with KPERS for prior service and are amortizing the payment of that liability over a period of no more than 15 years are shown in Tables 15A and 15B. Table 16 shows the KP&F individual employer contribution rates for fiscal years beginning in 2026 and 2027, while Tables 17 and 18 show the calculation of the additional contribution rate due to amortization of prior service unfunded actuarial liability for fiscal years beginning in 2027.

The rates shown in this report, which are based on the actuarial assumptions and cost methods described in Appendix C, are applicable for determining employer contribution rates for fiscal years commencing in 2027.





# TABLE 10 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM NORMAL COST RATE AS OF DECEMBER 31, 2024

	State	School	State/School	Local
1. Normal Cost Rate				
a. Retirement Benefits	5.02%	6.35%	6.07%	4.85%
b. Pre-Retirement Death Benefits	0.14%	0.13%	0.14%	0.18%
c. Termination Benefits	2.57%	1.91%	2.05%	2.60%
d. Disability Benefits	0.23%	0.11%	0.13%	0.14%
e. Administrative Expenses	0.23%	0.23%	0.23%	0.23%
f. Total	8.19%	8.73%	8.62%	8.00%





# TABLE 10 (cont.) KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM NORMAL COST RATE AS OF DECEMBER 31, 2024

Normal Cost Rate	KP&F	Judges
1. Normal Gost Nato		
a. Retirement Benefits	12.94%	23.11%
b. Pre-Retirement Death Benefits	0.34%	0.28%
c. Termination Benefits	1.83%	0.00%
d. Disability Benefits	2.47%	0.00%
e. Administrative Expenses	0.23%	0.23%
f. Total	17.81%	23.62%





### TABLE 11 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM UNFUNDED ACTUARIAL LIABILITY (UAL) AS OF DECEMBER 31, 2024

		State		School	State/School		Local	KP&F		Judges
1. Actuarial Liability	\$	5,542,177,347	\$	20,132,218,465	\$ 25,674,395,812	\$	7,714,740,168	\$ 4,988,710,400	\$	236,225,511
2. Actuarial Value of Assets	-	4,173,796,416	-	15,157,876,479	19,331,672,895	-	5,541,408,303	3,467,143,937	-	225,345,118
3. Unfunded Actuarial Liability (UAL)		1,368,380,931		4,974,341,986	6,342,722,917		2,173,331,865	1,521,566,463		10,880,393
<ul><li>a. Other local employer UAL*</li><li>b. Remaining UAL</li></ul>		0 1,368,380,931		0 4,974,341,986	0 6,342,722,917		1,497,723 2,171,834,142	534,281 1,521,032,182		0 10,880,393

<sup>\*</sup>These amounts are paid directly by the employer and do not enter into the overall unfunded actuarial liability and amortization calculations.





### TABLE 12A KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM PROJECTED UNFUNDED ACTUARIAL LIABILITY AT JUNE 30, 2027 EMPLOYERS CONTRIBUTING ON JUNE 30 FISCAL YEARS

	State	School	State/School	Judges
1. Unfunded Actuarial Liability at December 31, 2024	\$1,368,380,931	\$4,974,341,986	\$6,342,722,917	\$10,880,393
2. FY 2025 Expected Contribution Rate	16.81%	17.54%	17.54%	27.07%
3. Normal Cost Rate	<u>8.19%</u>	<u>8.73%</u>	<u>8.62%</u>	<u>23.62%</u>
4. Contribution Rate Applied to UAL for 2025 [(2) – (3)]	8.62%	8.81%	8.92%	3.45%
5. Expected Payroll for January to June, 2025	630,732,647	2,319,397,878	2,950,130,525	18,668,607
6. Statutory Excess State Contributions	0	4,604,348	0	N/A
7. Expected UAL Contribution [(4) * (5)] + (6)	54,369,154	208,943,301	263,151,643	644,067
8. Projected UAL at June 30, 2025	\$1,360,167,630	\$4,932,991,795	\$6,293,322,980	\$10,599,712
9. FY 2026 Expected Contribution Rate	17.33%	17.68%	17.68%	28.78%
10. Normal Cost Rate	<u>8.19%</u>	<u>8.73%</u>	<u>8.62%</u>	<u>23.62%</u>
11. Contribution Rate Applied to UAL for 2026 [(9) – (10)]	9.14%	8.95%	9.06%	5.16%
12. Expected Payroll for FY 2026	1,280,387,273	4,708,377,692	5,988,764,965	37,337,213
13. Statutory Excess State Contributions	0	4,481,355	0	N/A
14. Expected UAL Contribution [(11) * (12)] + (13)	117,027,397	425,881,158	542,582,106	1,926,600
15. Projected UAL at June 30, 2026	\$1,334,325,283	\$4,837,766,325	\$6,172,604,294	\$9,348,801
16. FY 2027 Expected Contribution Rate	16.98%	17.32%	17.32%	26.92%
17. Normal Cost Rate	<u>8.19%</u>	<u>8.73%</u>	<u>8.62%</u>	<u>23.62%</u>
18. Contribution Rate Applied to UAL for 2027 [(16) – (17)]	8.79%	8.59%	8.70%	3.30%
19. Expected Payroll for FY 2027	1,318,798,891	4,849,629,023	6,168,427,914	37,337,213
20. Statutory Excess State Contributions	0	4,483,916	0	N/A
21. Expected UAL Contribution [(18) * (19)] + (20)	\$115,922,423	\$421,067,049	\$536,653,229	\$1,232,128
22. Projected UAL at June 30, 2027	\$1,307,816,966	\$4,740,854,826	\$6,049,568,178	\$8,728,694

Note: The projected unfunded actuarial liability amount for State/School may not equal the sum of State and School due to rounding. The excess of the State/School statutory contribution rate over the actuarial required contribution rate for the State alone is allocated to the School group.





### TABLE 12B KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM PROJECTED UNFUNDED ACTUARIAL LIABILITY AT DECEMBER 31, 2026 EMPLOYERS CONTRIBUTING ON DECEMBER 31 FISCAL YEARS

		KPERS - Local	KP&F
1. 2. 3. 4. 5.	Unfunded Actuarial Liability at December 31, 2024 FY 2025 Expected Contribution Rate Normal Cost Rate Contribution Rate Applied to UAL for 2025 [(2) – (3)] Expected Payroll for 2025 Expected UAL Contribution (4) * (5)	\$2,171,834,142 15.71% <u>8.00%</u> 7.71% 2,385,045,053 \$183,886,974	\$1,521,032,182 31.82% <u>17.81%</u> 14.01% 773,537,600 \$108,372,618
11.	Projected UAL at December 31, 2025 FY 2026 Expected Contribution Rate Normal Cost Rate Contribution Rate Applied to UAL for 2026 [(8) – (9)] Expected Payroll for FY 2026 Expected UAL Contribution (10) * (11)	\$2,133,648,367 15.59% <u>8.00%</u> 7.59% 2,456,596,405 \$186,455,667	\$1,515,402,927 31.15% <u>17.81%</u> 13.34% 796,743,728 \$106,285,613
13.	Projected UAL at December 31, 2026	\$2,090,132,511	\$1,511,538,439





### TABLE 13A KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM AMORTIZATION OF THE UNFUNDED ACTUARIAL LIABILITY

### STATE

Amortization Base	Original Amount	Remaining Payments	,	Projected June 30, 2027 Balance	Annual Payment*		
2021 UAL Balance**	\$	1,085,728,314	14	\$	1,028,734,041	\$	96,229,790
2022 Experience		152,834,809	18		150,906,075		11,757,649
2023 Experience		88,269,025	19		87,826,851		6,592,791
2023 Assumption Changes		(24,761,858)	19		(24,637,816)		(1,849,457)
2024 Experience		64,987,815	20		64,987,815		4,712,547
Total				\$	1,307,816,966	\$	117,443,320

<sup>\*</sup> Payment amount reflects mid-year timing.

1. Total UAL Amortization Payments

\$ 117,443,320

2. Projected Payroll for FY 2028

\$ 1,358,362,858

3. UAL Amortization Payment Rate (1) / (2)

8.65%

We believe that the use of the layered amortization policy with new bases over 20 years and the remainder of the legacy base over 14 years complies with Actuarial Standard of Practice Number 4. This policy will fully amortize the individual, as well as the total, unfunded actuarial liability within a reasonable timeframe and/or reduce the amount of the UAL by a reasonable amount within a sufficiently short period.



<sup>\*\*</sup> The total UAL balance as of 12/31/2021 was re-amortized over a closed, 17-year period. This change was made in conjunction with the change in investment return assumption.



### TABLE 13B KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM AMORTIZATION OF THE UNFUNDED ACTUARIAL LIABILITY

### **SCHOOL**

Amortization Base	Original Amount	Remaining Payments	Projected June 30, 2027 Balance	Annual Payment*
2021 UAL Balance**	\$ 4,757,383,232	14	\$ 4,507,648,937	\$ 421,654,280
2022 Experience	89,842,529	18	88,708,740	6,911,625
2023 Experience	171,223,922	19	170,366,194	12,788,672
2023 Assumption Changes	(220,861,881)	19	(219,755,497)	(16,496,118)
2024 Experience	193,886,452	20	193,886,452	14,059,544
Total			\$ 4,740,854,826	\$ 438,918,003

<sup>\*</sup> Payment amount reflects mid-year timing.

1. Total UAL Amortization Payments

\$ 438,918,003

2. Projected Payroll for FY 2028

\$ 4,995,117,894

UAL Amortization Payment Rate
 (1) / (2)

8.79%

We believe that the use of the layered amortization policy with new bases over 20 years and the remainder of the legacy base over 14 years complies with Actuarial Standard of Practice Number 4. This policy will fully amortize the individual, as well as the total, unfunded actuarial liability within a reasonable timeframe and/or reduce the amount of the UAL by a reasonable amount within a sufficiently short period.



<sup>\*\*</sup> The total UAL balance as of 12/31/2021 was re-amortized over a closed, 17-year period. This change was made in conjunction with the change in investment return assumption.



## TABLE 13C KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM AMORTIZATION OF THE UNFUNDED ACTUARIAL LIABILITY

#### STATE/SCHOOL

Amortization Base	Original Amount	Remaining Payments	Projected June 30, 2027 Balance	Annual Payment*
2021 UAL Balance**	\$ 5,843,453	,369 14	\$ 5,536,706,857	\$ 517,914,366
2022 Experience	242,252	,266 18	239,195,108	18,636,574
2023 Experience	260,226	,098 19	258,922,523	19,436,222
2023 Assumption Changes	(245,639,	130) 19	(244,408,627)	(18,346,725)
2024 Experience	259,152	,317 20	259,152,317	18,792,254
Total			\$ 6,049,568,178	\$ 556,432,691

<sup>\*</sup> Payment amount reflects mid-year timing.

Note: Projected UAL contributions and amounts for State/School may not equal the sum of State and School due to rounding.

1. Total UAL Amortization Payments

\$ 556,432,691

2. Projected Payroll for FY 2028

\$ 6,353,480,751

3. UAL Amortization Payment Rate (1) / (2)

8.76%

We believe that the use of the layered amortization policy with new bases over 20 years and the remainder of the legacy base over 14 years complies with Actuarial Standard of Practice Number 4. This policy will fully amortize the individual, as well as the total, unfunded actuarial liability within a reasonable timeframe and/or reduce the amount of the UAL by a reasonable amount within a sufficiently short period.



<sup>\*\*</sup> The total UAL balance as of 12/31/2021 was re-amortized over a closed, 17-year period. This change was made in conjunction with the change in investment return assumption.

## **SECTION 5 – EMPLOYER CONTRIBUTIONS**



## TABLE 13D KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM AMORTIZATION OF THE UNFUNDED ACTUARIAL LIABILITY

#### LOCAL

Amortization Base	Original Amount	Remaining Payments	Dec	Projected ember 31, 2026 Balance	Annual Payment*
2021 UAL Balance**	\$ 1,770,232,584	14	\$	1,677,305,913	\$ 156,898,469
2022 Experience	190,407,301	18		188,004,412	14,648,118
2023 Experience	124,970,883	19		124,344,855	9,334,044
2023 Assumption Changes	5,909,182	19		5,879,581	441,355
2024 Experience	94,597,750	20		94,597,750	6,859,691
Total			\$	2,090,132,511	\$ 188,181,677

<sup>\*</sup> Payment amount reflects mid-year timing.

1. Total UAL Amortization Payments

\$ 188,181,677

2. Projected Payroll for FY 2027

\$ 2,530,294,297

3. UAL Amortization Payment Rate (1) / (2)

7.44%

We believe that the use of the layered amortization policy with new bases over 20 years and the remainder of the legacy base over 14 years complies with Actuarial Standard of Practice Number 4. This policy will fully amortize the individual, as well as the total, unfunded actuarial liability within a reasonable timeframe and/or reduce the amount of the UAL by a reasonable amount within a sufficiently short period.



<sup>\*\*</sup> The total UAL balance as of 12/31/2021 was re-amortized over a closed, 17-year period. This change was made in conjunction with the change in investment return assumption.

## **SECTION 5 – EMPLOYER CONTRIBUTIONS**



## TABLE 13E KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM AMORTIZATION OF THE UNFUNDED ACTUARIAL LIABILITY

#### KP&F

Amortization Base	Original Amount	Remaining Payments	Dec	Projected ember 31, 2026 Balance	Annual Payment*
2021 UAL Balance**	\$ 1,146,942,441	19	\$	1,137,642,181	\$ 85,398,000
2022 Experience	179,151,354	18		176,890,513	13,782,193
2022 Benefit Change	30,663,277	18		30,276,315	2,358,939
2023 Experience	7,606,369	19		7,568,265	568,118
2023 Assumption Changes	18,043,092	19		17,952,707	1,347,634
2024 Experience	141,208,458	20		141,208,458	10,239,635
Total			\$	1,511,538,439	\$ 113,694,519

<sup>\*</sup> Payment amount reflects mid-year timing.

1. Total UAL Amortization Payments

\$ 113,694,519

2. Projected Payroll for FY 2027

\$ 820,646,040

3. UAL Amortization Payment Rate (1) / (2)

13.85%

We believe that the use of the layered amortization policy with new bases over 20 years and the remainder of the legacy base over 19 years complies with Actuarial Standard of Practice Number 4. This policy will fully amortize the individual, as well as the total, unfunded actuarial liability within a reasonable timeframe and/or reduce the amount of the UAL by a reasonable amount within a sufficiently short period.



<sup>\*\*</sup> The total UAL balance as of 12/31/2021 was re-amortized over a closed, 22-year period. This change was made in conjunction with the change in investment return assumption.



## TABLE 13F KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM AMORTIZATION OF THE UNFUNDED ACTUARIAL LIABILITY

#### **JUDGES**

Amortization Base	Original Amount	Remaining Payments	Projected une 30, 2027 Balance	Annual Payment*
2021 UAL Balance**	\$ 12,222,716	17	\$ 11,264,200	\$ 1,115,360
2022 Experience	6,730,870	18	6,391,005	614,213
2023 Experience	(936,019)	19	(913,186)	(85,415)
2023 Assumption Changes	(4,443,477)	19	(4,335,088)	(405,481)
2024 Experience	(3,678,237)	20	(3,678,237)	(335,650)
Total			\$ 8,728,694	\$ 903,027

<sup>\*</sup> Payment amount reflects mid-year timing.

1. Total UAL Amortization Payments

\$ 903,027

2. Projected Payroll for 2025

\$ 37,337,213

3. UAL Amortization Payment Rate (1) / (2)

2.42%

We believe that the use of the layered amortization policy with new bases over 20 years and the remainder of the legacy base over 17 years complies with Actuarial Standard of Practice Number 4. This policy will fully amortize the individual, as well as the total, unfunded actuarial liability within a reasonable timeframe and/or reduce the amount of the UAL by a reasonable amount within a sufficiently short period.



<sup>\*\*</sup> The total UAL balance as of 12/31/2021 was re-amortized over a closed, 20-year period. This change was made in conjunction with the change in investment return assumption.



# TABLE 14 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTUARIAL EMPLOYER CONTRIBUTION RATES FISCAL YEAR COMMENCING IN 2027

	Total Normal Cost	Employee Normal Cost	Employer Normal Cost	Unfunded Actuarial Liability	Total Employer Contribution*
State Correctional Employees - Age 55 Correctional Employees - Age 60	8.19% 9.22% 9.59%	6.00% 6.00% 6.00%	2.19% 3.22% 3.59%	8.65% 8.65% 8.65%	10.84% 11.87% 12.24%
School	8.73%	6.00%	2.73%	8.79%	11.52%
State/School	8.62%	6.00%	2.62%	8.76%	11.38%
Local	8.00%	6.00%	2.00%	7.44%	9.44%
KP&F Uniform Contribution Rate State ** Local **	17.81% 17.81%	7.15% 7.15%	10.66% 10.66%	13.87% 13.85%	24.53% 24.51%
Judges	23.62%	5.62%	18.00%	2.42%	20.42%

<sup>\*</sup> Does not include the contribution to the Death and Disability Program.



<sup>\*\*</sup> The total contribution rate for each employer is equal to the appropriate uniform contribution rate (state or local) plus an additional rate, if applicable, required to amortize the unfunded past service liability, determined separately for each employer. (See Table 15) The rate for State employers includes an additional 0.02% due to the impact of HB 2711 which increased the lump sum retiree death benefit.



#### TABLE 15A LOCAL KPERS AFFILIATION COST FACTORS FOR FISCAL YEAR BEGINNING IN 2027

Employer	Year Affiliated	Projected 2027 Annual Payroll	Projected 1/1/2027 Unfunded Actuarial Liability	Payment on 1/1/2027 Unfunded Liability	Payment on Unfunded Liability as % of Payroll	Total Rate for Years Commencing <sup>1</sup> in 2027
Bourbon County RWD#2	1999	\$260,759	\$86,057	\$13,820	5.30%	14.74%
City of Burden	1999	172,831	12,266	1,960	1.13%	10.57%
City of Longton	1999	92,276	14,830	2,385	2.58%	12.02%
St. Francis Housing Authority	1999	58,561	6,185	995	1.70%	11.14%
Towanda Township	1999	123,807	7,088	1,127	0.91%	10.35%
Bucklin Public Library	2000	16,589	11,635	1,573	9.48%	18.92%
City of Blue Mound	2000	111,359	2,377	346	0.31%	9.75%
City of Linn Valley	2000	210,180	757	124	0.06%	9.50%
Elkhart Cemetery District	2000	35,118	1,303	225	0.64%	10.08%
Ellis Public Library	2000	20,248	3,940	631	3.12%	12.56%
Hamilton County Library	2000	135,438	10,358	1,662	1.23%	10.67%
Hays Housing Authority	2000	57,014	1,231	228	0.40%	9.84%
Haysville Community Library	2000	234,162	156,664	25,096	10.72%	20.16%
Kansas Workers' Risk Coop for Counties	2000	443,891	40,322	6,353	1.43%	10.87%
City of Arcadia	2002	125,524	13,258	1,951	1.55%	10.99%
Lindsborg Community Library	2002	38,273	3,101	433	1.13%	10.57%
Basehor Community Library	2003	524,361	46,864	6,918	1.32%	10.76%
City of Gypsum	2003	116,874	3,964	589	0.50%	9.94%
City of Linwood	2003	162,263	1,968	293	0.18%	9.62%
City of Bentley	2004	89,509	25,945	4,922	5.50%	14.94%
Mulvane Public Library	2004	263,474	9,291	1,766	0.67%	10.11%
The Center for Counseling and Consultation	2004	5,177,764	781,404	148,409	2.87%	12.31%
City of Denison	2005	46,942	13,699	2,602	5.54%	14.98%
Doniphan County RFD #2	2005	101,386	6,224	1,178	1.16%	10.60%
Stanton County Recreation Commission	2005	48,650	16,895	3,204	6.59%	16.03%
Total		\$8,667,253	\$1,277,626	\$228,790		

<sup>&</sup>lt;sup>1</sup>Basic local employer contribution rates excluding Death and Disability contribution: FY 2026: 9.59% FY 2027: 9.44%





#### TABLE 15B LOCAL KPERS AFFILIATION COST FACTORS – AFFILIATION AFTER 1/1/06 FOR FISCAL YEAR BEGINNING IN 2027

Effective for affiliations on or after January 1, 2006, the payment on the unfunded actuarial liability due to affiliation for prior service is amortized as a fixed level dollar payment. No adjustment is made to the employer contribution rate for these payments.

Employer	Year Affiliated	Unfunded Actuarial Liability on Jan 1 Following Affiliation	Annual Payment Due Jan 1, 2027 to Amortize Unfunded Liability	Final Payment Year
City of Vermillion	2006	3,950	338	2032
Stockton Recreation Commission	2010	1,245	113	2032







# TABLE 16 KP&F EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS COMMENCING IN CALENDAR YEARS 2026 AND 2027

Employer	Total Rate for Fiscal Year Commencing in 2026	Recommended Total Rate for Fiscal Year Commencing in 2027
Anderson County	24.00 %	24.51 %
Atchinson County	24.00	24.51
Board of Regents Campus Police	24.02	24.53
Cherokee County	24.00	24.51
City of Abilene	24.00	24.51
City of Andover	24.00	24.51
City of Arkansas City	24.00	24.51
City of Atchison	24.00	24.51
City of Auburn	24.00	24.51
City of Augusta	24.00	24.51
City of Baldwin City	24.00	24.51
City of Basehor	24.00	24.51
City of Bel Aire	24.00	24.51
City of Belleville	24.00	24.51
City of Bonner Springs Fireman	24.00	24.51
City of Bonner Springs Police	24.00	24.51
City of Bucklin	24.00	24.51
City of Burden	24.00	24.51
City of Chanute	24.00	24.51
City of Chapman	24.00	24.51
City of Cimarron	24.00	24.51
City of Coffeyville	24.00	24.51
City of Concordia	24.00	24.51
City of Derby	24.00	24.51
City of Dodge City	24.00	24.51
City of Edwardsville Firemen	26.70	27.42
City of Edwardsville Police	25.41	26.02
City of El Dorado	24.00	24.51
City of Ellsworth	24.00	24.51
City of Emporia	24.00	24.51
City of Erie	24.00	24.51
City of Eudora	24.00	24.51
City of Fairway	24.00	24.51
City of Fort Scott	24.00	24.51
City of Frontenac	24.00	24.51
City of Garden City	24.00	24.51
City of Gardner Public Safety Officers	24.00	24.51







# TABLE 16 (cont.) KP&F EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS COMMENCING IN CALENDAR YEARS 2026 AND 2027

Employer	Total Rate for Fiscal Year Commencing in 2026	Recommended Total Rate for Fiscal Year Commencing in 2027
City of Garnett	24.00 %	24.51 %
City of Girard	24.00	24.51
City of Goddard	24.00	24.51
City of Hays	24.00	24.51
City of Haysville	24.00	24.51
City of Herington	24.00	24.51
City of Hutchinson	24.00	24.51
City of Inman	24.00	24.51
City of Junction City	24.00	24.51
City of Kechi	24.00	24.51
City of Lake Quivira	24.00	24.51
City of Lansing	24.00	24.51
City of Lawrence	24.00	24.51
City of Leavenworth	24.00	24.51
City of Leawood	24.00	24.51
City of Lenexa	24.00	24.51
City of Liberal Police & Firemen	24.00	24.51
City of Linn Valley	24.00	24.51
City of Louisburg	24.00	24.51
City of Maize	24.00	24.51
City of Manhattan	24.00	24.51
City of Marion	24.00	24.51
City of McPherson	24.00	24.51
City of Merriam	24.00	24.51
City of Minneola	24.00	24.51
City of Mission	24.00	24.51
City of Moundridge	24.00	24.51
City of Newton	24.00	24.51
City of Newton EMTs	24.00	24.51
City of Norton	24.00	24.51
City of Olathe	24.00	24.51
City of Osawatomie	24.00	24.51
City of Oswego	24.00	24.51
City of Ottawa	24.00	24.51
City of Overbrook	24.00	24.51
City of Overland Park	24.00	24.51
City of Paola	24.00	24.51







# TABLE 16 (cont.) KP&F EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS COMMENCING IN CALENDAR YEARS 2026 AND 2027

Employer	Total Rate for Fiscal Year Commencing in 2026	Recommended Total Rate for Fiscal Year Commencing in 2027
City of Park City	24.00 %	24.51 %
City of Parsons	24.00	24.51
City of Pittsburg	24.00	24.51
City of Roeland Park	24.00	24.51
City of Rossville	24.00	24.51
City of Salina	24.00	24.51
City of Scott City	24.00	24.51
City of Shawnee	24.00	24.51
City of Spring Hill	24.00	24.51
City of St. George	24.00	24.51
City of Topeka	24.00	24.51
City of Valley Center	24.00	24.51
City of Victoria	24.00	24.51
City of Wakefield	24.00	24.51
City of Wamego	24.00	24.51
City of Wellington	24.00	24.51
City of Westwood	24.00	24.51
City of Winfield	24.00	24.51
City of Winfield (EMS)	24.00	24.51
Clark County	24.00	24.51
Coffey County	24.00	24.51
Cowley County Sheriff's Dept	24.00	24.51
Crawford County	24.00	24.51
Dickinson County	24.00	24.51
Douglas County Law Enforcement	24.00	24.51
Ellis County	24.00	24.51
Fairmount Township Fire District	24.00	24.51
Finney County	24.00	24.51
Ford County	24.00	24.51
Franklin County Sheriff's Dept	24.00	24.51
Geary County	24.00	24.51
Gray County Sheriff's Dept.	24.00	24.51
Harvey County Sheriff's Dept.	24.00	24.51
Haskell County	24.00	24.51
Haskell County (EMS)	24.00	24.51
Jefferson County	24.00	24.51
Johnson Co. Fire District No. 2	24.00	24.51







# TABLE 16 (cont.) KP&F EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS COMMENCING IN CALENDAR YEARS 2026 AND 2027

Employer	Total Rate for Fiscal Year Commencing in 2026	Recommended Total Rate for Fiscal Year Commencing in 2027		
Johnson County Fire Dept.	24.00 %	24.51 %		
Johnson County Fire No. 1	24.00	24.51		
Johnson County Fire No. 2	24.00	24.51		
Johnson County Park Commission	24.00	24.51		
Johnson County Sheriff's Dept.	24.00	24.51		
Kansas Bureau of Investigation	24.02	24.53		
Kansas Dept. of Wildlife and Parks	24.02	24.53		
Kansas Highway Patrol	24.02	24.53		
Kearny County	24.00	24.51		
Labette County Sheriff's Dept.	25.37	25.84		
Leavenworth County	24.00	24.51		
Leavenworth County (EMS)	24.00	24.51		
Leavenworth County Fire District #1	24.00	24.51		
McPherson County Rural Fire District #9	24.00	24.51		
Meade County	24.00	24.51		
Miami County	24.00	24.51		
Neosho County	24.00	24.51		
Northwest Consolidated Fire District	24.00	24.51		
Ottawa County	24.00	24.51		
Pottawatomie County	24.00	24.51		
Pottawatomie County (EMT)	24.00	24.51		
Reno County Sheriff's Dept.	24.00	24.51		
Republic County	24.00	24.51		
Riley County	24.00	24.51		
Riley County Law Enforcement	24.00	24.51		
Rush County	24.00	24.51		
Russell County	24.00	24.51		
Sedgwick County EMT's	24.00	24.51		
Sedgwick County Fire No. 1	24.00	24.51		
Sedgwick County Sheriff's Dept.	24.00	24.51		
Seward County	24.00	24.51		
Shawnee County Sheriff's Dept.	24.00	24.51		
Shawnee Heights Fire District	24.00	24.51		
Soldier Township	24.00	24.51		
State Fire Marshall	24.02	24.53		
Sumner County Sheriff's Dept.	24.00	24.51		
Unified Gov't of Wyandotte County	24.00	24.51		
Wallace County	24.00	24.51		







# TABLE 17A KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES PRIOR SERVICE LIABILITY FOR FISCAL YEARS BEGINNING IN 2027

Employer		Payment on Unfunded Liability		
City of Edwardsville Firemen	\$	246,455	\$	37,963
City of Edwardsville Police		188,815		18,952
Labette County Sheriff's Dept.		<u>99,011</u>		<u>16,582</u>
Total	\$	534,281	\$	73,497







# TABLE 17B KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES PRIOR SERVICE LIABILITY - AFFILIATION AFTER 1/1/06 FOR FISCAL YEARS BEGINNING IN 2027

Effective for affiliations on or after January 1, 2006, the payment on the unfunded actuarial liability due to affiliation for prior service is amortized as a fixed level dollar payment. No adjustment is made to the employer contribution rate for these payments.

			<b>Annual Payment</b>	
		<b>Unfunded Actuarial</b>	Due Jan 1, 2026	Final
	Year	Liability on Jan 1	to Amortize	Payment
Employer	Affiliated	Following Affiliation	Unfunded Liability	Year

None

Note: Only employers with remaining obligations as of the valuation date are shown.







## TABLE 18 KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES FOR FISCAL YEARS BEGINNING IN 2027

Employer	Number of Employees	Total Estimated 2027 Payroll	Payment on Unfunded Liability (Table 17A)	As Percent of Payroll
City of Edwardsville Firemen	17	1,304,770	\$37,963	2.91 %
City of Edwardsville Police	15	1,252,906	18,952	1.51
Labette County Sheriff's Dept.	<u>18</u>	1,245,718	<u>16,582</u>	1.33
Total	<del>50</del>	\$3,803,394	\$73,497	







#### **Legislative History**

Over the last two decades, a comprehensive plan has been developed to address the long-term funding of KPERS and significant changes have occurred. HB 2014, which was passed by the 2003 Legislature, increased the statutory cap on the State/School employer contribution rate from 0.20% to 0.40% in FY 2006, 0.50% in FY 2007 and 0.60% in FY 2008 and beyond. It also authorized the issuance of up to \$500 million in pension obligation bonds (POBs). The POBs were sold and proceeds of \$440.2 million were received on March 10, 2004. The debt service payments on the bonds are paid by the State in addition to the regular KPERS employer contribution rate.

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

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

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

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

- Increased the statutory cap on employer contribution rates to 0.9% in FY 2014, 1.0% in FY 2015, 1.1% in FY 2016 and 1.2% in FY 2017 and beyond.
- Contingent upon IRS approval, established an election by KPERS 1 members between
  different contribution rate and benefit levels. The legislation provided that, if the IRS
  rejected or did not take action to approve the election, KPERS 1 members would default
  to an increase in their employee contributions to 5% of compensation effective January 1,
  2014, and 6% effective January 1, 2015, with an increase in the benefit multiplier to 1.85%



## SECTION 6 - HISTORICAL FUNDING AND OTHER INFORMATION



beginning January 1, 2014, for future years of service only. Subsequently, the IRS issued a private letter ruling stating that the election granted to KPERS 1 members under 2012 HB 2333 was impermissible.

- For KPERS 2 members retiring after July 1, 2012, the cost-of-living adjustment (COLA) was eliminated, but members received a 1.85% multiplier for all years of service.
- Created a Cash Balance Plan for new hires beginning January 1, 2015. A cash balance plan is a type of defined benefit plan that includes some elements of a defined contribution plan and shares risk between the employer and employee. Each member has a hypothetical account that is credited with employee contributions, employer pay credits and interest credits. At retirement, the account balance is annuitized to create a guaranteed monthly benefit payable for the member's lifetime. Up to 30% of the account value at retirement may be paid as a lump sum.
- Beginning in FY 2014, provided for the state to make additional contributions to help pay down KPERS' unfunded actuarial liability until the State/School group reaches a funded ratio of at least 80%. The revenue was to come from the Expanded Lottery Act Revenues Fund (ELARF). However, for FY 2014 through 2017, the ELARF funds were appropriated as a partial funding source to meet the statutory contribution requirements for the School group rather than contributed in addition to the statutory contributions. Therefore, no additional funding of the unfunded actuarial liability has occurred. As a result, projections assume there will not be any additional payments to the unfunded actuarial liability from the ELARF funds.
- If the State of Kansas sells surplus real estate, 80% of the proceeds is to be used to pay down KPERS' unfunded actuarial liability until the System reaches an 80% funded ratio. However, 2016 SB 249 suspended this provision with respect to any sales of surplus real estate during FY 2017 (subsequently removed by the 2022 legislature).

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

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

- Net proceeds of up to \$1.0 billion from bonds issued by the state of Kansas were to be deposited into the KPERS trust fund for the State/School group, subject to certain criteria.
   The bonds had to be issued at an interest rate no greater than 5.0% and approved by the State Finance Council (approval received July 2, 2015).
- Revised the previously certified State/School employer contribution rate from 12.37% to 10.91% for fiscal year 2016 and from 13.57% to 10.81% for fiscal year 2017. The statutory







cap of 1.2% per year still applied to employer contribution rates in fiscal year 2018 and beyond.

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

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

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

- Senate Substitute for Substitute HB 2052 (S Sub for Sub HB 2052) provided that a portion of the contributions for the School group for FY 2017 would be delayed so the total State/School contribution was \$64.13 million less than the scheduled statutory contributions. The delayed employer contributions for fiscal year 2017 are repaid in level-dollar annual installments of \$6.4 million over twenty years beginning in fiscal year 2018. These payments are determined as a contribution rate for School employers to be paid in addition to the statutory State/School contribution rate. Further, S Sub for Sub HB 2052 provided that the repayment of the contribution reduction from FY 2016 with interest (\$115 million), scheduled in FY 2018, would not be paid (subsequent legislation passed by the 2019 Legislature repaid these delayed contributions).
- Senate Substitute for HB 2002 contained KPERS funding provisions for FY 2018 and FY 2019, including the following:
  - FY 2018: The contribution for the State/School group for fiscal year 2018 was made at the scheduled statutory rate of 12.01%. In addition, the first installment of \$6.4 million on the 20-year amortization of the delayed contributions for FY 2017 was included.
  - FY 2019: A portion of the employer contributions for School employers within the State/School group for fiscal year 2019 were delayed so the total employer contribution was \$420 million, including the second installment of \$6.4 million on the delayed contribution for FY 2017. This resulted in an expected delay of \$194 million to be repaid by the School group, as a level dollar amount over 20 years beginning in FY 2020.



### SECTION 6 - HISTORICAL FUNDING AND OTHER INFORMATION



- FY 2020: The current statutory cap of 1.2% per year applied 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 delayed contributions in FY 2017 and \$19.4 million amortization of the delayed contributions in FY 2019, was 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 applies 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 this bill, the duty-related 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 included changes to the working after retirement rules for members who retire on or after January 1, 2018. The key provisions of the bill were to lengthen the waiting period for KPERS members to return to work from 60 days to 180 days for members who retire before attaining age 62, remove the earnings limitation for all retirees, and establish a single employer contribution schedule for all retirees.

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

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

The 2019 Legislature passed two pieces of legislation that impacted the contributions to KPERS. Senate Bill 9 provided for a transfer of \$115 million from the State General Fund to KPERS in March, 2019. This payment covered the \$97 million in missed KPERS School contributions for FY 2016 plus interest. The additional contribution lowered the State/School actuarial required contribution rate by 0.29%. The 2019 Legislature also passed House Substitute for Senate Bill 25. This legislation repealed the actions of the 2018 Legislature which provided for a contingent payment of up to \$56 million in 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 net reduction of \$5 million did not have a significant impact on the valuation results.







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

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

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

The 2023 legislature passed House Bill 2196, which expanded the KP&F DROP to all KP&F 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 for DROP (about 6% of the KP&F active population).

The 2024 legislature passed House Bill 2711 which increased the retiree death benefit from \$4,000 to \$6,000.

There were no bills passed in the 2025 legislative session that changed benefit provisions or other aspects of KPERS' plan design and funding. As a result, there was no impact on the December 31, 2024 actuarial valuation from legislative changes.



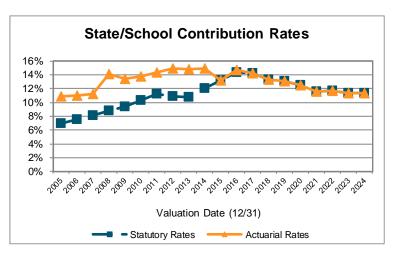




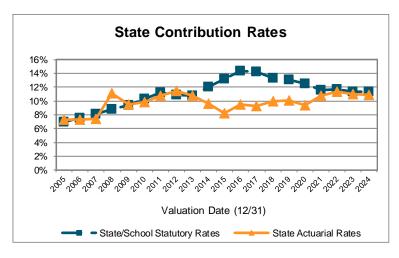
#### Historical Contribution Rates

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

The System received bond proceeds in 2015 and 2021. Actuarial assumptions were changed in the 2007, 2010, 2013, 2016, 2019, 2021 and 2023 valuations. These changes impact the comparability of contribution rates between various valuation dates.



Numerous factors have contributed to the increase in the ARC rate for the State/School group over much of this period including investment experience, changes in actuarial assumptions, and contributions significantly below the actuarial rate. In this valuation, the State/School ARC rate increased to 11.38% due to unfavorable experience including salary increases higher than expected and a lower return than expected on actuarial assets.

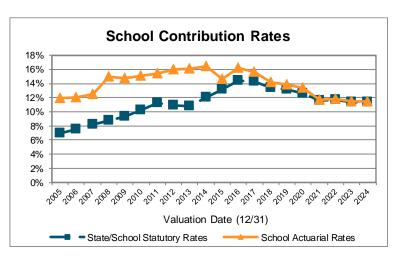


The State reached the full ARC rate in the 2010 valuation and has remained at ARC except for the recertification of the statutory contribution rate for FY 2017 from 12.37% to 10.91%. In this valuation, the State's ARC rate decreased to 10.84% due to payroll growth greater than expected.

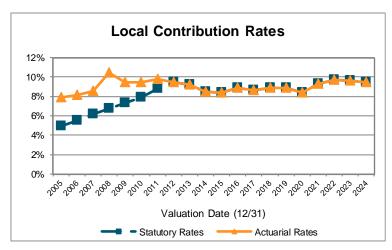




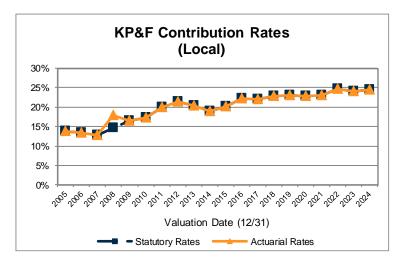




Due to investment experience, changes in actuarial assumptions, and the magnitude of the difference between the actuarial and statutory contribution rates, the ARC rate increased during the early part of this period. Increases to the statutory contribution rate, contribution sharing from the State group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



The Local contribution rate has also been impacted by changes in actuarial assumptions and methods as well as investment performance. With the significant changes in 2012 Sub House Bill 2333 and favorable investment returns, the statutory contribution rate was equal to the ARC rate in the 2012 valuation. In this valuation, the Local group's ARC rate decreased to 9.44% due to payroll growth greater than expected.

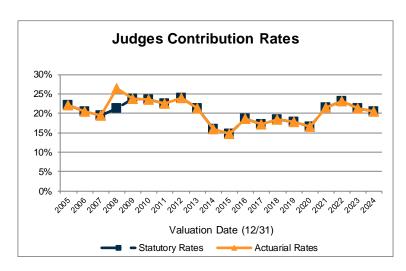


Investment experience in 2008, 2011, 2018 and 2022 resulted in higher contribution rates in the latter part of the period. The assumption changes reflected in the 2016 valuation also increased the contribution rate. Favorable investment experience during 2021 and re-amortization of the unfunded actuarial liability due to the change in assumptions resulted in a small increase in the ARC rate for the KP&F System.









Investment experience in 2008, 2011 and 2022 resulted in higher contribution rates during this period. The assumption changes reflected in the 2016 valuation increased the contribution rate, but assumption changes in the 2019 valuation decreased the contribution rate. Favorable investment experience during 2021 and re-amortization of the unfunded actuarial liability were insufficient to fully mitigate the impact of the assumption change and the contribution rate increased.

#### Historical Funding Information

The actuarial liability is a measure intended to help the reader assess:

- (i) a retirement system's funded status on a "going concern" basis, and
- (ii) progress being made toward accumulating the assets needed to pay benefits as due.

Allocation of the actuarial present value of projected benefits between past and future service was based on service using the Entry Age Normal actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the System's level percent of payroll annual required contribution between entry age and assumed exit age. Entry age was established by subtracting credited service from current age on the valuation date. The Entry Age Normal actuarial liability was determined as part of an actuarial valuation of the System as of December 31, 2024. The actuarial assumptions used in determining the actuarial liability can be found in Appendix C.





# TABLE 19 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM HISTORICAL FUNDING INFORMATION

(All Groups Combined)

### **Schedule of Funding Progress**

(\$ in thousands)

		(ψ 111 ti	loudalido)			
Actuarial	Actuarial	Actuarial	Unfunded	Funded	Covered	UAL as a Percent
Valuation	Value of Assets	Liability (AL)	AL (UAL)	Ratio	Payroll	of Covered Payroll
Date	(a)	(b)	(b-a)	(a/b)	(c)	((b-a)/c)
12/31/2005	\$11,339,293	\$16,491,762	\$5,152,469	69%	\$5,270,351	98%
12/31/2006	12,189,197	17,552,791	5,363,593	69%	5,599,193	96%
12/31/2007	13,433,115	18,984,915	5,551,800	71%	5,949,228	93%
12/31/2008	11,827,619	20,106,787	8,279,168	59%	6,226,526	133%
12/31/2009	13,461,221	21,138,206	7,676,985	64%	6,532,496	118%
12/31/2010	13,589,658	21,853,783	8,264,125	62%	6,494,048	127%
12/31/2011	13,379,020	22,607,170	9,228,150	59%	6,401,462	144%
12/31/2012	13,278,490	23,531,423	10,252,933	56%	6,498,962	158%
12/31/2013	14,562,765	24,328,670	9,765,906	60%	6,509,809	150%
12/31/2014	15,662,010	25,130,467	9,468,457	62%	6,560,105	144%
12/31/2015	17,408,578	25,947,781	8,539,203	67%	6,603,613	129%
12/31/2016	18,256,373	27,317,754	9,061,381	67%	6,650,451	136%
12/31/2017	19,246,613	28,153,827	8,907,214	68%	6,744,301	132%
12/31/2018	19,898,330	29,100,136	9,201,807	68%	7,048,621	131%
12/31/2019	20,975,535	29,982,337	9,006,801	70%	7,336,004	123%
12/31/2020	22,422,299	30,910,302	8,488,003	73%	7,505,899	113%
12/31/2021	24,803,793	34,630,796	9,827,004	72%	7,672,392	128%
12/31/2022	26,449,612	36,016,133	9,566,521	73%	8,059,095	119%
12/31/2023	27,582,781	37,268,529	9,685,748	74%	8,595,084	113%
12/31/2024	28,565,570	38,614,072	10,048,502	74%	9,096,181	110%





# TABLE 20 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM HISTORICAL FUNDING INFORMATION

(All Groups Combined)

### **Short Term Solvency Test**

Actuarial			Active Member	Actuarial			
Valuation	Member	Retirants and	Employer Financed	Value of	Portions of	f Accrued Li	abilities
Date	Contributions	Beneficiaries	Portion	Assets	Cove	red by Asse	ets
	(A)	(B)	(C)		(A)	(B)	(C)
12/31/2005	\$4,006,823,805	\$6,413,679,842	\$6,071,258,736	\$11,339,292,965	100%	100%	15%
12/31/2006	4,209,698,437	6,872,703,437	6,470,388,630	12,189,197,444	100%	100%	17%
12/31/2007	4,423,194,339	7,417,933,822	7,143,786,763	13,433,115,014	100%	100%	22%
12/31/2008	4,642,675,652	7,945,452,582	7,518,658,666	11,827,618,574	100%	90%	0%
12/31/2009	5,132,772,778	8,459,191,163	7,546,242,173	13,461,220,705	100%	99%	0%
12/31/2010	5,017,361,438	9,090,575,924	7,745,845,940	13,589,658,118	100%	96%	0%
12/31/2011	5,334,463,714	9,923,555,011	7,349,151,307	13,379,020,161	100%	81%	0%
12/31/2012	5,448,296,911	10,585,891,383	7,497,235,156	13,278,490,294	100%	74%	0%
12/31/2013	5,636,937,795	11,298,180,557	7,393,551,786	14,562,764,625	100%	79%	0%
12/31/2014	5,791,313,287	12,361,327,805	6,977,825,595	15,662,009,783	100%	80%	0%
12/31/2015	5,942,762,790	13,095,276,871	6,909,740,897	17,408,577,508	100%	88%	0%
12/31/2016	6,008,633,568	14,095,278,126	7,213,842,679	18,256,373,273	100%	87%	0%
12/31/2017	6,008,405,879	14,751,711,502	7,393,709,608	19,246,613,272	100%	90%	0%
12/31/2018	6,132,527,315	15,401,874,720	7,565,734,390	19,898,329,527	100%	89%	0%
12/31/2019	6,298,997,993	15,982,142,480	7,701,196,138	20,975,535,342	100%	92%	0%
12/31/2020	6,440,728,342	16,664,329,950	7,805,243,895	22,422,299,116	100%	96%	0%
12/31/2021	6,558,938,055	18,409,538,578	9,662,319,771	24,803,792,904	100%	99%	0%
12/31/2022	6,747,562,596	19,137,308,347	10,131,261,993	26,449,612,317	100%	100%	6%
12/31/2023	6,965,643,164	19,760,895,190	10,541,991,058	27,582,780,953	100%	100%	8%
12/31/2024	7,221,641,224	20,292,591,182	11,099,839,485	28,565,570,253	100%	100%	9%







# TABLE 21 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM HISTORICAL FUNDING INFORMATION

(All Groups Combined)

## **Schedule of Employer Contributions**

For the Fiscal Year Ended June 30

	Actuarial Required	Percentage
<u>Year</u>	<u>Contribution</u>	<u>Contributed</u>
2005	\$381,791,085	68.6%
2006	471,424,006	63.4%
2007	531,292,151	63.9%
2008	607,662,300	65.1%
2009	660,833,664	68.0%
2010	682,062,413	72.1%
2011	709,964,322	74.1%
2012	843,361,836	67.4%
2013	825,196,972	74.9%
2014	842,285,931	79.4%
2015	908,019,000	74.5%
2016	891,638,000	80.9% *
2017	920,789,000	80.9%
2018	937,808,000	87.2%
2019	921,045,000	98.7%
2020	1,022,243,000	97.1%
2021	1,029,106,000	96.5%
2022	1,015,599,000	99.4%
2023	1,050,427,000	99.6%
2024	1,058,065,000	101.8%

This information is as reported by KPERS. CavMac has relied on the accuracy of the numbers as provided and has not verified them.



<sup>\*</sup> Includes the long-term receivable contribution of \$97.4 million for the State/School group which was subsequently paid in FY 2019, with interest (2019 SB 9).





## TABLE 22 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM HISTORICAL FUNDING INFORMATION

#### **Historical Contribution Rates**

Valuation	Sta	te/School	Loc	cal	KP&F*	Judges*
Date	Actuarial	Statutory	Actuarial	Statutory		
12/31/2000	7.05%	4.58%	4.13%	3.07%	6.86%	16.67%
12/31/2001	7.69%	4.78%	4.64%	3.22%	9.47%	18.67%
12/31/2002	9.14%	5.27%	5.44%	3.41%	11.63%	21.97%
12/31/2003 <sup>(1)</sup>	8.64%	5.77%	6.24%	3.81%	12.39%	19.11%
12/31/2004	10.37%	6.37%	7.69%	4.31%	13.32%	22.38%
12/31/2005	10.86%	6.97%	7.92%	4.93%	13.88%	22.08%
12/31/2006	10.98%	7.57%	8.12%	5.53%	13.49%	20.50%
12/31/2007	11.30%	8.17%	8.52%	6.14%	12.86%	19.49%
12/31/2008	14.09%	8.77%	10.42%	6.74%	14.57%	21.18%
12/31/2009	13.46%	9.37%	9.44%	7.34%	16.54%	23.75%
12/31/2010	13.83%	10.27% <sup>(2)</sup>	9.43%	7.94%	17.26%	23.62%
12/31/2011	14.34%	11.27%/8.65% <sup>(3)</sup>	9.77%	8.84%	19.92%	22.59%
12/31/2012	14.95%	10.91% <sup>(4) (5)</sup>	9.48%	9.48%(6)	21.36%	23.98%
12/31/2013	14.85%	10.81% <sup>(4) (5)</sup>	9.18%	9.18%	20.42%	21.36%
12/31/2014	14.89%	12.01%	8.46%	8.46%	19.03%	15.89%
12/31/2015	13.23%	13.21% <sup>(5)</sup>	8.39%	8.39%	20.09%	14.68%
12/31/2016	14.74%	14.41%	8.89%	8.89%	22.13%	18.65%
12/31/2017	14.23%	14.23% <sup>(6)</sup>	8.61%	8.61%	21.93%	17.26%
12/31/2018	13.33% <sup>(7)</sup>	13.33% <sup>(7)</sup>	8.87%	8.87%	22.80%	18.40%
12/31/2019	13.11% <sup>(7)</sup>	13.11% <sup>(7)</sup>	8.90%	8.90%	22.99%	17.77%
12/31/2020	12.57%	12.57%	8.43%	8.43%	22.86%	16.48%
12/31/2021	11.54% <sup>(8)</sup>	11.54% <sup>(8)</sup>	9.26%	9.26%	23.10%	21.45%(8)
12/31/2022	11.68% <sup>(8)</sup>	11.68% <sup>(8)</sup>	9.71%(8)	9.71%(8)	24.67%(8)	23.16%(8)
12/31/2023	11.32%	11.32%	9.59%	9.59%	24.00%	21.29%
12/31/2024	11.38%	11.38%	9.44%	9.44%	24.51%	20.42%

<sup>\*</sup> KP&F and Judges contribute the full actuarial required contribution rate.

<sup>(8)</sup> Increased for FY 2025 and FY 2026 to fund benefit improvements after passage of HB 2711 in the 2024 session.



<sup>(1)</sup> Actuarial cost method changed to Entry Age Normal for valuations on or after 12/31/2003.

<sup>(2)</sup> Recertified from 9.97% after passage of Sub HB 2333 in the 2012 session.

<sup>(3) 11.27%</sup> for the first half of the fiscal year. Reduced by the governor's allotment and SB 4 to 8.65% for the second half of the fiscal year.

<sup>(4)</sup> Recertified from 12.37% to 10.91% and 13.57% to 10.81% after passage of SB 228 in the 2015 session.

<sup>(5)</sup> Although the rates were not revised, the full contribution amounts were not made.

<sup>(6)</sup> First actuarial valuation where the actuarial and the statutory contribution rate are equal (i.e., the ARC date).

<sup>(7)</sup> Recertified from 14.09% to 13.33% for FY 2022 and from 13.86% to 13.11% for FY 2023 after passage of SB 159 in the 2021 session.



TABLE 23
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PROJECTED BENEFIT PAYMENTS

Year	State	School	Local	Total KPERS	KP&F	Judges	Total
2025	\$417,451,000	\$1,278,974,000	\$488,872,000	\$2,185,297,000	\$289,190,000	\$19,759,000	\$2,494,246,000
2026	419,591,000	1,306,118,000	497,767,000	2,223,476,000	300,658,000	19,203,000	2,543,337,000
2027	426,875,000	1,341,122,000	513,206,000	2,281,203,000	323,207,000	19,539,000	2,623,949,000
2028	430,213,000	1,373,138,000	527,073,000	2,330,424,000	332,449,000	19,749,000	2,682,622,000
2029	434,107,000	1,407,523,000	540,049,000	2,381,679,000	360,310,000	20,464,000	2,762,453,000
2030	438,564,000	1,442,280,000	557,293,000	2,438,137,000	386,017,000	20,483,000	2,844,637,000
2031	442,602,000	1,479,309,000	573,125,000	2,495,036,000	372,762,000	21,125,000	2,888,923,000
2032	446,721,000	1,514,860,000	590,253,000	2,551,834,000	385,033,000	21,141,000	2,958,008,000
2033	449,153,000	1,552,556,000	605,196,000	2,606,905,000	398,656,000	21,626,000	3,027,187,000
2034	451,374,000	1,587,051,000	620,516,000	2,658,941,000	412,034,000	21,579,000	3,092,554,000
2035	452,349,000	1,624,123,000	635,677,000	2,712,149,000	422,494,000	22,205,000	3,156,848,000
2036	452,806,000	1,661,426,000	648,842,000	2,763,074,000	436,317,000	22,429,000	3,221,820,000
2037	453,371,000	1,694,193,000	662,428,000	2,809,992,000	447,705,000	22,984,000	3,280,681,000
2038	452,415,000	1,724,015,000	673,743,000	2,850,173,000	462,043,000	22,714,000	3,334,930,000
2039	450,694,000	1,756,788,000	685,716,000	2,893,198,000	474,801,000	23,516,000	3,391,515,000
2040	449,167,000	1,781,719,000	696,049,000	2,926,935,000	486,115,000	23,727,000	3,436,777,000
2041	448,250,000	1,803,354,000	705,326,000	2,956,930,000	500,225,000	24,244,000	3,481,399,000
2042	446,887,000	1,826,428,000	716,351,000	2,989,666,000	513,375,000	24,148,000	3,527,189,000
2043	444,467,000	1,847,281,000	725,386,000	3,017,134,000	528,534,000	24,665,000	3,570,333,000
2044	442,517,000	1,868,092,000	732,591,000	3,043,200,000	544,175,000	24,674,000	3,612,049,000
2045	440,947,000	1,892,609,000	744,224,000	3,077,780,000	557,373,000	24,749,000	3,659,902,000
2046	439,369,000	1,919,825,000	754,094,000	3,113,288,000	570,812,000	24,483,000	3,708,583,000
2047	437,142,000	1,950,430,000	762,208,000	3,149,780,000	583,243,000	24,375,000	3,757,398,000
2048	437,555,000	1,981,549,000	768,895,000	3,187,999,000	594,703,000	23,788,000	3,806,490,000
2049	435,105,000	2,006,147,000	775,782,000	3,217,034,000	604,567,000	23,731,000	3,845,332,000

Note: Cash flows are the expected future non-discounted payments to current members. These numbers exclude refund payouts to current non-vested inactives and assume future retirees elect the normal form of payment and future withdrawals elect refunds according to valuation assumptions.





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### SECTION 7 - RISK CONSIDERATIONS



Actuarial Standards of Practice are issued by the Actuarial Standards Board and are binding on credentialed actuaries practicing in the United States. These standards generally identify what the actuary should consider, document and disclose when performing an actuarial assignment. In September, 2017, Actuarial Standard of Practice Number 51, Assessment and Disclosure of Risk in Measuring Pension Obligations, (ASOP 51) was issued as final with application to measurement dates on or after November 1, 2018. This ASOP, which applies to funding valuations, actuarial projections, and actuarial cost studies of proposed plan changes, was first applicable for the December 31, 2018 actuarial valuation for the Kansas Public Employees Retirement System (KPERS).

A typical retirement plan faces many different risks, but the greatest risk is the inability to make benefit payments when due. The term "risk" is most commonly associated with an outcome with undesirable results. However, in the actuarial world, risk can simply be translated as uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for expected future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. ASOP 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions.

The various risk factors for a given plan can have a significant impact – positive or negative – on the actuarial projection of liability and contribution rates. There are a number of risks inherent in the funding of a defined benefit plan. These include:

- economic risks, such as investment return, salary increases, and price inflation;
- demographic risks, such as mortality, payroll growth, aging population including impact of baby boomers, and retirement ages;
- contribution risk, i.e., the potential for contribution rates to be higher than expected due to
  population changes or other factors (note ASOP 51 does not require the actuary to opine
  on the willingness or ability of the plan sponsor/employer to pay the contribution rate); and
- external risks, such as the regulatory and political environment (which are not included in the risks to be assessed under ASOP 51).

#### Impact of Funding Policy

One of the most important factors in the funding of any retirement system is consistently making contributions that are at least equal to the actuarial required contribution rate. With respect to this practice, there is a significant difference in the funding policy for KPERS (State/School and Local) and KP&F and Judges. KP&F and Judges have historically contributed the full actuarial required contribution rate. However, there is a long history of contributing less than the full actuarial required contribution rate for KPERS, particularly the School group.

The Kansas School Retirement System (KSRS) was created by the Kansas Legislature in 1940 and provided for a service annuity and a savings annuity (funded by employee contributions). The



## **SECTION 7 – RISK CONSIDERATIONS**



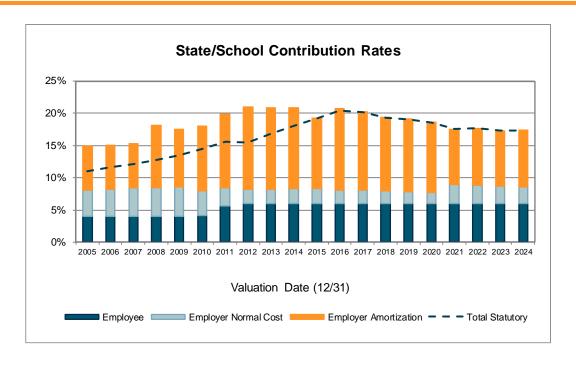
service annuity was not actuarially funded in advance, but rather was funded by general appropriations from the State General Fund for the amount necessary to fund the benefits each year (pay as you go). The Legislature explored options and eventually decided to merge KSRS into KPERS on January 1, 1971. At that time, any KSRS members who were not retired became KPERS members, with the provision for benefits on their years of service in the KSRS. Any KSRS member who was retired was not made a KPERS member at that time. In lieu of employer contributions in 1970, the State Permanent School Fund was abolished and all proceeds were transferred to the KPERS Trust Fund. Employer contributions for 1971 were set at 5.05% (4.55% Pension and 0.50% death and disability). Beginning in 1973, School group employer contributions were certified by the Board of Trustees and paid from the State General Fund. In 1972, a bill was passed to fund the remaining unfunded actuarial liability of \$68.4 million over eleven years with level payments of \$5.0 million per year starting in July, 1973. Due to increases in the unfunded actuarial liability from post-retirement benefit adjustments, the State contribution amount was increased to \$10 million in 1973 which was paid from FY 1974 through FY 1984 (11 total payments). The 1984 Legislature made the remaining KSRS retirees special KPERS members and rolled the remaining unfunded actuarial liability into the KPERS unfunded actuarial liability. The remaining KSRS unfunded actuarial liability at that time was estimated to be \$22.3 million (June, 1983). Rather than make the final two payments on the KSRS unfunded actuarial liability, the Legislature amortized the remaining \$22.3 million over 27 years, the years remaining on the KPERS unfunded actuarial liability in 1984. Since the State funds the contributions for both the State and School group, one valuation was performed to set the contribution rate for the combined State/School group. Legislation passed in 2004 (effective with the December 31, 2003 valuation) split the actuarial valuation into two separate groups, although the statutory contribution rate has continued to be determined on a combined basis. By statute, any excess of the statutory contribution over the actuarial required contribution rate for the State group is allocated to fund the School group.

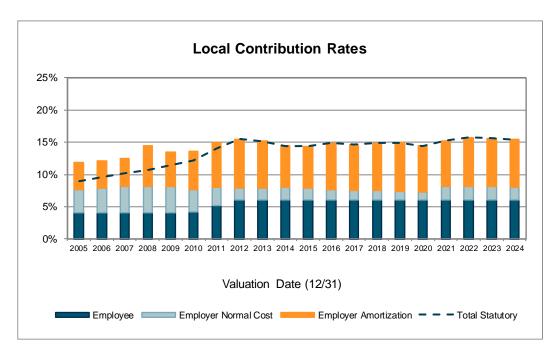
Unlike KP&F and Judges, the State, School and Local employers do not necessarily contribute the full actuarial required contribution rate. Due to legislation passed in 1993, the employer contribution rates certified by the Board may not increase over the prior year by more than the statutory cap. The statutory cap has changed over time but is currently set at 1.20%. Due to this cap, the statutory contribution rate was below the actuarial required contribution rate for many years (25 years for the State/School group and 21 for the Local group). In the December 31, 2015 valuation, the statutory rate for the Local group was equal to the actuarial required contribution rate, and in the December 31, 2017 valuation, the statutory rate for the State/School group was equal to the actuarial required contribution rate. The following graphs show the contribution rates for the State/School and Local groups over the last 20 years. Note these are the rates developed in the valuations which apply to later fiscal years.











Over the last two decades, there have been multiple efforts to address the long-term funding of KPERS, and some significant changes have occurred. As was discussed earlier, the statutory cap, which was 0.10% for State/School and 0.05% for Local when established in 1993, has been increased several times and is currently 1.20% for all groups. In addition, the Legislature approved the issuance of bonds in 2004, 2015 and 2021, resulting in total proceeds of about \$1.9 billion contributed to the KPERS trust fund. Different benefit structures with lower costs were created for members hired after July 1, 2009 (KPERS 2) and then again for members hired after January 1,



### **SECTION 7 – RISK CONSIDERATIONS**



2015 (KPERS 3). The plan design for KPERS 3 members is intended to share the pre-retirement investment risk directly with the members by adjusting the interest crediting rate when actual investment experience is different than expected, thereby effectively lowering the benefits to be paid to members. Over the very long term, this change in the benefit structure will reduce some of the investment risk for KPERS.

In the last ten years, there have been times when the Legislature and Governor have not paid the full statutory contribution rate (which was already lower than the actuarial required contribution rate). In 2015, SB 4 reset the previously certified employer contribution rate for the State/School group for the last half of FY 2015 from 11.27% to 8.65%. In addition, 2015 SB 228 lowered the statutory rates for the State/School group from 12.37% to 10.91% for FY 2016 and 13.57% to 10.81% for FY 2017, to reflect the impact of the bond proceeds on the current year's contribution rates.

The 2016 Legislature passed legislation to permit a delay of contributions of up to \$100 million in State and School contributions for fiscal year 2016, but provided that the delayed contributions would be repaid in full, with interest at 8.00%, by June 30, 2018. The Governor used this allotment authority to delay payments of \$97.4 million in State/School group and KP&F State contributions during the final quarter of FY 2016. Legislation in the 2017 session then provided that the repayment of these contributions would not be paid (subsequent legislation passed by the 2019 Legislature repaid these delayed contributions).

The 2017 Legislature passed bills that provided for a delay of \$64.13 million of the total FY 2017 State/School statutory contributions. The delayed employer contributions for fiscal year 2017 are repaid in level-dollar annual installments of \$6.4 million over twenty years beginning in fiscal year 2018. A portion of the employer contributions for School employers within the State/School group for fiscal year 2019 (\$194 million) were also delayed with repayment by an additional contribution for the School group, as a level dollar amount over 20 years, beginning in FY 2020.

The 2018 and 2019 Legislatures passed bills to contribute additional funding to the KPERS School group:

- \$82 million in July 2018 (received July 2018)
- \$56 million in FY 2018 (received June 2018)
- \$51 million in FY 2020 (received July 2019)

In addition, the 2019 Legislature passed Senate Bill 9 which provided for a transfer of \$115 million from the State General Fund to KPERS in March 2019. This payment covers the \$97 million in missed KPERS School contributions for FY 2016 plus interest.

The 2021 Legislature passed House Bill 2405, which provided for bonds to be issued to improve the funded status of the School group. As a result, net proceeds of up to \$500 million from bonds issued by the state of Kansas are to be deposited into the KPERS trust fund for the School group, subject to certain criteria. Due to the passage of House Bill 2405, Senate Bill 159, which was the



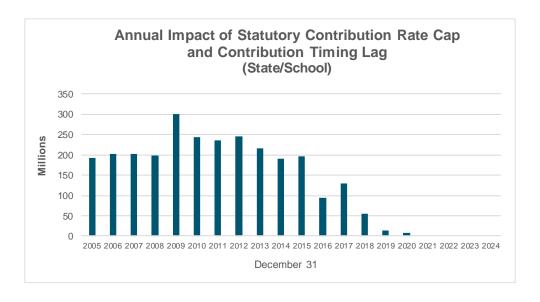
#### Section 7 – RISK Considerations



2021 legislative session's omnibus budget bill, included a provision to reduce the previously certified employer contribution rates for FY 2022 and FY 2023. As a result, the previously certified State/School employer contribution rate changed from 14.09% to 13.33% for FY 2022 and from 13.86% to 13.11% for FY 2023 to reflect the projected impact of the bond proceeds on the employer contribution rates.

The 2022 Legislature passed Senate Bill 421 which provided for additional contributions, totaling \$1.125 billion in four payments, to be deposited into the KPERS trust fund for the School group. The total amount included \$253.9 million for repayment of the delayed contributions from FY 2017 and FY 2019 in the first payment with additional contributions totaling \$871.1 million. A payment of \$553.9 million was received on May 19, 2022 and a second payment of \$300 million was received by KPERS on June 1, 2022. An additional payment of \$146.1 million was paid on August 1, 2022, and the last payment of \$125 million was paid on December 1, 2022.

While there has been significant activity over the last 20 years by the Legislature to address the funding of the State/School group, contributions, overall, have been significantly less than the full actuarial rate since 1994. Contribution shortfalls result in an increase in the actual unfunded actuarial liability compared to that expected, based on the actuarial funding policy. Note that the contribution shortfall was eliminated in calendar year 2021. The following graph shows the shortfall between the actuarial and statutory contributions over the last 20 years.

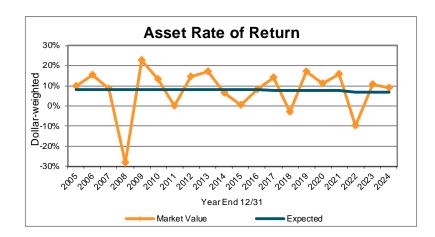


#### Other Risk Factors

The most significant risk factor for KPERS is investment return because of the volatility of returns and the size of plan assets compared to payroll (see Table 24). A perusal of historical returns over 20 years reveals that the actual return each year is rarely close to the expected return for the same period. This is to be expected, given the underlying capital market assumptions and the System's asset allocation.







Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we are required to include a low-default-risk obligation measure of the System's liability in our funding valuation report. This is an informational disclosure as described below and would not be appropriate for assessing the funding progress or health of the plan. This measure uses the unit credit cost method and reflects all the assumptions and provisions of the funding valuation except that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of December 31, 2024 and with the 30-year spot rate used for all durations beyond 30. Using these assumptions, we calculate the following approximate liabilities:

	(\$ millions)
State	\$5,868
School	20,698
Local	7,899
KP&F	5,211
Judges	<u>254</u>
Total	\$39,932

Note: Numbers may not add due to rounding.

These amounts approximate the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans, since governments rarely have the need or option to completely terminate a plan. However, this informational disclosure is required for all plans whether corporate or governmental, and care should be taken to ensure the one size fits all metric is not misconstrued.



### **SECTION 7 – RISK CONSIDERATIONS**



A key demographic risk for all retirement systems, including the Kansas Public Employees Retirement System, is improvements in mortality (longevity) greater than anticipated. While the actuarial assumptions reflect small, continuous improvements in mortality experience over time and these assumptions are refined every experience study, the risk arises because there is a possibility of some sudden shift, perhaps from a significant medical breakthrough that could quickly increase liabilities. Likewise, there is some possibility of a significant public health crisis that could result in a significant number of additional deaths in a short time period, as experienced with Covid-19. This kind of event is also significant, although more easily absorbed. While either of these events could happen, it represents a small probability and thus represents much less risk than the volatility associated with investment returns.

Finally, the unfunded actuarial liability is amortized as a level percentage of payroll for all groups, except for the Judges group. The underlying assumption used in developing the payment schedule assumes an increasing payroll over time which is dependent on a stable employment level, i.e., active member count remains the same. When payroll does not grow as expected, the unfunded actuarial liability contribution rate will be higher than expected even if the dollar amount of the payment is the same as scheduled. With the statutory employer contribution cap for the State/School and Local groups, stagnant growth in covered payroll together with investment returns far below the expected return, could create a situation in the future where the statutory contribution rate is less than the actuarial required contribution rate.

Many of the public retirement systems were created shortly after the end of World War II. Although KPERS (established in 1962) is younger than many of its peers, it has still been in existence for more than fifty years. In addition, the merger of KSRS into KPERS impacted the demographics of the System. In general, the aging of the population, including the retirement of the baby boomers, along with earlier retirement eligibility has created a shift in the demographics of most retirement systems. This change is not unexpected and has, in fact, been anticipated in the funding of the retirement systems. Even though it was anticipated, the demographic shift and maturing of the plans have increased the risk associated with funding the system. The following exhibits summarize certain historical information that indicates how certain key risk metrics have changed over time due to the maturing of the retirement system.





## TABLE 24 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ASSET VOLATILITY RATIOS

As a retirement system matures, the size of the market value of assets increases relative to the covered payroll of active members, on which the System is funded. The size of the plan assets relative to covered payroll, sometimes referred to as the asset volatility ratio, is an important indicator of the contribution risk for the System. The higher this ratio, the more sensitive a plan's contribution rate is to investment return volatility. In other words, it will be harder to recover from investment losses with increased contributions.

Group	Market Value of Assets	Covered Payroll	Asset Volatility Ratio	Increase in ARC with a Return 10% Lower than Assumed*
Local	\$5,428,458,982	\$2,385,045,053	2.28	1.65%
State/School	18,976,027,199	5,900,261,049	3.22	2.33%
KP&F	3,396,851,579	773,537,600	4.39	3.18%
Judges	220,589,542	37,337,213	5.91	4.29%

<sup>\*</sup>The impact of asset smoothing is not reflected in the impact on the Actuarial Required Contribution Rate (ARC).

_	Asset Volatility Ratio	Increase in ARC with a Return 10% Lower than Assumed*
	1.00	0.73%
	2.00	1.45%
Local ->	2.28	1.65%
	3.00	2.18%
State/School ->	3.22	2.33%
	4.00	2.90%
KP&F ->	4.39	3.18%
	5.00	3.63%
Judges ->	5.91	4.29%
	6.00	4.35%
	7.00	5.08%

The assets for the State/School group at December 31, 2024 are 322% of payroll, so underperforming the investment return assumption by 10.00% (i.e., earn -3.00% for one year) is equivalent to an actuarial loss of 32.2% of payroll. The impact on the employer contribution rate varies by group because of the difference in the Asset Volatility Ratio. While the actual impact in the first year is mitigated by the asset smoothing method and amortization of the unfunded actuarial liability, this exhibit illustrates the contribution risk associated with volatile investment returns.

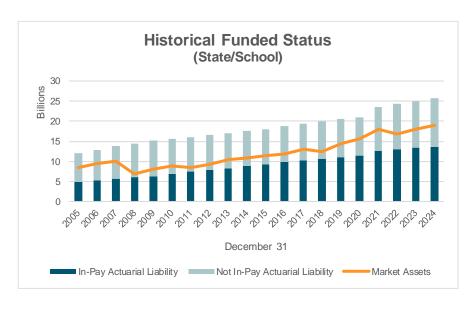


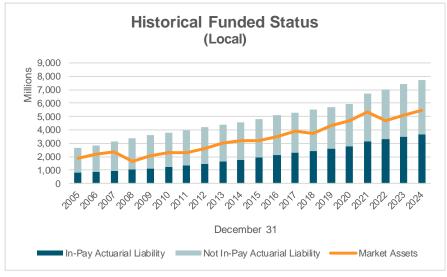


# TABLE 25 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM HISTORICAL FUNDED STATUS

Another key measurement is whether, and by how much, the current market value of assets exceeds the liability for current retirees and beneficiaries (in-pay members). This also provides an indication of the maturity of the retirement system.

The general trend line of the market value of assets is similar for both the State/School and Local groups, but the assets of the Local group have been well above the liability for in-pay members in all years while that has not been the case for the State/School group.



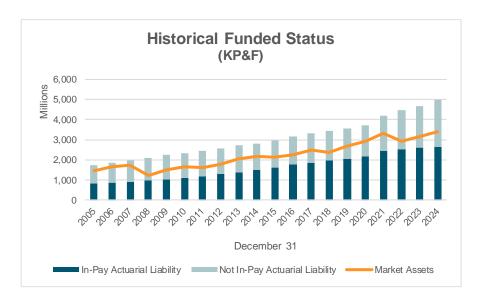




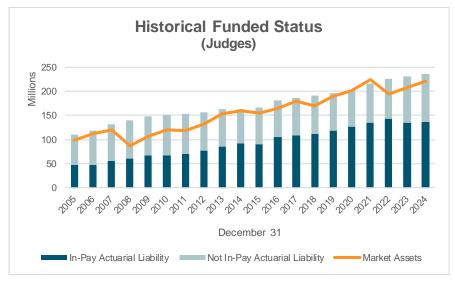


# TABLE 25 (cont.) KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM HISTORICAL FUNDED STATUS

The fact that the Kansas Police and Fire (KP&F) system has been funded with contributions equal to the full actuarial rate has contributed to the fact the market value of assets has historically been higher than the inactive liability. KP&F is currently about 68% funded on a market value basis.



The Judges System has also been funded with contributions equal to the actuarial required contribution rate. The funded status of the system declined due to the Great Recession in 2008 and 2009 but has since recovered. The funded ratio dropped due to the negative investment experience during CY 2022 but increased slightly in the current valuation to 93% on a market value basis.

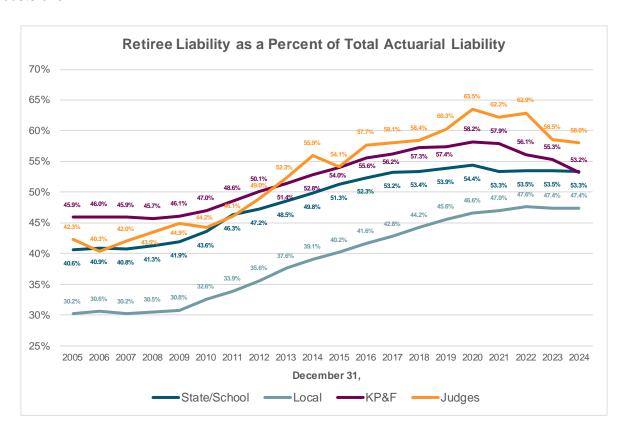






## TABLE 26 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM LIABILITY MATURITY MEASUREMENTS

Most public sector retirement systems have been in operation for many years. As a result, they have aging plan populations and, in some cases, declining active populations resulting in a growing percentage of retiree liability. With more of the total liability residing with retirees, investment volatility has a greater impact on the funding of the system, since it is more difficult to restore the system financially after losses occur when there is comparatively less payroll to spread costs over.



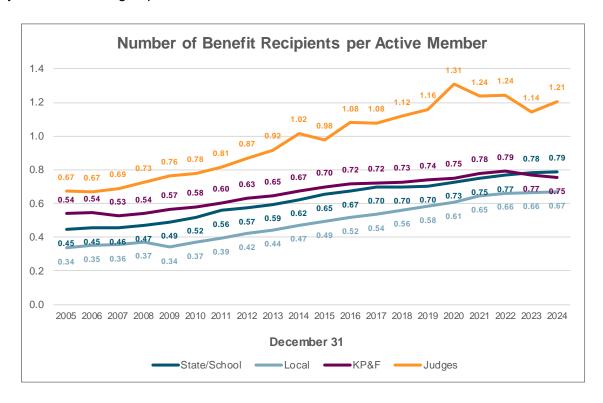
As the graph above illustrates, the relative percentage of total liability attributable to retirees has varied over time, and different patterns exist for the different groups. However, for all groups, the trend has been an increase in the percentage over the last 20 years, indicating that retirees are a growing portion of the membership of the System.





## TABLE 27 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM NUMBER OF BENEFIT RECIPIENTS PER ACTIVE MEMBER

In the past 20 years, KPERS has become more mature, as indicated by a continual increase in the ratio of benefit recipients (retirees and beneficiaries) to active members, shown in the graph below. The increase in the ratio is significant from a funding perspective, because any increase in the unfunded actuarial liability due to unfavorable future investment or non-investment experience for a larger group of non-active members has to be amortized and funded using the payroll of a smaller group of active members.



There has been a general increasing trend of benefit recipients to active members over the last 20 years, indicating a maturation of the systems. The increase has been more dramatic for the Judges system due to the size and demographics of the group.





## TABLE 28 KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM SCENARIO TESTING - STATE/SCHOOL GROUP

KPERS is subject to various risks that may impact the funded status and employer contribution rates. As past experience has demonstrated, investment performance is one of the most impactful risks. Any variance in actual experience, including but not limited to members living longer or shorter than expected, future salary increases more or less than assumed, and members leaving active employment earlier or later than assumed, will also impact the liabilities and contribution rates. It is because of these possible, and often likely, annual variances from expectations that an actuarial valuation is performed annually to assess and measure the variances and update the employer contribution rates.

To measure the investment risk, a "Scenario Test" is included to study the change in funded status and employer contribution rates if KPERS were to earn market returns higher or lower than 7.00% in the first year following the December 31, 2024 valuation (calendar year 2025) and then earn the assumed return in all other years. This section of the valuation report contains three deterministic projections of actuarial valuation results to illustrate the impact of variance in the investment return for a single year. The projections assume the actual return on assets for the year ending December 31, 2025 will be as follows:

- Scenario 1: 7.00% return in all years (the current assumption)
- Scenario 2: 0.00% return in CY 2025, then 7.00% thereafter
- Scenario 3: 14.00% return in CY 2025, then 7.00% thereafter

### Impact on the Future Valuation Results

The following graphs show the impact of each scenario on the State/School funded ratio and the State/School employer contribution rate. The orange line reflects the expected path for the funded ratio if all assumptions are met in the future, including the 7.00% assumed rate of return. The funded ratio declines initially as deferred asset losses are recognized and then improves as the System is expected to contribute the full actuarial required contribution rate, reaching 93% in 2038. If the actual investment return for calendar year 2025 is 0%, followed by returns of 7.00% in all subsequent years, the funded ratio would decrease to around 72% in 2026 as the deferred asset experience flows through the asset smoothing method and then steadily increase (dark teal line). Under the third scenario (light blue line), the return for calendar year 2025 is 14.00%, followed by 7.00% in all subsequent years, and the funded ratio increases steadily, reaching 97% by 2038. The purpose of the scenario testing is to illustrate the long-term impact of one year where the investment return is significantly better or worse than expected.

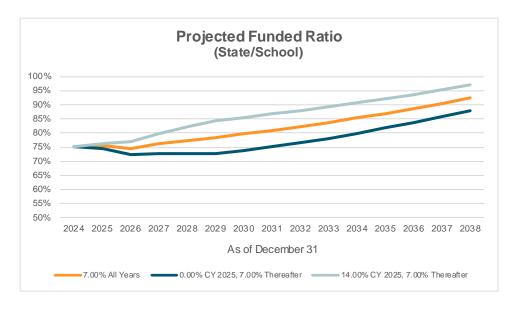
Similarly, for the State/School employer contribution rate, the orange line indicates the projection of the employer contribution rate, if all assumptions are met, which increases to around 12.2% as the deferred investment experience works through the asset smoothing method and then

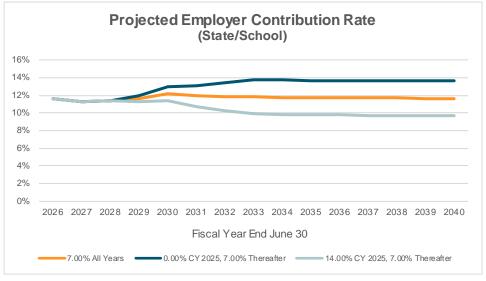






stabilizes around 11.7%. If the return in calendar year 2025 is 0.00% (dark teal line), the employer contribution rate increases more, to around 13.7%, as the investment experience is recognized in the actuarial value of assets and then remains at that level for the remainder of the period. Under the third scenario (light blue line), where the return in calendar year 2025 is 14.00%, the employer contribution rate decreases to around 9.7%.









# TABLE 29A KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS

### STATE/SCHOOL (\$ in millions)

This exhibit compares the key December 31, 2024 valuation results under five (5) different investment return assumptions to illustrate the impact of different assumptions on the funding of the System. Note that only the investment return assumption is changed, as identified in the heading below. All other assumptions, including PLSO factors, annuity factors and interest crediting rate, are unchanged for purposes of this analysis.

Investment Return Assumption	6.50%	6.75%	7.00%	7.25%	7.50%
Actuarial Liability Actuarial Value of Assets	\$27,119 19,332	\$26,381 19,332	\$25,674 19,332	\$24,998 19,332	\$24,350 19,332
Unfunded Actuarial Liability (UAL)	\$7,787	\$7,049	\$6,343	\$5,666	\$5,018
Funded Ratio	71.3%	73.3%	75.3%	77.3%	79.4%
Contribution Rates					
- Total Normal Cost Rate	9.65%	9.12%	8.62%	8.15%	7.72%
- Member Contribution Rate	(6.00%)	(6.00%)	(6.00%)	(6.00%)	(6.00%)
- Employer Normal Cost Rate	3.65%	3.12%	2.62%	2.15%	1.72%
- Amortization of the UAL	10.44%	9.60%	8.76%	7.91%	7.06%
Actuarial Required Contribution Rate	14.09%	12.72%	11.38%	10.06%	8.78%
Statutory Employer Contribution Rate*	12.52%	12.52%	11.38%	10.06%	8.78%

Note: Totals may not add due to rounding. The change in the UAL due to different investment return assumption is amortized over a 20-year period. \*Employer contribution rates may be impacted by the statutory cap.





# TABLE 29B KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS

### LOCAL (\$ in millions)

This exhibit compares the key December 31, 2024 valuation results under five (5) different investment return assumptions to illustrate the impact of different assumptions on the funding of the System. Note that only the investment return assumption is changed, as identified in the heading below. All other assumptions, including PLSO factors, annuity factors and interest crediting rate, are unchanged for purposes of this analysis.

Investment Return Assumption	6.50%	6.75%	7.00%	7.25%	7.50%
Actuarial Liability	\$8,161	\$7,933	\$7,715	\$7,506	\$7,306
Actuarial Value of Assets	5,541	5,541	5,541	5,541	5,541
Unfunded Actuarial Liability (UAL)	\$2,619	\$2,392	\$2,173	\$1,964	\$1,764
Funded Ratio	67.9%	69.9%	71.8%	73.8%	75.8%
Contribution Rates					
- Total Normal Cost Rate	8.88%	8.43%	8.00%	7.61%	7.24%
- Member Contribution Rate	(6.00%)	(6.00%)	(6.00%)	(6.00%)	(6.00%)
- Employer Normal Cost Rate	2.88%	2.43%	2.00%	1.61%	1.24%
- Amortization of the UAL	8.66%	8.05%	7.44%	6.82%	6.21%
Actuarial Required Contribution Rate	11.54%	10.48%	9.44%	8.43%	7.45%
Statutory Employer Contribution Rate*	10.79%	10.48%	9.44%	8.43%	7.45%

Note: Totals may not add due to rounding. The change in the UAL due to different investment return assumption is amortized over a 20-year period. \*Employer contribution rates may be impacted by the statutory cap.





# TABLE 29C KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS

KP&F (\$ in millions)

This exhibit compares the key December 31, 2024 valuation results under five (5) different investment return assumptions to illustrate the impact of different assumptions on the funding of the System. Note that only the investment return assumption is changed, as identified in the heading below.

Investment Return Assumption	6.50%	6.75%	7.00%	7.25%	7.50%
Actuarial Liability Actuarial Value of Assets	\$5,272 3,467	\$5,127 3,467	\$4,989 3,467	\$4,856 3,467	\$4,730 3,467
Unfunded Actuarial Liability (UAL)	\$1,805	\$1,660	\$1,522	\$1,389	\$1,262
Funded Ratio	65.8%	67.6%	69.5%	71.4%	73.3%
Contribution Rates					
- Total Normal Cost Rate	19.79%	18.77%	17.81%	16.92%	16.08%
- Member Contribution Rate	(7.15%)	(7.15%)	(7.15%)	(7.15%)	(7.15%)
- Employer Normal Cost Rate	12.64%	11.62%	10.66%	9.77%	8.93%
- Amortization of the UAL	16.19%	15.02%	13.85%	12.69%	11.51%
Actuarial Required Contribution Rate	28.83%	26.64%	24.51%	22.46%	20.44%
Statutory Employer Contribution Rate	28.83%	26.64%	24.51%	22.46%	20.44%

Note: Totals may not add due to rounding. The change in the UAL due to different investment return assumption is amortized over a 20-year period.





# TABLE 29D KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS

### **JUDGES**

This exhibit compares the key December 31, 2024 valuation results under five (5) different investment return assumptions to illustrate the impact of different assumptions on the funding of the System. Note that only the investment return assumption is changed, as identified in the heading below.

Investment Return Assumption	6.50%	6.75%	7.00%	7.25%	7.50%
Actuarial Liability Actuarial Value of Assets	\$246,520,309 225,345,118	\$241,280,214 225,345,118	\$236,225,511 225,345,118	\$231,347,806 225,345,118	\$226,639,150 225,345,118
Unfunded Actuarial Liability (UAL)	\$21,175,191	\$15,935,096	\$10,880,393	\$6,002,688	\$1,294,032
Funded Ratio	91.4%	93.4%	95.4%	97.4%	99.4%
Contribution Rates					
- Total Normal Cost Rate	25.71%	24.64%	23.62%	22.65%	21.73%
- Member Contribution Rate	(5.62%)	(5.62%)	(5.62%)	(5.62%)	(5.62%)
- Employer Normal Cost Rate	20.09%	19.02%	18.00%	17.03%	16.11%
- Amortization of the UAL	5.65%	4.04%	2.42%	0.78%	(0.88%)
Actuarial Required Contribution Rate	25.74%	23.06%	20.42%	17.81%	15.23%
Statutory Employer Contribution Rate	25.74%	23.06%	20.42%	17.81%	15.23%

Note: The change in the UAL due to different investment return assumption is amortized over a 20-year period.





### **HISTORICAL SUMMARY OF MEMBERS**

The following tables display selected historical data for KPERS, KP&F and Judges as available.

### **KPERS**

				Active N	/lembers						
Valu	ation			Ave	rage			Number			
Date	Total			Entry		Annual	Pay	Deferred			Act/Ret
December 31	Count	Number	Age	Age	Service	Pay (\$)	Increase	Disabled	Inactives	Retired	Ratio
2005	241,684	142,047	45.3	34.4	10.9	33,724	2.4%	3,099	37,015	59,523	2.39
2006	245,555	144,227	45.4	34.6	10.8	35,284	4.6%	3,007	36,513	61,808	2.33
2007	249,624	146,406	45.5	34.7	10.8	36,924	4.6%	2,911	37,140	63,167	2.32
2008	255,427	148,569	45.6	34.7	10.9	38,087	3.1%	2,823	37,567	66,468	2.24
2009	264,280	153,386	45.4	34.7	10.7	38,749	1.7%	2,781	39,212	68,901	2.23
2010	265,477	150,482	45.6	34.9	10.7	40,109	3.5%	2,749	40,122	72,124	2.09
2011	267,713	147,647	45.6	34.4	11.2	40,166	0.1%	2,711	41,358	75,997	1.94
2012	272,561	148,605	45.5	34.3	11.2	40,522	0.9%	2,575	41,991	79,390	1.87
2013	275,983	147,957	45.5	34.2	11.3	40,684	0.4%	2,436	43,660	81,930	1.81
2014	281,172	146,746	45.4	34.2	11.2	41,367	1.7%	2,340	46,503	85,583	1.71
2015	284,912	144,669	45.4	34.2	11.2	42,149	1.9%	2,210	49,488	88,545	1.63
2016	290,025	144,564	45.4	34.2	11.2	42,460	0.7%	2,051	52,140	91,270	1.58
2017	296,383	143,947	45.3	34.2	11.1	43,128	1.6%	1,904	56,402	94,130	1.53
2018	302,735	146,104	45.1	34.1	11.0	44,404	3.0%	1,771	58,008	96,852	1.51
2019	309,154	148,199	45.0	34.2	10.8	45,563	2.6%	1,650	59,746	99,559	1.49
2020	310,298	145,880	45.0	34.1	10.9	47,346	3.9%	1,566	61,211	101,641	1.44
2021	316,372	144,251	44.9	34.1	10.8	48,963	3.4%	1,482	66,427	104,212	1.38
2022	323,422	143,849	44.9	34.2	10.7	51,381	4.9%	1,367	71,731	106,475	1.35
2023	328,498	145,378	44.8	34.2	10.6	54,028	5.2%	1,298	72,524	109,298	1.33
2024	332,260	146,792	44.7	34.2	10.5	56,443	4.5%	1,202	73,225	111,041	1.32





### HISTORICAL SUMMARY OF MEMBERS (continued)

### KP&F

				Active Me	embers						
Valua	ition			Avera	age				Number		
Date	Total			Entry		Annual	Pay	Deferred			Act/Ret
December 31	Count	Number	Age	Age	Service	Pay (\$)	Increase	Disabled*	Inactives	Retired	Ratio
2005	11,719	6,772	38.9	27.9	11.0	52,222	2.4%	194	1,099	3,654	1.85
2006	12,070	6,965	39.0	28.1	11.0	53,939	3.3%	186	1,134	3,785	1.84
2007	12,210	7,137	39.1	28.1	11.0	56,068	3.9%	175	1,143	3,755	1.90
2008	12,499	7,242	39.1	28.0	11.1	57,800	3.1%	173	1,175	3,909	1.85
2009	12,556	7,179	39.5	28.1	11.4	60,287	4.3%	181	1,136	4,060	1.77
2010	12,691	7,173	39.6	28.2	11.4	61,805	2.5%	181	1,169	4,168	1.72
2011	12,863	7,143	39.6	27.9	11.7	61,907	0.2%	197	1,208	4,315	1.66
2012	13,109	7,187	39.5	27.8	11.7	62,489	0.9%	203	1,194	4,525	1.59
2013	13,276	7,224	39.6	27.8	11.8	63,928	2.3%	208	1,174	4,670	1.55
2014	13,463	7,204	39.7	27.8	11.9	64,156	0.4%	210	1,196	4,853	1.48
2015	13,762	7,244	39.5	27.8	11.7	65,925	2.8%	210	1,243	5,065	1.43
2016	14,090	7,303	39.3	27.7	11.6	66,441	0.8%	204	1,351	5,232	1.40
2017	14,533	7,481	39.1	27.8	11.3	67,875	2.2%	200	1,454	5,398	1.39
2018	15,001	7,695	38.8	27.8	11.0	69,184	1.9%	192	1,519	5,595	1.38
2019	15,412	7,797	38.8	27.9	10.9	71,122	2.8%	192	1,660	5,763	1.35
2020	15,732	7,835	38.7	27.8	10.9	72,831	2.4%	184	1,823	5,890	1.33
2021	16,138	7,779	38.7	27.9	10.8	74,451	2.2%	197	2,107	6,055	1.28
2022	16,607	7,868	38.6	27.8	10.8	80,735	8.4%	203	2,312	6,224	1.26
2023	17,220	8,284	38.7	28.2	10.5	84,815	5.1%	206	2,348	6,382	1.30
2024	17,732	8,619	38.7	28.3	10.4	89,748	5.8%	220	2,398	6,495	1.33

<sup>\*</sup>KP&F deferred disabled members also receive a temporary disability benefit which is included in the retiree counts.





### HISTORICAL SUMMARY OF MEMBERS (continued)

### **JUDGES**

				Active Me	embers					
Valu	ation		Average						Number	
Date	Total			Entry		Annual	Pay			Act/Ret
December 31	Count	Number	Age	Age	Service	Pay (\$)	Increase	Inactives	Retired	Ratio
2005	444	254	55.7	44.1	11.6	90,585	2.1%	19	171	1.47
2006	447	257	56.2	44.2	11.9	96.743	6.8%	18	172	1.49
2007	455	261	56.6	44.8	11.8	101,732	5.2%	14	180	1.45
2007	463	262	57.1	45.2	11.9	101,752	2.4%	11	190	1.43
2009	483	266	57.1 57.1	45.2 45.6	11.5	104,139	1.5%	14	203	1.31
2009	403	200	37.1	45.0	11.3	105,709	1.3%	14	203	1.31
2010	480	264	57.8	45.7	12.1	107,019	1.2%	10	206	1.28
2011	486	264	58.1	45.5	12.6	109,387	2.2%	7	215	1.23
2012	494	261	58.3	46.0	12.3	107,584	(1.6)%	6	227	1.15
2013	514	265	57.8	46.1	11.7	107,364	(0.2)%	6	243	1.09
2014	516	253	58.2	46.3	11.9	108,411	1.0%	6	257	0.98
2015	526	262	58.4	46.4	12.0	108,166	(0.2%)	8	256	1.02
2016	533	252	58.1	46.5	11.6	100,100	(0.5%)	9	272	0.93
2017	544	259	58.0	46.6	11.4	107,033	1.6%	6	272	0.93
2017	547	256	58.5	46.8	11.4	111,465	1.0%	5	286	0.90
2019	564	257	58.1	47.0	11.7	113,100	1.5%	9	298	0.86
2019	304	257	30.1	47.0	11.1	113,100	1.376	9	290	0.00
2020	572	244	57.4	46.9	10.5	116,687	3.2%	9	319	0.76
2021	588	258	57.2	47.1	10.1	117,282	0.5%	11	319	0.81
2022	608	267	56.5	47.3	9.2	123,037	4.9%	9	332	0.80
2023	623	286	56.6	47.2	9.4	132,558	7.7%	10	327	0.87
2024	621	277	57.1	47.2	9.9	134,791	1.7%	10	334	0.83







### **SUMMARY OF DATA FILE RECONCILIATION**

The following table reconciles the data Cavanaugh Macdonald Consulting received from KPERS to the final membership counts used in the valuation.

Records on the in-pay data file Missing records added	137,570 7
Removed deaths prior to 12/31/2024	(19,408)
Records removed because the member has received all benefits or is not eligible for KPERS benefits	(914)
Added new retirees from supplemental file	615
Records used in the valuation	117,870
Records on the not-in-pay data file	270,611
Missing records added	7
Records removed because the member has received all benefits or is not eligible for KPERS benefits	(32,350)
Records removed because the member began receiving benefits	(5,525)
Records used in the valuation	232,743

These records are allocated as follows:

	State	School	Local	KP&F	Judges
Active members*	20,917	87,634	38,241	8,619	277
Inactive vested members	5,495	17,675	8,763	299	10
Inactive nonvested members	5,467	21,529	14,296	2,099	0
Deferred disabled members**	<u>349</u>	<u>498</u>	<u>355</u>	<u>220</u>	<u>0</u>
Total	32,228	127,336	61,655	11,237	287
Retirees and beneficiaries	21,838	63,619	25,584	6,495	334
GRAND TOTAL	54,066	190,955	87,239	17,732	621

<sup>\*</sup> For KP&F, includes 172 current DROP participants.



<sup>\*\*</sup>For KP&F, deferred disabled members also receive a temporary disability benefit which is included in the retiree counts.





### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTIVE MEMBER DATA

	12/31/2024	12/31/2023	Change
State			
Number KPERS 1 KPERS 2 KPERS 3 Average Current Age Average Service Average Pay	20,917 5,631 4,083 11,203 45.10 10.48 \$60,308	20,527 6,172 4,115 10,240 45.43 10.73 \$56,892	1.9% (8.8%) (0.8%) 9.4% (0.7%) (2.3%) 6.0%
School			
Number KPERS 1 KPERS 2 KPERS 3 Average Current Age Average Service Average Pay	87,634 24,375 13,158 50,101 44.61 10.97 \$52,934	87,148 26,381 13,798 46,969 44.63 10.97 \$51,259	0.6% (7.6%) (4.6%) 6.7% (0.0%) 0.0% 3.3%
State/School			
Number KPERS 1 KPERS 2 KPERS 3 Average Current Age Average Service Average Pay	108,551 30,006 17,241 61,304 44.70 10.88 \$54,355	107,675 32,553 17,913 57,209 44.78 10.92 \$52,333	0.8% (7.8%) (3.8%) 7.2% (0.2%) (0.4%) 3.9%
Local			
Number KPERS 1 KPERS 2 KPERS 3 Average Current Age Average Service Average Pay	38,241 9,270 4,635 24,336 44.73 9.57 \$62,369	37,703 10,110 4,936 22,657 44.91 9.65 \$58,870	1.4% (8.3%) (6.1%) 7.4% (0.4%) (0.8%) 5.9%





### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTIVE MEMBER DATA

	12/31/2024	12/31/2023	Change
KPERS Total			
Number KPERS 1 KPERS 2 KPERS 3 Average Current Age Average Service Average Pay	146,792 39,276 21,876 85,640 44.71 10.54 \$56,443	145,378 42,663 22,849 79,866 44.82 10.59 \$54,028	1.0% (7.9%) (4.3%) 7.2% (0.2%) (0.5%) 4.5%
KP&F			
Number Tier 1 Tier 2 DROP Average Current Age Average Service Average Pay	8,619 2 8,445 172 38.69 10.40 \$89,748	8,284 5 8,174 105 38.68 10.49 \$84,815	4.0% (60.0%) 3.3% 63.8% 0.0% (0.9%) 5.8%
Judges			
Number Average Current Age Average Service Average Pay	277 57.05 9.91 \$134,791	286 56.57 9.37 \$132,558	(3.1%) 0.8% 5.8% 1.7%
System Total			
Number Average Current Age Average Service Average Pay	155,688 44.40 10.53 \$58,426	153,948 44.51 10.59 \$55,831	1.1% (0.2%) (0.6%) 4.6%





### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM INACTIVE MEMBER DATA

	12/31/2024	12/31/2023	Change
State Inactive Vested Inactive Nonvested Deferred Disabled	5,495	5,325	3.2%
	5,467	5,390	1.4%
	349	384	(9.1%)
School Inactive Vested Inactive Nonvested Deferred Disabled	17,675	17,224	2.6%
	21,529	21,755	(1.0%)
	498	537	(7.3%)
Local Inactive Vested Inactive Nonvested Deferred Disabled	8,763	8,643	1.4%
	14,296	14,187	0.8%
	355	377	(5.8%)
KPERS Total Inactive Vested Inactive Nonvested Deferred Disabled	31,933	31,192	2.4%
	41,292	41,332	(0.1%)
	1,202	1,298	(7.4%)
KP&F Inactive Vested Inactive Nonvested Deferred Disabled*	299	299	0.0%
	2,099	2,049	2.4%
	220	206	6.8%
Judges Inactive Vested Inactive Nonvested Deferred Disabled	10	10	0.0%
	0	0	0.0%
	0	0	0.0%
System Total Inactive Vested Inactive Nonvested Deferred Disabled	32,242	31,501	2.4%
	43,391	43,381	0.0%
	1,422	1,504	(5.5%)

<sup>\*</sup>KP&F deferred disabled members also receive a temporary disability benefit which is included in the retiree counts.







### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM RETIREE MEMBER DATA

	12/31/2024	12/31/2023	Change
State			
Number Average Benefit Average Age	19,606 \$16,835 73.69	19,558 \$16,550 73.39	0.2% 1.7% 0.4%
School			
Number Average Benefit Average Age	59,956 \$17,713 73.74	58,935 \$17,439 73.49	1.7% 1.6% 0.3%
Local			
Number Average Benefit Average Age	23,017 \$15,798 72.95	22,560 \$15,360 72.75	2.0% 2.9% 0.3%
KPERS Total			
Number Average Benefit Average Age	102,579 \$17,115 73.55	101,053 \$16,803 73.31	1.5% 1.9% 0.3%
KP&F			
Number Average Benefit Average Age	5,408 \$41,657 66.35	5,305 \$41,301 66.06	1.9% 0.9% 0.4%
Judges			
Number Average Benefit Average Age	262 \$47,985 75.67	258 \$47,689 75.41	1.6% 0.6% 0.3%
System Total			
Number Average Benefit Average Age	108,249 \$18,416 73.20	106,616 \$18,097 72.95	1.5% 1.8% 0.3%







### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM BENEFICIARY MEMBER DATA

	12/31/2024	12/31/2023	Change
State			
Number Average Benefit Average Age	2,232 \$10,539 76.88	2,189 \$10,318 76.73	2.0% 2.1% 0.2%
School			
Number Average Benefit Average Age	3,663 \$10,495 77.26	3,556 \$10,306 77.24	3.0% 1.8% 0.0%
Local			
Number Average Benefit Average Age	2,567 \$8,778 75.65	2,500 \$8,677 75.61	2.7% 1.2% 0.1%
KPERS Total			
Number Average Benefit Average Age	8,462 \$9,986 76.67	8,245 \$9,815 76.61	2.6% 1.7% 0.1%
KP&F			
Number Average Benefit Average Age	1,087 \$19,860 70.87	1,077 \$19,681 70.75	0.9% 0.9% 0.2%
Judges			
Number Average Benefit Average Age	72 \$30,813 78.63	69 \$30,354 78.04	4.3% 1.5% 0.8%
System Total			
Number Average Benefit Average Age	9,621 \$11,257 76.03	9,391 \$11,097 75.95	2.4% 1.4% 0.1%







### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM RETIREE AND BENEFICIARY MEMBER DATA

	12/31/2024	12/31/2023	Change
State			_
Number	21,838	21,747	0.4%
Average Benefit	\$16,192	\$15,923	1.7%
Average Age	74.02	73.73	0.4%
School			
Number	63,619	62,491	1.8%
Average Benefit	\$17,297	\$17,033	1.5%
Average Age	73.94	73.70	0.3%
Local			
Number	25,584	25,060	2.1%
Average Benefit	\$15,094	\$14,693	2.7%
Average Age	73.22	73.04	0.2%
KPERS Total			
Number	111,041	109,298	1.6%
Average Benefit	\$16,572	\$16,276	1.8%
Average Age	73.79	73.55	0.3%
KP&F			
Number	6,495	6,382	1.8%
Average Benefit	\$38,009	\$37,652	0.9%
Average Age	67.11	66.85	0.4%
Judges			
Number	334	327	2.1%
Average Benefit	\$44,283	\$44,031	0.6%
Average Age	76.31	75.96	0.5%
System Total			
Number	117,870	116,007	1.6%
Average Benefit	\$17,832	\$17,530	1.7%
Average Age	73.43	73.19	0.3%





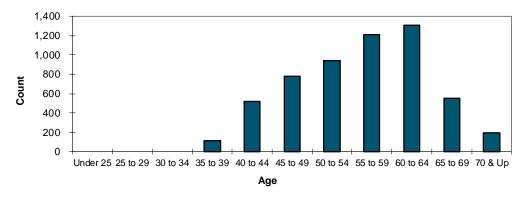
as of December 31, 2024

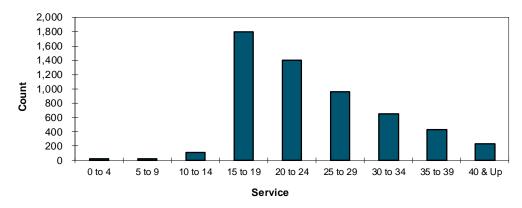
#### **STATE - KPERS 1\***

					Se	ervice				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	8	101	1	0	0	0	0	110
40 to 44	1	5	25	383	103	0	0	0	0	517
45 to 49	0	1	25	351	325	82	0	0	0	784
50 to 54	1	7	12	263	293	287	79	1	0	943
55 to 59	4	5	15	270	270	298	265	86	2	1,215
60 to 64	7	7	18	267	262	196	208	253	95	1,313
65 to 69	8	3	4	119	108	73	73	79	89	556
70 & Up	1	0	3	41	44	25	23	14	42	193
Total	22	28	110	1,795	1,406	961	648	433	228	5,631
		•	•		•	•		•		•

<sup>\*</sup> Closed effective July 1, 2009.

### Age Distribution









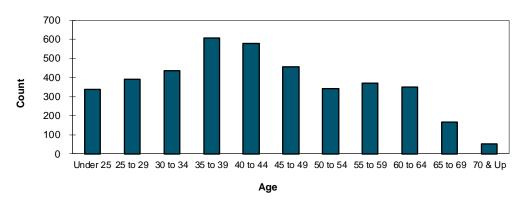
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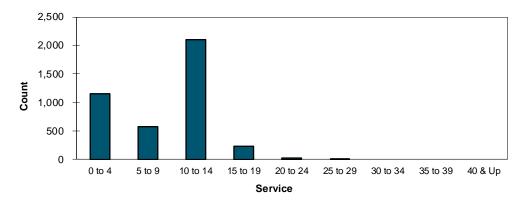
### STATE - KPERS 2\*

					Se	ervice				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	333	5	0	0	0	0	0	0	0	338
25 to 29	273	115	3	0	0	0	0	0	0	391
30 to 34	175	114	144	1	0	0	0	0	0	434
35 to 39	102	97	383	26	0	0	0	0	0	608
40 to 44	80	70	385	42	0	0	0	0	0	577
45 to 49	68	54	288	42	3	0	0	0	0	455
50 to 54	45	39	216	34	6	0	0	0	0	340
55 to 59	44	37	257	27	5	0	0	0	0	370
60 to 64	29	33	257	26	5	1	0	0	0	351
65 to 69	5	12	129	17	2	0	0	0	0	165
70 & Up	5	2	37	9	1	0	0	0	0	54
Total	1,159	578	2,099	224	22	1	0	0	0	4,083

<sup>\*</sup> Effective date of KPERS 2 was July 1, 2009. Closed effective January 1, 2015.

### Age Distribution









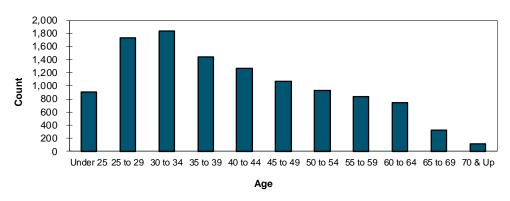
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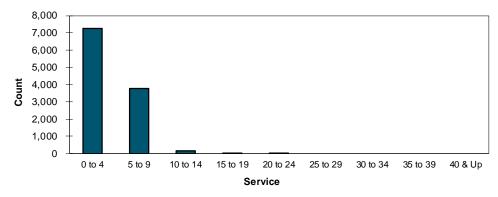
### STATE - KPERS 3\*

					S	Service				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	899	6	0	0	0	0	0	0	0	905
25 to 29	1,427	303	1	0	0	0	0	0	0	1,731
30 to 34	1,106	710	24	0	0	0	0	0	0	1,840
35 to 39	830	575	40	0	0	0	0	0	0	1,445
40 to 44	793	457	22	1	0	0	0	0	0	1,273
45 to 49	628	420	19	2	0	0	0	0	0	1,069
50 to 54	525	381	20	0	0	0	0	0	0	926
55 to 59	489	314	29	1	1	0	0	0	0	834
60 to 64	378	351	14	1	1	0	0	0	0	745
65 to 69	136	179	7	0	0	0	0	0	0	322
70 & Up	47	60	5	1	0	0	0	0	0	113
Total	7,258	3,756	181	6	2	0	0	0	0	11,203

<sup>\*</sup> Effective date of KPERS 3 was January 1, 2015

### Age Distribution









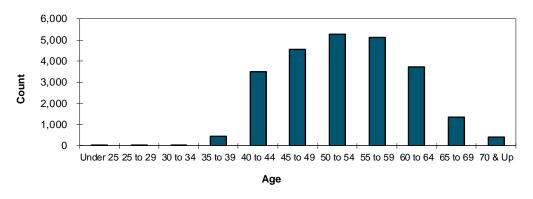
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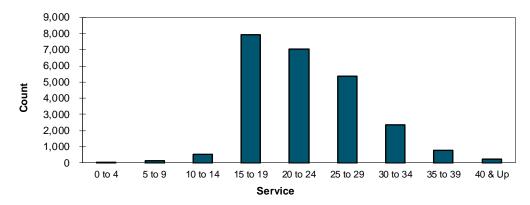
#### **SCHOOL - KPERS 1\***

					S	ervice				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	2	0	0	0	0	0	0	0	0	2
25 to 29	3	0	0	0	0	0	0	0	0	3
30 to 34	2	0	0	1	0	0	0	0	0	3
35 to 39	1	10	30	385	2	0	0	0	0	428
40 to 44	1	44	185	2,568	696	4	0	0	0	3,498
45 to 49	2	24	124	1,325	2,513	573	1	0	0	4,562
50 to 54	0	11	70	1,166	1,261	2,320	445	1	0	5,274
55 to 59	2	21	67	1,172	1,161	1,317	1,194	188	0	5,122
60 to 64	3	14	43	903	992	754	473	447	90	3,719
65 to 69	1	4	21	299	324	312	180	98	112	1,351
70 & Up	1	1	1	119	87	80	59	29	36	413
Total	18	129	541	7,938	7,036	5,360	2,352	763	238	24,375

<sup>\*</sup> Closed effective July 1, 2009.

### **Age Distribution**









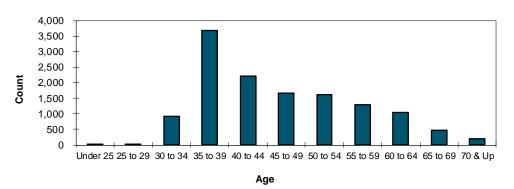
as of December 31, 2024

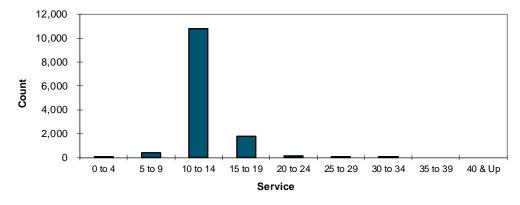
### **SCHOOL - KPERS 2\***

					S	ervice				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	2	0	0	0	0	0	0	0	0	2
25 to 29	5	3	6	0	0	0	0	0	0	14
30 to 34	9	54	847	2	0	0	0	0	0	912
35 to 39	5	122	3,209	364	0	0	0	0	0	3,700
40 to 44	4	66	1,663	471	7	0	0	0	0	2,211
45 to 49	1	43	1,304	282	38	0	0	0	0	1,668
50 to 54	1	37	1,310	239	34	1	0	0	0	1,622
55 to 59	0	36	1,056	187	20	3	1	0	0	1,303
60 to 64	4	27	836	160	14	1	0	0	0	1,042
65 to 69	2	12	396	63	3	0	0	0	0	476
70 & Up	1	4	184	18	1	0	0	0	0	208
Total	34	404	10,811	1,786	117	5	1	0	0	13,158

<sup>\*</sup> Effective date of KPERS 2 was July 1, 2009. Closed effective January 1, 2015.

### Age Distribution









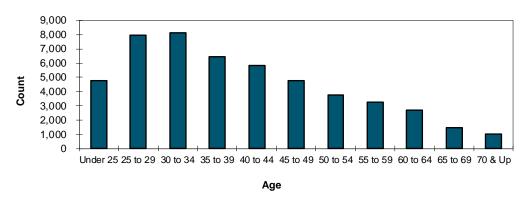
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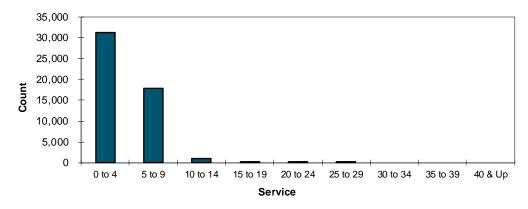
### **SCHOOL - KPERS 3\***

					Ser	vice				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	4,754	43	0	0	0	0	0	0	0	4,797
25 to 29	6,329	1,623	2	0	0	0	0	0	0	7,954
30 to 34	3,898	4,102	126	0	0	0	0	0	0	8,126
35 to 39	3,690	2,489	258	0	0	0	0	0	0	6,437
40 to 44	3,417	2,274	167	0	0	0	0	0	0	5,858
45 to 49	2,572	2,084	101	5	1	0	0	0	0	4,763
50 to 54	2,001	1,637	111	9	0	0	0	0	0	3,758
55 to 59	1,780	1,393	87	5	1	1	0	0	0	3,267
60 to 64	1,497	1,129	63	5	2	1	0	0	0	2,697
65 to 69	818	613	24	2	0	0	0	0	0	1,457
70 & Up	564	401	20	0	1	1	0	0	0	987
Total	31,320	17,788	959	26	5	3	0	0	0	50,101

<sup>\*</sup> Effective date of KPERS 3 was January 1, 2015

### **Age Distribution**









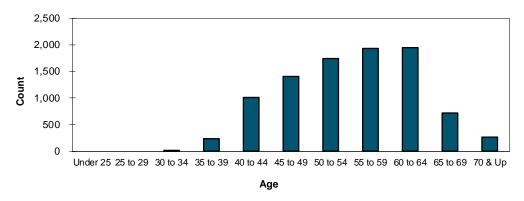
as of December 31, 2024

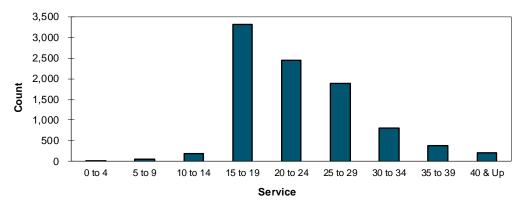
#### **LOCAL - KPERS 1\***

Under 25         0<						Se	ervice				
25 to 29       0<	Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
30 to 34     0     0     0     0     0     0     0       35 to 39     0     2     13     212     2     0     0     0     0       40 to 44     4     14     42     746     202     4     0     0     0       45 to 49     0     15     36     599     572     188     1     0     0       50 to 54     0     8     30     523     520     544     121     3     0       55 to 59     1     8     28     506     501     522     271     89     1	Under 25	0	0	0	0	0	0	0	0	0	0
35 to 39     0     2     13     212     2     0     0     0     0       40 to 44     4     14     42     746     202     4     0     0     0       45 to 49     0     15     36     599     572     188     1     0     0       50 to 54     0     8     30     523     520     544     121     3     0       55 to 59     1     8     28     506     501     522     271     89     1	25 to 29	0	0	0	0	0	0	0	0	0	0
40 to 44     4     14     42     746     202     4     0     0     0     4       45 to 49     0     15     36     599     572     188     1     0     0     6       50 to 54     0     8     30     523     520     544     121     3     0     6       55 to 59     1     8     28     506     501     522     271     89     1	30 to 34	0	0	3	3	0	0	0	0	0	6
45 to 49     0     15     36     599     572     188     1     0     0     6       50 to 54     0     8     30     523     520     544     121     3     0     6       55 to 59     1     8     28     506     501     522     271     89     1     6	35 to 39	0	2	13	212	2	0	0	0	0	229
50 to 54     0     8     30     523     520     544     121     3     0     6       55 to 59     1     8     28     506     501     522     271     89     1     6	40 to 44	4	14	42	746	202	4	0	0	0	1,012
55 to 59 1 8 28 506 501 522 271 89 1	45 to 49	0	15	36	599	572	188	1	0	0	1,411
	50 to 54	0	8	30	523	520	544	121	3	0	1,749
60 to 64 0 0 22 471 447 422 274 104 05 c	55 to 59	1	8	28	506	501	522	271	89	1	1,927
00 10 04   0 9 22 471 447 432 274 194 95	60 to 64	0	9	22	471	447	432	274	194	95	1,944
65 to 69 0 0 6 167 153 143 103 73 79	65 to 69	0	0	6	167	153	143	103	73	79	724
70 & Up 0 2 1 89 56 54 25 19 22	70 & Up	0	2	1	89	56	54	25	19	22	268
Total 5 58 181 3,316 2,453 1,887 795 378 197 9	Total	5	58	181	3,316	2,453	1,887	795	378	197	9,270

<sup>\*</sup> Closed effective July 1, 2009.

### Age Distribution









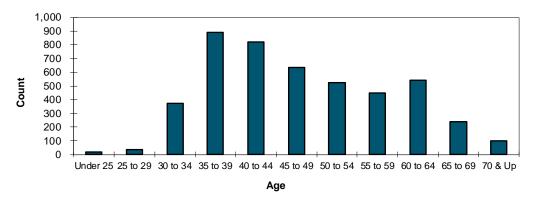
as of December 31, 2024

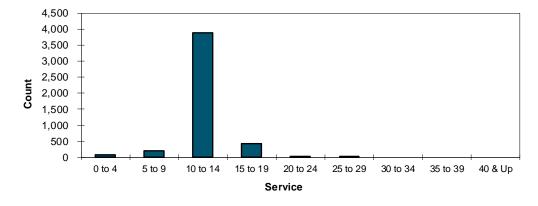
### **LOCAL - KPERS 2\***

					Se	rvice				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	17	0	0	0	0	0	0	0	0	17
25 to 29	18	14	4	0	0	0	0	0	0	36
30 to 34	22	29	319	3	0	0	0	0	0	373
35 to 39	12	57	765	55	0	0	0	0	0	889
40 to 44	6	37	697	81	1	1	0	0	0	823
45 to 49	6	23	524	77	7	0	0	0	0	637
50 to 54	1	21	433	65	3	1	0	0	0	524
55 to 59	1	12	385	42	7	3	0	0	0	450
60 to 64	2	13	463	61	3	2	0	0	0	544
65 to 69	0	3	207	28	2	0	0	0	0	240
70 & Up	0	1	92	9	0	0	0	0	0	102
Total	85	210	3,889	421	23	7	0	0	0	4,635

<sup>\*</sup> Effective date of KPERS 2 was July 1, 2009. Closed effective January 1, 2015.

### **Age Distribution**







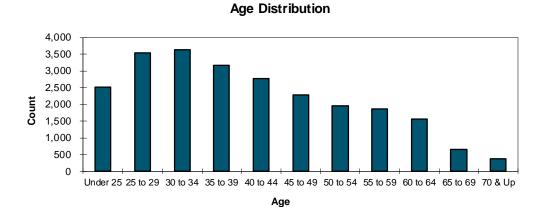


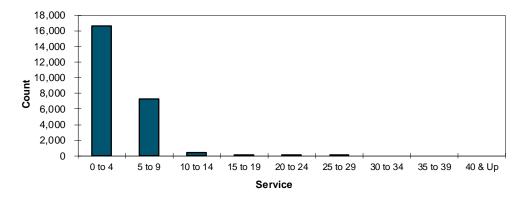
as of December 31, 2024

### **LOCAL - KPERS 3\***

					Se	ervice				
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	2,501	20	0	0	0	0	0	0	0	2,521
25 to 29	2,948	604	3	0	0	0	0	0	0	3,555
30 to 34	2,374	1,231	43	0	0	0	0	0	0	3,648
35 to 39	1,937	1,159	78	0	0	0	0	0	0	3,174
40 to 44	1,735	976	54	0	0	0	0	0	0	2,765
45 to 49	1,449	774	51	2	0	0	0	0	0	2,276
50 to 54	1,190	729	37	0	1	0	0	0	0	1,957
55 to 59	1,171	636	48	2	0	2	0	0	0	1,859
60 to 64	835	671	48	1	0	0	0	0	0	1,555
65 to 69	334	306	23	1	0	0	0	0	0	664
70 & Up	185	161	15	0	0	1	0	0	0	362
Total	16,659	7,267	400	6	1	3	0	0	0	24,336

<sup>\*</sup> Effective date of KPERS 3 was January 1, 2015









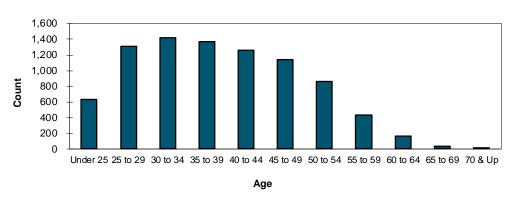
as of December 31, 2024

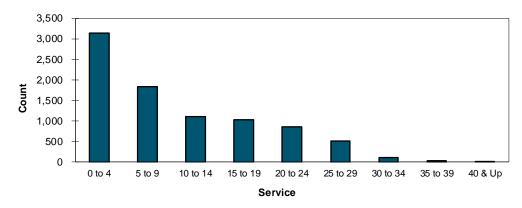
#### KP&F

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	630	1	0	0	0	0	0	0	0	631
25 to 29	1,000	313	0	0	0	0	0	0	0	1,313
30 to 34	595	672	156	0	0	0	0	0	0	1,423
35 to 39	346	406	460	152	1	0	0	0	0	1,365
40 to 44	212	204	273	432	142	1	0	0	0	1,264
45 to 49	154	101	110	246	417	108	3	0	0	1,139
50 to 54	109	58	57	114	212	272	34	1	0	857
55 to 59	68	48	32	63	68	96	49	9	0	433
60 to 64	32	22	11	25	17	22	16	14	1	160
65 to 69	7	5	5	1	4	3	4	0	0	29
70 & Up	3	1	0	0	0	0	0	0	1	5
Total	3,156	1,831	1,104	1,033	861	502	106	24	2	8,619

<sup>\*</sup> Includes 172 KP&F members currently participating in DROP.

### **Age Distribution**







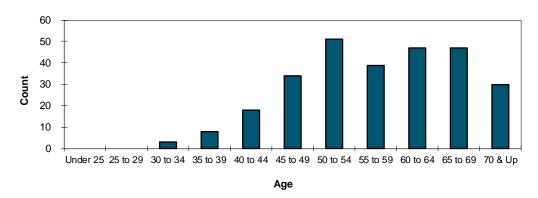


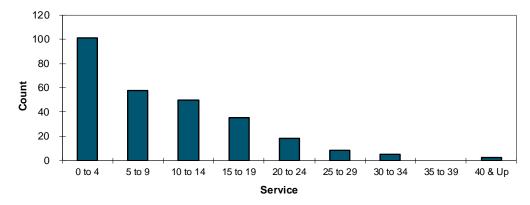
as of December 31, 2024

#### **JUDGES**

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	3	0	0	0	0	0	0	0	0	3
35 to 39	6	1	1	0	0	0	0	0	0	8
40 to 44	13	4	1	0	0	0	0	0	0	18
45 to 49	18	8	8	0	0	0	0	0	0	34
50 to 54	29	12	8	1	0	1	0	0	0	51
55 to 59	8	13	8	7	3	0	0	0	0	39
60 to 64	14	8	10	12	3	0	0	0	0	47
65 to 69	5	9	7	11	9	5	1	0	0	47
70 & Up	5	3	7	4	3	2	4	0	2	30
Total	101	58	50	35	18	8	5	0	2	277

### **Age Distribution**





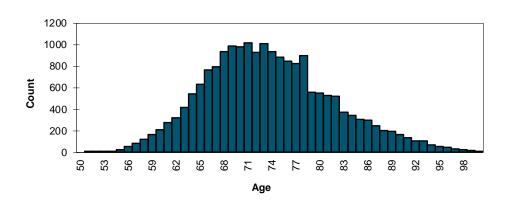




as of December 31, 2024

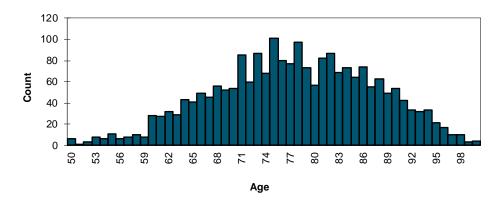
#### **STATE**

### Retirees



Count: 19,606 Average age: 73.7 Average benefit: \$16,835

### **Beneficiaries**



Count: 2,232 Average age: 76.9 Average benefit: \$10,539

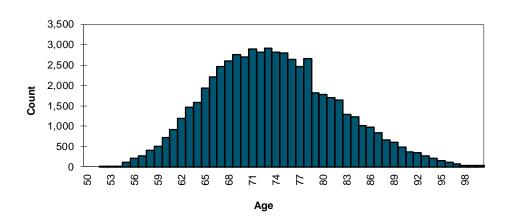




as of December 31, 2024

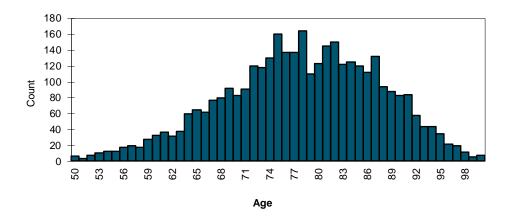
### **SCHOOL**

### Retirees



Count: 59,956 Average age: 73.7 Average benefit: \$17,713

### **Beneficiaries**



Count: 3,663 Average age: 77.3 Average benefit: \$10,495

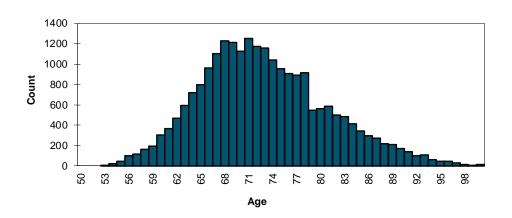




as of December 31, 2024

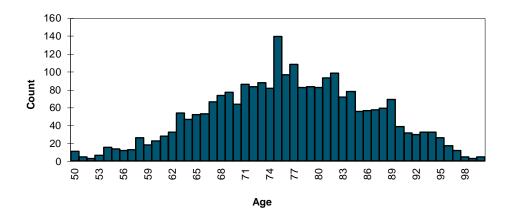
### **LOCAL**

#### **Retirees**



Count: 23,017 Average age: 73.0 Average benefit: \$15,798

#### **Beneficiaries**



Count: 2,567 Average age: 75.7 Average benefit: \$8,778

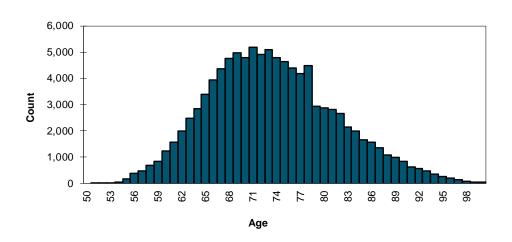




as of December 31, 2024

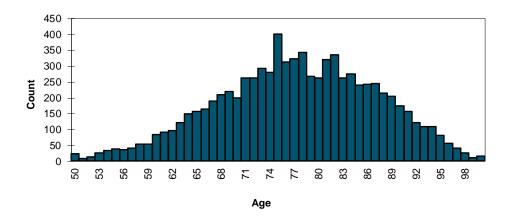
### **TOTAL KPERS**

### Retirees



Count: 102,579 Average age: 73.6 Average benefit: \$17,115

#### **Beneficiaries**



Count: 8,462 Average age: 76.7 Average benefit: \$9,986

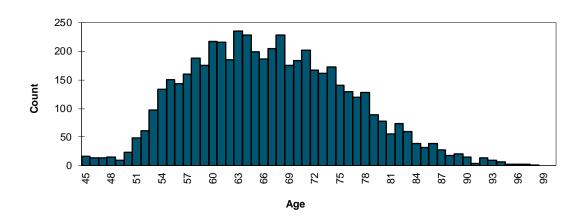




as of December 31, 2024

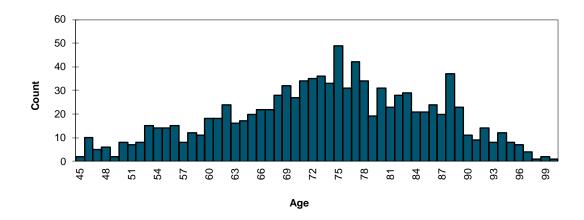
### KP&F

### Retirees



Count: 5,408 Average age: 66.4 Average benefit: \$41,657

### **Beneficiaries**



Count: 1,087 Average age: 70.9 Average benefit: \$19,860



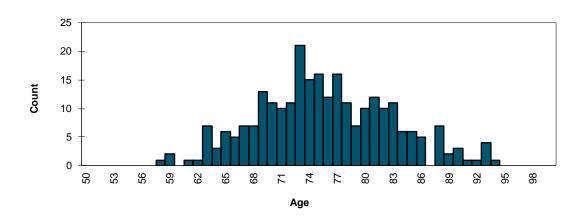


## KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM DISTRIBUTION OF RETIREES AND BENEFICIARIES

as of December 31, 2024

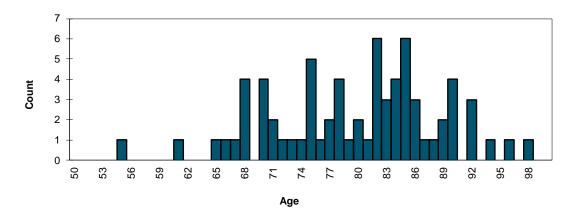
### **JUDGES**

### **Retirees**



Count: 262 Average age: 75.7 Average benefit: \$47,985

## **Beneficiaries**



Count: 72 Average age: 78.6 Average benefit: \$30,813



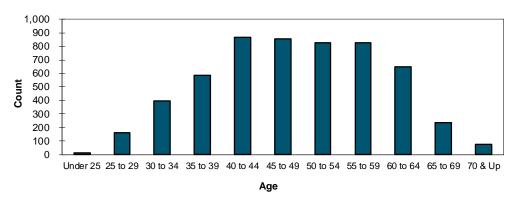


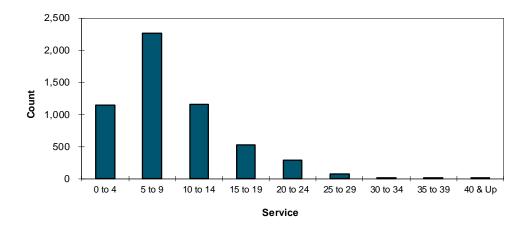
as of December 31, 2024

#### **STATE**

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	11	1	0	0	0	0	0	0	0	12
25 to 29	107	56	0	0	0	0	0	0	0	163
30 to 34	165	212	17	0	0	0	0	0	0	394
35 to 39	161	341	77	6	0	0	0	0	0	585
40 to 44	213	411	174	62	5	0	0	0	0	865
45 to 49	148	346	227	93	41	3	0	0	0	858
50 to 54	118	256	216	126	84	23	4	0	0	827
55 to 59	89	269	227	125	84	29	3	2	0	828
60 to 64	68	261	156	85	57	12	6	5	1	651
65 to 69	37	101	49	24	11	8	5	1	1	237
70 & Up	29	14	17	8	5	0	1	0	1	75
Total	1,146	2,268	1,160	529	287	75	19	8	3	5,495

## **Age Distribution**







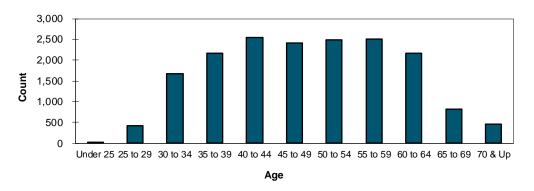


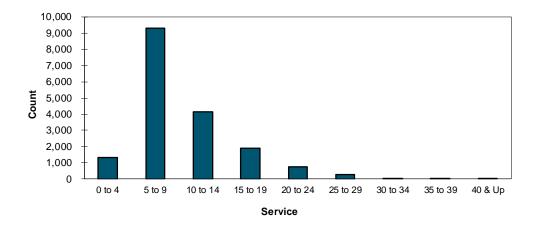
as of December 31, 2024

### **SCHOOL**

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	7	8	0	0	0	0	0	0	0	15
25 to 29	100	318	0	0	0	0	0	0	0	418
30 to 34	205	1,384	77	1	0	0	0	0	0	1,667
35 to 39	173	1,501	461	28	0	0	0	0	0	2,163
40 to 44	167	1,484	609	271	20	0	0	0	0	2,551
45 to 49	121	1,120	642	370	145	12	0	0	0	2,410
50 to 54	107	978	713	399	212	82	3	0	0	2,494
55 to 59	102	923	758	405	207	99	7	1	0	2,502
60 to 64	104	1,024	596	280	130	26	9	2	1	2,172
65 to 69	75	408	196	93	26	21	5	3	0	827
70 & Up	147	155	96	30	17	7	4	0	0	456
Total	1,308	9,303	4,148	1,877	757	247	28	6	1	17,675

## **Age Distribution**







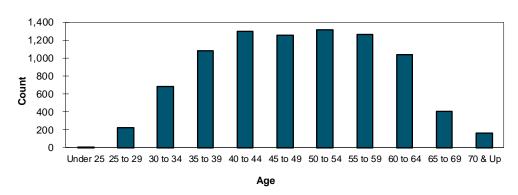


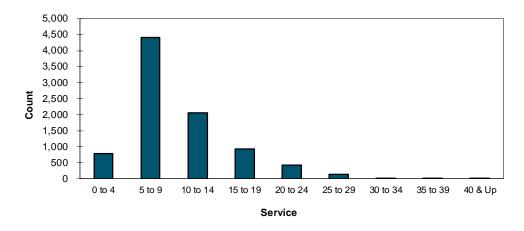
as of December 31, 2024

#### **LOCAL**

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	2	1	0	0	0	0	0	0	0	3
25 to 29	72	148	1	0	0	0	0	0	0	221
30 to 34	123	523	43	0	0	0	0	0	0	689
35 to 39	124	740	194	25	0	0	0	0	0	1,083
40 to 44	108	750	322	113	10	0	0	0	0	1,303
45 to 49	91	577	353	171	65	5	0	0	0	1,262
50 to 54	46	485	356	241	139	46	5	0	0	1,318
55 to 59	57	450	393	203	108	49	6	0	0	1,266
60 to 64	67	479	256	132	72	21	8	4	2	1,041
65 to 69	45	195	101	31	19	11	4	3	0	409
70 & Up	42	62	33	20	4	4	1	0	2	168
Total	777	4,410	2,052	936	417	136	24	7	4	8,763

## **Age Distribution**







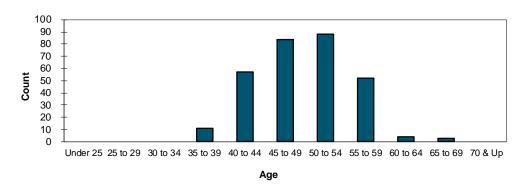


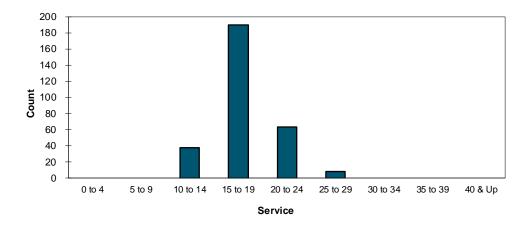
as of December 31, 2024

#### KP&F

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	4	7	0	0	0	0	0	11
40 to 44	0	0	8	43	6	0	0	0	0	57
45 to 49	0	0	7	48	23	6	0	0	0	84
50 to 54	0	0	7	52	28	1	0	0	0	88
55 to 59	0	0	12	34	5	1	0	0	0	52
60 to 64	0	0	0	4	0	0	0	0	0	4
65 to 69	0	0	0	2	1	0	0	0	0	3
70 & Up	0	0	0	0	0	0	0	0	0	0
Total	0	0	38	190	63	8	0	0	0	299

## Age Distribution







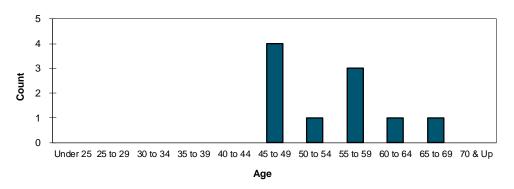


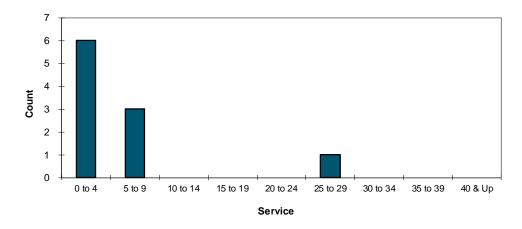
as of December 31, 2024

### **JUDGES**

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0
45 to 49	3	1	0	0	0	0	0	0	0	4
50 to 54	1	0	0	0	0	0	0	0	0	1
55 to 59	2	1	0	0	0	0	0	0	0	3
60 to 64	0	1	0	0	0	0	0	0	0	1
65 to 69	0	0	0	0	0	1	0	0	0	1
70 & Up	0	0	0	0	0	0	0	0	0	0
Total	6	3	0	0	0	1	0	0	0	10

## Age Distribution









### **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>	<b>Beneficiaries</b>
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 dividend rates over the past five years is contained in the following table:

	Applicable	Compound	
<u>Year</u>	Rate of Return	<u>Average</u>	<u>Dividend</u>
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%
2024	8.8%	6.9%	0.675%

**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 the KPERS1 and KPERS2 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 Employees +1

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

Merit Ir	ncrease*
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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%

<sup>\*</sup> 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:**

	<u>Sch</u>	<u>iool</u>	<u>St</u>	<u>ate</u>	<u>Local</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:

	Early Retirement			<u>Norr</u>	nal Retirer	<u>nent</u>	Rule of 85 (Tier 1 Only)		
•	<del></del> : 4	<b>T</b> ' 0	<b>T</b> : 0	<del></del> : 4	<b>T</b> ' 0	<b>T</b> : 0	1 <sup>St</sup> Year With	After 1 <sup>st</sup> Year	
<u>Age</u>	Tier 1	Tier 2	Tier 3	Tier 1	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	<u>ent</u>	<u>Norn</u>	nal Retirer	<u>nent</u>	Rule of 85	(Tier 1 Only)
							1 <sup>St</sup> Year With	After 1st Year
<u>Age</u>	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	85 Points	With 85 Points
53							18.0%	
54							18.0%	10.0%
55	4.0%	4.0%	3.0%				18.0%	10.0%
56	4.0%	4.0%	3.0%				18.0%	10.0%
57	4.0%	4.0%	3.0%				18.0%	10.0%
58	5.0%	5.0%	3.0%				18.0%	10.0%
59	5.0%	5.0%	5.0%				18.0%	10.0%
60	5.0%	5.0%	5.0%		18.0%	15.0%	18.0%	10.0%
61	10.0%	10.0%	5.0%		18.0%	10.0%	18.0%	15.0%
62		15.0%	5.0%	18.0%	18.0%	10.0%		18.0%
63		15.0%	5.0%	18.0%	18.0%	10.0%		18.0%
64		15.0%	5.0%	18.0%	18.0%	10.0%		18.0%
65				30.0%	30.0%	25.0%		30.0%
66				30.0%	30.0%	25.0%		30.0%
67-72				27.0%	27.0%	25.0%		27.0%
73				20.0%	20.0%	25.0%		20.0%
74				20.0%	20.0%	25.0%		20.0%
75				100.0%	100.0%	100.0%		100.0%







## **Local Members:**

	Early Retirement		Normal Retirement		Rule of 85 (Tier 1 Only)			
							1 <sup>St</sup> Year With	After 1st 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.

Years of	Rate of
<u>Service</u>	Increase*
1	8.50%
5	3.25%
10	1.15%
15	0.55%
20	0.00%
25	0.00%

<sup>\*</sup> 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

<u>etirement</u>	Normal Retirement		
<u>Rate</u>	<u>Age</u>	<u>Rate</u>	
5%	55	35%	
7%	56	30%	
7%	57	30%	
15%	58	35%	
30%	59	30%	
	60	30%	
	61	35%	
	62	100%	
	Rate 5% 7% 7% 15%	Rate         Age           5%         55           7%         56           7%         57           15%         58           30%         59           60         61	

## Tier 2

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







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%

<sup>\* 90%</sup> 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.





## <u>Judges</u>

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 used

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	\$30,000
KPF	\$50,100
Judges	N/A

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.





#### **Actuarial Methods**

## 1. Funding Method

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

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

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

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

In our opinion, the amortization policy meets the requirements of Actuarial Standard of Practice Number 4. The approach is intended to promote stable contributions, balance cost among generations of taxpayers and members, and ensure adequate advance funding of benefits. The amortization schedule will fully fund the UAL within 20 years, and the scheduled contributions







currently exceed the normal cost plus interest on the UAL, which means the UAL is being reduced.

## 2. Asset Valuation Method

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





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## APPENDIX D - GLOSSARY OF TERMS



The following are key terms used in the discussion of actuarial funding valuations. Actuarial measurements for other purposes, such as accounting, may use different terms.

Actuarial Accrued Liability The difference between the actuarial present value of

system benefits and the actuarial value of future normal costs. Also referred to as "accrued liability" or "actuarial

liability".

Actuarial Assumptions Estimates of future experience with respect to rates of

mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment

plus a provision for a long-term average rate of inflation.

Accrued Service Service credited under the system which was rendered

before the date of the actuarial valuation.

Actuarial Equivalent A single amount or series of amounts of equal actuarial

value to another single amount or series of amounts,

computed on the basis of appropriate assumptions.

Actuarial Cost Method A mathematical budgeting procedure for allocating the

dollar amount of the actuarial present value of retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial

funding method".

Experience Gain (Loss) The difference between actual experience and anticipated

experience, based on the actuarial assumptions, during the

period between two actuarial valuation dates.

Actuarial Present Value The amount of funds currently required to provide a

payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of

interest and by probabilities of payment.

Amortization Paying off an interest-discounted amount with periodic

payments of interest and principal, as opposed to paying off

with lump sum payment.



## APPENDIX D - GLOSSARY OF TERMS



valuation date.

valuation, i.e., active members and terminated members

entitled to a benefit in the future.

Normal Cost The actuarial present value of retirement system benefits

allocated to the current year by the actuarial cost method.

**Unfunded Actuarial Accrued** 

Liability

The difference between actuarial accrued liability and the valuation assets. Sometimes referred to as "unfunded

actuarial liability" or "unfunded accrued liability".

Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and

each time an actuarial loss is realized.

