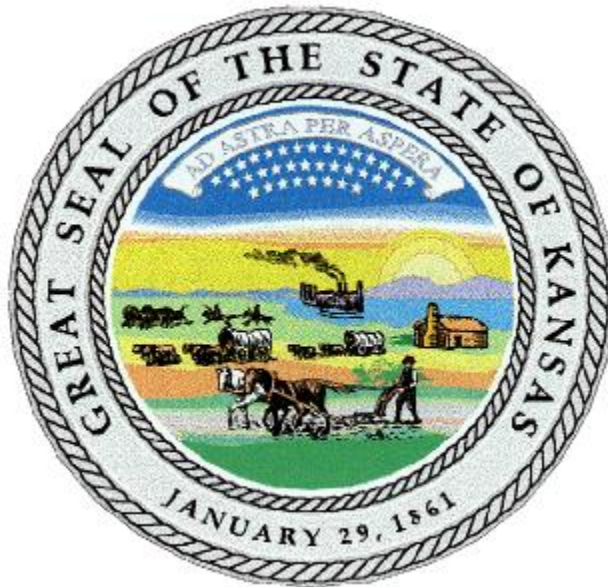


***Kansas Public Employees
Retirement System***



Valuation Report as of December 31, 2007



Kansas Public Employees Retirement System Actuarial Valuation Report

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July 9, 2008

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

Dear Members of Board:

At your request, we have completed an actuarial valuation of the Kansas Public Employees Retirement System as of December 31, 2007 for determining contributions for fiscal year 2011 for the State and 2010 for Local employers. The major findings of the valuation are contained in this report. There was no change in the actuarial methods from the prior valuation. The report reflects the new assumptions adopted by the Board in November, 2007, as a result of the Triennial Experience Study. The report also reflects the \$300 one-time payment granted to certain retirees and their joint annuitants by the 2008 Legislature. There were no other changes in the benefit provisions.

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

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board (ASB) and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting recommendations of the American Academy of Actuaries.

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

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

Milliman's work product was prepared exclusively for KPERS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning KPERS' operations, and uses KPERS' data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

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

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

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

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

MILLIMAN, Inc.

Sincerely,



Patrice A. Beckham, F.S.A.
Consulting Actuary



Brent A. Banister, F.S.A.
Actuary

SECTION I

BOARD SUMMARY

OVERVIEW

The Kansas Public Employees Retirement System is an umbrella organization which administers the following three statewide pension groups: the Kansas Public Employees Retirement System (KPERs), the Kansas Police and Firemen's Retirement System (KP&F) and the Kansas Retirement System for Judges (Judges). This report presents the results of the December 31, 2007 actuarial valuations for each of the Systems.

The primary purposes of performing actuarial valuations are to:

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

The 2008 Legislature passed legislation (House Bill 2390) which provides a \$300 one-time benefit payment to all retirees who retired on or before July 1, 1998, and have ten or more years of service credit and their joint survivors. The \$300 payment is contingent on the State's receipt of adequate expanded gaming revenues. For purposes of this valuation, we have assumed that expanded gaming revenues will exist and they will be sufficient to permit the \$300 one-time payment to be made, i.e. both the liability and assets reflect the payment.

There was no change in the actuarial methods used in the valuation. However, there was a change in the set of actuarial assumptions used in the December 31, 2007 actuarial valuation. The Board of Trustees adopted the new set of assumptions in November, 2007, following the completion of the Triennial Experience Study. The changes recommended by Milliman, Inc. and adopted by the Board of Trustees were:

KPERs

- Adjust the mortality rates to better fit observed patterns.
- Adjust some retirement rates.
- Change the termination of employment to be based solely on length of employment.
- Changes to the salary growth assumption (primarily for the School group).
- Minor adjustments to disability rates.
- Changes in the probability of electing a refund of contributions.

KP&F

- Adjust the mortality rates.
- Adjust some retirement rates.

Judges

- Adjust the mortality rates.
- Change the salary increase assumption from 5.5% to 4.5%.

In KPERs, State, School and Local employers do not necessarily contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap.

The statutory cap, which has been changed periodically, is currently 0.60% for the State, School and Local groups.

The valuation results provide a “snapshot” view of the System’s financial condition on December 31, 2007. The unfunded actuarial liability for the System as a whole increased by \$189 million due to various factors. A detailed analysis of the change in the unfunded actuarial liability from December 31, 2006 to December 31, 2007 is shown on page 6.

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

| System | December 31, 2007 Valuation | | Difference |
|--|-----------------------------|--------------------|------------|
| | Actuarial | Statutory | |
| State | 7.39% | 7.39% ³ | 0.00% |
| School ¹ | 12.48% | 8.17% | 4.31% |
| Local ¹ | 8.52% | 6.14% | 2.38% |
| Police & Fire - Uniform Rates ² | 12.86% | 12.86% | 0.00% |
| Judges | 19.49% | 19.49% | 0.00% |

| System | December 31, 2006 Valuation | | Difference |
|-------------------------------|-----------------------------|---------------------|------------|
| | Actuarial | Statutory | |
| State | 7.34% | 7.34% ³ | 0.00% |
| School | 12.07% | 7.57% | 4.50% |
| Local | 8.12% | 5.53% ⁴ | 2.59% |
| Police & Fire - Uniform Rates | 13.49% | 13.49% ⁵ | 0.00% |
| Judges | 20.50% | 20.50% | 0.00% |

- ¹ By statute, rates are allowed to increase by a maximum of 0.60% plus the cost of any benefit enhancements.
- ² For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 12.72% this year, which includes a payment of 0.50% for the debt service payment on the bonds issued for the 13th check. The uniform rate does not include the payment required to amortize the unfunded past service liability or any 15% excess benefit liability determined separately for each employer. (See Table 13.)
- ³ The difference between the statutory rate and the actuarial contribution rate times actual State payroll is deposited to the School assets.
- ⁴ This rate was recertified to 5.54% to reflect the cost of the one-time payment for retirees of Local employers in 2008.
- ⁵ This rate was recertified to 13.51% to reflect the cost of the one-time payment for retirees of Local employers in 2008.

The long term funding outlook for KPERS has improved due to legislation, Board action and strong investment performance in the last few years. The statutory contribution rate is projected to converge with the actuarial required contribution (ARC) rate before the end of the amortization period (2033). Therefore the System is in actuarial balance over the long term if all actuarial assumptions are met. However, the shortfall between the actuarial and statutory contribution rates will continue to produce increases in the UAL. As a result, the actuarial contribution rate is expected to increase until the ARC Date (defined as the date at which the actuarial and statutory contribution rates are equal) is reached.

The market value of assets is about 5% higher than the actuarial value. This is due to the use of an asset smoothing method and the delayed reflection of market experience in the actuarial value of assets. These deferred gains will be reflected over the next four years. However, the net impact on the actuarial value of assets will depend on actual experience in future years.

EXPERIENCE - ALL SYSTEMS COMBINED

December 31, 2006 – December 31, 2007

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, 2007. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and employers in the future to balance the System assets and liabilities.

Changes in the Systems' assets and liabilities impacted the change in the actuarial contribution rates between the December 31, 2006 and December 31, 2007 actuarial valuations. On the following pages each component is examined and quantified.

MEMBERSHIP

Below is a summary of the changes in active members (for KPERS) between the December 31, 2006 and December 31, 2007 actuarial valuations.

| | State | School | Local | KP&F | Judges | Total |
|-----------------------------|------------|--------------|------------|-----------|-----------|--------------|
| 12/31/2006 (Starting count) | 23,840 | 84,707 | 35,680 | 6,965 | 257 | 151,449 |
| New actives | 2,316 | 11,013 | 4,077 | 527 | 11 | 17,944 |
| Nonvested Terminations | 688 | 4,899 | 1,563 | 167 | 0 | 7,317 |
| Elected Refund | 409 | 1,212 | 960 | 95 | 0 | 2,676 |
| Vested Terminations | <u>395</u> | <u>917</u> | <u>539</u> | <u>47</u> | <u>2</u> | <u>1,900</u> |
| Total Withdrawals | 1,492 | 7,028 | 3,062 | 309 | 2 | 11,893 |
| Deaths | 22 | 65 | 35 | 6 | 0 | 128 |
| Disabilities | 88 | 99 | 74 | 15 | 0 | 276 |
| Early Retirements | 57 | 214 | 77 | 3 | 0 | 351 |
| Unreduced Retirements | <u>489</u> | <u>1,651</u> | <u>519</u> | <u>91</u> | <u>10</u> | <u>2,760</u> |
| Total Retirements | 546 | 1,865 | 596 | 94 | 10 | 3,111 |
| Other/Transfer | 16 | (195) | (76) | 69 | 5 | (181) |
| 12/31/2007 (Ending count) | 24,024 | 86,468 | 35,914 | 7,137 | 261 | 153,804 |

ASSETS

As of December 31, 2007, the System had total funds when measured on a market value basis, of \$14.2 billion, including the receivable of \$7 million from the State for the one-time cost-of-living payment and excluding assets held for the Group Insurance and Optional Life reserves. This was an increase of \$0.8 billion from the December 31, 2006 figure of \$13.4 billion. The components of the change in the market value of assets for the Retirement System (in millions) are set forth below.

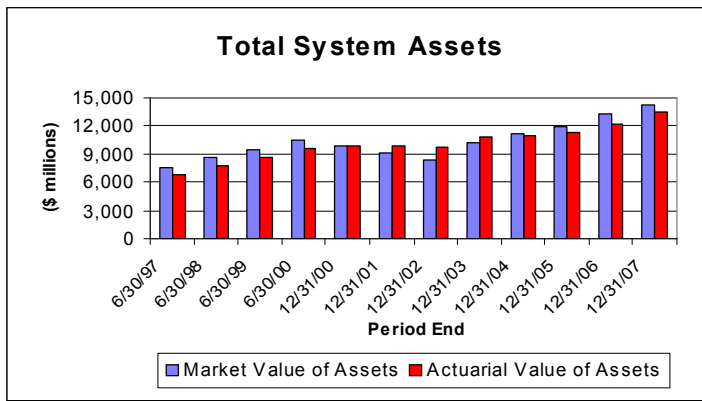
| | Market Value \$(millions) |
|-------------------------------------|------------------------------|
| Assets, December 31, 2006 | \$13,369 |
| • Employer and Member Contributions | 623 |
| • Benefit Payments and Expenses | (974) |
| • Investment Income | 1,143 |
| Assets, December 31, 2007 | \$14,161 |
| • Receivables | 7 |
| Adjusted Assets, December 31, 2007 | \$14,168 |

The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The smoothing method calculates the difference between the actual return and the expected return (assumed rate of return) on the market value of assets each year. The difference is recognized equally over a five-year period. See Tables 3A through 3F and 4 for the detailed development of the actuarial value of assets as of December 31, 2007 for each group.

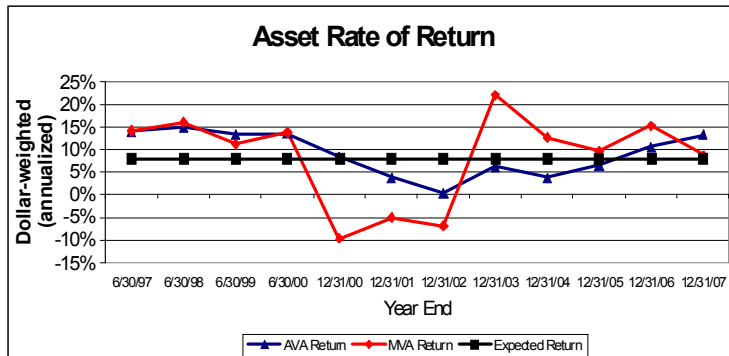
| | Actuarial Value \$(millions) |
|-------------------------------------|---------------------------------|
| Actuarial Value of Assets 12/31/06 | \$12,189 |
| • Employer and Member Contributions | 623 |
| • Receivable | 7 |
| • Benefit Payments and Expenses | (974) |
| • Investment Income | 1,588 |
| Actuarial Value of Assets 12/31/07 | \$13,433 |

The actuarial value of assets as of December 31, 2007, was \$13.433 billion. The annualized dollar-weighted rate of return for 2007 measured on the actuarial value of assets was approximately 13.2% and measured on the market value of assets, as reported by KPERS, was 8.7%, net of investment and administrative expenses.

Due to the use of an asset smoothing method, there is \$735 million of net deferred investment gain experience that has not yet been recognized. This deferred investment gain will gradually be reflected in the actuarial value of assets over the next four years, but may be offset by actual investment experience if less favorable than assumed.



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



The rate of return on the actuarial (smoothed) value of assets has been less volatile than the market value return. Absent losses in future years, rates of return are expected to be above 8% as the deferred investment gains are reflected in the actuarial value of assets.

LIABILITIES

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

The liabilities in this report reflect the increase due to the one-time payment of \$300 to retirees and their joint survivors who retired on or before July 1, 1998, with ten or more years of service, that is expected to be paid in the fall of 2008.

The \$300 one-time payment to retirees increased the actuarial liability in total by approximately \$9 million. The lump-sum payment from the State of \$7 million results in an increase of \$2 million in the unfunded actuarial liability.

The unfunded actuarial liability (\$ million) by group is summarized below:

| | State | School | Local | KP&F | Judges |
|------------------------------|--------------|--------------|--------------|--------------|------------|
| Actuarial Liability | \$3,422 | \$10,316 | \$3,147 | \$1,968 | \$ 132 |
| Actuarial Value of Assets | <u>2,971</u> | <u>6,454</u> | <u>2,206</u> | <u>1,684</u> | <u>117</u> |
| Unfunded Actuarial Liability | \$ 451 | \$ 3,862 | \$ 941 | \$ 284 | \$ 15 |

See Table 6 for the detailed development of the Actuarial Liability by System. The calculation of the Unfunded Actuarial Liability by System is shown in Table 8.

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

Other factors influencing the UAL from year to year include actual experience versus that expected based on the actuarial assumptions (on both assets and liabilities), changes in actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (calendar year 2007). The State, School and Local groups all had a net liability loss for the year, largely from salary experience. KP&F and Judges also had liability gains for the 2007 year. There was an experience gain from investment return on the actuarial value of assets for all groups.

Between December 31, 2006 and December 31, 2007 the change in the unfunded actuarial liabilities for the System as a whole was as follows (in millions):

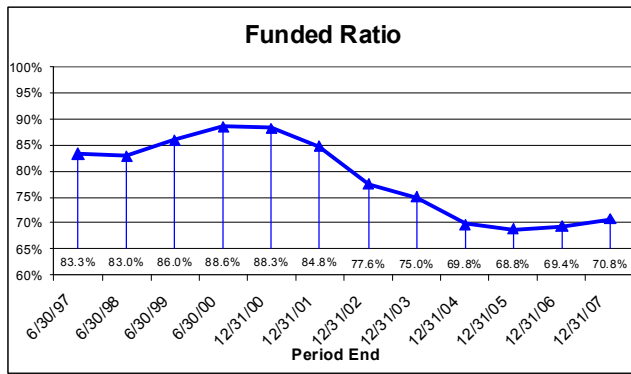
| | <u>\$millions</u> |
|---|-------------------|
| Unfunded Actuarial Liability, December 31, 2006 | \$ 5,364 |
| • effect of contribution cap/time lag | 251 |
| • expected increase due to amortization method | 78 |
| • gain from investment return | (626) |
| • demographic experience ¹ | 144 |
| • all other experience | (45) |
| • change in actuarial assumptions | 384 |
| • change in benefit provisions | 2 |
| Unfunded Actuarial Liability, December 31, 2007 | 5,552 |

¹Liability loss is about 0.8% of total actuarial liability.

A detailed summary of the change in the unfunded actuarial liability by System is shown on page 12.

An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial liability. The change to the Entry Age Normal actuarial cost method in the 2003 valuation and the change in actuarial assumptions in the 2004 and 2007 valuations both resulted in an increase in the UAL and a decrease in the funded status. The funded status information is shown below (in millions).

| | 12/31/02 | 12/31/03 | 12/31/04 | 12/31/05 | 12/31/06 | 12/31/07 |
|------------------------------------|----------|----------|----------|----------|----------|----------|
| Funded Ratio | 77.6% | 75.2% | 69.8% | 68.8% | 69.4% | 70.8% |
| Unfunded Actuarial Liability (UAL) | \$2,829 | \$3,586 | \$4,743 | \$5,152 | \$5,364 | \$5,552 |



Due to strong investment returns, the funded status of the System generally improved in the last half of the 1990's. Changes in actuarial assumptions and methods, coupled with investment returns below the assumed rate, significantly reduced the funded ratio in 2002 to 2005. However, the funded ratio has stabilized around 70%.

Given the current funded status of the System, the amortization method, the amortization period, and the scheduled increases in employer contribution rates, the unfunded actuarial liability is expected to continue to grow and the funded ratio is expected to decline for many years.

CONTRIBUTION RATES

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

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

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

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

The contribution rates in the December 31, 2007 valuation will set rates for fiscal year end 2011 for the State and 2010 for Local employers.

In KPERS, State, School and Local employers do not necessarily contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. The statutory cap, which has been changed periodically, is currently 0.60% for all groups. The actuarial contribution rate of 7.39% for the State is less than the combined State/School statutory contribution rate of 8.17%. As a result, the difference between 8.17% and 7.39%, or 0.78%, of the expected State payroll for FY 2011 will be deposited into the School assets.

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

| System | December 31, 2007 Valuation | | Difference |
|--|-----------------------------|--------------------|------------|
| | Actuarial | Statutory | |
| State | 7.39% | 7.39% ³ | 0.00% |
| School ¹ | 12.48% | 8.17% | 4.31% |
| Local ¹ | 8.52% | 6.14% | 2.38% |
| Police & Fire - Uniform Rates ² | 12.86% | 12.86% | 0.00% |
| Judges | 19.49% | 19.49% | 0.00% |

¹ By statute, rates are allowed to increase by a maximum of 0.60% plus the cost of any benefit enhancements.

² For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 12.72% which includes a payment of 0.50% for the debt service payment on the bonds issued for the 13th check. The uniform rate does not include the payment required to amortize the unfunded past service liability or any 15% excess benefit liability determined separately for each employer. (See Table 13.)

³ The difference between 8.17% and the actuarial contribution rate of 7.39% times actual State payroll for FY 2011 will be deposited to the School assets.

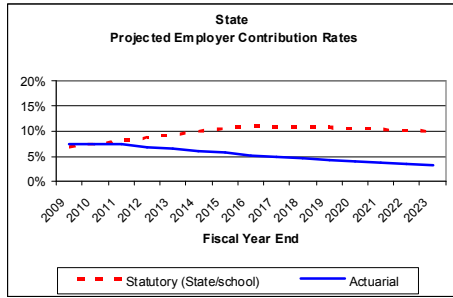
Separate employer contribution rates are calculated for two subgroups of the State. Two Correctional Employee Groups, one with normal retirement age 55 and the other with normal retirement age 60 have higher contribution rates to finance the earlier normal retirement age. The actuarial contribution rates for the Correctional Employee Groups are shown below:

| | <u>Actuarial Rate</u> | <u>Statutory Rate</u> |
|--------------------|-----------------------|-----------------------|
| Retirement Age 55: | 9.20% | 8.64% |
| Retirement Age 60: | 8.55% | 8.50% |

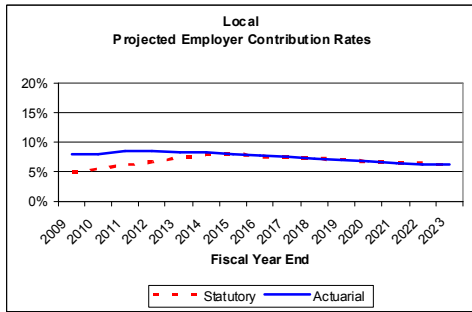
The change in the actuarial contribution rate from December 31, 2006 to December 31, 2007 and the primary components thereof are shown in the table on page 12.

Due to statutory caps, the full actuarial contribution rate is not contributed for the School and Local groups. Based on the current valuation, there is a difference (shortfall) between the actuarial and statutory contribution rates of 4.31% and 2.38% respectively for the School and Local groups. Assuming an 8% return on the market value of assets for 2008 and beyond, all other actuarial assumptions are met in the future, and the current level of statutory caps, the ARC Date (statutory and actuarial contribution rates are equal) for the School group is 2016 and the Local group is 2015.

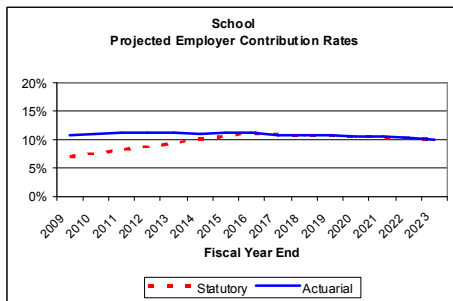
The rate of return on the market value of assets was about 8.7% for 2007, but the return on the actuarial value of assets was around 13.2% due to recognition of some of the deferred investment experience. This generated an actuarial gain that decreased the UAL. As the remainder of the deferred investment experience is recognized in the actuarial value of assets in future years, the contribution rate for the UAL payment can be expected to decrease, absent unfavorable experience to offset the previously unrecognized gains.



Although the State will be contributing the ARC rate in 2010 and later, the statutory rate will continue to increase, with the difference between the statutory and actuarial contribution rates applied to fund the School group.

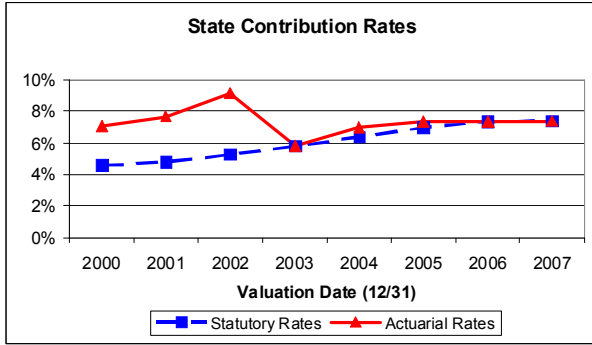


The ARC date is projected to occur in approximately 2015, assuming all actuarial assumptions are met in future years. Actual experience in future years will impact the ARC date.

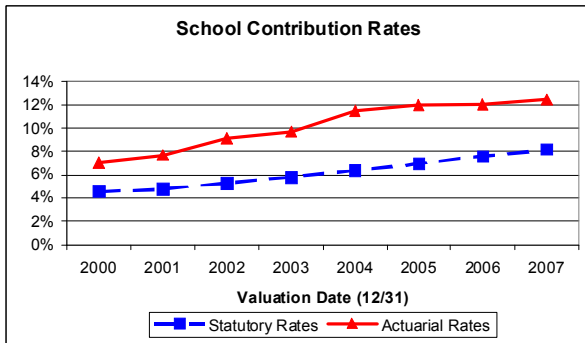


The statutory rate is expected to increase steadily before reaching the ARC Date in approximately 2016. Future experience, especially investment returns, will influence the movement in the ARC Date.

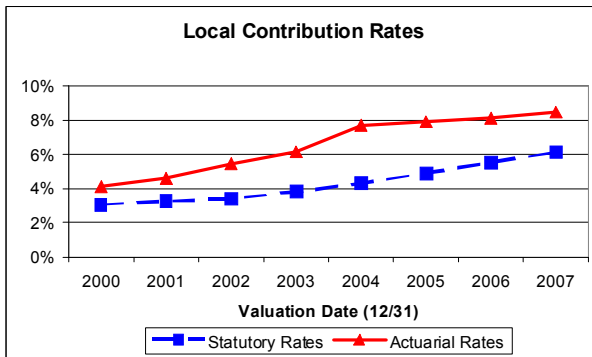
Historical contribution rates for each group are shown on the following pages. Please note that prior to the December 31, 2003 valuation, one contribution rate was developed for the State and School together as one group. Legislation passed in 2004 split the contribution rate calculations into two separate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



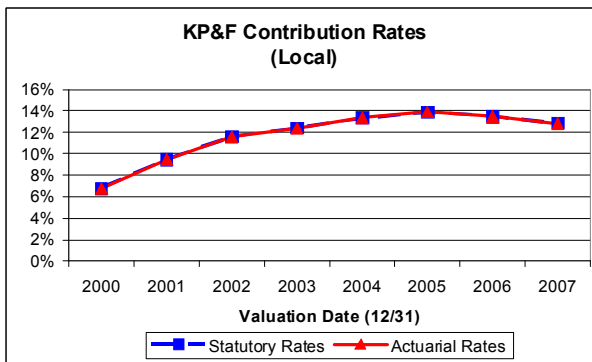
The split of the State group into a separate group with the 2003 valuation, coupled with the bond issue, lowered the actuarial contribution rate. The State's statutory contribution rate is again equal to the actuarial contribution rate in this valuation.



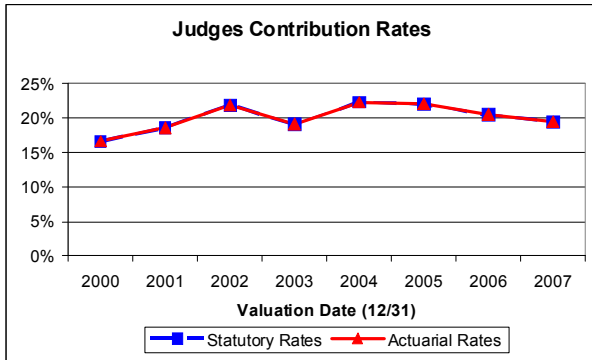
Due to investment experience, changes in actuarial methods and assumptions, and the magnitude of the difference between the actuarial and statutory contribution rates, the funded status of the School group has declined and the actuarial contribution rate has increased.



The Local contribution rate has also been impacted by changes in actuarial assumptions and methods as well as investment performance. As a result, a significant difference still exists between the statutory and actuarial contribution rate. Legislation passed in 2004 provided for increased statutory caps, under which the statutory and actuarial rates are expected to converge if all actuarial assumptions are met in future years.



Investment experience, coupled with a change in actuarial methodology, dramatically increased the contribution rates in the first half of the period. Favorable investment experience in the latter part of the period has helped to stabilize the rates.



Significant changes in the actuarial assumptions in the 2004 valuation, coupled with investment experience in recent years, have generally resulted in higher contribution rates.

Over the past few years, the Retirement System, the Governor and the Legislature have given a high priority to the development of a comprehensive plan to address the long-term funding of KPERS. HB2014, 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 FY2006, 0.50% in FY2007 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 SB520, 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. SB520 also increased the statutory cap for Local employers from 0.15% to 0.40% in FY2006, 0.50% in FY2007 and 0.60% in FY2008 and beyond and also split the State/School group into separate groups for purposes of determining employer contribution rates.

The 2005 Legislature clarified the determination of KPERS State Group and School Group employer contributions by specifying that, in any year in which the State employer rate is less than the combined State/School rate, the Legislature shall appropriate a supplemental amount to the School group, equal to the difference between the State's contributions using the combined rate and contributions using the State Group rate.

The 2007 Legislature passed SB362 which created a new benefit structure for members first employed on or after July 1, 2009. The change was made partially due to long term funding considerations, but also in response to demographic changes in the membership.

Based on the December 31, 2007 actuarial valuation results and the current statutory caps, the statutory contribution rates for the State, School and Local groups are projected to converge with the actuarial required contribution (ARC) rate before the end of the amortization period. As a result, the System is in long term actuarial balance. However, these projections assume that all actuarial assumptions are met exactly in each future year. To the extent that actual experience deviates from that expected, the ARC Date (date at which the statutory and actuarial rates are expected to converge), as well as the ARC rate, will vary. In particular, due to the School group's funded status, the projected ARC Date and rate are very sensitive to changes in the UAL. Unfavorable experience for this group could result in a situation where the statutory contribution rate never reaches the actuarial required contribution (ARC) rate. Key funding measurements should continue to be closely monitored in order to determine whether a change in the contribution cap is needed.

SUMMARY OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY

DECEMBER 31, 2007 VALUATION

(\$millions)

| | State | School | Local | KP&F | Judges | Total |
|---|---------|-----------|---------|---------|--------|------------------------|
| UAL in 12/31/2006 Valuation Report | \$453.9 | \$3,680.7 | \$892.6 | \$321.5 | \$14.9 | \$5,363.6 ¹ |
| • Effect of contribution cap/timing | 12.5 | 190.1 | 52.6 | (4.8) | 0.8 | 251.2 |
| • Expected increase due to method | 5.6 | 54.9 | 13.0 | 4.4 | (0.2) | 77.7 |
| • Actual vs. expected experience | | | | | | |
| • Investment return | (123.4) | (324.9) | (106.7) | (66.7) | (4.3) | (626.0) |
| • Demographic experience | 48.2 | 70.9 | 11.9 | 12.2 | 1.2 | 144.4 |
| • All other experience | (10.4) | (17.9) | (8.0) | (7.2) | (1.4) | (44.9) |
| • Change in assumptions | 64.2 | 207.8 | 83.5 | 24.4 | 3.8 | 383.7 |
| • Change in benefit provisions | 0.0 | 0.0 | 1.6 | 0.5 | 0.0 | 2.1 |
| UAL in 12/31/2007 Valuation Report | \$450.6 | \$3,861.6 | \$940.5 | \$284.3 | \$14.8 | \$5,551.8 |

¹May not add due to rounding.

**SUMMARY OF
CHANGES IN ACTUARIAL CONTRIBUTION RATE
BY SYSTEM
AS OF DECEMBER 31, 2007**

| Percentage of Payroll | State | School | Local | KP&F ¹ | Judges |
|--|--------|--------|--------|-------------------|-------------------|
| Actuarial Contribution Rate in 12/31/2006 Valuation | 7.34% | 12.07% | 8.10% | 13.49% | 20.50% |
| Adjustment for 2007 COLA | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 |
| Change Due to Amortization of UAL | | | | | |
| • effect of contribution cap/time lag | 0.08 | 0.38 | 0.24 | (0.07) | 0.28 |
| • amortization method | 0.00 | 0.00 | 0.00 | 0.00 | (0.21) |
| • investment experience | (0.81) | (0.65) | (0.48) | (1.03) | (1.43) |
| • liability experience | 0.32 | 0.14 | 0.05 | 0.19 | 0.41 |
| • all other experience | (0.19) | (0.20) | (0.07) | (0.22) | (0.61) |
| • change in assumptions | 0.42 | 0.41 | 0.38 | 0.38 | 1.26 |
| • change in benefit provisions | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| Change in Normal Cost Rate | | | | | |
| • change in benefit provisions | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| • change in assumptions | 0.29 | 0.30 | 0.28 | 0.12 | (0.91) |
| • all other experience | (0.06) | 0.02 | 0.00 | (0.02) | 0.20 ² |
| Actuarial Contribution Rate in 12/31/2007 Valuation | 7.39% | 12.48% | 8.52% | 12.86% | 19.49% |

¹Contribution rate for Local employers only.

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

SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL
as of
DECEMBER 31, 2007 VALUATION

| %(millions) | As Reported on Valuation Date | | | | | | | | | |
|---------------------------------------|-------------------------------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| | 6/30/94 | 6/30/95 | 6/30/96 | 6/30/97 | 6/30/98 | 6/30/99 | 6/30/00 | 12/31/00 | 12/31/01 | 12/31/02 |
| Actual Experience vs. Assumed | | | | | | | | | | |
| • Investment | \$(102) | \$(143) | \$(280) | \$(323) | \$(413) | \$(360) | \$(441) | \$(23) | \$350 | \$644 |
| • Other | 320 | 72 | 136 | 157 | 104 | 46 | 99 | 84 | (9) | 68 |
| Assumption Changes | 0 | (96) | 0 | 0 | 350 | 0 | 0 | (206) | 0 | 0 |
| Changes in Data/Procedures | 244 | 0 | 0 | 0 | 0 | 21 | 71 | 145** | 5 | 177** |
| Change in Cost Method | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effect of Contribution Cap/Lag | * | 95 | 70 | 63 | 54 | 78 | 66 | 60 | 115 | 143 |
| Amortization Method | * | 47 | 38 | 35 | 32 | 30 | 22 | 12 | 14 | 21 |
| Change in Benefit Provisions | 75 | 0 | 0 | 0 | 88 | 0 | 19 | 0 | 0 | 37 |
| Bond Issue | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (41) |
| Total | \$537 | \$(25) | \$(36) | \$(68) | \$215 | \$(194) | \$(164) | \$72 | \$475 | \$1,048 |

*Not calculated for this year.

Unfunded actuarial liability 6/30/93: \$ 968 million
Unfunded actuarial liability 12/31/07: \$ 5,552 million

SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL
as of
DECEMBER 31, 2007 VALUATION (continued)

| \$(millions) | As Reported on Valuation Date | | | | | |
|---------------------------------------|-------------------------------|----------|----------|----------|----------|-----------|
| | 12/31/03 | 12/31/04 | 12/31/05 | 12/31/06 | 12/31/07 | Total |
| Actual Experience vs. Assumed | | | | | | |
| • Investment | \$140 | \$456 | \$167 | \$(293) | \$(626) | \$(1,256) |
| • Other | (32) | 16 | (84) | 139 | 99 | 1,215 |
| Assumption Changes | 0 | 437 | (5) | (0) | 384 | 864 |
| Changes in Data/Procedures | (286)*** | 0 | 0 | 0 | 0 | 377 |
| Change in Cost Method | 1,147 | 0 | 0 | 0 | 0 | 1,147 |
| Effect of Contribution Cap/Lag | 178 | 179 | 247 | 258 | 251 | 1,857 |
| Amortization Method | 47 | 68 | 84 | 83 | 78 | 611 |
| Change in Benefit Provisions | 3 | 1 | 0 | 24 | 2 | 249 |
| Bond Issue | (440) | 0 | 0 | 0 | 0 | (481) |
| Total | \$757 | \$1,157 | \$409 | \$211 | \$188 | \$4,583 |

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

***Change in asset valuation method.

Unfunded actuarial liability 6/30/93: \$ 968 million
Unfunded actuarial liability 12/31/07: \$ 5,552 million

SUMMARY OF PRINCIPAL RESULTS

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (STATE)

| | 12/31/2007 Valuation | 12/31/2006 Valuation | % Change |
|---|-------------------------|-------------------------|----------|
| 1. PARTICIPANT DATA | | | |
| Number of: | | | |
| Active Members | 24,024 | 23,840 | 0.8 % |
| Retired Members and Beneficiaries | 14,994 | 14,937 | 0.4 |
| Inactive Members | 6,025 | 5,997 | 0.5 |
| Total Members | 45,043 | 44,774 | 0.6 |
| Projected Annual Salaries of Active Members | \$ 954,472,949 | \$ 887,116,943 | 7.6 |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 167,939,366 | \$ 162,078,502 | 3.6 |
| 2. ASSETS AND LIABILITIES | | | |
| Total Actuarial Liability | \$ 3,422,120,738 | \$ 3,184,451,649 | 7.5 |
| Assets for Valuation Purposes | 2,971,538,701 | 2,730,530,798 | 8.8 |
| Unfunded Actuarial Liability | 450,582,037 | 453,920,851 | |
| 3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL | | | |
| Normal Cost | 4.13% | 3.90% | |
| Amortization of Unfunded Actuarial and Debt Service | <u>3.26%</u> | <u>3.44%</u> | |
| Actuarial Contribution Rate | 7.39% | 7.34% | |
| Statutory Employer Contribution Rate* | <u>7.39%</u> | <u>7.34%</u> | |

* Statutory Employer Contribution Rate may not exceed last year's rate by more than rate increase limit of 0.60%. This rate does not include the contribution rate for the Death and Disability Program.

SUMMARY OF PRINCIPAL RESULTS

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (SCHOOL)

| | 12/31/2007 Valuation | 12/31/2006 Valuation | % Change |
|---|-------------------------|-------------------------|----------|
| 1. PARTICIPANT DATA | | | |
| Number of: | | | |
| Active Members | 86,468 | 84,707 | 2.1 % |
| Retired Members and Beneficiaries | 35,412 | 34,389 | 3.0 |
| Inactive Members | 23,653 | 23,225 | 1.8 |
| Total Members | 145,533 | 142,321 | 2.3 |
| Projected Annual Salaries of Active Members | \$ 3,172,108,563 | \$ 2,985,385,666 | 6.3 |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 444,027,093 | \$ 417,087,582 | 6.5 |
| 2. ASSETS AND LIABILITIES | | | |
| Total Actuarial Liability | \$ 10,316,004,061 | \$ 9,550,731,974 | 8.0 |
| Assets for Valuation Purposes | 6,454,380,538 | 5,870,070,892 | 10.0 |
| Unfunded Actuarial Liability | 3,861,623,523 | 3,680,661,082 | |
| 3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL | | | |
| Normal Cost | 4.61% | 4.29% | |
| Amortization of Unfunded Actuarial and Debt Service | <u>7.87%</u> | <u>7.78%</u> | |
| Actuarial Contribution Rate | 12.48% | 12.07% | |
| Statutory Employer Contribution Rate* | <u>8.17%</u> | <u>7.57%</u> | |

* Statutory Employer Contribution Rate may not exceed last year's rate by more than rate increase limit of 0.60%. This rate does not include the contribution rate for the Death and Disability Program.

SUMMARY OF PRINCIPAL RESULTS

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (STATE/SCHOOL)

| | 12/31/2007 Valuation | 12/31/2006 Valuation | % Change |
|---|-------------------------|-------------------------|----------|
| 1. PARTICIPANT DATA | | | |
| Number of: | | | |
| Active Members | 110,492 | 108,547 | 1.8 % |
| Retired Members and Beneficiaries | 50,406 | 49,326 | 2.2 |
| Inactive Members | 29,678 | 29,222 | 1.6 |
| Total Members | 190,576 | 187,095 | 1.9 |
| | | | |
| Projected Annual Salaries of Active Members | \$ 4,126,581,512 | \$ 3,872,502,609 | 6.6 |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 611,966,459 | \$ 579,166,084 | 5.7 |
| 2. ASSETS AND LIABILITIES | | | |
| Total Actuarial Liability | \$ 13,738,124,799 | \$ 12,735,183,623 | 7.9 |
| Assets for Valuation Purposes | 9,425,919,239 | 8,600,601,690 | 9.6 |
| Unfunded Actuarial Liability | 4,312,205,560 | 4,134,581,933 | |
| 3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL | | | |
| Normal Cost | 4.50% | 4.20% | |
| Amortization of Unfunded Actuarial and Debt Service | <u>6.80%</u> | <u>6.78%</u> | |
| Actuarial Contribution Rate | 11.30% | 10.98% | |
| Statutory Employer Contribution Rate* | <u>8.17%</u> | <u>7.57%</u> | |

* Statutory Employer Contribution Rate may not exceed last year's rate by more than rate increase limit of 0.60%. This rate does not include the contribution rate for the Death and Disability Program.

SUMMARY OF PRINCIPAL RESULTS

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (LOCAL)

| | 12/31/2007 Valuation | 12/31/2006 Valuation | % Change |
|---|-------------------------|-------------------------|----------|
| 1. PARTICIPANT DATA | | | |
| Number of: | | | |
| Active Members | 35,914 | 35,680 | 0.7 % |
| Retired Members and Beneficiaries | 12,761 | 12,482 | 2.2 |
| Inactive Members | 10,373 | 10,298 | 0.7 |
| Total Members | 59,048 | 58,460 | 1.0 |
| Projected Annual Salaries of Active Members | \$ 1,387,401,497 | \$ 1,318,131,075 | 5.3 |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 108,829,381 | \$ 102,399,977 | 6.3 |
| 2. ASSETS AND LIABILITIES | | | |
| Total Actuarial Liability | \$ 3,147,020,449 | \$ 2,862,278,719 | 9.9 |
| Assets for Valuation Purposes | 2,206,473,161 | 1,969,679,136 | 12.0 |
| Unfunded Actuarial Liability | 940,547,288 | 892,599,583 | |
| 3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL | | | |
| Normal Cost | 4.14% | 3.86% | |
| Amortization of Unfunded Actuarial and Supplemental Liability | <u>4.38%</u> | <u>4.26%</u> | |
| Actuarial Contribution Rate | 8.52% | 8.12% | |
| Statutory Employer Contribution Rate* | <u>6.14%</u> | <u>5.54%</u> | |

* Statutory Employer Contribution Rate exceeds last year's rate by the statutory rate increase limit of 0.60%. This rate does not include the contribution rate for the Death and Disability Program. The rate for the 12/31/06 valuation was recertified to 5.54% to reflect the additional 0.01% contribution to fund the 2008 one-time payment to certain retirees.

SUMMARY OF PRINCIPAL RESULTS

KANSAS POLICE AND FIREMEN'S RETIREMENT SYSTEM

| | 12/31/2007 Valuation | 12/31/2006 Valuation | % Change |
|---|-------------------------|-------------------------|----------|
| 1. PARTICIPANT DATA | | | |
| Number of: | | | |
| Active Members | 7,137 | 6,965 | 2.5 % |
| Retired Members and Beneficiaries | 3,755 | 3,785 | (0.8) |
| Inactive Members | 1,318 | 1,320 | (0.2) |
| Total Members | 12,210 | 12,070 | 1.2 |
| Projected Annual Salaries of Active Members | \$ 408,162,049 | \$ 383,199,478 | 6.5 |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 92,223,463 | \$ 87,418,444 | 5.5 |
| 2. ASSETS AND LIABILITIES | | | |
| Total Actuarial Liability | \$ 1,968,168,480 | \$ 1,836,524,837 | 7.2 |
| Assets for Valuation Purposes | 1,683,915,313 | 1,514,988,606 | 11.2 |
| Unfunded Actuarial Liability | 284,253,167 | 321,536,231 | |
| 3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL | | | |
| Normal Cost | 8.17% | 8.07% | |
| Amortization of Unfunded Actuarial and Supplemental Liability | 4.69% | 5.44% | |
| Actuarial Contribution Rate (Local Employers) | 12.86% | 13.51% | |
| Statutory Employer Contribution Rate* | 12.86% | 13.51% | |

* The Statutory Employer Contribution Rate is equal to the Actuarial Rate. This is referred to as the "Uniform" rate, and varies for State and Local employers. The total contribution is equal to the appropriate uniform rate plus the payment required to amortize any unfunded past service liability or 15% excess benefit liability, determined separately for each employer. The contribution rate for Local employers for the 12/31/06 valuation was recertified to 13.51% to reflect the additional 0.02% contribution to fund the 2008 one-time payment to certain retirees.

SUMMARY OF PRINCIPAL RESULTS

KANSAS RETIREMENT SYSTEM FOR JUDGES

| | 12/31/2007 Valuation | 12/31/2006 Valuation | % Change |
|---|-------------------------|-------------------------|----------|
| 1. PARTICIPANT DATA | | | |
| Number of: | | | |
| Active Members | 261 | 257 | 1.6 % |
| Retired Members and Beneficiaries | 180 | 172 | 4.7 |
| Inactive Members | 14 | 18 | (22.2) |
| Total Members | 455 | 447 | 1.8 |
| Projected Annual Salaries of Active Members | \$ 27,083,186 | \$ 25,360,133 | 6.8 |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 6,092,952 | \$ 5,546,754 | 9.8 |
| 2. ASSETS AND LIABILITIES | | | |
| Total Actuarial Liability | \$ 131,601,196 | \$ 118,803,324 | 10.8 |
| Assets for Valuation Purposes | 116,807,301 | 103,928,012 | 12.4 |
| Unfunded Actuarial Liability | 14,793,895 | 14,875,312 | |
| 3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL | | | |
| Normal Cost | 14.49% | 15.20% | |
| Amortization of Unfunded Actuarial and Supplemental Liability | <u>5.00%</u> | <u>5.30%</u> | |
| Actuarial Contribution Rate | 19.49% | 20.50% | |
| Statutory Employer Contribution Rate* | <u>19.49%</u> | <u>20.50%</u> | |
| <p>* Statutory Employer Contribution Rate is equal to the Actuarial Rate. This rate excludes the contribution for the Death and Disability Program.</p> | | | |

SUMMARY OF PRINCIPAL RESULTS

ALL SYSTEMS COMBINED

| | 12/31/2007 Valuation | 12/31/2006 Valuation | % Change |
|---|-------------------------|-------------------------|----------|
| 1. PARTICIPANT DATA | | | |
| Number of: | | | |
| Active Members | 153,804 | 151,449 | 1.6 % |
| Retired Members and Beneficiaries | 67,102 | 65,765 | 2.0 |
| Inactive Members | 41,383 | 40,858 | 1.3 |
| Total Members | 262,289 | 258,072 | 1.6 |
| Projected Annual Salaries of Active Members | \$ 5,949,228,244 | \$ 5,599,193,295 | 6.3 |
| Annual Retirement Payments for Retired Members and Beneficiaries | \$ 819,112,255 | \$ 774,531,259 | 5.8 |
| 2. ASSETS AND LIABILITIES | | | |
| Total Actuarial Liability | \$ 18,984,914,924 | \$ 17,552,790,504 | 8.2 |
| Assets for Valuation Purposes | 13,433,115,014 | 12,189,197,444 | 10.2 |
| Unfunded Actuarial Liability | 5,551,799,910 | 5,363,593,060 | |

SECTION 2

SCOPE OF THE REPORT

This report presents the actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2007. 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.

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, 2007, as amended by changes enacted by the 2008 Legislature.
- 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.

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, market values of assets provide a basis for measuring investment performance from time to time. At December 31, 2007 the market value of assets (excluding receivables) for the Retirement System was \$14.168 billion. Table 1 is a comparison, at market values, of System assets as of December 31, 2007, and December 31, 2006, in total and by investment category. Table 2 summarizes the change in the market value of assets from December 31, 2006 to December 31, 2007 by System.

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 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, 2007.

TABLE 1
ANALYSIS OF NET ASSETS AT MARKET VALUE

| | <u>December 31, 2007</u> | | | <u>December 31, 2006</u> | | |
|---|--------------------------|--------------|----------|--------------------------|--------------|----------|
| | <u>Amount</u> | <u>% of</u> | | <u>Amount</u> | <u>% of</u> | |
| | (\$ Millions) | Total | | (\$ Millions) | Total | |
| Cash & Equivalents | \$ 887 | 6.2 | % | \$ 1,117 | 8.3 | % |
| Alternative Investments | 421 | 3.0 | | 485 | 3.6 | |
| Real Estate | 1,004 | 7.1 | | 1,003 | 7.5 | |
| Fixed Income | 4,054 | 28.5 | | 3,143 | 23.5 | |
| Domestic Equity | 4,355 | 30.6 | | 4,287 | 32.0 | |
| International Equity | <u>3,490</u> | <u>24.6</u> | | <u>3,367</u> | <u>25.1</u> | |
| Subtotal | \$ 14,211 | 100.0 | % | \$ 13,402 | 100.0 | % |
| Administrative Reserves | (16) | | | (17) | | |
| Group Insurance and Optional Life Reserves | <u>(34)</u> | | | <u>(23)</u> | | |
| Net Assets | \$ 14,161 | | | \$ 13,362 | | |
| Receivables | 7 | | | 7 | | |
| Adjusted Net Assets | <u>\$ 14,168</u> | | | <u>\$ 13,369</u> | | |

Allocation of Net Assets on December 31, 2007:

| | | |
|------------------|------------------|--------------|
| State | \$ 3,094 | |
| School | 6,863 | |
| Local | 2,340 | |
| KP&F | 1,750 | |
| Judges | 121 | |
| Total Net Assets | <u>\$ 14,168</u> | ¹ |

¹ May not add due to rounding

TABLE 2
SUMMARY OF CHANGES IN KPERS ASSETS
DURING PERIOD ENDED DECEMBER 31, 2007

(Market Value)

| | State | School | Local | Total KPERS |
|---|----------------------|----------------------|----------------------|----------------------|
| Market Value of Assets as of January 1, 2007* | \$ 2,947,274,021 | \$ 6,501,191,800 | \$ 2,176,385,696 | \$ 11,624,851,517 |
| Contributions: | | | | |
| Employee | 37,488,895 | 121,495,404 | 53,886,505 | 212,870,804 |
| Employee service purchases | 3,257,597 | 7,079,927 | 4,146,605 | 14,484,129 |
| Employer | 56,805,240 | 183,751,626 | 58,799,246 | 299,356,112 |
| Miscellaneous | 42,227 | 33,201 | 0 | 75,428 |
| Total Contributions | <u>97,593,959</u> | <u>312,360,158</u> | <u>116,832,356</u> | <u>526,786,473</u> |
| Total Investment Income | 244,076,105 | 564,132,397 | 189,733,568 | 997,942,070 |
| Total Income | <u>341,670,064</u> | <u>876,492,555</u> | <u>306,565,924</u> | <u>1,524,728,543</u> |
| Less Benefits: | | | | |
| Annuity Retirement Benefits | (166,128,281) | (429,281,902) | (106,811,780) | (702,221,963) |
| Partial Lump Sum Benefits | (16,511,237) | (57,120,066) | (16,949,135) | (90,580,438) |
| Retirant Dividends | (3,113,517) | (6,224,781) | (2,024,434) | (11,362,732) |
| Withdrawals | (7,064,780) | (19,103,595) | (13,381,017) | (39,549,392) |
| Death Benefits | (3,979,141) | (7,441,499) | (4,089,454) | (15,510,094) |
| Total Benefits | <u>(196,796,956)</u> | <u>(519,171,843)</u> | <u>(143,255,820)</u> | <u>(859,224,619)</u> |
| Net Increase in Assets | 144,873,108 | 357,320,712 | 163,310,104 | 665,503,924 |
| Receivables | 2,220,000 | 4,730,000 | 0 | 6,950,000 |
| Market Value of Assets as of December 31, 2007* | \$ 3,094,367,129 | \$ 6,863,242,512 | \$ 2,339,695,800 | \$ 12,297,305,441 |

* Note: Assets exclude insurance and administrative reserves.

**TABLE 2 (cont.)
SUMMARY OF CHANGES IN KPERS ASSETS
DURING PERIOD ENDED DECEMBER 31, 2007**

(Market Value)

| | KPERS | KP&F | Judges | Total |
|---|----------------------|----------------------|--------------------|----------------------|
| Market Value of Assets as of January 1, 2007* | \$ 11,624,851,517 | \$ 1,632,582,900 | \$ 111,406,613 | \$ 13,368,841,030 |
| Contributions: | | | | |
| Employee | 212,870,804 | 27,654,759 | 1,388,410 | 241,913,973 |
| Employee service purchases | 14,484,129 | 747,290 | 156,222 | 15,387,641 |
| Employer | 299,356,112 | 61,807,699 | 5,364,471 | 366,528,282 |
| Miscellaneous | 75,428 | 18,164 | 0 | 93,592 |
| Total Contributions | <u>526,786,473</u> | <u>90,227,912</u> | <u>6,909,103</u> | <u>623,923,488</u> |
| Total Investment Income | 997,942,070 | 135,408,040 | 9,176,922 | 1,142,527,032 |
| Total Income | <u>1,524,728,543</u> | <u>225,635,952</u> | <u>16,086,025</u> | <u>1,766,450,520</u> |
| Less Benefits: | | | | |
| Annuity Retirement Benefits | (702,221,963) | (90,341,847) | (6,072,138) | (798,635,948) |
| Partial Lump Sum Benefits | (90,580,438) | (11,371,878) | (525,897) | (102,478,213) |
| Retirant Dividends | (11,362,732) | (1,701,908) | (57,877) | (13,122,517) |
| Withdrawals | (39,549,392) | (4,237,170) | - | (43,786,562) |
| Death Benefits | (15,510,094) | (915,960) | (16,374) | (16,442,428) |
| Total Benefits | <u>(859,224,619)</u> | <u>(108,568,763)</u> | <u>(6,672,286)</u> | <u>(974,465,668)</u> |
| Receivables | 6,950,000 | 90,000 | 20,000 | 7,060,000 |
| Net Increase in Assets | 665,503,924 | 117,067,189 | 9,413,739 | 791,984,852 |
| Market Value of Assets as of December 31, 2007* | \$ 12,297,305,441 | \$ 1,749,740,089 | \$ 120,840,352 | \$ 14,167,885,882 |

* Note: Assets exclude insurance and administrative reserves.

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

| | Plan Year End | | | |
|--|------------------|------------------|------------------|------------------|
| | 12/31/2004 | 12/31/2005 | 12/31/2006 | 12/31/2007 |
| 1. Market Value of Assets, beginning of year | \$ 2,370,036,710 | \$ 2,553,610,968 | \$ 2,680,153,605 | \$ 2,947,274,021 |
| 2. Contributions during year | 76,634,336 | 80,477,494 | 90,064,863 | 97,593,959 |
| 3. Benefits during year | (162,256,907) | (172,670,110) | (184,716,537) | (196,796,956) |
| 4. Expected net investment income | 186,243,922 | 200,672,116 | 210,699,057 | 231,890,140 |
| 5. Transfers and receivables | 0 | 0 | 2,300,000 | 2,220,000 |
| 6. Expected Value of Assets, end of year | 2,470,658,061 | 2,662,090,468 | 2,798,500,988 | 3,082,181,164 |
| 7. Market Value of Assets, end of year | 2,553,610,968 | 2,680,153,605 | 2,947,274,021 | 3,094,367,129 |
| 8. Excess (shortfall) of net investment income | \$ 82,952,907 | \$ 18,063,137 | \$ 148,773,033 | \$ 12,185,965 |

* Includes asset values for the TIAA group

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

| | Plan Year End | | | |
|--|------------------|------------------|------------------|------------------|
| | 12/31/2004 | 12/31/2005 | 12/31/2006 | 12/31/2007 |
| 1. Market Value of Assets, beginning of year | \$ 4,991,542,973 | \$ 5,427,574,148 | \$ 5,773,541,598 | \$ 6,501,191,800 |
| 2. Contributions during year | 232,136,850 | 247,762,716 | 277,813,825 | 312,360,158 |
| 3. Benefits during year | (401,994,358) | (442,053,181) | (473,994,469) | (519,171,843) |
| 4. Expected net investment income | 392,659,845 | 426,583,823 | 454,187,066 | 511,982,021 |
| 5. Transfers and receivables | 0 | 0 | 4,600,000 | 4,730,000 |
| 6. Expected Value of Assets, end of year | 5,214,345,310 | 5,659,867,506 | 6,036,148,020 | 6,811,092,136 |
| 7. Market Value of Assets, end of year | 5,427,574,148 | 5,773,541,598 | 6,501,191,800 | 6,863,242,512 |
| 8. Excess (shortfall) of net investment income | \$ 213,228,838 | \$ 113,674,092 | \$ 465,043,780 | \$ 52,150,376 |

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

| | Plan Year End | | | |
|--|------------------|------------------|------------------|------------------|
| | 12/31/2004 | 12/31/2005 | 12/31/2006 | 12/31/2007 |
| 1. Market Value of Assets, beginning of year | \$ 7,361,579,683 | \$ 7,981,185,116 | \$ 8,453,695,203 | \$ 9,448,465,821 |
| 2. Contributions during year | 308,771,186 | 328,240,210 | 367,878,688 | 409,954,117 |
| 3. Benefits during year | (564,251,265) | (614,723,291) | (658,711,006) | (715,968,799) |
| 4. Expected net investment income | 578,903,767 | 627,255,939 | 664,886,123 | 743,872,161 |
| 5. Transfers and receivables | 0 | 0 | 6,900,000 | 6,950,000 |
| 6. Expected Value of Assets, end of year | 7,685,003,371 | 8,321,957,974 | 8,834,649,008 | 9,893,273,300 |
| 7. Market Value of Assets, end of year | 7,981,185,116 | 8,453,695,203 | 9,448,465,821 | 9,957,609,641 |
| 8. Excess (shortfall) of net investment income | \$ 296,181,745 | \$ 131,737,229 | \$ 613,816,813 | \$ 64,336,341 |

* Includes asset values for the TIAA group

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

| | Plan Year End | | | |
|--|------------------|------------------|------------------|------------------|
| | 12/31/2004 | 12/31/2005 | 12/31/2006 | 12/31/2007 |
| 1. Market Value of Assets, beginning of year | \$ 1,561,501,396 | \$ 1,743,287,610 | \$ 1,897,431,737 | \$ 2,176,385,696 |
| 2. Contributions during year | 91,862,152 | 96,419,499 | 104,980,627 | 116,832,356 |
| 3. Benefits during year | (106,730,071) | (117,896,660) | (127,971,578) | (143,255,820) |
| 4. Expected net investment income | 124,336,836 | 138,620,449 | 150,892,593 | 173,074,250 |
| 5. Transfers and receivables | 0 | 0 | 0 | 0 |
| 6. Expected Value of Assets, end of year | 1,670,970,313 | 1,860,430,898 | 2,025,333,379 | 2,323,036,482 |
| 7. Market Value of Assets, end of year | 1,743,287,610 | 1,897,431,737 | 2,176,385,696 | 2,339,695,800 |
| 8. Excess (shortfall) of net investment income | \$ 72,317,297 | \$ 37,000,839 | \$ 151,052,317 | \$ 16,659,318 |

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

| | Plan Year End | | | |
|--|------------------|------------------|------------------|------------------|
| | 12/31/2004 | 12/31/2005 | 12/31/2006 | 12/31/2007 |
| 1. Market Value of Assets, beginning of year | \$ 1,232,406,980 | \$ 1,363,065,004 | \$ 1,459,554,937 | \$ 1,632,582,900 |
| 2. Contributions during year | 75,287,870 | 71,931,377 | 79,129,699 | 90,227,912 |
| 3. Benefits during year | (87,682,550) | (93,936,263) | (102,440,958) | (108,568,763) |
| 4. Expected net investment income | 98,106,309 | 108,181,938 | 115,849,883 | 129,887,112 |
| 5. Transfers and receivables | 0 | 0 | 100,000 | 90,000 |
| 6. Expected Value of Assets, end of year | 1,318,118,609 | 1,449,242,056 | 1,552,093,561 | 1,744,219,161 |
| 7. Market Value of Assets, end of year | 1,363,065,004 | 1,459,554,937 | 1,632,582,900 | 1,749,740,089 |
| 8. Excess (shortfall) of net investment income | \$ 44,946,395 | \$ 10,312,881 | \$ 80,489,339 | \$ 5,520,928 |

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

| | Plan Year End | | | |
|--|---------------|---------------|---------------|----------------|
| | 12/31/2004 | 12/31/2005 | 12/31/2006 | 12/31/2007 |
| 1. Market Value of Assets, beginning of year | \$ 81,081,078 | \$ 90,483,059 | \$ 98,126,948 | \$ 111,406,613 |
| 2. Contributions during year | 5,090,779 | 5,729,305 | 6,514,385 | 6,909,103 |
| 3. Benefits during year | (5,275,093) | (5,920,730) | (6,046,384) | (6,672,286) |
| 4. Expected net investment income | 6,479,256 | 7,231,135 | 7,868,516 | 8,921,819 |
| 5. Transfers and receivables | 0 | 0 | 0 | 20,000 |
| 6. Expected Value of Assets, end of year | 87,376,020 | 97,522,769 | 106,463,465 | 120,585,249 |
| 7. Market Value of Assets, end of year | 90,483,059 | 98,126,948 | 111,406,613 | 120,840,352 |
| 8. Excess (shortfall) of net investment income | \$ 3,107,039 | \$ 604,179 | \$ 4,943,148 | \$ 255,103 |

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 12/31/07 | \$ 64,336,341 | \$ 12,185,965 | \$ 52,150,376 | \$ 16,659,318 | \$ 80,995,659 |
| b. Year ending 12/31/06 | 613,816,813 | 148,773,033 | 465,043,780 | 151,052,317 | 764,869,130 |
| c. Year ending 12/31/05 | 131,737,229 | 18,063,137 | 113,674,092 | 37,000,839 | 168,738,068 |
| d. Year ending 12/31/04 | 296,181,745 | 82,952,907 | 213,228,838 | 72,317,297 | 368,499,042 |
| e. Total | <u>\$ 1,106,072,128</u> | <u>\$ 261,975,042</u> | <u>\$ 844,097,086</u> | <u>\$ 277,029,771</u> | <u>\$ 1,383,101,899</u> |
| 2. Deferral of excess (shortfall) of investment income | | | | | |
| a. Year ending 12/31/07 (80%) | 51,469,073 | 9,748,772 | 41,720,301 | 13,327,454 | 64,796,527 |
| b. Year ending 12/31/06 (60%) | 368,290,088 | 89,263,820 | 279,026,268 | 90,631,390 | 458,921,478 |
| c. Year ending 12/31/05 (40%) | 52,694,892 | 7,225,255 | 45,469,637 | 14,800,336 | 67,495,228 |
| d. Year ending 12/31/04 (20%) | 59,236,349 | 16,590,581 | 42,645,768 | 14,463,459 | 73,699,808 |
| e. Total | <u>\$ 531,690,402</u> | <u>\$ 122,828,428</u> | <u>\$ 408,861,974</u> | <u>\$ 133,222,639</u> | <u>\$ 664,913,041</u> |
| 3. Market Value of Assets, end of year | \$ 9,957,609,641 | \$ 3,094,367,129 | \$ 6,863,242,512 | \$ 2,339,695,800 | \$ 12,297,305,441 |
| 4. Actuarial Value of Assets, end of year (3) - (2e) | \$ 9,425,919,239 | \$ 2,971,538,701 | \$ 6,454,380,538 | \$ 2,206,473,161 | \$ 11,632,392,400 |
| 5. Actuarial Value divided by market value (4)/(3) | 94.7% | 96.0% | 94.0% | 94.3% | 94.6% |

**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 12/31/07 | \$ 80,995,659 | \$ 5,520,928 | \$ 255,103 | \$ 86,771,690 |
| b. Year ending 12/31/06 | 764,869,130 | 80,489,339 | 4,943,148 | 850,301,617 |
| c. Year ending 12/31/05 | 168,738,068 | 10,312,881 | 604,179 | 179,655,128 |
| d. Year ending 12/31/04 | 368,499,042 | 44,946,395 | 3,107,039 | 416,552,476 |
| e. Total | \$ 1,383,101,899 | \$ 141,269,543 | \$ 8,909,469 | \$ 1,533,280,911 |
| 2. Deferral of excess (shortfall) of investment income | | | | |
| a. Year ending 12/31/07 (80%) | 64,796,527 | 4,416,742 | 204,082 | 69,417,351 |
| b. Year ending 12/31/06 (60%) | 458,921,478 | 48,293,603 | 2,965,889 | 510,180,970 |
| c. Year ending 12/31/05 (40%) | 67,495,228 | 4,125,152 | 241,672 | 71,862,052 |
| d. Year ending 12/31/04 (20%) | 73,699,808 | 8,989,279 | 621,408 | 83,310,495 |
| e. Total | \$ 664,913,041 | \$ 65,824,776 | \$ 4,033,051 | \$ 734,770,868 |
| 3. Market Value of Assets, end of year | \$ 12,297,305,441 | \$ 1,749,740,089 | \$ 120,840,352 | \$ 14,167,885,882 |
| 4. Actuarial Value of Assets, end of year (3) - (2e) | \$ 11,632,392,400 | \$ 1,683,915,313 | \$ 116,807,301 | \$ 13,433,115,014 |
| 5. Actuarial Value divided by market value (4)/(3) | 94.6% | 96.2% | 96.7% | 94.8% |

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, 2007. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 4 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 4 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 benefit is chosen, for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of the 2007 Triennial Experience Study. This set of assumptions, as shown in Appendix C, was adopted by the Board in November 2007 and was first used for the December 31, 2007 valuation.

The liabilities reflect the benefit structure in place as of December 31, 2007 plus the provisions of legislation passed by the 2008 Legislature.

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 which is attributable to the past and
- (2) that which is 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 6 contains the calculation of actuarial liabilities for all groups.

TABLE 5
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF DECEMBER 31, 2007

| | State | School | Local | Total KPERs |
|---------------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
| 1. Active employees | | | | |
| a. Retirement Benefit | \$ 2,102,945,975 | \$ 7,388,985,739 | \$ 2,555,027,314 | \$ 12,046,959,028 |
| b. Pre-Retirement Death Benefit | 27,114,473 | 55,080,253 | 45,197,441 | 127,392,167 |
| c. Withdrawal Benefit | 96,912,947 | 296,626,802 | 155,995,808 | 549,535,557 |
| d. Disability Benefit | 100,852,688 | 190,487,260 | 116,222,045 | 407,561,993 |
| e. Total | <u>2,327,826,083</u> | <u>7,931,180,054</u> | <u>2,872,442,608</u> | <u>13,131,448,745</u> |
| 2. Inactive Vested Members | 123,771,738 | 220,659,810 | 121,272,552 | 465,704,100 |
| 3. Inactive Nonvested Members | 10,418,675 | 35,112,719 | 22,312,050 | 67,843,444 |
| 4. Disabled Members | 75,346,531 | 91,446,112 | 52,902,993 | 219,695,636 |
| 5. Retirees | 1,351,132,168 | 4,058,391,192 | 884,666,572 | 6,294,189,932 |
| 6. Beneficiaries | 85,454,190 | 109,663,325 | 65,767,225 | 260,884,740 |
| 7. Unclaimed Account Reserve | <u>668,200</u> | <u>1,331,800</u> | <u>500,000</u> | <u>2,500,000</u> |
| 8. Total PVFB | <u>\$ 3,974,617,585</u> | <u>\$ 12,447,785,012</u> | <u>\$ 4,019,864,000</u> | <u>\$ 20,442,266,597</u> |

**TABLE 5 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF DECEMBER 31, 2007**

| | KP&F | Judges |
|---------------------------------|-------------------------|-----------------------|
| 1. Active employees | | |
| a. Retirement Benefit | \$ 1,304,949,886 | \$ 111,646,423 |
| b. Pre-Retirement Death Benefit | 19,954,539 | 1,063,390 |
| c. Withdrawal Benefit | 45,730,362 | 32,568 |
| d. Disability Benefit | 194,665,253 | 0 |
| e. Total | <u>1,565,300,040</u> | <u>112,742,381</u> |
| 2. Inactive Vested Members | 31,751,148 | 1,315,876 |
| 3. Inactive Nonvested Members | 11,080,560 | 0 |
| 4. Disabled Members | 96,105,493 | 0 |
| 5. Retirees | 720,803,786 | 46,841,569 |
| 6. Beneficiaries | <u>86,737,805</u> | <u>8,475,990</u> |
| 7. Total PVFB | <u>\$ 2,511,778,832</u> | <u>\$ 169,375,816</u> |

**TABLE 6
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL LIABILITIES
AS OF DECEMBER 31, 2007**

| | State | School | Local | Total KPERS |
|--|-------------------------|--------------------------|-------------------------|--------------------------|
| 1. Present Value of Future Benefits | \$ 3,974,617,585 | \$ 12,447,785,012 | \$ 4,019,864,000 | \$ 20,442,266,597 |
| 2. Present Value of Future Normal Costs for Active Members | | | | |
| a. Retirement Benefit | \$ 401,296,364 | \$ 1,718,442,701 | \$ 642,165,021 | \$ 2,761,904,086 |
| b. Pre-Retirement Death Benefit | 6,951,361 | 16,764,573 | 13,962,754 | 37,678,688 |
| c. Withdrawal Benefit | 106,213,228 | 332,740,999 | 173,171,529 | 612,125,756 |
| d. Disability Benefit | 38,035,894 | 63,832,678 | 43,544,247 | 145,412,819 |
| e. Total | <u>552,496,847</u> | <u>2,131,780,951</u> | <u>872,843,551</u> | <u>3,557,121,349</u> |
| 3. Total Actuarial Liability (1) - (2e) | <u>\$ 3,422,120,738</u> | <u>\$ 10,316,004,061</u> | <u>\$ 3,147,020,449</u> | <u>\$ 16,885,145,248</u> |

**TABLE 6 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL LIABILITIES
AS OF DECEMBER 31, 2007**

| | KP&F | Judges | |
|---|------------------|----------------|--|
| 1. Present Value of Future Benefits | \$ 2,511,778,832 | \$ 169,375,816 | |
| 2. Present Value of Future Normal Costs for Active Members | | | |
| a. Retirement Benefit | \$ 372,634,568 | \$ 37,278,590 | |
| b. Pre-Retirement Death Benefit | 12,434,461 | 451,577 | |
| c. Withdrawal Benefit | 58,172,119 | 44,453 | |
| d. Disability Benefit | 100,369,204 | 0 | |
| e. Total | 543,610,352 | 37,774,620 | |
| 3. Total Actuarial Liability (1) - (2e) | \$ 1,968,168,480 | \$ 131,601,196 | |

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 6 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 down 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 (UAL) exists.

Description of Rate Components

Commencing with the December 31, 2003 actuarial valuation, the actuarial cost method for all three systems was changed to 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 allocates on a level basis over the member's compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial liability. The unfunded actuarial liability represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. The unfunded actuarial liability is calculated each year and reflects experience gains/losses.

The contribution rates based on this December 31, 2007 actuarial valuation will be used to determine employer contribution rates to the Kansas Public Employees Retirement System for fiscal years beginning in 2010 (July 1, 2010 to June 30, 2011 for the State and calendar year 2010 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).

Legislation provides that the employer rates of contribution for the State and School recommended by the Board of Trustees for all groups may not increase more than 0.40% in FY2006, 0.50% in FY2007 and 0.60% in FY2008 and later. Contribution rates for the Local group cannot increase more than 0.40% in 2006, 0.50% in 2007 and 0.60% in 2008 and later. Such limits on the increase in the statutory contribution rate do not apply to the increase in the employer

contribution rate for benefit enhancements. Although not shown in these rates, the total contribution rates for KPERS employers include the statutory employer contribution to the KPERS Group Life Insurance.

There are several components of the unfunded actuarial liability which are amortized over different periods. The increase in the unfunded actuarial liability resulting from the 1998 COLA is amortized over 15 years. The increase in the unfunded actuarial liability for Local employers resulting from 2003 legislation which made the 13th check for pre-July 2, 1987 retirees a permanent benefit is funded over a 10 year period, with the first contribution in 2005 (5 years remaining in FY2010, the fiscal year for which this valuation sets the contribution rate). The increase in the unfunded actuarial liability due to the \$300 one-time payment to retirees in 2007 and 2008 is amortized over 10 years (Local only). The State funded the increased liability for the \$300 one-time payment for its members in both 2007 and 2008. The remainder of the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993. At the December 31, 2007 valuation date, twenty-five (25) years remain in that period.

The UAL is amortized as a level percentage of payroll. The payroll growth assumption is 4% so the annual amortization payments will increase 4% each year. As a result, if total payroll grows 4% per year, as assumed, the amortization payment will remain level as a percentage of total current payroll. If payroll increases less/more than 4% each year, the amortization payment will increase/decrease as a percentage of total payroll.

The actuarial contribution rate for KPERS is comprised of the normal cost rate and a contribution toward the unfunded actuarial liability. The State and School contribution rate includes an additional contribution necessary to pay the debt service payment on the bonds issued by the State in 2003 to finance the increase in liability from making the 13th check permanent.

Local employers who affiliate with KPERS for prior service on or after January 1, 1999 pay an additional employer contribution to finance their unfunded actuarial liability on their affiliation date.

KP&F

The actuarially determined contribution requirements 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 a UAL 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 employers who enter KP&F for future service only, the total cost is the uniform contribution rate.

There are several components of the unfunded actuarial liability, which are amortized over different periods. The increase in the unfunded actuarial liability resulting from the 1998 COLA is amortized over 15 years. The increase in the unfunded actuarial liability for Local employers resulting from 2003 legislation which made the 13th check for pre-July 2, 1987 retirees a permanent benefit is funded over a 10 year period with the first contribution in 2005 (5 years remain as of FY2010, the fiscal year for which this valuation sets the contribution rate). The increase in the unfunded actuarial liability due to the \$300 one-time payment to retirees in 2007 is amortized over 10 years (Local only). The State funded the increased liability for the \$300 one-time payment for its members in both 2007 and 2008. The remainder of the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993. At the December 31, 2007 valuation date, twenty-five (25) years remain in that period.

The UAL is amortized as a level percentage of payroll. The payroll growth assumption is 4% so the annual amortization payments will increase 4% each year. As a result, if total payroll grows 4% per year, as assumed, the amortization payment will remain level as a percentage of total current payroll. If payroll increases less/more than 4% each year, the amortization payment will increase/decrease as a percentage of total payroll

Judges

The actuarial contribution rate for the Judges is comprised of the normal cost rate and a contribution toward the unfunded actuarial liability. The UAL is amortized over a 40 year period established in 1993 with payments determined as a level dollar amount. As of this valuation date, twenty-five (25) years remain. The contribution rate includes an additional contribution necessary to pay the debt service payment on the bonds issued by the State in 2003 to finance the increase in liability from making the 13th check permanent.

Contribution Rate Summary

The normal cost rates for each System are developed in Table 7. Table 8 develops the actuarial contribution rate for the unfunded actuarial liability. Bonds were issued in 2003 by the State to finance the increase in the actuarial liability due to legislation making the 13th check for pre-July 2, 1987 retirees a permanent benefit. The debt service payment on the bonds is to be paid by an additional employer contribution to the System, effective July 1, 2004. The development of this debt service contribution rate for FY2011 is shown in Table 9. The total actuarial contribution rates determined as of December 31, 2007, are presented in Table 10. 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 years are shown in Tables 11A and 11B. Table 12 shows the KP&F individual employer contribution rates for fiscal years beginning in 2009 and 2010 while Tables 13 and 14 show the calculation of the additional contribution rate due to amortization of prior service UAL or excess benefit liability for fiscal years beginning in 2010.

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 2010.

**TABLE 7
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
NORMAL COST RATE
AS OF DECEMBER 31, 2007**

| | State | School | State/School | Local |
|---------------------------------------|-------------------|--------------------|--------------------|--------------------|
| 1. Normal Cost at Beginning of Year | | | | |
| a. Retirement Benefit | \$ 54,441,307 | \$ 210,907,978 | \$ 265,349,285 | \$ 79,929,893 |
| b. Pre-Retirement Death Benefit | 969,740 | 2,200,543 | 3,170,283 | 1,790,661 |
| c. Withdrawal Benefit | 14,129,144 | 41,369,416 | 55,498,560 | 21,365,198 |
| d. Disability Benefit | 5,156,013 | 8,326,389 | 13,482,402 | 5,581,587 |
| e. Total | <u>74,696,204</u> | <u>262,804,326</u> | <u>337,500,530</u> | <u>108,667,339</u> |
| 2. Estimated Covered Payroll for 2008 | \$ 954,472,949 | \$ 3,172,108,563 | \$ 4,126,581,512 | \$ 1,387,401,497 |
| 3. Normal Cost Rate [(1e) / (2)] | 8.13% | 8.61% | 8.50% | 8.14% |
| *1.08 ⁵ | | | | |

TABLE 7 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
NORMAL COST RATE
AS OF DECEMBER 31, 2007

| | KP&F | Judges |
|---------------------------------------|----------------|---------------|
| 1. Normal Cost at Beginning of Year | | |
| a. Retirement Benefit | \$ 39,413,116 | \$ 4,920,524 |
| b. Pre-Retirement Death Benefit | 1,402,062 | 57,094 |
| c. Withdrawal Benefit | 6,094,775 | 6,888 |
| d. Disability Benefit | 10,839,197 | 0 |
| e. Total | 57,749,150 | 4,984,506 |
| 2. Estimated Covered Payroll for 2008 | \$ 408,162,049 | \$ 27,083,186 |
| 3. Normal Cost Rate [(1e) / (2)] | 14.70% | 19.13% |
| *1.08 ⁵ | | |

TABLE 8
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL LIABILITY CONTRIBUTION RATES
AS OF DECEMBER 31, 2007

| | State | School | Local | KPF | | Judges |
|---|----------------------|----------------------|----------------------|----------------------|----|--------------------|
| 1. Actuarial Liability | \$ 3,422,120,738 | \$ 10,316,004,061 | \$ 3,147,020,449 | \$ 1,968,168,480 | | \$ 131,601,196 |
| 2. Actuarial Value of Assets | <u>2,971,538,701</u> | <u>6,454,380,538</u> | <u>2,206,473,161</u> | <u>1,683,915,313</u> | | <u>116,807,301</u> |
| 3. Unfunded Actuarial Liability (UAL) | 450,582,037 | 3,861,623,523 | 940,547,288 | 284,253,167 | | 14,793,895 |
| a. UAL for 1998 COLA | 10,830,079 | 26,515,019 | 7,755,372 | 6,766,029 | | 0 |
| b. UAL for 13th Check (2003) | 0 | 0 | 2,719,294 | 5,092,766 | | 0 |
| c. UAL for 2007 One Time Payment | 0 | 0 | 1,493,733 | 436,744 | | 0 |
| d. UAL for 2008 One Time Payment | 0 | 0 | 1,610,000 | 490,000 | | 0 |
| e. Prior service and other local employer UAL* | 0 | 0 | 6,260,142 | 17,320,161 | | 0 |
| f. Remaining UAL | 439,751,959 | 3,835,108,504 | 920,708,747 | 254,147,466 | | 14,793,895 |
| 4. Payment to Amortize UAL (assumed mid-year) | | | | | | |
| a. UAL for 1998 COLA | 2,424,019 | 5,934,666 | 1,735,829 | 1,477,464 | ** | 0 |
| b. UAL for 13th Check (2003) | 0 | 0 | 608,640 | 1,139,887 | ** | 0 |
| c. UAL for 2007 One Time Payment | 0 | 0 | 199,638 | 58,371 | ** | 0 |
| d. UAL for 2008 One Time Payment | 0 | 0 | 197,127 | 59,995 | ** | 0 |
| e. Remaining UAL | <u>27,714,013</u> | <u>241,695,902</u> | <u>58,024,833</u> | <u>14,231,490</u> | ** | <u>1,333,558</u> |
| f. Total | 30,138,032 | 247,630,568 | 60,766,068 | 16,967,207 | ** | 1,333,558 |
| 5. Total Estimated Payroll for 2008 | \$ 954,472,949 | \$ 3,172,108,563 | \$ 1,387,401,497 | \$ 362,124,437 | ** | \$ 27,083,186 |
| 6. Amortization Payment as a Percent of Payroll | 3.16% | 7.81% | 4.38% | 4.69% | ** | 4.92% |

* These obligations are paid directly by the employer and do not enter into the overall amortization rates.

**Only includes local governments. State agencies have a different uniform rate.

TABLE 9
DEVELOPMENT OF CONTRIBUTION RATES
FOR DEBT SERVICE PAYMENT ON BONDS

The 2003 Legislature made the retirant dividend (13th check) for pre-July 2, 1987 retirees a permanent benefit. To offset the estimated cost of the benefit enhancement the State issued bonds in the late summer of 2003. The debt service payment on the bonds will come from increased contribution rates for the KPERS State and School groups, the State KP&F group and the Judges.

| | State | School | KPF (state) | Judges | Total |
|---------------------------------|--------------|---------------|--------------|------------|---------------|
| Original Bond Issue Proceeds | \$ 7,793,450 | \$ 15,068,078 | \$ 1,867,119 | \$ 171,353 | \$ 24,900,000 |
| Scheduled Payments | | | | | |
| FYE 2011 | 1,005,871 | 1,944,779 | 240,982 | 22,116 | 3,213,748 |
| FYE 2012 | 1,004,727 | 1,942,566 | 240,708 | 22,091 | 3,210,092 |
| FYE 2013 | 1,004,383 | 1,941,902 | 240,625 | 22,083 | 3,208,993 |
| FYE 2014 | 1,005,138 | 1,943,362 | 240,806 | 22,100 | 3,211,406 |
| Projected Payroll for FYE 2011* | 990,669,358 | 3,292,404,207 | 47,783,493 | 28,105,127 | |
| Rate of Pay Required | 0.10% | 0.06% | 0.50% | 0.08% | |

* Assumes 1.5% annual payroll growth

**TABLE 10
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL EMPLOYER CONTRIBUTION RATES
FISCAL YEAR COMMENCING IN 2010**

| | Total Normal Cost | Employee Normal Cost | Employer Normal Cost | Unfunded Actuarial Liability | Debt Service Payment | Total Employer Contribution* |
|---|----------------------------------|-------------------------------------|-------------------------------------|---|-------------------------------------|---|
| State ** | 8.13% | 4.00% | 4.13% | 3.16% | 0.10% | 7.39% |
| School | 8.61% | 4.00% | 4.61% | 7.81% | 0.06% | 12.48% |
| State/School ** | 8.50% | 4.00% | 4.50% | 6.73% | 0.07% | 11.30% |
| Local | 8.14% | 4.00% | 4.14% | 4.38% | 0.00% | 8.52% |
| KP&F Uniform Contribution Rate | | | | | | |
| State *** | 14.70% | 6.53% | 8.17% | 4.05% | 0.50% | 12.72% |
| Local *** | 14.70% | 6.53% | 8.17% | 4.69% | 0.00% | 12.86% |
| Judges | 19.13% | 4.64% | 14.49% | 4.92% | 0.08% | 19.49% |

* Does not include the contribution to the Death and Disability Program.

** For Correctional Employees, employer contribution rates of 9.20% and 8.55% apply for normal retirement ages of 55 and 60, respectively.

*** 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 or the 15% excess benefit liability, determined separately for each employer. (See Table 12)

**TABLE 11A
LOCAL AFFILIATION COST FACTORS
FOR FISCAL YEAR BEGINNING IN 2010**

| Employer | Year Affiliated | Projected 2010 Annual Payroll | Projected 1/1/2010 Unfunded Actuarial Liability | Projected 1/1/2010 Excess Benefit Liability | Payment on 1/1/2010 Unfunded Liabilities² | Payment on Unfunded Liability as % of Payroll | Total Rate for Years Commencing¹ in 2010 |
|--|----------------------------|--|--|--|---|--|--|
| St. Francis Housing Authority | 1999 | \$13,208 | \$7,955 | \$0 | \$511 | 3.87% | 10.01% |
| City of Burden | 1999 | \$111,333 | \$15,693 | \$0 | \$1,006 | 0.90% | 7.04% |
| City of Longton | 1999 | \$75,329 | \$19,073 | \$0 | \$1,224 | 1.63% | 7.77% |
| Bourbon County RWD#2 | 1999 | \$200,991 | \$110,545 | \$0 | \$7,095 | 3.53% | 9.67% |
| Towanda Township | 1999 | \$49,526 | \$9,032 | \$0 | \$578 | 1.17% | 7.31% |
| City of Herndon | 1999 | \$9,375 | \$21,088 | \$0 | \$5,895 | | |
| Hays Housing Authority | 2000 | \$54,566 | \$1,770 | \$0 | \$117 | 0.21% | 6.35% |
| Haysville Community Library | 2000 | \$112,939 | \$200,846 | \$0 | \$12,883 | 11.41% | 17.55% |
| Hamilton County Library | 2000 | \$87,493 | \$13,300 | \$0 | \$853 | 0.98% | 7.12% |
| Ellis Public Library | 2000 | \$20,837 | \$5,050 | \$0 | \$324 | 1.55% | 7.69% |
| Bucklin Public Library | 2000 | \$16,221 | \$12,568 | \$0 | \$808 | 4.98% | 11.12% |
| Elkhart Cemetery District | 2000 | \$21,450 | \$1,772 | \$0 | \$115 | 0.54% | 6.68% |
| Clay County Conservation District | 2000 | \$32,241 | \$55,926 | \$0 | \$3,593 | 11.14% | 17.28% |
| City of Linn Valley | 2000 | \$67,416 | \$987 | \$0 | \$64 | 0.09% | 6.23% |
| City of Blue Mound | 2000 | \$59,712 | \$2,826 | \$0 | \$177 | 0.30% | 6.44% |
| Kansas Workers' Risk Coop for Counties | 2000 | \$278,531 | \$51,024 | \$0 | \$3,262 | 1.17% | 7.31% |
| Lindsborg Community Library | 2002 | \$22,420 | \$3,532 | \$0 | \$222 | 0.99% | 7.13% |
| City of North Newton | 2002 | \$310,264 | \$162,609 | \$0 | \$10,247 | 3.30% | 9.44% |
| City of Arcadia | 2002 | \$51,653 | \$15,904 | \$0 | \$1,001 | 1.94% | 8.08% |
| Four County Mental Health | 2002 | \$6,238,766 | \$1,522,093 | \$0 | \$160,854 | 2.58% | 8.72% |
| City of Linwood | 2003 | \$33,332 | \$2,384 | \$0 | \$151 | 0.45% | 6.59% |
| Cottonwood Inc. | 2003 | \$5,285,643 | \$1,133,377 | \$0 | \$71,426 | 1.35% | 7.49% |
| Johnson County Fire District #2 Rural | 2003 | \$2,408,020 | \$443,281 | \$0 | \$27,936 | 1.16% | 7.30% |
| Basehor Community Library | 2003 | \$98,544 | \$56,363 | \$0 | \$3,552 | 3.60% | 9.74% |
| City of Gypsum | 2003 | \$50,313 | \$4,792 | \$0 | \$302 | 0.60% | 6.74% |
| Greenleaf Housing Authority | 2003 | \$16,793 | \$22,495 | \$0 | \$1,417 | 8.44% | 14.58% |
| City of Bentley | 2004 | \$69,854 | \$38,102 | \$0 | \$2,527 | 3.62% | 9.76% |
| Mulvane Public Library | 2004 | \$50,382 | \$13,663 | \$0 | \$906 | 1.80% | 7.94% |
| The Center for Counseling and Consultation | 2004 | \$2,102,111 | \$1,148,546 | \$0 | \$76,189 | 3.62% | 9.76% |

**TABLE 11A (cont.)
LOCAL AFFILIATION COST FACTORS
FOR FISCAL YEAR BEGINNING IN 2010**

| Employer | Year Affiliated | Projected 2010 Annual Payroll | Projected 1/1/2010 Unfunded Actuarial Liability | Projected 1/1/2010 Excess Benefit Liability | Payment on 1/1/2010 Unfunded Liabilities² | Payment on Unfunded Liability as % of Payroll | Total Rate for Years Commencing¹ in 2010 |
|---|----------------------------|--|--|--|---|--|--|
| Crawford County RWD #2 | 2005 | \$34,288 | \$5,469 | \$0 | \$4,688 | 13.67% | 19.81% |
| Doniphan County RFD #2 | 2005 | \$71,216 | \$9,123 | \$0 | \$605 | 0.85% | 6.99% |
| City of Denison | 2005 | \$70,051 | \$20,139 | \$0 | \$1,336 | 1.91% | 8.05% |
| Stanton County Recreation Commission | 2005 | \$58,754 | \$24,803 | \$0 | \$1,645 | 2.80% | 8.94% |
| City of Salina | NA | \$12,971,655 | \$0 | \$115,688 | \$30,656 | 0.24% | 6.38% |
| City of Shawnee | NA | \$8,612,667 | \$0 | \$213,477 | \$53,332 | 0.62% | 6.76% |
| Unified Government - Wyandotte Co./ KCK | NA | \$59,830,943 | \$0 | \$551,463 | \$134,050 | 0.22% | 6.36% |
| City of Emporia | NA | \$5,363,872 | \$0 | \$6,731 | \$1,622 | 0.03% | 6.17% |
| City of Leavenworth | NA | \$5,223,052 | \$0 | \$8,248 | \$1,988 | 0.04% | 6.18% |
| Total | | \$110,185,763 | \$5,156,128 | | \$625,158 | | |

¹Basic local employer contribution rates excluding Death and Disability contribution:

FY 2009: 5.54%

FY 2010: 6.14%

²Payments are assumed to be mid-year for Unfunded Actuarial Liability or Excess Benefit Liability

³The City of Herndon has elected to pay off their unfunded actuarial liability according to a fixed schedule. Payments are as of January 1.

**TABLE 11B
LOCAL AFFILIATION COST FACTORS - AFFILIATION AFTER 1/1/06
FOR FISCAL YEAR BEGINNING IN 2010**

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 January 1 to Amortize Unfunded Liability | Final Payment Year |
|-------------------------------|----------------------------|--|--|-----------------------------------|
| Nippawalla Township | 2006 | \$4,158 | \$356 | 2032 |
| USD 350 Recreation Commission | 2006 | \$18,382 | \$1,574 | 2032 |
| City of Vermillion | 2006 | \$3,950 | \$338 | 2032 |

TABLE 12
KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS
COMMENCING IN CALENDAR YEARS 2009 AND 2010

| Employer | Total Rate for Fiscal Year Commencing in 2009 | Recommended Total Rate for Fiscal Year Commencing in 2010 |
|--------------------------------------|--|--|
| Douglas County Law Enforcement | 16.47 % | 15.63 % |
| Ford County | 13.51 | 12.86 |
| Franklin County Sheriff's Dept | 13.51 | 12.86 |
| Gray County Sheriff's Dept. | 13.51 | 12.86 |
| Harvey County Sheriff's Dept. | 13.51 | 12.86 |
| Johnson County Fire Dept. | 13.51 | 12.86 |
| Johnson County Fire No. 1 | 13.51 | 12.86 |
| Johnson County Fire No. 2 | 13.51 | 12.86 |
| Johnson County Park Commission | 13.51 | 12.86 |
| Johnson County Sheriff's Dept. | 13.71 | 13.05 |
| Labette County Sheriff's Dept. | 16.02 | 15.36 |
| Reno County Sheriff's Dept. | 13.51 | 12.86 |
| Riley County Law Enforcement | 13.51 | 12.86 |
| Sedgwick County Fire No. 1 | 13.51 | 12.86 |
| Sedgwick County Sheriff's Dept. | 13.86 | 13.20 |
| Sedgwick County EMT's | 13.93 | 13.25 |
| Shawnee County Sheriff's Dept. | 16.18 | 15.47 |
| Sumner County Sheriff's Dept. | 15.11 | 14.31 |
| Unified Gov't of Wyandotte County | 13.51 | 12.86 |
| Unified Gov't of Wyandotte Co. - KCK | 15.03 | 15.09 |
| City of Abilene | 13.51 | 12.86 |
| City of Arkansas City | 13.51 | 12.86 |
| City of Atchison | 13.51 | 13.72 |
| City of Bonner Springs | 13.51 | 12.86 |
| City of Chanute | 13.51 | 12.86 |
| City of Cimarron | 13.51 | 12.86 |
| City of Coffeyville | 18.85 | 17.90 |
| City of Concordia | 17.27 | 16.43 |
| City of Derby | 13.51 | 12.86 |
| City of Dodge City | 20.01 | 18.67 |
| City of Emporia | 13.51 | 12.86 |
| City of Erie | 13.51 | 12.86 |
| City of Eudora | 13.51 | 12.86 |
| City of Fairway | 13.51 | 12.86 |
| City of Fort Scott | 19.10 | 18.47 |
| City of Herington | 14.33 | 13.77 |
| City of Hutchinson | 13.51 | 12.86 |

**TABLE 12 (cont.)
KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS
COMMENCING IN CALENDAR YEARS 2009 AND 2010**

| Employer | Total Rate for Fiscal Year Commencing in 2009 | Recommended Total Rate for Fiscal Year Commencing in 2010 |
|--|--|--|
| City of Junction City | 13.51 % | 12.86 % |
| City of Lawrence | 13.51 | 12.86 |
| City of Leavenworth | 14.69 | 14.17 |
| City of Leawood | 14.20 | 13.49 |
| City of Lenexa | 13.64 | 12.98 |
| City of Manhattan | 16.14 | 13.38 |
| City of Merriam | 13.51 | 12.86 |
| City of McPherson | 13.51 | 12.86 |
| City of Mission | 13.51 | 12.86 |
| City of Newton EMTs | 15.70 | 14.88 |
| City of Newton | 13.51 | 12.86 |
| City of Olathe | 13.58 | 12.93 |
| City of Ottawa | 13.51 | 12.86 |
| City of Parsons | 13.51 | 12.86 |
| City of Pittsburg | 16.30 | 15.57 |
| City of Salina | 17.24 | 16.05 |
| City of Shawnee | 14.13 | 13.99 |
| City of Topeka | 13.51 | 12.86 |
| City of Wellington | 16.75 | 16.32 |
| City of Westwood | 13.51 | 12.86 |
| City of Winfield | 17.33 | 16.70 |
| Board of Regents Campus Police | 13.38 | 12.72 |
| Kansas Bureau of Investigation | 13.38 | 12.72 |
| Kansas Highway Patrol | 13.38 | 12.72 |
| Cowley County Sheriff's Dept | 13.51 | 12.86 |
| City of Gardner Public Safety Officers | 13.51 | 12.86 |
| City of Liberal Police & Firemen | 13.51 | 12.86 |
| City of Oswego | 13.51 | 12.86 |
| Leavenworth County | 13.51 | 12.86 |
| Pottawatomie County | 13.51 | 12.86 |
| City of Roeland Park | 13.51 | 12.86 |
| City of Edwardsville Police | 16.27 | 15.22 |
| City of Garden City | 13.51 | 12.86 |
| City of Lake Quivira | 13.51 | 12.86 |
| City of Paola | 13.51 | 12.86 |
| City of Winfield (EMS) | 21.16 | 21.35 |
| Miami County | 13.51 | 12.86 |

TABLE 12 (cont.)
KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS
COMMENCING IN CALENDAR YEARS 2009 AND 2010

| Employer | Total Rate for Fiscal Year Commencing in 2009 | Recommended Total Rate for Fiscal Year Commencing in 2010 |
|-------------------------------------|--|--|
| Atchinson County | 13.51 % | 12.86 % |
| City of Park City | 13.51 | 12.86 |
| Dickinson County | 13.51 | 12.86 |
| Leavenworth County (EMS) | 13.51 | 12.86 |
| City of Basehor | 13.51 | 12.86 |
| City of Edwardsville Firemen | 18.70 | 17.67 |
| City of Marion | 13.51 | 12.86 |
| City of Overbrook | 13.51 | 12.86 |
| Leavenworth County Fire District #1 | 13.51 | 12.86 |
| Shawnee Heights Fire District | 13.51 | 12.86 |
| City of Lansing | 13.51 | 12.86 |
| State Fire Marshall | 13.38 | 12.72 |
| Seward County | 13.51 | 12.86 |
| City of Hays | 13.51 | 12.86 |
| Ellis County | 13.51 | 12.86 |
| City of Baldwin City | 13.51 | 12.86 |
| McPherson County | 13.51 | 12.86 |
| City of Spring Hill | 13.51 | 12.86 |
| City of Andover | 13.51 | 12.86 |
| Kearny County | 13.51 | 12.86 |
| Neosho County | 13.51 | 12.86 |
| Clark County | 13.51 | 12.86 |
| City of Wakefield | 13.51 | 12.86 |

TABLE 13A
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
PRIOR SERVICE LIABILITY
FOR FISCAL YEARS BEGINNING IN 2010

| Employer | 1/1/2008 Unfunded Prior Service Liability | Payment on Unfunded Liability* |
|--------------------------------------|--|---|
| Douglas County Law Enforcement | \$1,546,846 | \$181,138 |
| Ford County | 0 | 0 |
| Franklin County Sheriff's Dept | 0 | 0 |
| Gray County Sheriff's Dept. | 0 | 0 |
| Harvey County Sheriff's Dept. | 0 | 0 |
| Johnson County Fire Dept. | 0 | 0 |
| Johnson County Fire No. 1 | 0 | 0 |
| Johnson County Fire No. 2 | 0 | 0 |
| Johnson County Park Commission | 0 | 0 |
| Johnson County Sheriff's Dept. | 292,715 | 67,758 |
| Labette County Sheriff's Dept. | 183,948 | 16,582 |
| Reno County Sheriff's Dept. | 0 | 0 |
| Riley County Law Enforcement | 0 | 0 |
| Sedgwick County Fire No. 1 | 0 | 0 |
| Sedgwick County Sheriff's Dept. | 335,699 | 54,352 |
| Sedgwick County EMT's | 117,288 | 31,177 |
| Shawnee County Sheriff's Dept. | 1,250,497 | 154,845 |
| Sumner County Sheriff's Dept. | 84,268 | 11,639 |
| Unified Gov't of Wyandotte County | 0 | 0 |
| Unified Gov't of Wyandotte Co. - KCK | 0 | 0 |
| City of Abilene | 0 | 0 |
| City of Arkansas City | 0 | 0 |
| City of Atchison | 0 | 0 |
| City of Bonner Springs | 0 | 0 |
| City of Chanute | 0 | 0 |
| City of Cimarron | 0 | 0 |
| City of Coffeyville | 649,904 | 122,214 |
| City of Concordia | 66,200 | 12,471 |
| City of Derby | 0 | 0 |
| City of Dodge City | 1,980,924 | 215,432 |
| City of Emporia | 0 | 0 |
| City of Erie | 0 | 0 |
| City of Eudora | 0 | 0 |
| City of Fairway | 0 | 0 |
| City of Fort Scott | 389,802 | 73,266 |
| City of Herington | 14,562 | 3,014 |
| City of Hutchinson | 0 | 0 |
| City of Junction City | 0 | 0 |
| City of Lawrence | 0 | 0 |
| City of Leavenworth | 44,610 | 24,838 |

TABLE 13A (cont.)
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
PRIOR SERVICE LIABILITY
FOR FISCAL YEARS BEGINNING IN 2010

| Employer | 1/1/2008 Unfunded Prior Service Liability | Payment on Unfunded Liability* |
|--|--|---|
| City of Leawood | \$329,556 | \$47,701 |
| City of Lenexa | 54,258 | 14,445 |
| City of Manhattan | 18,249 | 18,965 |
| City of Merriam | 0 | 0 |
| City of McPherson | 0 | 0 |
| City of Mission | 0 | 0 |
| City of Newton EMTs | 61,678 | 7,898 |
| City of Newton | 0 | 0 |
| City of Olathe | 43,381 | 13,718 |
| City of Ottawa | 0 | 0 |
| City of Parsons | 0 | 0 |
| City of Pittsburg | 539,466 | 101,429 |
| City of Salina | 1,289,547 | 242,452 |
| City of Shawnee | 109,885 | 20,681 |
| City of Topeka | 0 | 0 |
| City of Wellington | 300,210 | 56,430 |
| City of Westwood | 0 | 0 |
| City of Winfield | 568,231 | 86,672 |
| Board of Regents Campus Police | 0 | 0 |
| Kansas Bureau of Investigation | 0 | 0 |
| Kansas Highway Patrol | 0 | 0 |
| Cowley County Sheriff's Dept | 0 | 0 |
| City of Gardner Public Safety Officers | 0 | 0 |
| City of Liberal Police & Firemen | 0 | 0 |
| City of Oswego | 0 | 0 |
| Leavenworth County | 0 | 0 |
| Pottawatomie County | 0 | 0 |
| City of Roeland Park | 0 | 0 |
| City of Edwardsville Police | 230,690 | 18,952 |
| City of Garden City | 0 | 0 |
| City of Lake Quivira | 0 | 0 |
| City of Paola | 0 | 0 |
| City of Winfield (EMS) | 430,902 | 39,655 |
| Miami County | 0 | 0 |
| Atchinson County | 0 | 0 |
| City of Park City | 0 | 0 |
| Dickinson County | 0 | 0 |
| Leavenworth County (EMS) | 0 | 0 |
| City of Basehor | 0 | 0 |
| City of Edwardsville Firemen | 426,480 | 37,963 |

TABLE 13A (cont.)
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
PRIOR SERVICE LIABILITY
FOR FISCAL YEARS BEGINNING IN 2010

| Employer | 1/1/2008 Unfunded Prior Service Liability | Payment on Unfunded Liability* |
|-------------------------------------|--|---|
| City of Marion | \$0 | \$0 |
| City of Overbrook | 0 | 0 |
| Leavenworth County Fire District #1 | 0 | 0 |
| Shawnee Heights Fire District | 0 | 0 |
| City of Lansing | 0 | 0 |
| State Fire Marshall | 0 | 0 |
| Seward County | 0 | 0 |
| City of Hays | 0 | 0 |
| Ellis County | 0 | 0 |
| City of Spring Hill | 0 | 0 |
| City of Andover | 0 | 0 |
| Kearny County | 0 | 0 |
| Neosho County | 0 | 0 |
| Clark County | 0 | 0 |
| City of Wakefield | 0 | 0 |
| Total | \$ 11,359,796 | \$ 1,675,686 |

* Payments are based on a remaining 40-year amortization periods, except for Harvey County Sheriff's Department (20 years) and Sedgwick County EMTs (30 years). Payments are assumed to be made throughout the year.

**TABLE 13B
 KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
 PRIOR SERVICE LIABILITY - AFFILIATION AFTER 1/1/06
 FOR FISCAL YEAR BEGINNING IN 2010**

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 January 1 to Amortize Unfunded Liability | Final Payment Year |
|----------------------|----------------------------|--|--|-----------------------------------|
| City of Baldwin City | 2007 | \$8,765 | \$760 | 2032 |
| McPherson County | 2007 | \$457 | \$63 | 2017 |

TABLE 14
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
FOR FISCAL YEARS BEGINNING IN 2010

| Employer | Number of Employees | Total Estimated 2010 Payroll | Projected 1/1/2008 Excess Benefit Liability | Payment on Excess Benefit Liability* | Payment on Unfunded Liability (Table 13) | Total Payment Amount | As Percent of Payroll |
|--------------------------------------|----------------------------|-------------------------------------|--|---|---|-----------------------------|------------------------------|
| Douglas County Law Enforcement | 88 | \$6,545,181 | \$0 | \$0 | \$181,138 | \$181,138 | 2.77 % |
| Ford County | 49 | 2,294,504 | 0 | 0 | 0 | 0 | 0.00 |
| Franklin County Sheriff's Dept | 49 | 2,513,260 | 0 | 0 | 0 | 0 | 0.00 |
| Gray County Sheriff's Dept. | 10 | 454,319 | 0 | 0 | 0 | 0 | 0.00 |
| Harvey County Sheriff's Dept. | 23 | 1,082,692 | 0 | 0 | 0 | 0 | 0.00 |
| Johnson County Fire Dept. | 164 | 11,341,787 | 0 | 0 | 0 | 0 | 0.00 |
| Johnson County Fire No. 1 | 18 | 991,172 | 0 | 0 | 0 | 0 | 0.00 |
| Johnson County Fire No. 2 | 67 | 5,071,099 | 0 | 0 | 0 | 0 | 0.00 |
| Johnson County Park Commission | 19 | 1,003,224 | 0 | 0 | 0 | 0 | 0.00 |
| Johnson County Sheriff's Dept. | 507 | 36,615,225 | 0 | 0 | 67,758 | 67,758 | 0.19 |
| Labette County Sheriff's Dept. | 16 | 663,210 | 0 | 0 | 16,582 | 16,582 | 2.50 |
| Reno County Sheriff's Dept. | 65 | 3,324,072 | 0 | 0 | 0 | 0 | 0.00 |
| Riley County Law Enforcement | 100 | 5,768,029 | 0 | 0 | 0 | 0 | 0.00 |
| Sedgwick County Fire No. 1 | 129 | 8,250,088 | 0 | 0 | 0 | 0 | 0.00 |
| Sedgwick County Sheriff's Dept. | 270 | 16,155,034 | 698 | 145 | 54,352 | 54,497 | 0.34 |
| Sedgwick County EMT's | 139 | 8,074,143 | 0 | 0 | 31,177 | 31,177 | 0.39 |
| Shawnee County Sheriff's Dept. | 107 | 5,925,405 | 0 | 0 | 154,845 | 154,845 | 2.61 |
| Sumner County Sheriff's Dept. | 21 | 803,762 | 0 | 0 | 11,639 | 11,639 | 1.45 |
| Unified Gov't of Wyandotte County | 834 | 3,884,658 | 0 | 0 | 0 | 0 | 0.00 |
| Unified Gov't of Wyandotte Co. - KCK | 0 | 53,665,832 | 5,021,098 | 1,197,350 | 0 | 1,197,350 | 2.23 |
| City of Abilene | 22 | 949,490 | 0 | 0 | 0 | 0 | 0.00 |
| City of Arkansas City | 48 | 2,576,791 | 0 | 0 | 0 | 0 | 0.00 |
| City of Atchison | 39 | 1,801,493 | 57,565 | 15,571 | 0 | 15,571 | 0.86 |
| City of Bonner Springs | 24 | 1,342,431 | 0 | 0 | 0 | 0 | 0.00 |
| City of Chanute | 36 | 1,917,363 | 0 | 0 | 0 | 0 | 0.00 |
| City of Cimarron | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| City of Coffeyville | 46 | 2,425,926 | 0 | 0 | 122,214 | 122,214 | 5.04 |
| City of Concordia | 8 | 348,856 | 0 | 0 | 12,471 | 12,471 | 3.57 |
| City of Derby | 46 | 2,487,357 | 0 | 0 | 0 | 0 | 0.00 |

**TABLE 14 (cont.)
 KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
 FOR FISCAL YEARS BEGINNING IN 2010**

| Employer | Number of Employees | Total Estimated 2010 Payroll | Projected 1/1/2008 Excess Benefit Liability | Payment on Excess Benefit Liability* | Payment on Unfunded Liability (Table 13) | Total Payment Amount | As Percent of Payroll | % |
|-----------------------|----------------------------|-------------------------------------|--|---|---|-----------------------------|------------------------------|----------|
| City of Dodge City | 75 | \$3,708,136 | \$0 | \$0 | \$215,432 | \$215,432 | 5.81 | % |
| City of Emporia | 95 | 4,893,373 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Erie | 2 | 89,380 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Eudora | 10 | 633,767 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Fairway | 9 | 684,990 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Fort Scott | 31 | 1,305,624 | 0 | 0 | 73,266 | 73,266 | 5.61 | |
| City of Herington | 8 | 330,070 | 0 | 0 | 3,014 | 3,014 | 0.91 | |
| City of Hutchinson | 156 | 9,327,374 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Junction City | 98 | 5,209,096 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Lawrence | 269 | 21,310,439 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Leavenworth | 117 | 6,090,427 | 213,832 | 54,647 | 24,838 | 79,485 | 1.31 | |
| City of Leawood | 111 | 7,512,144 | 0 | 0 | 47,701 | 47,701 | 0.63 | |
| City of Lenexa | 172 | 11,970,073 | 0 | 0 | 14,445 | 14,445 | 0.12 | |
| City of Manhattan | 67 | 3,648,020 | 0 | 0 | 18,965 | 18,965 | 0.52 | |
| City of Merriam | 49 | 3,214,344 | 0 | 0 | 0 | 0 | 0.00 | |
| City of McPherson | 44 | 2,180,170 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Mission | 29 | 1,729,151 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Newton EMTs | 6 | 391,519 | 0 | 0 | 7,898 | 7,898 | 2.02 | |
| City of Newton | 67 | 3,796,547 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Olathe | 281 | 20,668,205 | 0 | 0 | 13,718 | 13,718 | 0.07 | |
| City of Ottawa | 45 | 2,667,484 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Parsons | 44 | 1,888,616 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Pittsburg | 73 | 3,749,605 | 0 | 0 | 101,429 | 101,429 | 2.71 | |
| City of Salina | 164 | 9,926,327 | 266,391 | 74,383 | 242,452 | 316,835 | 3.19 | |
| City of Shawnee | 143 | 11,144,111 | 391,558 | 104,777 | 20,681 | 125,458 | 1.13 | |
| City of Topeka | 513 | 34,064,839 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Wellington | 31 | 1,630,487 | 0 | 0 | 56,430 | 56,430 | 3.46 | |
| City of Westwood | 7 | 539,584 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Winfield | 40 | 2,256,178 | 0 | 0 | 86,672 | 86,672 | 3.84 | |

**TABLE 14 (cont.)
 KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
 FOR FISCAL YEARS BEGINNING IN 2010**

| Employer | Number of Employees | Total Estimated 2010 Payroll | Projected 1/1/2008 Excess Benefit Liability | Payment on Excess Benefit Liability* | Payment on Unfunded Liability (Table 13) | Total Payment Amount | As Percent of Payroll | % |
|--|------------------------------------|---|--|---|---|-------------------------------------|----------------------------------|----------|
| Board of Regents Campus Police | 127 | \$6,789,450 | \$0 | \$0 | \$0 | \$0 | 0.00 | |
| Kansas Bureau of Investigation | 88 | 6,377,082 | 0 | 0 | 0 | 0 | 0.00 | |
| Kansas Highway Patrol | 526 | 36,719,874 | 0 | 0 | 0 | 0 | 0.00 | |
| Cowley County Sheriff's Dept | 27 | 1,067,851 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Gardner Public Safety Officers | 37 | 2,118,738 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Liberal Police & Firemen | 51 | 2,368,157 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Oswego | 5 | 192,162 | 0 | 0 | 0 | 0 | 0.00 | |
| Leavenworth County | 47 | 2,482,974 | 0 | 0 | 0 | 0 | 0.00 | |
| Pottawatomie County | 25 | 1,129,196 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Roeland Park | 15 | 890,442 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Edwardsville Police | 15 | 802,552 | 0 | 0 | 18,952 | 18,952 | 2.36 | |
| City of Garden City | 85 | 4,120,400 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Lake Quivira | 3 | 150,320 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Paola | 16 | 821,429 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Winfield (EMS) | 9 | 467,317 | 0 | 0 | 39,655 | 39,655 | 8.49 | |
| Miami County | 46 | 2,485,853 | 0 | 0 | 0 | 0 | 0.00 | |
| Atchinson County | 11 | 422,733 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Park City | 18 | 866,003 | 0 | 0 | 0 | 0 | 0.00 | |
| Dickinson County | 15 | 704,388 | 0 | 0 | 0 | 0 | 0.00 | |
| Leavenworth County (EMS) | 35 | 1,519,528 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Basehor | 10 | 397,840 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Edwardsville Firemen | 15 | 789,159 | 0 | 0 | 37,963 | 37,963 | 4.81 | |
| City of Marion | 5 | 160,327 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Overbrook | 2 | 74,107 | 0 | 0 | 0 | 0 | 0.00 | |
| Leavenworth County Fire District #1 | 4 | 187,453 | 0 | 0 | 0 | 0 | 0.00 | |
| Shawnee Heights Fire District | 10 | 622,527 | 0 | 0 | 0 | 0 | 0.00 | |
| City of Lansing | 16 | 725,309 | 0 | 0 | 0 | 0 | 0.00 | |
| State Fire Marshall | 10 | 578,181 | 0 | 0 | 0 | 0 | 0.00 | |
| Seward County | 20 | 1,048,701 | 0 | 0 | 0 | 0 | 0.00 | |

**TABLE 14 (cont.)
 KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
 FOR FISCAL YEARS BEGINNING IN 2010**

| Employer | Number of Employees | Total Estimated 2010 Payroll | Projected 1/1/2008 Excess Benefit Liability | Payment on Excess Benefit Liability* | Payment on Unfunded Liability (Table 13) | Total Payment Amount | As Percent of Payroll |
|----------------------|------------------------------------|---|--|---|---|-------------------------------------|----------------------------------|
| City of Hays | 54 | \$2,638,317 | \$0 | \$0 | \$0 | \$0 | 0.00 % |
| Ellis County | 42 | 2,268,006 | 0 | 0 | 0 | 0 | 0.00 |
| City of Baldwin City | 9 | 488,161 | 0 | 0 | ** | ** | 0.00 |
| McPherson County | 1 | 24,187 | 0 | 0 | ** | ** | 0.00 |
| City of Spring Hill | 10 | 469,099 | 0 | 0 | 0 | 0 | 0.00 |
| City of Andover | 28 | 1,364,459 | 0 | 0 | 0 | 0 | 0.00 |
| Kearny County | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| Neosho County | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| Clark County | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| City of Wakefield | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| Total | 7,137 | \$ 449,168,760 | \$ 5,951,143 | \$ 1,446,873 | \$ 1,675,686 | \$ 3,122,559 | |

* Payments are based on paying off the liability in 2014.

** See Table 13b for fixed dollar amortization schedule.

SECTION 6

ACCOUNTING AND OTHER INFORMATION

Historically, Government Accounting Standards Board (GASB) Statement No. 5, "Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Government Employers", required the disclosure of the funded status of the Plan on an annual basis using the pension benefit obligation (PBO).

In an effort to enhance the understandability and usefulness of the pension information that is included in the financial reports of pension plans for state and local governments, the Governmental Accounting Standards Board (GASB) issued Statement No. 25 - Financial Reporting for Defined Benefit Pension Plans. This Statement, along with GASB Statement No. 27, supersedes GASB Statement No. 5.

GASB Statement No. 25, effective for fiscal years beginning after June 15, 1996, establishes financial reporting standards for defined benefit pension plans. In addition to two required statements regarding plan assets, the statement requires two schedules and accompanying notes disclosing information relative to the funded status of the plan and historical contribution patterns.

- The Schedule of Funding Progress provides information about whether the financial strength of the Plan is improving or deteriorating over time.
- The Schedule of Employer Contributions provides historical information about the annual required contribution (ARC) and the percentage of the ARC that was actually contributed.

In addition to information required by GASB, we also provide an exhibit of the anticipated cash flows from the System.

TABLE 15
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACCOUNTING INFORMATION FOR GASB 25

Schedule of Funding Progress
(\$ in thousands)

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percent of Covered Payroll ((b-a)/c) |
|--------------------------------|-------------------------------------|---|---------------------------------|--------------------------|----------------------------|--|
| 12/31/2002 | \$9,784,862 | \$12,613,599 | \$2,828,736 | 78% | \$4,865,903 ⁽¹⁾ | 58% |
| 12/31/2003 | 10,853,462 | 14,439,546 ⁽²⁾ | 3,586,084 | 75% | 4,978,132 | 72% |
| 12/31/2004 | 10,971,427 | 15,714,092 | 4,742,666 | 70% | 5,102,016 | 93% |
| 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% |

⁽¹⁾ Beginning with the 12/31/02 actuarial valuation, the unfunded liability of the TIAA group was eliminated. Therefore, covered payroll no longer includes the salaries of the non-KPERS unclassified employees of the Board of Regents institutions previously included.

⁽²⁾ Beginning with the 12/31/03 actuarial valuation, the actuarial cost method was changed to the Entry Age Normal (EAN) method.

**TABLE 15 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACCOUNTING INFORMATION FOR GASB 25**

| | KPERS System | KP& F System | Judges System |
|-------------------------------|---|-------------------------|----------------------|
| Valuation Date | 12/31/07 | 12/31/07 | 12/31/07 |
| Actuarial Cost Method | Entry Age Normal | Entry Age Normal | Entry Age Normal |
| Amortization Method | Level Percent Closed | Level Percent Closed | Level Percent Closed |
| Remaining Amortization Period | 25 years | 25 years | 25 years |
| Asset Valuation Method | Difference between actual return and expected return on market value recognized evenly over five-year period. | | |
| Actuarial Assumptions: | | | |
| Investment Rate of Return | 8.0% | 8.0% | 8.0% |
| Projected Salary Increases | 4.0% - 12.0% | 4.0% - 12.5% | 4.5% |
| Cost of Living Adjustment | None | None | None |

TABLE 16
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACCOUNTING INFORMATION FOR GASB 25

Schedule of Employer Contributions
For the Fiscal Year Ended June 30

| Year | Annual Required Contribution | Percentage Contributed |
|------|---------------------------------|---------------------------|
| 2003 | \$282,329,785 | 78.9% |
| 2004 | 338,879,960 | 69.4% |
| 2005 | 381,791,085 | 68.6% |
| 2006 | 471,424,006 | 63.4% |
| 2007 | 531,292,151 | 63.9% |
| 2008 | 613,221,030 * | 63.6% * |

*Due to timing of the actuarial valuation versus the System's fiscal year, the actual number is not yet available. The number shown is an estimate.

The numbers shown in this exhibit are provided by KPERS. Milliman has relied on the accuracy of the numbers as provided and has not verified them.

TABLE 17
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PROJECTED BENEFIT PAYMENTS

| Year | State | School | Local | Total KPERS | KP&F | Judges | Total |
|------|---------------|---------------|---------------|---------------|---------------|-------------|---------------|
| 2008 | \$182,692,000 | \$485,075,000 | \$125,885,000 | \$793,652,000 | \$102,444,000 | \$7,313,000 | \$903,409,000 |
| 2009 | 196,263,000 | 529,537,000 | 138,648,000 | 864,448,000 | 109,658,000 | 8,217,000 | 982,323,000 |
| 2010 | 208,711,000 | 574,561,000 | 150,246,000 | 933,518,000 | 117,000,000 | 9,039,000 | 1,059,557,000 |
| 2011 | 221,801,000 | 621,330,000 | 163,142,000 | 1,006,273,000 | 124,503,000 | 9,726,000 | 1,140,502,000 |
| 2012 | 235,705,000 | 669,281,000 | 177,668,000 | 1,082,654,000 | 132,317,000 | 10,414,000 | 1,225,385,000 |
| 2013 | 250,946,000 | 719,395,000 | 194,406,000 | 1,164,747,000 | 140,267,000 | 11,151,000 | 1,316,165,000 |
| 2014 | 266,689,000 | 769,977,000 | 212,798,000 | 1,249,464,000 | 148,656,000 | 12,050,000 | 1,410,170,000 |
| 2015 | 282,662,000 | 820,889,000 | 232,304,000 | 1,335,855,000 | 157,535,000 | 13,039,000 | 1,506,429,000 |
| 2016 | 299,391,000 | 872,004,000 | 253,259,000 | 1,424,654,000 | 167,108,000 | 14,007,000 | 1,605,769,000 |
| 2017 | 316,120,000 | 923,497,000 | 275,407,000 | 1,515,024,000 | 177,250,000 | 14,991,000 | 1,707,265,000 |
| 2018 | 332,774,000 | 974,591,000 | 298,325,000 | 1,605,690,000 | 187,699,000 | 16,025,000 | 1,809,414,000 |
| 2019 | 348,933,000 | 1,024,300,000 | 321,748,000 | 1,694,981,000 | 198,691,000 | 16,923,000 | 1,910,595,000 |
| 2020 | 364,024,000 | 1,073,164,000 | 344,934,000 | 1,782,122,000 | 209,851,000 | 17,547,000 | 2,009,520,000 |
| 2021 | 378,756,000 | 1,120,568,000 | 368,142,000 | 1,867,466,000 | 221,299,000 | 18,153,000 | 2,106,918,000 |
| 2022 | 392,403,000 | 1,166,560,000 | 391,626,000 | 1,950,589,000 | 232,961,000 | 18,801,000 | 2,202,351,000 |
| 2023 | 404,935,000 | 1,211,321,000 | 414,201,000 | 2,030,457,000 | 244,432,000 | 19,247,000 | 2,294,136,000 |
| 2024 | 416,205,000 | 1,255,117,000 | 436,045,000 | 2,107,367,000 | 256,371,000 | 19,591,000 | 2,383,329,000 |
| 2025 | 426,454,000 | 1,297,335,000 | 457,472,000 | 2,181,261,000 | 268,438,000 | 19,924,000 | 2,469,623,000 |
| 2026 | 435,526,000 | 1,338,119,000 | 478,362,000 | 2,252,007,000 | 280,399,000 | 20,060,000 | 2,552,466,000 |
| 2027 | 442,518,000 | 1,377,031,000 | 497,622,000 | 2,317,171,000 | 292,474,000 | 20,018,000 | 2,629,663,000 |
| 2028 | 447,800,000 | 1,414,245,000 | 515,566,000 | 2,377,611,000 | 303,809,000 | 19,908,000 | 2,701,328,000 |
| 2029 | 451,551,000 | 1,450,056,000 | 531,999,000 | 2,433,606,000 | 314,431,000 | 19,750,000 | 2,767,787,000 |
| 2030 | 453,800,000 | 1,484,076,000 | 547,110,000 | 2,484,986,000 | 324,477,000 | 19,524,000 | 2,828,987,000 |
| 2031 | 455,033,000 | 1,516,666,000 | 561,207,000 | 2,532,906,000 | 333,871,000 | 19,163,000 | 2,885,940,000 |
| 2032 | 455,039,000 | 1,547,664,000 | 574,481,000 | 2,577,184,000 | 342,433,000 | 18,796,000 | 2,938,413,000 |

Note: Cash flows exclude refund payouts to current nonvested inactivees and assume future retirees elect the normal form of payment.

APPENDIX A HISTORICAL SUMMARY OF MEMBERS

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

KPERS

| Valuation | | Active Members | | | | | | Number | | | Act/Ret Ratio |
|---------------------|----------------|----------------|------|--------------|---------|--------------------|-----------------|-----------------------|-----------|---------|---------------|
| | | Average | | | | | | | | | |
| Date December 31 | Total Count | Number | Age | Entry Age | Service | Annual Pay (\$) | Pay Increase | Deferred Disabled* | Inactives | Retired | |
| 2000 | 222,968 | 137,086 | 44.2 | 34.1 | 10.1 | 30,307 | N/A | | 34,667 | 51,215 | 2.68 |
| 2001 | 229,185 | 139,253 | 44.4 | 34.2 | 10.2 | 31,279 | 3.2% | | 37,175 | 52,757 | 2.64 |
| 2002 | 234,023 | 140,498 | 44.7 | 34.3 | 10.4 | 31,634 | 1.1% | | 39,420 | 54,105 | 2.60 |
| 2003 | 237,123 | 141,401 | 45.0 | 34.4 | 10.6 | 32,111 | 1.5% | 2,933 | 37,280 | 55,509 | 2.55 |
| 2004 | 238,375 | 140,779 | 45.3 | 34.4 | 10.8 | 32,937 | 2.6% | 3,004 | 37,191 | 57,401 | 2.45 |
| 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 |

*Prior to 2003, deferred disabled members were included in the Inactives count.

KP&F

| Valuation | | Active Members | | | | | | Number | | | Act/Ret Ratio |
|---------------------|----------------|----------------|------|--------------|---------|--------------------|-----------------|-----------------------|-----------|---------|---------------|
| | | Average | | | | | | | | | |
| Date December 31 | Total Count | Number | Age | Entry Age | Service | Annual Pay (\$) | Pay Increase | Deferred Disabled* | Inactives | Retired | |
| 2000 | 10,083 | 6,258 | 38.1 | 27.7 | 10.4 | 44,511 | N/A | | 794 | 3,031 | 2.06 |
| 2001 | 10,471 | 6,405 | 38.3 | 27.7 | 10.6 | 46,483 | 4.4% | | 855 | 3,211 | 1.99 |
| 2002 | 10,847 | 6,548 | 38.4 | 27.8 | 10.6 | 47,580 | 2.4% | | 961 | 3,338 | 1.96 |
| 2003 | 11,007 | 6,464 | 38.8 | 27.9 | 11.0 | 49,017 | 3.0% | 0 | 1,087 | 3,456 | 1.87 |
| 2004 | 11,528 | 6,721 | 38.9 | 28.0 | 11.0 | 51,014 | 4.1% | 187 | 1,062 | 3,558 | 1.89 |
| 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 |

*Prior to 2003, deferred disabled members were included in the Inactives count.

**APPENDIX A
HISTORICAL SUMMARY OF MEMBERS
(continued)**

JUDGES

| Valuation | | Active Members | | | | | | Number | | Act/Ret Ratio |
|------------------|-------------|----------------|------|-----------|---------|-----------------|--------------|--------|---------|-----------------|
| | | Average | | Entry Age | Service | Annual Pay (\$) | Pay Increase | | | |
| Date December 31 | Total Count | Number | Age | | | | | Age | Service | Annual Pay (\$) |
| 2000 | 411 | 247 | 54.2 | 43.5 | 10.8 | 84,794 | | 14 | 150 | 1.65 |
| 2001 | 417 | 252 | 54.4 | 43.9 | 10.5 | 85,625 | 1.0% | 18 | 147 | 1.71 |
| 2002 | 417 | 248 | 55.0 | 43.9 | 11.1 | 86,116 | 0.6% | 15 | 154 | 1.64 |
| 2003 | 424 | 250 | 55.1 | 43.8 | 11.3 | 86,770 | 0.8% | 15 | 159 | 1.56 |
| 2004 | 435 | 251 | 55.5 | 43.9 | 11.6 | 88,761 | 2.3% | 18 | 166 | 1.51 |
| 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 |

APPENDIX A SUMMARY OF DATA FILE RECONCILIATION

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

| | |
|---|----------|
| Records on the in-pay data file | 80,467 |
| Removed deaths prior to 12/31/07 | (13,365) |
| Records used in the valuation | 67,102 |
| | |
| Records on the not-in-pay data file | 211,576 |
| Records removed because the member has received all benefits or is in a non-benefiting group | (16,389) |
| Records used in the valuation | 195,187 |

These records are allocated as follows:

| | State | School | Local | KP&F | Judges |
|----------------------------|--------------|---------------|--------------|--------------|----------|
| Active members | 24,024 | 86,468 | 35,914 | 7,137 | 261 |
| Vested inactive members | 3,159 | 6,116 | 3,259 | 307 | 14 |
| Nonvested inactive members | <u>2,866</u> | <u>17,537</u> | <u>7,114</u> | <u>1,011</u> | <u>0</u> |
| Total Not-in pay | 30,049 | 110,121 | 46,287 | 8,455 | 275 |
| | | | | | |
| Retirees and beneficiaries | 14,994 | 35,412 | 12,761 | 3,755 | 180 |
| | | | | | |
| TOTAL | 45,043 | 145,533 | 59,048 | 12,210 | 455 |

KPERS is in the process of implementing a new computer information system. The in-pay data supplied for the 12/31/07 valuation was first produced using the new system. The not-in-pay data was first provided from the new system for the 12/31/06 valuation. While we did not audit the data, we did a limited review for reasonableness and did not find anything that appeared to have a material impact.

**APPENDIX A
SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTIVE MEMBER DATA

| | 12/31/2007 | 12/31/2006 |
|---------------------|------------|------------|
| State/School | | |
| Number | 110,492 | 108,547 |
| Average Current Age | 45.43 | 45.35 |
| Average Service | 11.02 | 11.08 |
| Average Pay | \$36,615 | \$34,976 |
| State | | |
| Number | 24,024 | 23,840 |
| Average Current Age | 47.41 | 47.38 |
| Average Service | 12.87 | 12.93 |
| Average Pay | \$38,951 | \$36,482 |
| School | | |
| Number | 86,468 | 84,707 |
| Average Current Age | 44.87 | 44.78 |
| Average Service | 10.51 | 10.56 |
| Average Pay | \$35,966 | \$34,553 |
| Local | | |
| Number | 35,914 | 35,680 |
| Average Current Age | 45.77 | 45.60 |
| Average Service | 10.23 | 10.08 |
| Average Pay | \$37,874 | \$36,219 |
| KPERS Total | | |
| Number | 146,406 | 144,227 |
| Average Current Age | 45.51 | 45.41 |
| Average Service | 10.83 | 10.83 |
| Average Pay | \$36,924 | \$35,284 |

**APPENDIX A
SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTIVE MEMBER DATA

| | 12/31/2007 | 12/31/2006 |
|-------------------------|------------|------------|
| KP&F | | |
| Number | 7,137 | 6,965 |
| Tier I | 584 | 618 |
| Tier II | 6,553 | 6,347 |
| Average Current Age | 39.10 | 39.00 |
| Average Service | 10.96 | 10.92 |
| Average Pay | \$56,068 | \$53,939 |
| Judges | | |
| Number | 261 | 257 |
| Average Current Age | 56.64 | 56.15 |
| Average Service | 11.85 | 11.94 |
| Average Pay | \$101,732 | \$96,743 |
| System Total | | |
| Number | 153,804 | 151,449 |
| Average Current Age | 45.23 | 45.14 |
| Average Service | 10.83 | 10.84 |
| Average Pay | \$37,922 | \$36,246 |

SUMMARY OF MEMBERSHIP DATA

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM INACTIVE MEMBER DATA

| | 12/31/2007 | 12/31/2006 |
|---------------------|------------|------------|
| State | | |
| inactive vested | 2,133 | 2,093 |
| inactive nonvested | 2,866 | 2,824 |
| deferred disabled | 1,026 | 1,080 |
| School | | |
| inactive vested | 5,025 | 4,945 |
| inactive nonvested | 17,537 | 17,158 |
| deferred disabled | 1,091 | 1,122 |
| Local | | |
| inactive vested | 2,465 | 2,391 |
| inactive nonvested | 7,114 | 7,102 |
| deferred disabled | 794 | 805 |
| KPERS Total | | |
| inactive vested | 9,623 | 9,429 |
| inactive nonvested | 27,517 | 27,084 |
| deferred disabled | 2,911 | 3,007 |
| KP&F | | |
| inactive vested | 132 | 139 |
| inactive nonvested | 1,011 | 995 |
| deferred disabled | 175 | 186 |
| Judges | | |
| inactive vested | 14 | 18 |
| inactive nonvested | 0 | 0 |
| deferred disabled | 0 | 0 |
| System Total | | |
| inactive vested | 9,769 | 9,586 |
| inactive nonvested | 28,528 | 28,079 |
| deferred disabled | 3,086 | 3,193 |

**APPENDIX A
SUMMARY OF MEMBERSHIP DATA**

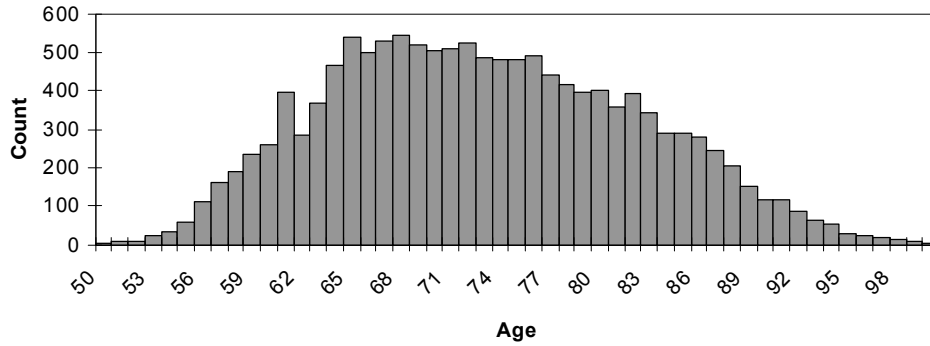
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
RETIREE AND BENEFICIARY MEMBER DATA

| | 12/31/2007 | 12/31/2006 |
|---------------------|------------|------------|
| State | | |
| Number | 14,994 | 14,937 |
| Average Benefit | \$11,200 | \$10,851 |
| Average Age | 72.67 | 72.85 |
| School | | |
| Number | 35,412 | 34,389 |
| Average Benefit | \$12,539 | \$12,129 |
| Average Age | 71.96 | 72.24 |
| Local | | |
| Number | 12,761 | 12,482 |
| Average Benefit | \$8,528 | \$8,204 |
| Average Age | 72.87 | 73.21 |
| KPERS Total | | |
| Number | 63,167 | 61,808 |
| Average Benefit | \$11,411 | \$11,027 |
| Average Age | 72.31 | 72.59 |
| KP&F | | |
| Number | 3,755 | 3,785 |
| Average Benefit | \$24,560 | \$23,096 |
| Average Age | 63.10 | 62.50 |
| Judges | | |
| Number | 180 | 172 |
| Average Benefit | \$33,850 | \$32,249 |
| Average Age | 73.60 | 73.50 |
| System Total | | |
| Number | 67,102 | 65,765 |
| Average Benefit | \$12,207 | \$11,777 |
| Average Age | 71.80 | 72.01 |

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2007**

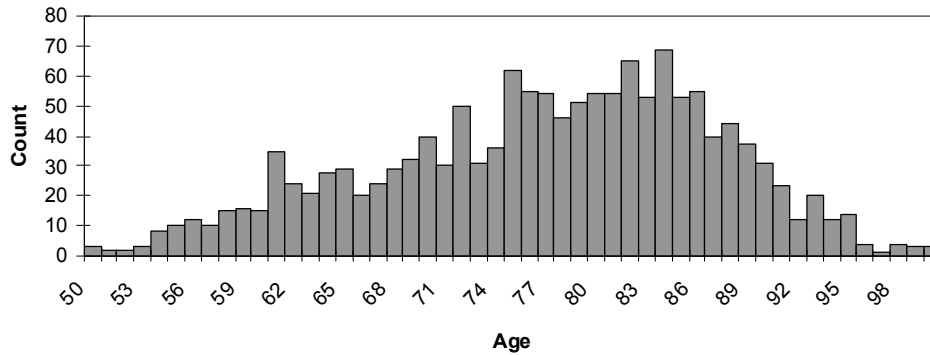
STATE

Retirees



Count: 13,427 Average age: 73 Average benefit: \$ 11,624

Beneficiaries



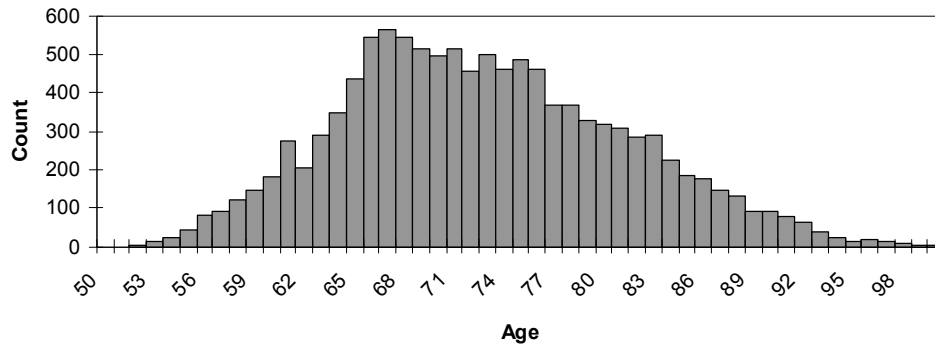
Count: 1,567 Average age: 75.4 Average benefit: \$ 7,576

Number of certain only beneficiaries not graphed: 91

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2007**

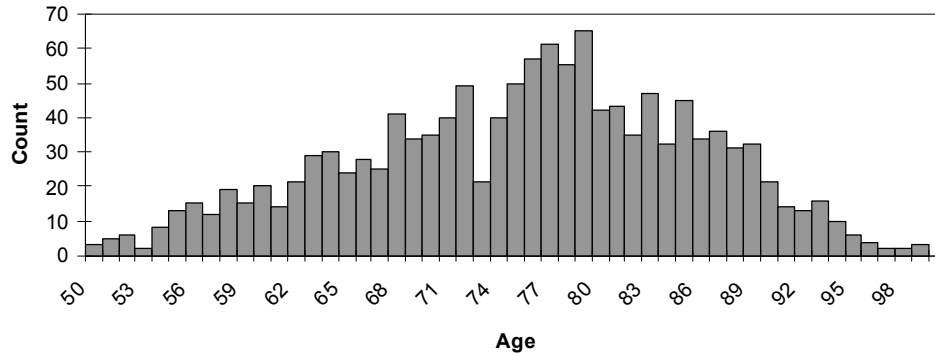
LOCAL

Retirees



Count: 11,339 Average age: 72.7 Average benefit: \$ 8,862

Beneficiaries



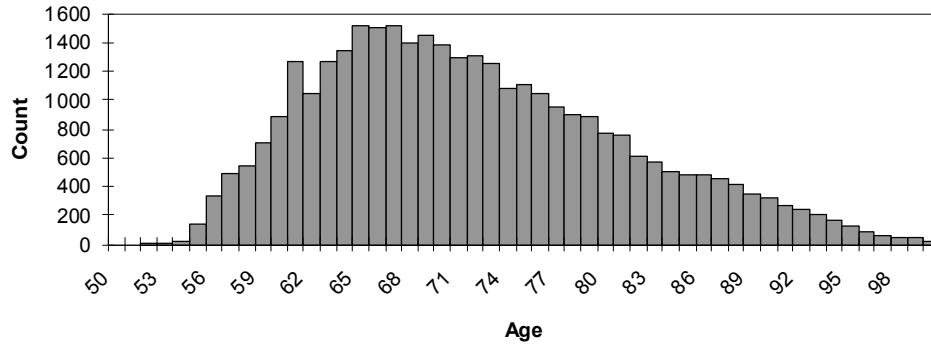
Count: 1,422 Average age: 74.2 Average benefit: \$ 5,871

Number of certain only beneficiaries not graphed: 93

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2007**

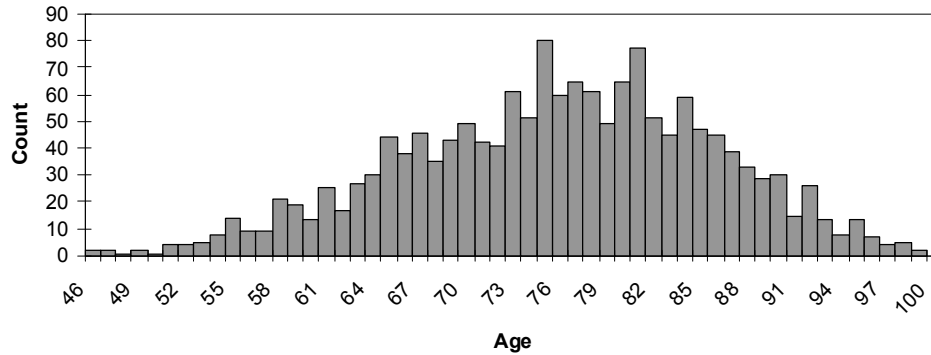
SCHOOL

Retirees



Count: 33,676 Average age: 71.8 Average benefit: \$ 12,769

Beneficiaries



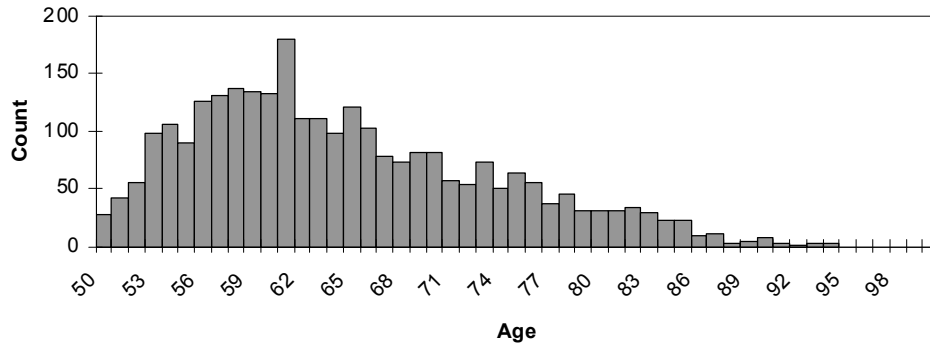
Count: 1,736 Average age: 75.0 Average benefit: \$ 8,079

Number of certain only beneficiaries not graphed: 141

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2007**

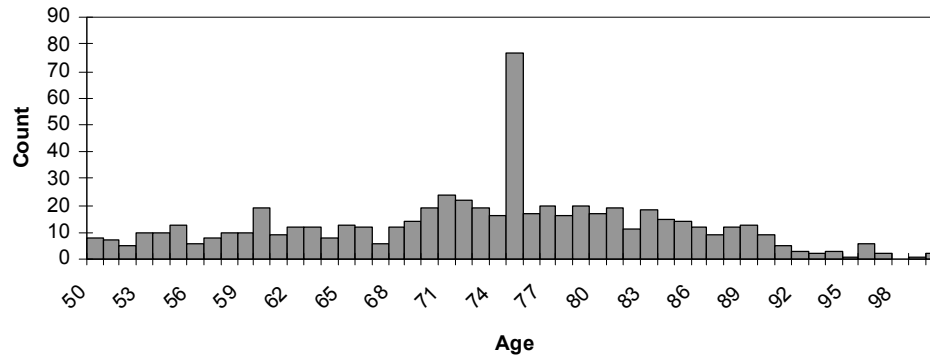
KP&F

Retirees



Count: 2,929 Average age: 63.5 Average benefit: \$ 27,924

Beneficiaries



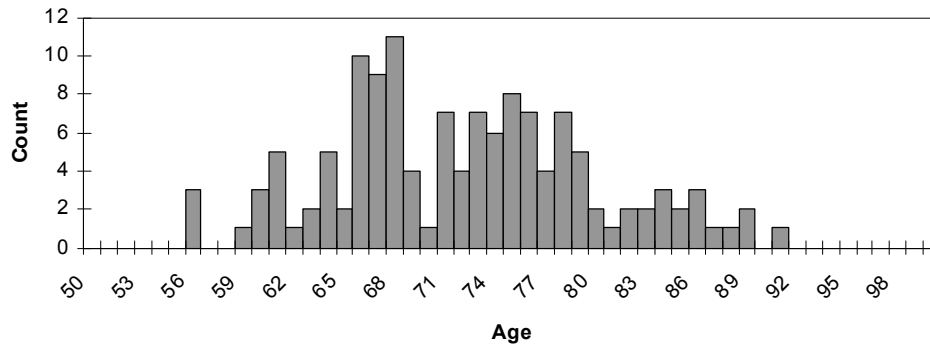
Count: 826 Average non-child age: 70.4 Average benefit: \$ 12,633

Number of certain only beneficiaries not graphed: 1

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2007**

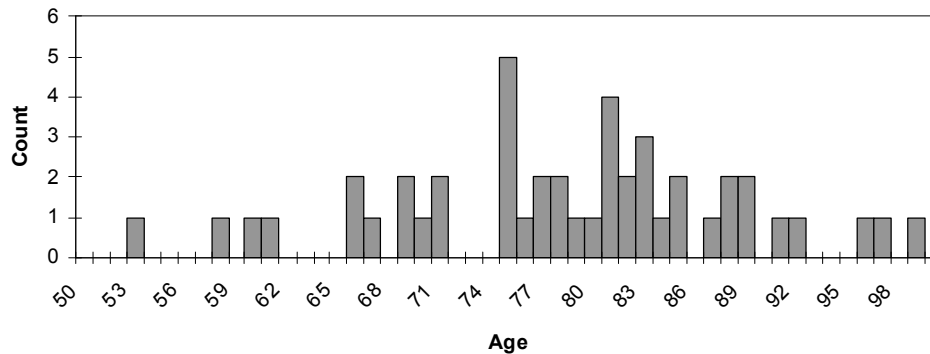
JUDGES

Retirees



Count: 132 Average age: 72.1 Average benefit: \$ 37,407

Beneficiaries



Count: 48 Average age: 77.8 Average benefit: \$ 24,067

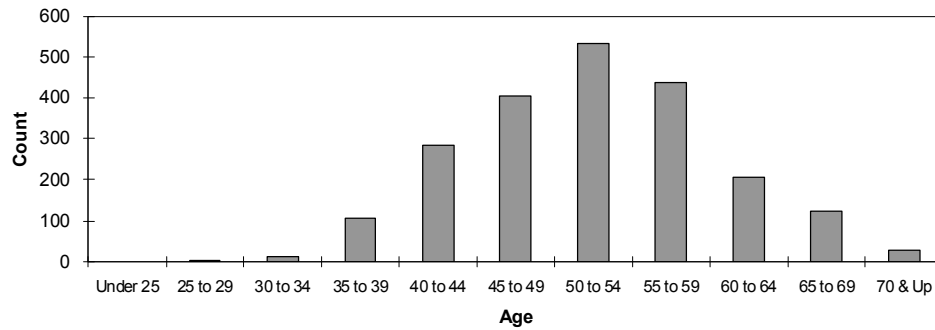
Number of certain only beneficiaries not graphed: 1

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2007**

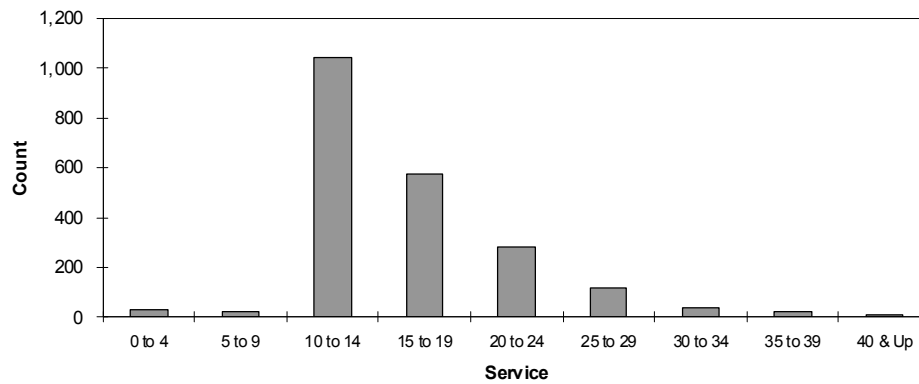
STATE

| Age | Service | | | | | | | | | Total |
|--------------|-----------|-----------|--------------|------------|------------|------------|-----------|-----------|----------|--------------|
| | 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 | |
| Under 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 to 29 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 30 to 34 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 35 to 39 | 0 | 0 | 94 | 12 | 0 | 0 | 0 | 0 | 0 | 106 |
| 40 to 44 | 0 | 0 | 191 | 78 | 15 | 0 | 0 | 0 | 0 | 284 |
| 45 to 49 | 0 | 0 | 206 | 133 | 51 | 13 | 0 | 0 | 0 | 403 |
| 50 to 54 | 2 | 3 | 258 | 143 | 81 | 31 | 15 | 0 | 0 | 533 |
| 55 to 59 | 0 | 0 | 186 | 119 | 82 | 38 | 12 | 2 | 0 | 439 |
| 60 to 64 | 0 | 1 | 68 | 61 | 34 | 20 | 5 | 14 | 3 | 206 |
| 65 to 69 | 16 | 15 | 20 | 25 | 21 | 12 | 5 | 4 | 5 | 123 |
| 70 & Up | 12 | 5 | 5 | 3 | 0 | 1 | 1 | 0 | 0 | 27 |
| Total | 30 | 24 | 1,040 | 574 | 284 | 115 | 38 | 20 | 8 | 2,133 |

Age Distribution



Service Distribution



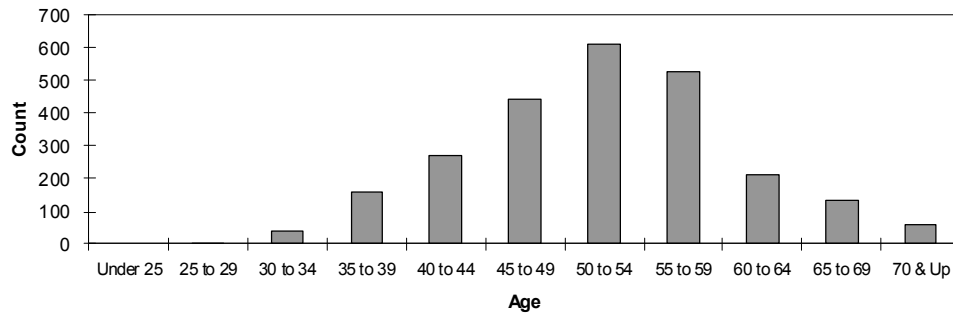
Nonvested: 2,866

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2007**

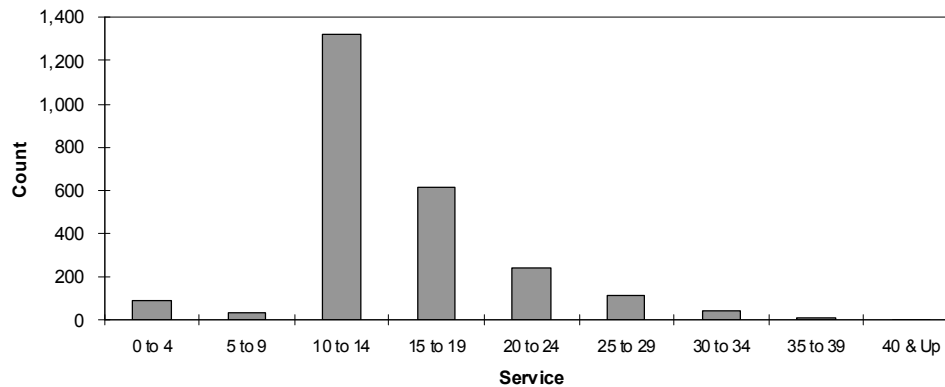
LOCAL

| Age | Service | | | | | | | | | Total | |
|--------------|-----------|-----------|--------------|------------|------------|------------|-----------|-----------|----------|----------|--------------|
| | 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 | | |
| Under 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 to 29 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 30 to 34 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| 35 to 39 | 0 | 0 | 144 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 159 |
| 40 to 44 | 0 | 1 | 195 | 63 | 10 | 0 | 0 | 0 | 0 | 0 | 269 |
| 45 to 49 | 0 | 1 | 270 | 123 | 44 | 8 | 0 | 0 | 0 | 0 | 446 |
| 50 to 54 | 4 | 2 | 293 | 175 | 81 | 44 | 14 | 0 | 0 | 0 | 613 |
| 55 to 59 | 3 | 1 | 247 | 159 | 58 | 39 | 15 | 5 | 1 | 0 | 528 |
| 60 to 64 | 0 | 0 | 110 | 54 | 24 | 12 | 8 | 5 | 0 | 0 | 213 |
| 65 to 69 | 46 | 17 | 23 | 19 | 18 | 7 | 5 | 1 | 0 | 0 | 136 |
| 70 & Up | 36 | 13 | 5 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 62 |
| Total | 89 | 35 | 1,326 | 612 | 238 | 110 | 43 | 11 | 1 | 0 | 2,465 |

Age Distribution



Service Distribution



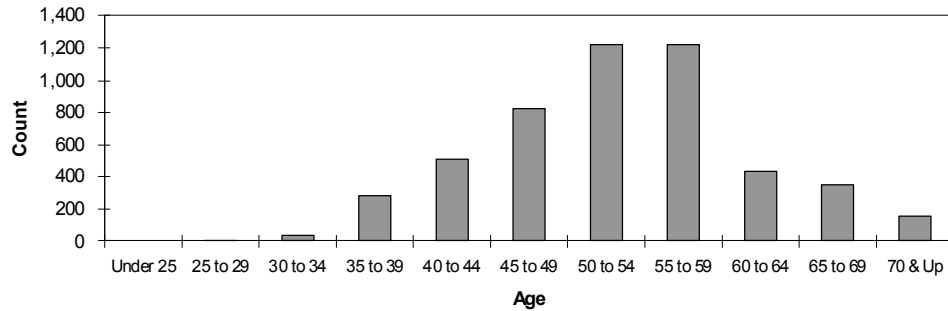
Nonvested: 7,114

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2007**

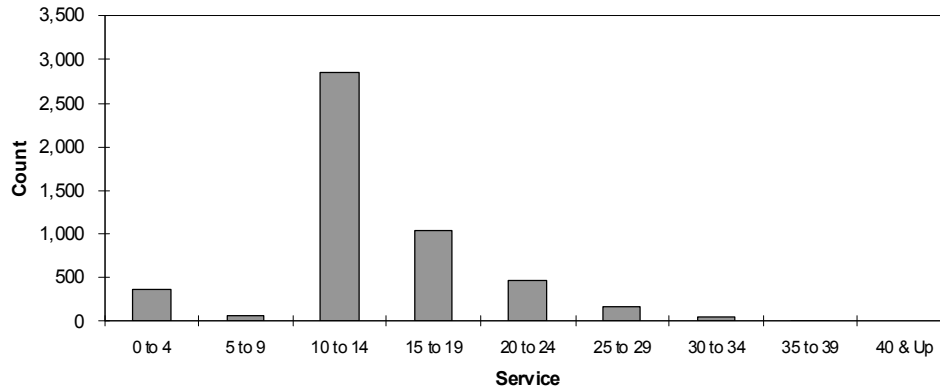
SCHOOL

| Age | Service | | | | | | | | | Total |
|--------------|------------|-----------|--------------|--------------|------------|------------|-----------|----------|----------|--------------|
| | 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 | |
| Under 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 to 29 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 30 to 34 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 35 to 39 | 0 | 0 | 261 | 18 | 2 | 0 | 0 | 0 | 0 | 281 |
| 40 to 44 | 0 | 0 | 405 | 90 | 10 | 1 | 0 | 0 | 0 | 506 |
| 45 to 49 | 0 | 0 | 531 | 195 | 80 | 12 | 1 | 0 | 0 | 819 |
| 50 to 54 | 18 | 0 | 689 | 291 | 147 | 70 | 10 | 0 | 0 | 1,225 |
| 55 to 59 | 0 | 2 | 657 | 322 | 159 | 65 | 10 | 4 | 0 | 1,219 |
| 60 to 64 | 13 | 0 | 232 | 115 | 51 | 12 | 9 | 2 | 0 | 434 |
| 65 to 69 | 214 | 42 | 37 | 18 | 16 | 12 | 7 | 2 | 1 | 349 |
| 70 & Up | 113 | 30 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 155 |
| Total | 358 | 74 | 2,858 | 1,051 | 466 | 172 | 37 | 8 | 1 | 5,025 |

Age Distribution



Prior Service Distribution



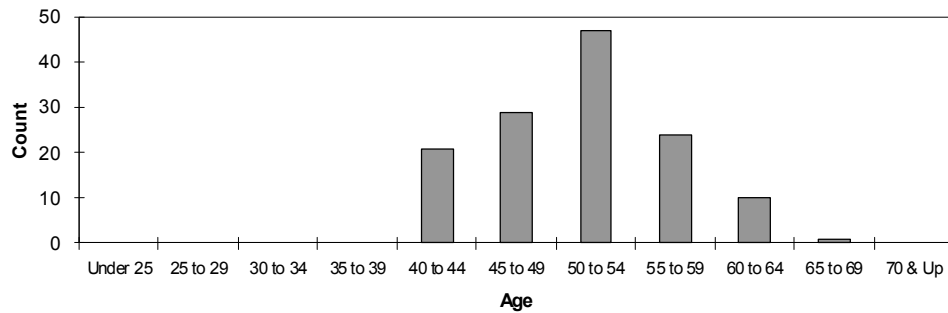
Nonvested: 17,537

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2007**

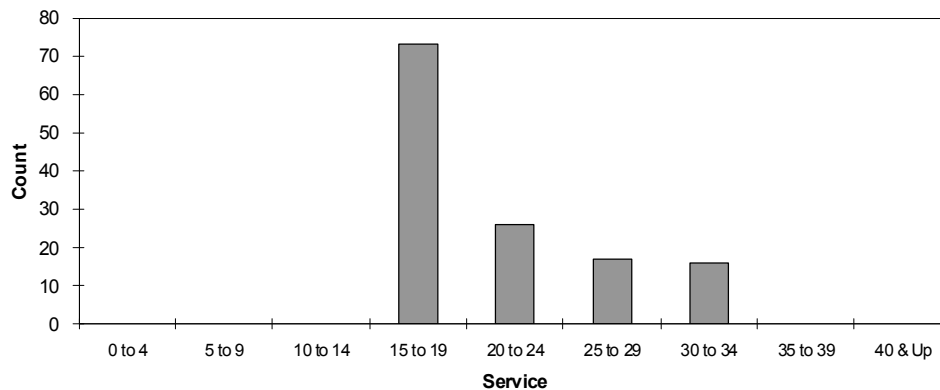
KP&F

| Age | Service | | | | | | | | | Total |
|--------------|----------|----------|----------|-----------|-----------|-----------|-----------|----------|----------|------------|
| | 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 | |
| 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 | 18 | 2 | 1 | 0 | 0 | 0 | 21 |
| 45 to 49 | 0 | 0 | 0 | 18 | 10 | 1 | 0 | 0 | 0 | 29 |
| 50 to 54 | 0 | 0 | 0 | 18 | 9 | 12 | 8 | 0 | 0 | 47 |
| 55 to 59 | 0 | 0 | 0 | 11 | 4 | 3 | 6 | 0 | 0 | 24 |
| 60 to 64 | 0 | 0 | 0 | 8 | 0 | 0 | 2 | 0 | 0 | 10 |
| 65 to 69 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 70 & Up | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 73 | 26 | 17 | 16 | 0 | 0 | 132 |

Age Distribution



Service Distribution



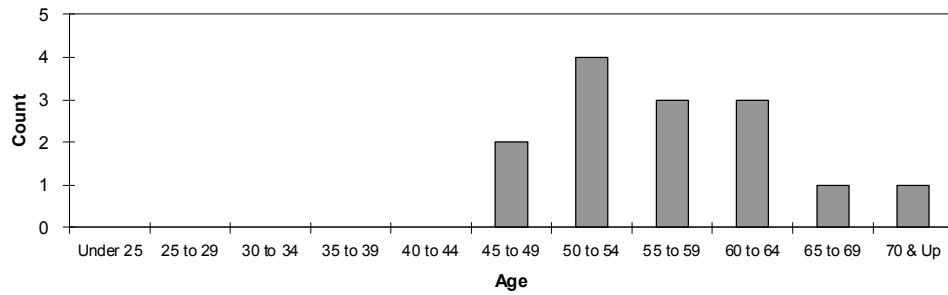
Nonvested: 1,011

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2007**

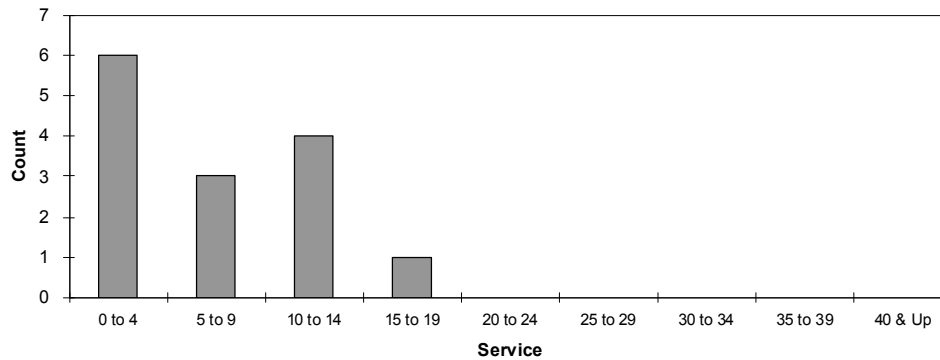
JUDGES

| Age | Service | | | | | | | | | Total |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| | 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 | |
| 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 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 50 to 54 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 55 to 59 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 60 to 64 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 65 to 69 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 70 & Up | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 6 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |

Age Distribution



Service Distribution



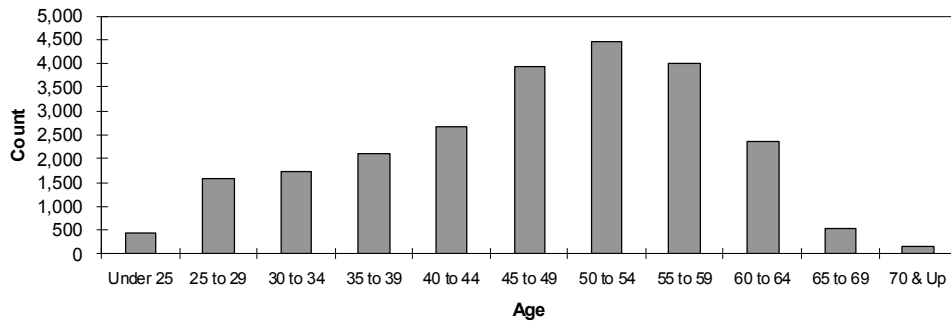
Nonvested: 0

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2007**

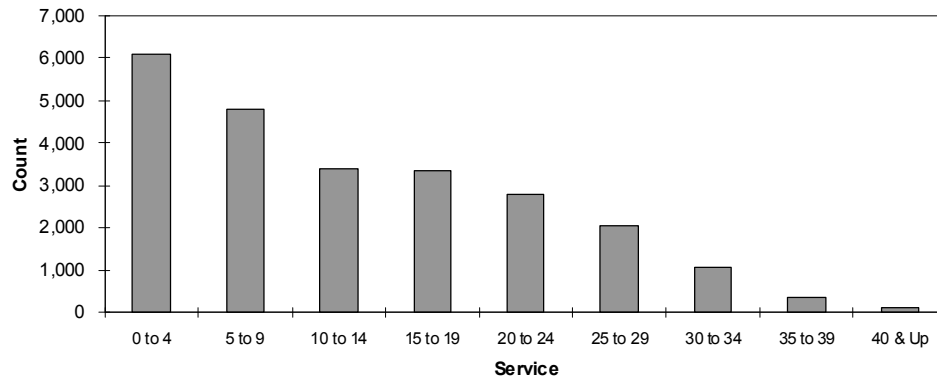
STATE

| Age | Service | | | | | | | | | Total |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|---------------|
| | 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 | |
| Under 25 | 433 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 438 |
| 25 to 29 | 1,268 | 330 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1,602 |
| 30 to 34 | 882 | 719 | 117 | 1 | 0 | 0 | 0 | 0 | 0 | 1,719 |
| 35 to 39 | 711 | 698 | 528 | 165 | 7 | 0 | 0 | 0 | 0 | 2,109 |
| 40 to 44 | 630 | 590 | 543 | 581 | 315 | 17 | 0 | 0 | 0 | 2,676 |
| 45 to 49 | 689 | 717 | 567 | 695 | 743 | 484 | 52 | 0 | 0 | 3,947 |
| 50 to 54 | 618 | 711 | 593 | 701 | 673 | 732 | 414 | 23 | 0 | 4,465 |
| 55 to 59 | 526 | 544 | 563 | 662 | 630 | 511 | 386 | 168 | 15 | 4,005 |
| 60 to 64 | 262 | 354 | 342 | 441 | 326 | 230 | 176 | 154 | 75 | 2,360 |
| 65 to 69 | 53 | 97 | 89 | 88 | 81 | 60 | 31 | 18 | 24 | 541 |
| 70 & Up | 29 | 24 | 23 | 23 | 27 | 17 | 4 | 6 | 9 | 162 |
| Total | 6,101 | 4,789 | 3,369 | 3,357 | 2,802 | 2,051 | 1,063 | 369 | 123 | 24,024 |

Age Distribution



Service Distribution

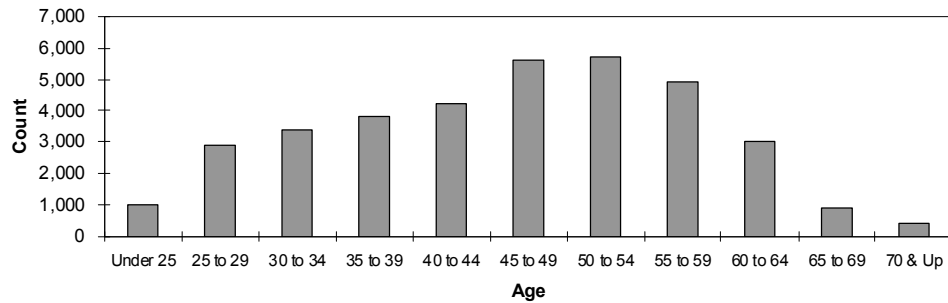


KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2007

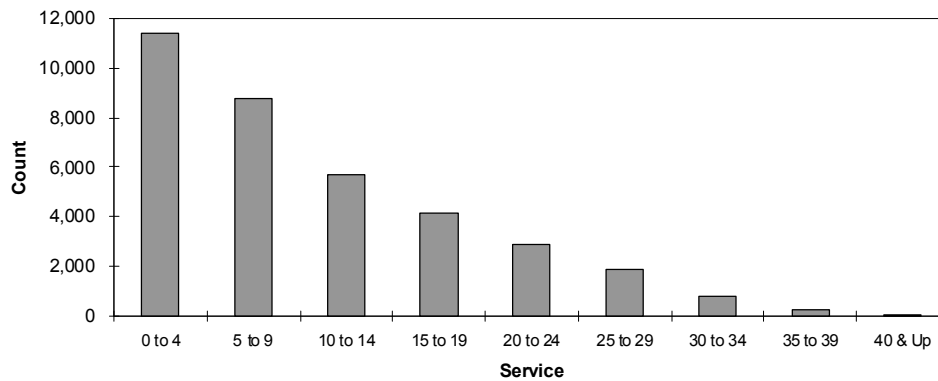
LOCAL

| Age | Service | | | | | | | | | Total |
|--------------|---------------|--------------|--------------|--------------|--------------|--------------|------------|------------|-----------|---------------|
| | 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 | |
| Under 25 | 1,007 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,027 |
| 25 to 29 | 2,268 | 632 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 2,912 |
| 30 to 34 | 1,642 | 1,371 | 346 | 2 | 0 | 0 | 0 | 0 | 0 | 3,361 |
| 35 to 39 | 1,371 | 1,272 | 901 | 265 | 13 | 0 | 0 | 0 | 0 | 3,822 |
| 40 to 44 | 1,181 | 1,155 | 898 | 678 | 313 | 20 | 0 | 0 | 0 | 4,245 |
| 45 to 49 | 1,226 | 1,243 | 1,050 | 864 | 715 | 463 | 38 | 0 | 0 | 5,599 |
| 50 to 54 | 1,088 | 1,188 | 961 | 905 | 674 | 617 | 296 | 13 | 0 | 5,742 |
| 55 to 59 | 872 | 940 | 807 | 801 | 628 | 466 | 292 | 108 | 6 | 4,920 |
| 60 to 64 | 507 | 605 | 520 | 455 | 412 | 224 | 148 | 99 | 26 | 2,996 |
| 65 to 69 | 125 | 198 | 165 | 155 | 104 | 63 | 30 | 20 | 13 | 873 |
| 70 & Up | 88 | 127 | 60 | 55 | 35 | 20 | 15 | 4 | 13 | 417 |
| Total | 11,375 | 8,751 | 5,720 | 4,180 | 2,894 | 1,873 | 819 | 244 | 58 | 35,914 |

Age Distribution



Service Distribution

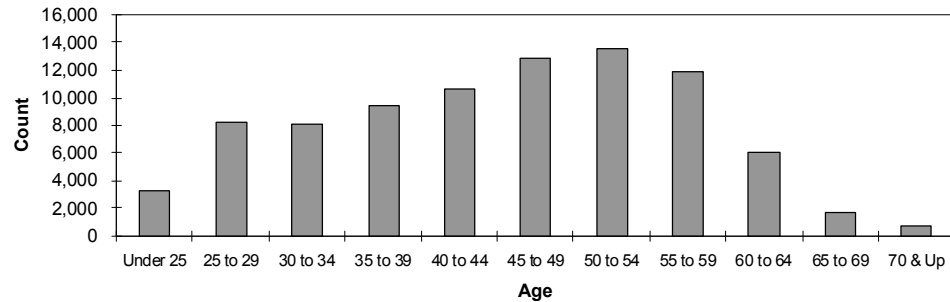


KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2007

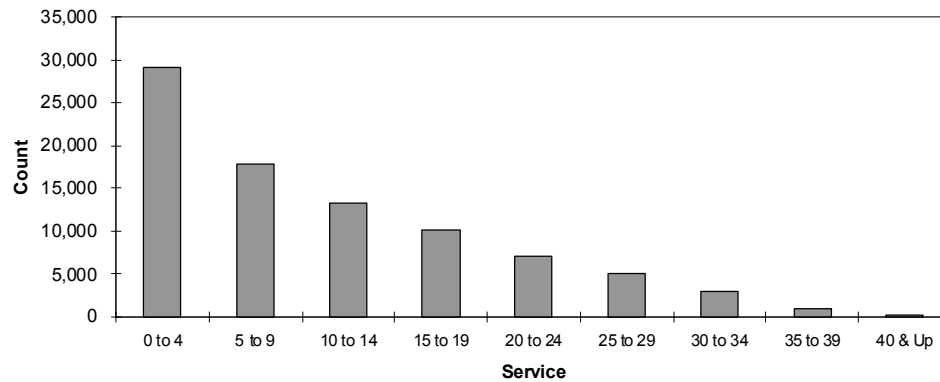
SCHOOL

| Age | Service | | | | | | | | | Total |
|--------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|------------|---------------|
| | 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 | |
| Under 25 | 3,201 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,226 |
| 25 to 29 | 6,470 | 1,754 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 8,239 |
| 30 to 34 | 3,527 | 3,532 | 1,091 | 7 | 0 | 0 | 0 | 0 | 0 | 8,157 |
| 35 to 39 | 3,584 | 2,252 | 2,740 | 879 | 5 | 0 | 0 | 0 | 0 | 9,460 |
| 40 to 44 | 3,483 | 2,383 | 1,826 | 2,139 | 801 | 14 | 0 | 0 | 0 | 10,646 |
| 45 to 49 | 3,150 | 2,708 | 2,300 | 1,715 | 1,961 | 975 | 20 | 0 | 0 | 12,829 |
| 50 to 54 | 2,389 | 2,237 | 2,346 | 2,116 | 1,430 | 1,983 | 1,116 | 7 | 0 | 13,624 |
| 55 to 59 | 1,645 | 1,548 | 1,758 | 2,046 | 1,678 | 1,349 | 1,322 | 550 | 1 | 11,897 |
| 60 to 64 | 938 | 883 | 867 | 994 | 922 | 587 | 349 | 418 | 57 | 6,015 |
| 65 to 69 | 424 | 357 | 265 | 193 | 148 | 92 | 70 | 49 | 57 | 1,655 |
| 70 & Up | 242 | 181 | 124 | 70 | 38 | 25 | 13 | 7 | 20 | 720 |
| Total | 29,053 | 17,860 | 13,332 | 10,159 | 6,983 | 5,025 | 2,890 | 1,031 | 135 | 86,468 |

Age Distribution



Prior Service Distribution

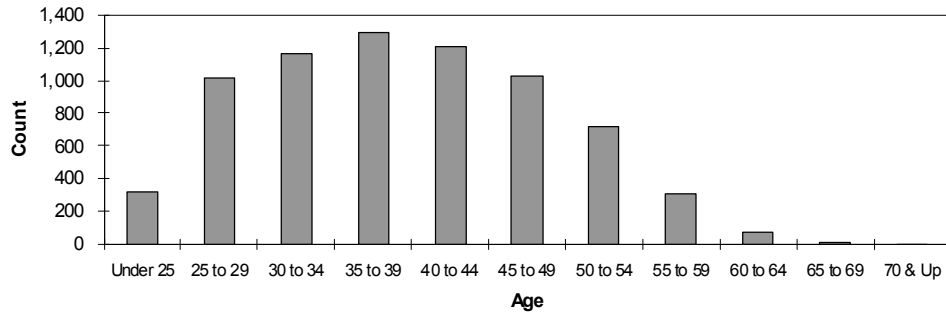


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2007**

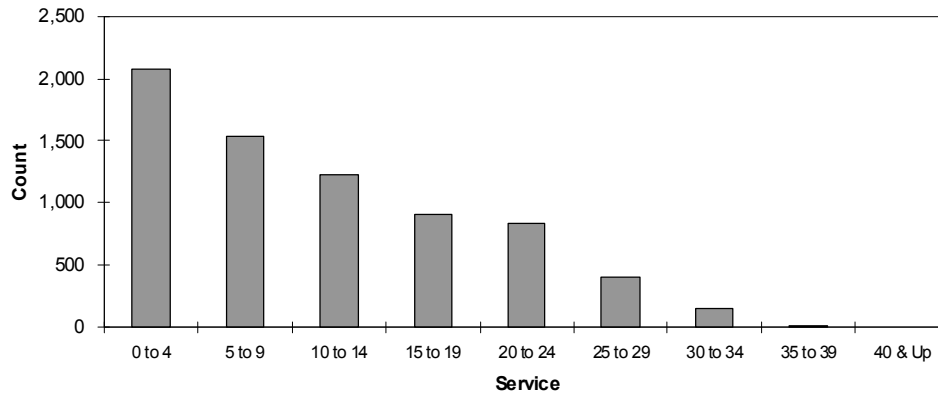
KP&F

| Age | Service | | | | | | | | | Total |
|--------------|--------------|--------------|--------------|------------|------------|------------|------------|----------|----------|--------------|
| | 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 | |
| Under 25 | 318 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 319 |
| 25 to 29 | 786 | 235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,021 |
| 30 to 34 | 420 | 556 | 189 | 0 | 0 | 0 | 0 | 0 | 0 | 1,165 |
| 35 to 39 | 250 | 398 | 514 | 120 | 6 | 0 | 0 | 0 | 0 | 1,288 |
| 40 to 44 | 135 | 175 | 308 | 375 | 213 | 5 | 0 | 0 | 0 | 1,211 |
| 45 to 49 | 77 | 81 | 122 | 226 | 381 | 132 | 4 | 0 | 0 | 1,023 |
| 50 to 54 | 52 | 52 | 52 | 102 | 174 | 202 | 84 | 0 | 0 | 718 |
| 55 to 59 | 31 | 17 | 35 | 64 | 57 | 47 | 50 | 2 | 0 | 303 |
| 60 to 64 | 9 | 12 | 8 | 13 | 9 | 10 | 8 | 4 | 0 | 73 |
| 65 to 69 | 3 | 2 | 2 | 2 | 1 | 1 | 0 | 2 | 0 | 13 |
| 70 & Up | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 2,081 | 1,530 | 1,232 | 902 | 841 | 397 | 146 | 8 | 0 | 7,137 |

Age Distribution



Service Distribution

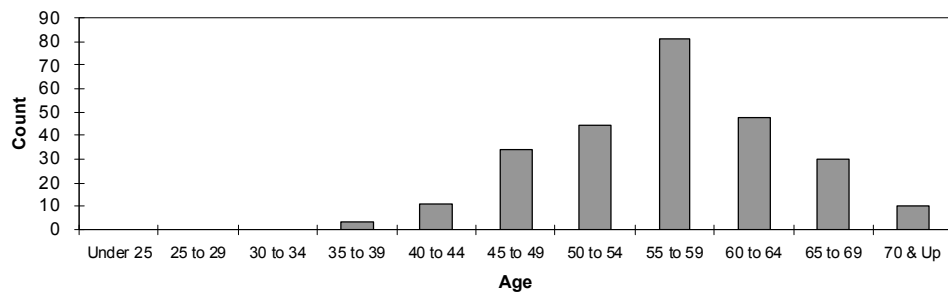


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2007**

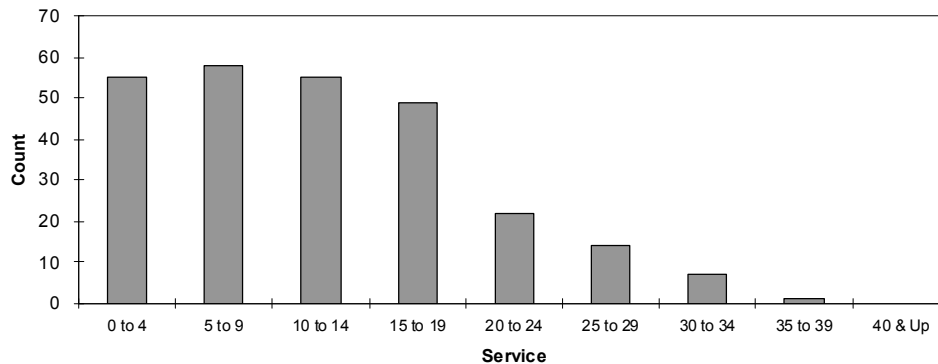
JUDGES

| Age | Service | | | | | | | | | Total |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|------------|
| | 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 | |
| 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 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 40 to 44 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 45 to 49 | 17 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 34 |
| 50 to 54 | 10 | 13 | 9 | 11 | 1 | 0 | 0 | 0 | 0 | 44 |
| 55 to 59 | 11 | 19 | 17 | 19 | 9 | 4 | 2 | 0 | 0 | 81 |
| 60 to 64 | 3 | 6 | 14 | 13 | 4 | 6 | 2 | 0 | 0 | 48 |
| 65 to 69 | 3 | 4 | 8 | 4 | 6 | 3 | 2 | 0 | 0 | 30 |
| 70 & Up | 0 | 1 | 3 | 1 | 2 | 1 | 1 | 1 | 0 | 10 |
| Total | 55 | 58 | 55 | 49 | 22 | 14 | 7 | 1 | 0 | 261 |

Age Distribution



Service Distribution



APPENDIX B

SUMMARY OF PLAN PROVISIONS

Plan Membership

The Kansas Public Employees Retirement System (the Retirement System, or, the System), is an umbrella organization administering three statewide retirement systems: the Kansas Public Employees Retirement System (KPERs), the Kansas Police and Firemen's Retirement System (KP & F), and the Kansas Retirement System for Judges. All three systems are defined benefit, contributory plans that cover substantially 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.

Employee Membership

Membership is mandatory for all employees in covered positions, except elected officials. A covered position for non-school employees is one that is covered by Social Security, is not seasonal or temporary, and requires at least 1,000 hours of work per year. School employees become KPERs members on their date of employment. 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. Non-school employees become KPERs members after one year of continuous employment. Those who retire under the provisions of the Retirement System may not become contributing members again.

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM **Summary of Provisions ***

Normal Retirement

Eligibility – Eligibility is (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.

Benefits – Benefits are based on the member's years of credited service, Final Average Salary (FAS), and a statutory multiplier. For those who were hired prior to July 1, 1993, Final Average Salary equals the greater of either: a four-year Final Average Salary, including add-ons, such as sick and annual leave; or a 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, Final Average Salary equals the average of the three highest years of service, excluding add-ons, such as sick and annual leave.

Prior Service Credit – Prior service credit is 0.75% or 1% of Final Average Salary per year [School employees receive 0.75% Final Average Salary for each year of prior service that is not credited under the former Kansas School Retirement System (KSRS)].

Participating Service Credit – Participating service credit is 1.75% of Final Average Salary.

* Does not reflect the benefit provisions for employees hired on/after July 1, 2009. These provisions were not used in this valuation.

Early Retirement

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

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

Vesting Requirements

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

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

Other Benefits

Withdrawal Benefit – Members who terminate employment may withdraw contributions with interest after the last day on the employer's payroll. Withdrawing contributions forfeits all membership rights and benefits, which a member may have accrued prior to withdrawing their contributions from the Retirement System. Former members, who return to covered employment within five years after terminating employment, will not have lost any membership rights or privileges if they *haven't* withdrawn contributions. The Retirement Act provides for withdrawal of contributions 30 days after employment terminates, but it does not allow members to borrow from contributions.

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

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

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

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

Member Contributions

Member contributions are 4% of compensation. Interest is credited to members’ contribution accounts on June 30 each year, based on account balance as of the preceding December 31. Those who became members prior to July 1, 1993, have interest credited to their accounts at the rate of 8% per year. Those who become members on and after July 1, 1993, have interest credited to their accounts at the rate of 4% per year.

Employer Contributions

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

Board of Regents Plan Members (TIAA and equivalents)

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

Correctional Members

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

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

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 80% of Final Average Salary.

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

Early Retirement

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

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

Vesting Requirements

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

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

Other Benefits

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

Disability Benefits

Tier I*: Service-connected disability – There are no age or service requirements to be eligible for this benefit. There is an annual benefit of 50% 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 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 80% of Final Average Salary. Upon the death of a member after two years from the proximate cause of death which is the original service-connected disability, the same benefits are payable. Upon the death of a member after 2 years from a cause different than the disability for which the member is receiving service-connected disability benefits, the surviving spouse receives a lump sum payment of 50% 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 80% of FAS.

Tier II**: There is no distinction between service-connected and non-service-connected disability benefits. Annual benefit of 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.

Death Benefits (Tier I* and Tier II**)

Active Member Service Connected Death – There is no age or service requirement. An annual benefit of 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 if full time student(s)], to a maximum of 75% of Final Average Salary Active Member.

Active Member Non-Service Connected Death – A lump sum of 100% of Final Average Salary is payable to the spouse 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 \$4,000 payable, less any death benefit payable under local plan provisions. If the member has selected a retirement option, benefits are paid to the joint annuitant or the designated beneficiary. Under joint and survivor options, if the joint annuitant predeceases the retired member, the benefit is increased to the amount the retired member would have received if no option had been selected. Benefits payable to the joint annuitant cease when the joint annuitant dies. If no option is selected, the designated beneficiary receives the excess, if any, of the member's accumulated contributions over total benefits paid to the date of death. The surviving spouse of a transfer member (who was covered by local plan on the employer's entry date, who dies after retirement, and who has not elected a retirement benefit option) receives a lump sum payment of 50% 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 – 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 – 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% of compensation. For members with 32 years of credited service, the contribution rate is reduced to 2% of compensation.

Brazelton members contribute .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.

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 to 0.2% per month for each month between the ages of 60 and 62, plus 0.6% per month for each month between the ages of 55 and 60.

Vesting Requirements

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

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

Other Benefits

Disability Benefits – These benefits are payable if a member is defined as totally and permanently disabled as certified by the Supreme Court. The disability benefit, payable until age 65, is 3.5% of Final Average Salary for each year of service (minimum of 25% 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 forfeit any right to a future benefit.

Pre-retirement Death – A refund of the member’s accumulated contributions is payable. In lieu of receiving the member’s accumulated contributions, the surviving spouse of a member who is eligible to retire at death, may elect to receive benefits under any survivor benefit option. If the member had at least 10 years of credited service, but hadn’t reached retirement age at the time of death, the spouse

may elect a monthly benefit to begin on the date the member first would have been eligible to retire as long as the member's contributions aren't withdrawn.

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

Member Contributions

Judges contributions are 6% 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.

APPENDIX C

ACTUARIAL ASSUMPTIONS AND METHODS

KPERS

Rate of Investment Return 8.0%

Implicit Inflation Rate 3.25%

**Rates of Mortality:
Post-retirement** The RP-2000 Healthy Annuitant table was first adjusted by an age setback or set forward. Rates were further adjusted to fit actual experience.

Starting Table

School Males: RP-2000 M Healthy -2
 School Females: RP-2000 F Healthy -2
 State Males: RP-2000 M Healthy +2
 State Females: RP-2000 F Healthy +0
 Local Males: RP-2000 M Healthy +2
 Local Females: RP-2000 F Healthy -1

Sample Rates

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

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

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

Rates of Salary Increase

| Years of Service | Rate of Increase* | | |
|------------------|-------------------|--------|--------|
| | School | State | Local |
| 1 | 12.00% | 10.50% | 10.50% |
| 5 | 6.55% | 5.60% | 6.20% |
| 10 | 5.10% | 4.90% | 5.20% |
| 15 | 4.60% | 4.40% | 4.80% |
| 20 | 4.10% | 4.10% | 4.60% |
| 25 | 4.00% | 4.00% | 4.10% |
| 30 | 4.00% | 4.00% | 4.00% |

*Includes general wage increase assumption of 4.0% (composed of 3.25% inflation and 0.75% productivity)

Rates of Termination

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

Retirement Rates

School

| <u>Age</u> | <u>Rule of 85</u> | |
|------------|-----------------------|-----------------------|
| | <u>1st Year</u> | <u>After 1st Year</u> |
| | <u>With 85 Points</u> | <u>With 85 Points</u> |
| 53 | 20% | 18% |
| 55 | 20% | 18% |
| 57 | 22% | 18% |
| 59 | 25% | 23% |
| 61 | 30% | 30% |

Early Retirement

| <u>Age</u> | <u>Rate</u> |
|------------|-------------|
| 55 | 5% |
| 56 | 5% |
| 57 | 8% |
| 58 | 8% |
| 59 | 12% |
| 60 | 15% |
| 61 | 22% |

Normal Retirement

| <u>Age</u> | <u>Rate</u> |
|------------|-------------|
| 62 | 30% |
| 63 | 25% |
| 64 | 35% |
| 65 | 35% |
| 66-71 | 25% |
| 72-74 | 20% |
| 75 | 100% |

State

| <u>Age</u> | <u>Rule of 85</u> | |
|------------|-----------------------|-----------------------|
| | <u>1st Year</u> | <u>After 1st Year</u> |
| | <u>With 85 Points</u> | <u>With 85 Points</u> |
| 53 | 10% | 15% |
| 55 | 15% | 15% |
| 57 | 15% | 12% |
| 59 | 15% | 12% |
| 61 | 30% | 25% |

Early Retirement

| <u>Age</u> | <u>Rate</u> |
|------------|-------------|
| 55 | 5% |
| 56 | 5% |
| 57 | 5% |
| 58 | 5% |
| 59 | 8% |
| 60 | 8% |
| 61 | 20% |

Normal Retirement

| <u>Age</u> | <u>Rate</u> |
|------------|-------------|
| 62 | 30% |
| 63 | 20% |
| 64 | 30% |
| 65 | 35% |
| 66-67 | 25% |
| 68-74 | 20% |
| 75 | 100% |

Local

| <u>Age</u> | <u>Rule of 85</u> | |
|------------|------------------------------------|--|
| | <u>1st Year With 85 Points</u> | <u>After 1st Year With 85 Points</u> |
| 53 | 11% | 10% |
| 55 | 13% | 10% |
| 57 | 13% | 10% |
| 59 | 15% | 12% |
| 61 | 25% | 25% |

| <u>Early Retirement</u> | | <u>Normal Retirement</u> | |
|-------------------------|-------------|--------------------------|-------------|
| <u>Age</u> | <u>Rate</u> | <u>Age</u> | <u>Rate</u> |
| 55 | 5% | 62 | 25% |
| 56 | 5% | 63 | 20% |
| 57 | 5% | 64 | 30% |
| 58 | 5% | 65 | 35% |
| 59 | 5% | 66 | 25% |
| 60 | 5% | 67-74 | 20% |
| 61 | 15% | 75 | 100% |

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

| <u>Age</u> | <u>Rate</u> |
|------------|-------------|
| 55 | 10% |
| 58 | 10% |
| 60 | 10% |
| 62 | 45% |
| 65 | 100% |

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

Rates of Disability

| <u>Age</u> | <u>School</u> | <u>State</u> | <u>Local</u> |
|------------|---------------|--------------|--------------|
| 25 | .025% | .036% | .030% |
| 30 | .028% | .102% | .065% |
| 35 | .034% | .161% | .097% |
| 40 | .058% | .244% | .143% |
| 45 | .110% | .376% | .209% |
| 50 | .213% | .511% | .363% |
| 55 | .362% | .720% | .600% |
| 60 | .680% | .920% | .850% |

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

Probability of Vested Members Leaving Contributions With System

| <u>Age</u> | <u>School</u> | <u>State</u> | <u>Local</u> |
|------------|---------------|--------------|--------------|
| 25 | 80% | 65% | 60% |
| 30 | 80% | 65% | 60% |
| 35 | 80% | 65% | 60% |
| 40 | 80% | 65% | 60% |
| 45 | 82% | 75% | 64% |
| 50 | 87% | 85% | 74% |
| 55 | 100% | 100% | 100% |

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

KP&F

| Rate of Investment Return | 8.0% | | | | | | | | | | | | | | |
|--------------------------------------|--|-------------------------|--------------------------|---|-------|---|------|----|------|----|------|----|------|----|------|
| Implicit Inflation Assumption | 3.25% | | | | | | | | | | | | | | |
| Rates of Mortality: | | | | | | | | | | | | | | | |
| Post-retirement | RP-2000 Healthy Annuitant Table | | | | | | | | | | | | | | |
| Pre-retirement | 90% of RP-2000 Employee Table* *70% of preretirement deaths assumed to be service related. | | | | | | | | | | | | | | |
| Disabled Life Mortality | RP-2000 Disabled Life Table | | | | | | | | | | | | | | |
| Rates of Salary Increase | <table> <thead> <tr> <th><u>Years of Service</u></th> <th><u>Rate of Increase*</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>12.5%</td> </tr> <tr> <td>5</td> <td>7.0%</td> </tr> <tr> <td>10</td> <td>4.9%</td> </tr> <tr> <td>15</td> <td>4.3%</td> </tr> <tr> <td>20</td> <td>4.0%</td> </tr> <tr> <td>25</td> <td>4.0%</td> </tr> </tbody> </table> <p>*Includes general wage increase assumption of 4.0% (composed of 3.25% inflation and 0.75% productivity)</p> | <u>Years of Service</u> | <u>Rate of Increase*</u> | 1 | 12.5% | 5 | 7.0% | 10 | 4.9% | 15 | 4.3% | 20 | 4.0% | 25 | 4.0% |
| <u>Years of Service</u> | <u>Rate of Increase*</u> | | | | | | | | | | | | | | |
| 1 | 12.5% | | | | | | | | | | | | | | |
| 5 | 7.0% | | | | | | | | | | | | | | |
| 10 | 4.9% | | | | | | | | | | | | | | |
| 15 | 4.3% | | | | | | | | | | | | | | |
| 20 | 4.0% | | | | | | | | | | | | | | |
| 25 | 4.0% | | | | | | | | | | | | | | |

Rates of Termination

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

| | <u>Years of Service</u> | <u>Rate</u> |
|----------|-------------------------|-------------|
| Tier II: | 1 | 13.0% |
| | 5 | 6.0% |
| | 10 | 2.5% |
| | 15 | 1.0% |
| | 20 | 1.0% |
| | 25 | 0.0% |

Retirement Rates

| Tier I: | <u>Early Retirement</u> | | <u>Normal Retirement</u> | |
|---------|-------------------------|-------------|--------------------------|-------------|
| | <u>Age</u> | <u>Rate</u> | <u>Age</u> | <u>Rate</u> |
| | 50 | 5% | 55 | 40% |
| | 51 | 5% | 56 | 30% |
| | 52 | 5% | 57 | 25% |
| | 53 | 10% | 58 | 40% |
| | 54 | 30% | 59 | 35% |
| | | | 60 | 55% |
| | | | 61 | 20% |
| | | | 62 | 100% |

| Tier II: | <u>Early Retirement</u> | | <u>Normal Retirement</u> | |
|----------|-------------------------|-------------|--------------------------|-------------|
| | <u>Age</u> | <u>Rate</u> | <u>Age</u> | <u>Rate</u> |
| | 50 | 10% | 50 | 25% |
| | 51 | 10% | 53 | 25% |
| | 52 | 10% | 55 | 25% |
| | 53 | 15% | 58 | 20% |
| | 54 | 25% | 60 | 20% |
| | | | 61 | 40% |
| | | | 62 | 35% |
| | | | 63 | 100% |

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

Rates of Disability

| <u>Age</u> | <u>Rate*</u> |
|------------|--------------|
| 22 | .06% |
| 27 | .07% |
| 32 | .15% |
| 37 | .35% |
| 42 | .56% |
| 47 | .76% |
| 52 | .96% |
| 57 | 1.00% |

*90% assumed to be service-connected under KP & F Tier I.

Marriage Assumption: 80% of all members assumed married with male spouse assumed to be three years

older than female.

Judges

| | |
|--------------------------------------|---|
| Rate of Investment Return | 8.0% |
| Implicit Inflation Assumption | 3.25% |
| Rates of Mortality: | |
| Post-retirement | RP-2000 Healthy Annuitant Table, set back two years |
| Pre-retirement | 70% of RP-2000 Employee Table, set back two years |
| Rates of Salary Increase | 4.5% |
| Rates of Termination | None assumed |
| Disabled Life Mortality | RP-2000 Disabled Life Table, set back two years |
| Rates of Disability | None assumed |
| Retirement Age | Age 64 or current age, if greater |

Marriage Assumption: 70% of all members are assumed married with male spouse assumed 3 years older than 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> | <u>Active member age at hire</u> | <u>Inactive member age at valuation</u> |
|---------------|----------------------------------|---|
| KPERS | 34.7 | 50 |
| KP&F | 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.

Salaries for first year members are annualized assuming they were hired in the middle of the month of membership

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 occur mid-year.

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

Actuarial Methods

1. Funding Method

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

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

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

2. Asset Valuation Method

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

APPENDIX D

GLOSSARY OF 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 actuarial assumptions anticipated experience 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. |
| Normal Cost | The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method. |

APPENDIX D (continued)

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.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar).