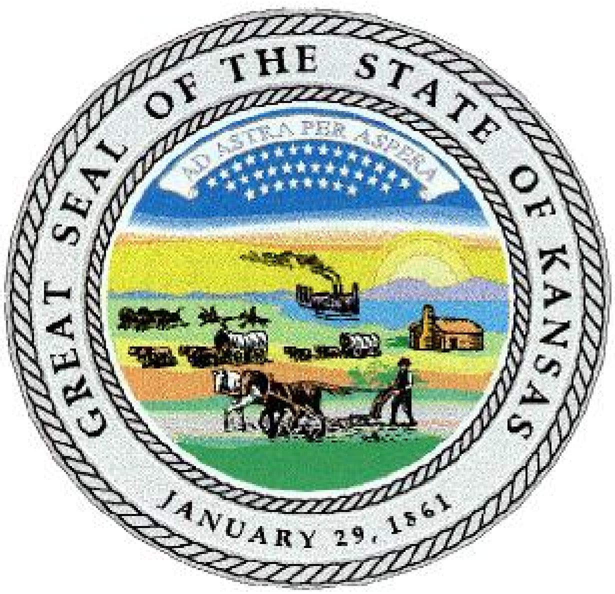
Kansas Public Employees Retirement System



Valuation Report as of December 31, 2003

A MILLIMAN GLOBAL FIRM
Milliman
Consultants and Actuaries

Kansas Public Employees Retirement System
Actuarial Valuation Report

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July 6, 2004

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

Dear Members of Board:

At your request, we have conducted our annual actuarial valuation of the Kansas Public Employees Retirement System as of December 31, 2003. The major findings of the valuation are contained in this report. While there was no change in the actuarial assumptions, there were changes made to both the actuarial cost method and the asset valuation method from the prior valuation. The report also reflects several legislative changes. All of these items are discussed in detail on page 1 of the report.

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

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

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

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

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 Beckham

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, 2003 actuarial valuations for each of the Systems.

There are a number of significant changes that are first reflected in this valuation. They include changing the actuarial cost method, changing the asset valuation method, issuance of Pension Obligation Bonds (POBs), increases in the statutory cap for Local employers, a benefit enhancement for KP&F and splitting the State/School group into two separate groups. The number of changes and the magnitude of their impact make it very difficult to compare the results of the current valuation to those in prior years. This report discusses each change individually and quantifies the change of each on the System's UAL and actuarial contribution rates.

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

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

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

The prior actuarial cost method was the Projected Unit Credit (PUC) method for KPERS, the Aggregate Cost method with a Supplemental Unfunded Actuarial Liability for KP&F, and the Frozen Entry Age method for Judges. At the May 21, 2004 meeting of the KPERS Board of Trustees, the Board adopted a resolution changing the actuarial cost method for all three Systems to the traditional Entry Age Normal (EAN) cost method for the December 31, 2003 valuation. This change provides for a consistent valuation basis for all three plans and moves the System's funding method to the method most commonly used by public retirement systems.

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

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

In KPERS, State, School and Local employers do not necessarily contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. The statutory cap, which has been changed periodically, is currently 0.50% in FY2007 for State and School and will increase to 0.60% in FY 2008. Legislation passed in 2004 increased the statutory cap for Local employers from 0.15% to 0.40% in CY 2006, 0.50% in CY2007 and 0.60% in CY2008 and thereafter.

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

	December 31, 2003 Valuation		
System	Actuarial	Statutory	Difference
State	5.21%	5.21%	0.00%
School	9.75%	5.77%[1]	3.98%
Local	6.24%	3.81%[1]	2.43%
Police & Fire - Uniform Rates[2]	12.39%	12.39%	0.00%
Judges	19.11%	19.11%	0.00%

	December 31, 2002 Valuation		
System	Actuarial	Statutory	Difference
State/School	9.14%	5.27%	3.87%
Local	5.44%	3.41%	2.03%
Police & Fire - Uniform Rates	11.63%	11.63%	0.00%
Judges	21.97%	21.97%	0.00%

[1] Rates for this fiscal year, by statute, are allowed to increase by a maximum of 0.50% for State and School and 0.40% for Local employees per year 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 12.52% which includes a payment of 0.76% 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).

Due to favorable experience and the allocation of the POB proceeds, the State reached equilibrium with the December 31, 2003 actuarial valuation. “Equilibrium” means that the actual contribution rate being paid into the System will equal the actuarial contribution rate. However, due to the use of an asset smoothing method, there are still deferred investment losses that have not been recognized in the actuarial process. For the State group, the amount of deferred loss is $150 million. If the actuarial assumed rate of 8% is met for calendar year 2004, $120 million of the deferred loss for the State will flow into the actuarial value of assets and result in an increase in the UAL in the December 31, 2004 valuation. If this occurs, the actuarial contribution rate would increase about 0.90% to 6.11%. The statutory cap would limit the increase in the contribution rate to 5.81% and the State would again be out of equilibrium. Since one of the funding objectives is to establish relatively level contribution rates, the Board may want to recommend a rate for FY2007 that is higher than the actuarial contribution rate, given the likelihood that an increase in the actuarial contribution rate will occur in next year’s valuation (which will set rates for FY2008). Various options exist but two reasonable choices are (1) maintain the contribution rate of 5.27% that is effective for FY2006 or (2) raise the contribution rate with the statutory cap to 5.77%. Because of the expected increase in the actuarial contribution rate, the second option might better meet the funding objectives.

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

EXPERIENCE - ALL SYSTEMS COMBINED
December 31, 2002 – December 31, 2003

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is December 31, 2003. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and employers in the future to balance the System assets and liabilities.

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

ASSETS

As of December 31, 2003, the System had total funds when measured on a market value basis, of $9.8 billion, excluding receivables and assets held for the Group Insurance and Optional Life reserves. This was a increase of $1. 6 billion from the December 31, 2002 figure of $8.2 billion. The components of the change in the market value of assets for the Retirement System (in millions) are set forth on the following page.

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

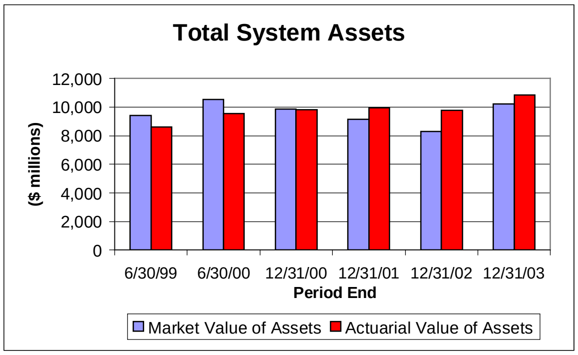
The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The asset valuation method was changed by the Board effective with the December 31, 2003 valuation. Under the previous method, the expected value of plan assets was determined using the prior year's actuarial value of assets, actual receipts and disbursements of the Fund for the year and the assumed rate of investment return. The actuarial value of assets was the expected value plus one-third of the difference between actual market value and the expected value.

The new smoothing method calculates the difference between the actual return and the expected return (assumed rate of return) on the market value of assets each year. The difference is recognized equally over a five-year period. To implement the new smoothing method the gain or loss on the market value of assets for the prior four years was calculated and recognized at 20% per year. See Tables 3A through 3D and 4 for the detailed development of the actuarial value of assets as of December 31, 2003 for each group. The impact of the change in the asset smoothing method was to increase the actuarial value of assets by $285 million. The change by group is shown below:

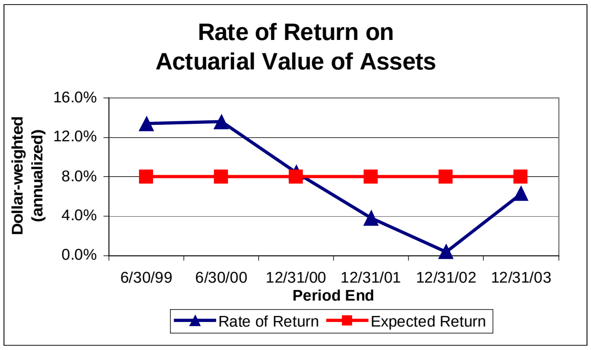
	$(millions)
State/School	$209
Local	42
KP&F	32
Judges	2

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

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



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



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

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

	State	School	Local	KP&F	Judges
AL (prior method)	$2,542	$7,138	$1,997	$1,514	$ 101
Chg to EAN	$ 205	656	237	48	0
AL (EAN)	$2,747	$7,794	$2,234	$1,562	$ 101
AVA	(2,520)	(5,287)	(1,646)	(1,313)	(86)
UAL	$ 227	$2,507	$ 588*	$ 249*	$ 15

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

The UAL amount shown above reflects the POB proceeds for the State and School groups. Absent the POB, the State UAL would have been $263 million and the School UAL would have been $2,911 million.

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. In the early years of the period, the payment is less than the interest accruing on the UAL. As a result, the dollar amount of UAL is expected to increase for many years before it begins to decline. In addition, with the planned difference in the statutory and actuarial contribution rates prior to convergence, the unfunded actuarial liability is expected to increase by an additional amount each year.

Other factors influencing the UAL from year to year include actual experience versus that expected based on the actuarial assumptions (both asset and liability), changes in actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (calendar year 2003). Both the State/School and Local groups had a small net liability gain. Retiree mortality, retirement experience and service purchases resulted in an actuarial loss which was more than offset by a gain on salary experience. The experience loss from investment return on the actuarial value of assets was greater than the net liability gain so overall experience was a loss.

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

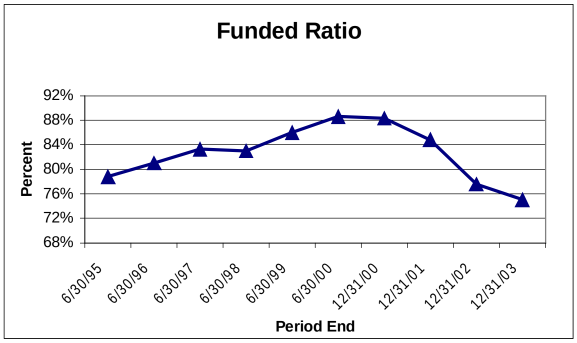
	$millions
Unfunded Actuarial Liability, December 31, 2002	$ 2,829
• effect of contribution cap/time lag	178
• expected increase due to amortization method	47
• loss from investment return	140
• demographic experience*	(37)
• all other experience	5
• change in actuarial assumptions	0
• change in actuarial cost method	1,147
• change in asset valuation method	(286)
• change in benefit provisions (KP&F)	3
Preliminary UAL, December 31, 2003	$4,026
• receivable bond proceeds	(440)
Final Unfunded Actuarial Liability, December 31, 2003	$3,586

*Liability gain is about 0.26% 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 resulted in an increase in the UAL and a decrease in the funded status. The funded status information is shown below (in millions):

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



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

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

Given the current funded status of the System (including the deferred investment loss), the amortization method and period, and the statutory cap on increases in employer contribution rates, the unfunded actuarial liability is expected to continue to grow and the funded ratio is expected to decline.

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 2033.

Generally, the actuarial contribution rate 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 on hand,

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, 2003 valuation will set rates for fiscal year end 2007 for the State and 2006 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 0.50% in FY2007 for State and School and will increase to 0.60% in FY 2008. Legislation passed in 2004 increased the statutory cap for Local employers from 0.15% to 0.40% in CY 2006, 0.50% in CY2007 and 0.60% in CY2008 and thereafter.

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

System	December 31, 2003 Valuation Actuarial	December 31, 2003 Valuation Statutory	Difference
State	5.21%	5.21%	0.00%
School	9.75%	5.77%[1]	3.98%
Local	6.24%	3.81%[1]	2.43%
Police & Fire -Uniform Rates[2]	12.39%	12.39%	0.00%
Judges	19.11%	19.11%	0.00%

[1] Rates for this fiscal year, by statute, are allowed to increase by a maximum of 0.50% for State and School and 0.40% for Local employees per year 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 12.52% which includes a payment of 0.76% 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).

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:

	Actuarial Rate	State Rate	Additional Contribution
Retirement Age 55:	7.17%	5.21%	1.96%
Retirement Age 60:	7.04%	5.21%	1.83%

The change in the actuarial contribution rate from December 31, 2002 to December 31, 2003 and the primary components thereof are shown in the table on page 13.

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

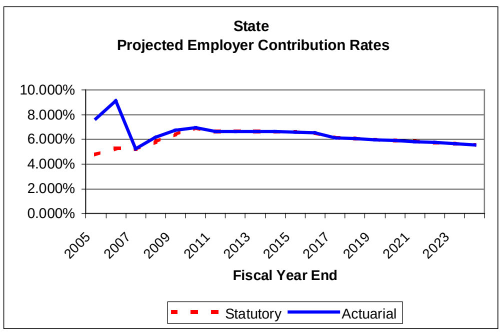
	Actuarial Contribution Rates					
	Normal Cost		UAL Payment		Total (EE + ER)	
	Before	After	Before	After	Before	After
State/School*	9.29%	7.81%	3.72%	4.83%	13.01%	12.64%
Local	7.75%	7.36%	1.95%	2.88%	9.70%	10.24%
KP&F (Local)	16.09%	14.78%	3.85%	4.18%	19.94%	18.96%
Judges	19.27%	17.86%	5.33%	6.07%	24.60%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

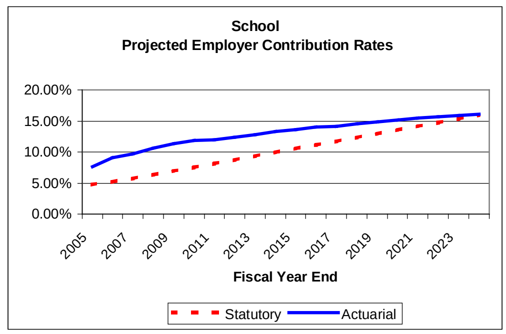
*Informational only. Separate rates apply for State and School groups effective December 31, 2003.

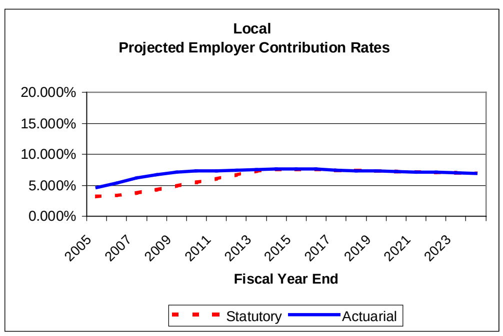
Due to statutory caps, the full actuarial contribution rate is not contributed for the School and the Local group. Based on the current valuation, there is a difference (shortfall) between the actuarial and statutory contribution rates of 3.98%, and 2.43% respectively for the School and Local groups.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

Despite a rate of return on the market value of assets of over 20% for 2003, there was an actuarial experience loss on the actuarial value of assets. The impact of negative experience is reflected in the unfunded actuarial liability (UAL). The result is an actuarial loss that increases the payment on the UAL. As the remainder of the deferred investment loss is recognized in the actuarial value of assets in future years, contribution rates can be expected to continue to increase.

HB2014, passed by the legislature in 2003, increased the statutory cap for the State/School group. Legislation passed in 2004 (SB520) split the State/School group into two separate groups. Last year's statutory rate of 5.27% with the statutory cap increase of 0.50% results in a statutory contribution rate of 5.77% for fiscal year 2007. The State's funded ratio is much higher than the School's funded ratio. As a result, the actuarial contribution rate is much different when calculated for each group separately. The State's actuarial contribution rate of 5.21% is lower than the 5.77% statutory cap. The School's actuarial contribution rate is 9.75%, far above the 5.77% statutory cap. There are different approaches for applying the statutory cap. The projections included in this report assume the statutory cap applies individually to the State and School contribution rates. However, the actuarial and statutory contribution rates could be determined for the State and School on a combined basis. Under this alternative, the difference between the statutory rate and the State's actuarial rate would go to fund the School group. This would keep the total dollar amount of contributions the same as was projected under HB2014. This is a policy decision that ultimately must be decided by the State. If the State elects the latter option, equilibrium for the School group would be reached at an earlier date.

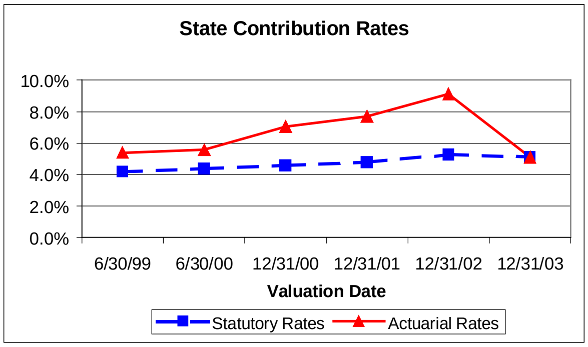




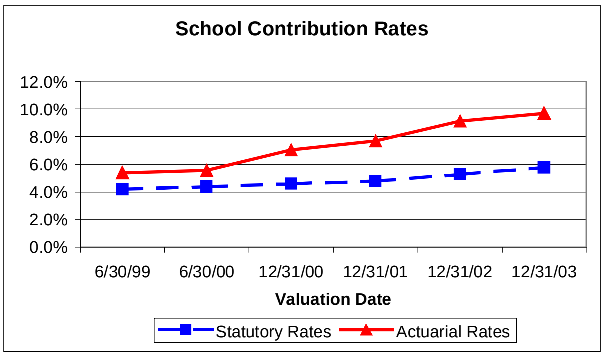


The funding for the State and School groups was strengthened by the bond issue and subsequent deposit of $440 million. With the separation of the State and Schools into two separate groups, it is more difficult to see the impact. If the actuarial funding had remained on a combined basis, the State/School actuarial contribution rate would have been 8.64%, as compared to 9.14% last year, despite increases in the UAL due to the change in the actuarial cost method and an actuarial experience loss for the 2003 year.

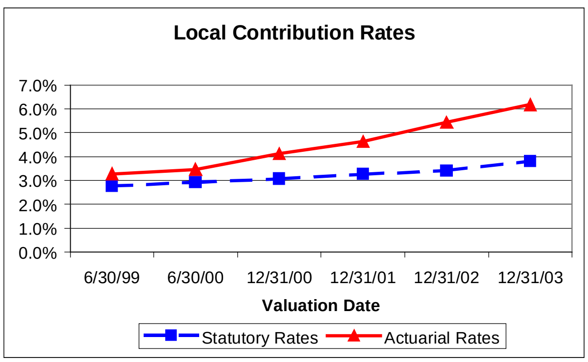
Historical contribution rates for each group are shown on the following pages. Please note that prior to the December 31, 2003 valuation, one contribution rate was developed for the State and School together as one group. Legislation passed in 2004 split the group for contribution rate calculations into two separate groups. In addition, bonds were issued by the State to help finance the UAL of the State and School groups and the actuarial methods were changed for all groups. These changes impact the comparability of contribution rates from the 2003 valuation and prior years.



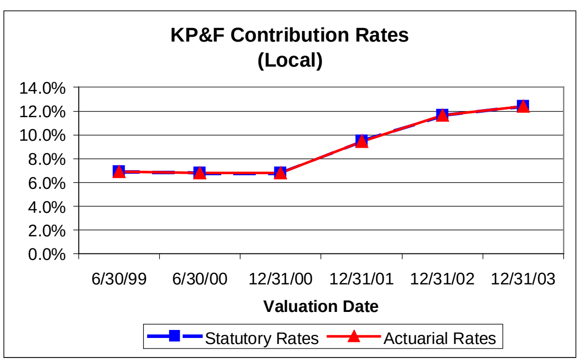
Investment experience in 2000 - 2002 resulted in an increase in the actuarial contribution rate. The split of State into a separate group in the 2003 valuation, coupled with the bonds issued, significantly lowered the actuarial rate. Currently, the State group is at equilibrium.



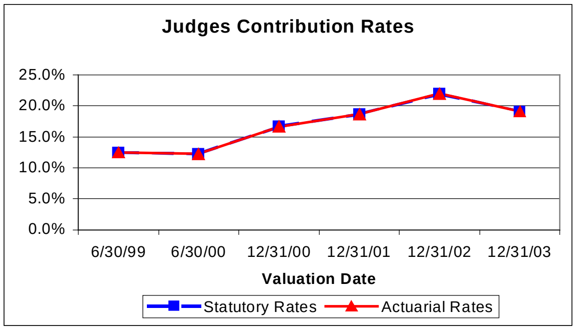
Due to investment experience, changes in actuarial methods, and the magnitude of the difference between the actuarial and statutory contribution rates, the funded status of the School group has declined and the actuarial contribution rate has increased.



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



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



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

SUMMARY

In recent years, the Retirement System and the Legislature have given a high priority to the development of a comprehensive plan to address the long-term funding shortfall 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.

Given the significant changes in the last two years in the System funded status, resulting from legislation and Board action along with strong investment performance in 2003, the System is back in actuarial balance. The State has reached equilibrium (the statutory contribution rate is equal to the actuarial contribution rate). With the current statutory caps, both the School and Local groups are projected to reach equilibrium before the end of the amortization period, assuming all actuarial assumptions are met in future years. The System is in actuarial balance and the long term funding of the System has improved dramatically.

SUMMARY OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY

DECEMBER 31, 2003 VALUATION

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

*The actuarial cost method was changed to the Entry Age Normal cost method with the December 31, 2003 valuation.

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

SUMMARY OF
CHANGES IN ACTUARIAL CONTRIBUTION RATE
BY SYSTEM
AS OF DECEMBER 31, 2003

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

* Contribution rate for Local employers only.

SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL
as of
DECEMBER 31, 2003 VALUATION

	As Reported on Valuation Date											
$(millions)	**6/30/94**	**6/30/95**	**6/30/96**	**6/30/97**	**6/30/98**	**6/30/99**	**6/30/00**	**12/31/00**	**12/31/01**	**12/31/02**	**12/31/03**	**Total**
Actual Experience vs Assumed												
• Investment	$(102)	$(143)	$(280)	$(323)	$(413)	$(369)	$(441)	$(23)	$350	$644	$140	$(960)
• Other	320	72	136	157	104	46	99	84	(9)	68	(32)	1,045
Assumption Changes	0	(96)	0	0	350	0	0	(206)	0	0	0	48
Changes in Data/Procedures	244	0	0	0	0	21	71	145**	5	177**	(286)	377
Change in Cost Method	0	0	0	0	0	0	0	0	0	0	1,147	1,147
Effect of Contribution Cap/Lag	*	95	70	63	54	78	66	60	115	143	178	922
Amortization Method	*	47	38	35	32	30	22	12	14	21	47	298
Change in Benefit Provisions	75	0	0	0	88	0	19	0	0	37	3	222
Bond Issue	0	0	0	0	0	0	0	0	0	(41)	(440)	(481)
Total	$537	$(25)	$(36)	$(68)	$215	$(194)	$(164)	$72	$475	$1,048	$757	$2,618

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

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

SUMMARY OF PRINCIPAL RESULTS
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
(STATE)

		12/31/2003 Valuation	12/31/2002 Valuation	% Change
1.	**PARTICIPANT DATA**			
	Number of:			
	Active Members	24,933	24,934	(0.0) %
	Retired Members and Beneficiaries	14,137	13,247	6.7
	Inactive Members	5,913	5,612	5.4
	Total Members	44,983	43,793	2.7
	Projected Annual Salaries of Active Members	$ 833,252,904	$ 838,397,642	(0.6)
	Annual Retirement Payments for Retired Members and Beneficiaries	$ 141,291,491	$ 132,595,231	6.6
2.	**ASSETS AND LIABILITIES**			
	Total Actuarial Liability	$ 2,747,341,651	$ 2,415,071,587	13.8
	Assets for Valuation Purposes	2,520,572,847	2,309,556,304	9.1
	Unfunded Actuarial Liability	226,768,804	105,515,283	
3.	**EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL**			
	Normal Cost	3.37%	4.83%	
	Amortization of Unfunded Actuarial and Debt Service	1.84%	1.06%	
	Actuarial Contribution Rate	5.21%	5.89%	
	Statutory Employer Contribution Rate*	5.21%	5.27%	

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

SUMMARY OF PRINCIPAL RESULTS
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
(SCHOOL)

		12/31/2003 Valuation	12/31/2002 Valuation	% Change
1.	**PARTICIPANT DATA**			
	Number of:			
	Active Members	80,169	80,109	0.1
	Retired Members and Beneficiaries	30,093	29,151	3.2
	Inactive Members	24,999	24,872	0.5
	Total Members	135,261	134,132	0.8
	Projected Annual Salaries of Active Members	$ 2,585,895,939	$ 2,534,768,517	2.0
	Annual Retirement Payments for Retired Members and Beneficiaries	$ 332,917,524	$ 311,503,562	6.9
2.	**ASSETS AND LIABILITIES**			
	Total Actuarial Liability	$ 7,794,261,207	$ 6,736,497,855	15.7
	Assets for Valuation Purposes	5,287,509,312	4,603,213,237	14.9
	Unfunded Actuarial Liability	2,506,751,895	2,133,284,618	
3.	**EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL**			
	Normal Cost	3.95%	5.29%	
	Amortization of Unfunded Actuarial and Debt Service	5.80%	4.89%	
	Actuarial Contribution Rate	9.75%	10.18%	
	Statutory Employer Contribution Rate*	5.77%	5.27%	

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

SUMMARY OF PRINCIPAL RESULTS
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
(STATE/SCHOOL - FOR INFORMATIONAL PURPOSES)

	12/31/2003 Valuation	12/31/2002 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	105,102	105,263	(0.2) %
Retired Members and Beneficiaries	44,230	43,136	2.5
Inactive Members	30,912	30,590	1.1
Total Members	180,244	178,989	0.7
Projected Annual Salaries of Active Members	$ 3,419,148,843	$ 3,373,166,160	1.4
Annual Retirement Payments for Retired Members and Beneficiaries	$ 474,209,015	$ 447,360,185	6.0
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	$ 10,541,602,858	$ 9,189,098,277	14.7
Assets for Valuation Purposes	7,808,082,159	6,950,298,376	12.3
Unfunded Actuarial Liability	2,733,520,699	2,238,799,901	
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	3.81%	5.17%	
Amortization of Unfunded Actuarial and Debt Service	4.83%	3.97%	
Actuarial Contribution Rate	8.64%	9.14%	
Statutory Employer Contribution Rate*	5.77%	5.27%	

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

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

	12/31/2003 Valuation	12/31/2002 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	36,299	35,235	3.0 %
Retired Members and Beneficiaries	11,279	10,969	2.8
Inactive Members	9,301	8,838	5.2
Total Members	56,879	55,042	3.3
Projected Annual Salaries of Active Members	$ 1,212,174,026	$ 1,153,168,204	5.1
Annual Retirement Payments for Retired Members and Beneficiaries	$ 83,190,648	$ 78,602,629	5.8
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	$ 2,234,229,454	$ 1,858,721,775	20.2
Assets for Valuation Purposes	1,646,342,459	1,518,684,533	8.4
Unfunded Actuarial Liability	587,886,995	340,037,242	
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	3.36%	3.67%	
Amortization of Unfunded Actuarial and Supplemental Liability	2.88%	1.77%	
Actuarial Contribution Rate	6.24%	5.44%	
Statutory Employer Contribution Rate*	3.81%	3.41%	

* Statutory Employer Contribution Rate exceeds last year's rate by the statutory rate increase limit of 0.40%. This rate does not include the 0.60% contribution rate for the Death and Disability Program.

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

		12/31/2003 Valuation	12/31/2002 Valuation	% Change
1.	**PARTICIPANT DATA**			
	Number of:			
	Active Members	6,494	6,548	(0.8) %
	Retired Members and Beneficiaries	3,456	3,338	3.5
	Inactive Members	1,087	961	13.1
	Total Members	11,037	10,847	1.8
	Projected Annual Salaries of Active Members	$ 324,682,693	$ 317,784,548	2.2
	Annual Retirement Payments for Retired Members and Beneficiaries	$ 73,469,109	$ 69,902,312	5.1
2.	**ASSETS AND LIABILITIES**			
	Total Actuarial Liability	$ 1,562,157,258	$ 1,467,979,675	6.4
	Assets for Valuation Purposes	1,312,799,683	1,235,479,858	6.3
	Unfunded Actuarial Liability	249,357,575	232,499,817	
3.	**EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL**			
	Normal Cost	8.21%	7.85%	
	Amortization of Unfunded Actuarial and Supplemental Liability	4.18%	3.78%	
	Actuarial Contribution Rate (Local Employers)	12.39%	11.63%	
	Statutory Employer Contribution Rate*	12.39%	11.63%	

* 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 rate shown in the December 31, 2002 column does not include the 0.06% increase for fiscal years beginning in 2005 to pay for the benefit enhancement passed by the 2004 Legislature.

SUMMARY OF PRINCIPAL RESULTS

KANSAS RETIREMENT SYSTEM FOR JUDGES

	12/31/2003 Valuation	12/31/2002 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	250	248	0.8 %
Retired Members and Beneficiaries	159	154	3.2
Inactive Members	15	15	0.0
Total Members	424	417	1.7
Projected Annual Salaries of Active Members	$ 22,126,223	$ 21,784,017	1.6
Annual Retirement Payments for Retired Members and Beneficiaries	$ 4,843,692	$ 4,597,899	5.3
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	$ 101,556,700	$ 97,798,899	3.8
Assets for Valuation Purposes	86,237,877	80,399,421	7.3
Unfunded Actuarial Liability	15,318,823	17,399,478 *	
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	13.04%	15.00%	
Amortization of Unfunded Actuarial and Supplemental Liability	6.07%	6.97%	
Actuarial Contribution Rate	19.11%	21.97%	
Statutory Employer Contribution Rate**	19.11%	21.97%	

* The "frozen" Unfunded Actuarial Liability was reset as of December 31, 2002.

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

SUMMARY OF PRINCIPAL RESULTS
ALL SYSTEMS COMBINED

	12/31/2003 Valuation	12/31/2002 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	148,145	147,294	0.6 %
Retired Members and Beneficiaries	59,124	57,597	2.7
Inactive Members	41,315	40,404	2.3
Total Members	248,584	245,295	1.3
Projected Annual Salaries of Active Members	$ 4,978,131,785	$ 4,865,902,928	2.3
Annual Retirement Payments for Retired Members and Beneficiaries	$ 635,712,464	$ 600,463,025	5.9
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	$ 14,439,546,270	$ 12,613,598,626	14.5
Assets for Valuation Purposes	10,853,462,178	9,784,862,188	10.9
Unfunded Actuarial Liability	3,586,084,092	2,828,736,438	

SECTION 2

SCOPE OF THE REPORT

This report presents the actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2003. This valuation was requested by the System's Board.

Particular attention is called for in reading our cover letter, where the guidelines employed in the preparation of this report are outlined. We also comment 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, 2003.
- 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, 2003 the market value of assets (excluding receivables) for the Retirement System was $9.797 billion. Table 1 is a comparison, at market values, of System assets as of December 31, 2003, and December 31, 2002, in total and by investment category. Table 2 summarizes the change in the market value of assets from December 31, 2002 to December 31, 2003 by System.

On the valuation date there was one receivable to be reflected. The State issued bonds for $500 million in March 2004 to assist with financing the unfunded actuarial liability for the State/School group. The net bond proceeds of $440 million were treated as a receivable.

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 Board of Trustees approved a change in the asset smoothing method, effective with the December 31, 2003 actuarial valuation.

Under the prior method, the expected value of plan assets was determined using the prior year's actuarial value of assets, the actual receipts and disbursements of the Fund for the previous 12 months and the assumed rate of investment return. One-third of the difference between actual market value and the expected value was recognized and added to the expected value.

Under the new 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 3D and Table 4 show the development of the actuarial value of assets (AVA) as of December 31, 2003.

TABLE 1

ANALYSIS OF NET ASSETS AT MARKET VALUE

	December 31, 2003			December 31, 2002		
		Amount ($ Millions)	% of Total		Amount ($ Millions)	% of Total
Cash & Equivalents	$	489	5.0 %	$	276	3.3 %
Alternative Investments		498	5.1		473	5.7
Real Estate		600	6.1		625	7.5
Fixed Income		2,795	28.2		2,822	33.8
Domestic Equity		3,448	35.0		2,621	31.4
International Equity		2,031	20.6		1,523	18.3
Subtotal	$	9,861	100.0 %	$	8,341	100.0 %
Administrative Reserves		(14)			(14)	
Group Insurance and Optional Life Reserves		(50)			(86)	
Net Assets	$	9,797		$	8,241	
Receivables		440			42	
Adjusted Net Assets	$	10,237		$	8,283	

Allocation of Net Assets on December 31, 2003:

State	$	2,370
School		4,992
Local		1,562
KP&F		1,232
Judges		81
Total Net Assets	$	10,237

TABLE 2
SUMMARY OF CHANGES IN KPERS ASSETS
DURING PERIOD ENDED DECEMBER 31, 2003

(Market Value)

		State		School		Local		Total KPERS
Market Value of Assets as of January 1, 2003*	$	1,965,140,878	$	3,880,004,263	$	1,297,521,480	$	7,142,666,621
Receivables		23,402,829		15,068,078		405,168		38,876,075
Adjusted Market Value of Assets		1,988,543,707		3,895,072,341		1,297,926,648		7,181,542,696
Contributions:								
Employee		32,992,482		99,830,987		46,102,356		178,925,825
Employee service purchases		3,913,531		7,564,796		4,489,573		15,967,900
Employer		39,575,100		113,207,906		35,619,024		188,402,030
Miscellaneous		62,068		42,030		-		104,098
Total Contributions		76,543,181		220,645,719		86,210,953		383,399,853
Total Investment Income		423,424,708		835,084,231		276,994,106		1,535,503,045
Total Income		499,967,889		1,055,729,950		363,205,059		1,918,902,898
Less Benefits:								
Annuity Retirement Benefits		(136,646,906)		(318,262,193)		(80,005,789)		(534,914,888)
Partial Lump Sum Benefits		(6,105,135)		(20,779,511)		(5,756,332)		(32,640,978)
Retirant Dividends		(1,513,022)		(3,000,214)		(774,267)		(5,287,503)
Withdrawals		(6,970,921)		(14,720,715)		(9,986,482)		(31,678,118)
Death Benefits		(3,754,334)		(6,146,253)		(3,107,441)		(13,008,028)
Total Benefits		(154,990,318)		(362,908,886)		(99,630,311)		(617,529,515)
Net Increase in Assets		344,977,571		692,821,064		263,574,748		1,301,373,383
Market Value of Assets as of December 31, 2003*	$	2,333,521,278	$	4,587,893,405	$	1,561,501,396	$	8,482,916,079
Receivables		36,515,432		403,649,568		-		440,165,000
Adjusted Market Value of Assets	$	2,370,036,710	$	4,991,542,973	$	1,561,501,396	$	8,923,081,079

* Note: Assets exclude insurance and administrative reserves.

TABLE 2 (cont.)
SUMMARY OF CHANGES IN KPERS ASSETS
DURING PERIOD ENDED DECEMBER 31, 2003

(Market Value)

	KPERS	KP&F	Judges	Total
Market Value of Assets as of January 1, 2003*	$ 7,142,666,621	$ 1,031,738,884	$ 66,966,094	$ 8,241,371,599
Receivables	38,876,075	2,707,853	171,353	41,755,281
Adjusted Market Value of Assets	7,181,542,696	1,034,446,737	67,137,447	8,283,126,880
Contributions:				
Employee	178,925,825	21,646,023	1,010,356	201,582,204
Employee service purchases	15,967,900	374,674	57,874	16,400,448
Employer	188,402,030	29,049,759	3,055,429	220,507,218
Miscellaneous	104,098	17,691	-	121,789
Total Contributions	383,399,853	51,088,147	4,123,659	438,611,659
Total Investment Income	1,535,503,045	226,806,757	14,926,247	1,777,236,049
Total Income	1,918,902,898	277,894,904	19,049,906	2,215,847,708
Less Benefits:				
Annuity Retirement Benefits	(534,914,888)	(70,162,287)	(4,776,339)	(609,853,514)
Partial Lump Sum Benefits	(32,640,978)	(4,980,823)	(263,939)	(37,885,740)
Retirant Dividends	(5,287,503)	(1,340,553)	(45,277)	(6,673,333)
Withdrawals	(31,678,118)	(2,673,638)	-	(34,351,756)
Death Benefits	(13,008,028)	(777,360)	(20,720)	(13,806,108)
Total Benefits	(617,529,515)	(79,934,661)	(5,106,275)	(702,570,451)
Net Increase in Assets	1,301,373,383	197,960,243	13,943,631	1,513,277,257
Market Value of Assets as of December 31, 2003*	$ 8,482,916,079	$ 1,232,406,980	$ 81,081,078	$ 9,796,404,137
Receivables	440,165,000	-	-	440,165,000
Adjusted Market Value of Assets	$ 8,923,081,079	$ 1,232,406,980	$ 81,081,078	$ 10,236,569,137

* Note: Assets exclude insurance and administrative reserves.

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

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

* Includes asset values for the TIAA group
** The plan year ended 12/31/00 was a short plan year from 7/1/00 to 12/31/00.

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

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

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

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

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

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

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

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

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

TABLE 4
DEVELOPMENT OF ACTUARIAL VALUE OF NET ASSETS

	State/School	Local	KP&F	Judges	Total KPERS
1. Excess (shortfall) of investment income					
a. Year ending 12/31/03	$796,478,227	$173,686,422	$145,182,681	$9,593,800	$1,124,941,130
b. Year ending 12/31/02	(978,073,236)	(197,379,440)	(183,062,822)	(12,065,403)	(1,370,580,901)
c. Year ending 12/31/01	(905,761,322)	(192,474,560)	(158,428,580)	(10,235,971)	(1,266,900,434)
d. Year ending 12/31/00	(672,682,938)	(141,863,561)	(116,648,615)	(7,491,043)	(938,686,158)
e. Total	($1,760,039,268)	($358,031,140)	($312,957,336)	($20,198,618)	($2,451,226,362)
2. Deferral of excess (shortfall) of investment income					
a. Year ending 12/31/03 (80%)	$637,182,582	$138,949,138	$116,146,145	$7,675,040	$899,952,904
b. Year ending 12/31/02 (60%)	(586,843,942)	(118,427,664)	(109,837,693)	(7,239,242)	(822,348,540)
c. Year ending 12/31/01 (40%)	(362,304,529)	(76,989,824)	(63,371,432)	(4,094,389)	(506,760,173)
d. Year ending 12/31/00 (20%)	(134,536,588)	(28,372,712)	(23,329,723)	(1,498,209)	(187,737,232)
e. Total	($446,502,476)	($84,841,063)	($80,392,703)	($5,156,799)	($616,893,041)
3. Market Value of Assets, end of year	$7,361,579,683	$1,561,501,396	$1,232,406,980	$81,081,078	$10,236,569,137
4. Actuarial Value of Assets, end of year	$7,808,082,159	$1,646,342,459	$1,312,799,683	$86,237,877	$10,853,462,178
5. Actuarial Value divided by market value	106.1%	105.4%	106.5%	106.4%	106.0%
6. Allocation between State and School (without POB)*					
Market Value - State	$2,333,521,278				
Market Value - School	4,587,893,405				
Actuarial Value - State	2,484,057,415				
Actuarial Value - School	4,883,859,744				
7. POB Receivable**	$440,165,000				
Allocated to State	36,515,432				
Allocated to School	403,649,568				
8. Adjusted Actuarial Value of Assets - State	$2,520,572,847				
Adjusted Actuarial Value of Assets - School	$5,287,509,312				

*Actuarial Value for State and School split in proportion to Market Value
**Allocated in proportion to Unfunded Actuarial Liability

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, 2003. 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 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 2001 Triennial Experience Study, as shown in Appendix C. This set of assumptions was adopted by the Board in September 2001 and was first used for the December 31, 2001 valuation.

The liabilities reflect the benefit structure in place as of December 31, 2003 plus the provisions of 2004 legislation that provided that Tier I members in KP&F may retire at any age with 32 or more years of service. Legislation passed in May 2004 also split the liability for the State/School group into separate groups for purposes of determining funding requirements.

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, 2003

	State	School	Local	Total KPERS
1. Active employees				
a. Retirement Benefit	$ 1,590,309,983	$ 5,576,535,573	$ 1,726,556,523	$ 8,893,402,079
b. Pre-Retirement Death Benefit	35,000,005	69,225,635	47,200,506	151,426,146
c. Withdrawal Benefit	121,812,492	320,285,366	205,733,486	647,831,344
d. Disability Benefit	90,884,249	145,048,465	83,474,613	319,407,327
e. Total	1,838,006,729	6,111,095,039	2,062,965,128	10,012,066,896
2. Inactive Vested Members	91,348,620	172,350,870	95,723,310	359,422,800
3. Inactive Nonvested Members	7,468,636	33,732,560	14,635,430	55,836,626
4. Deferred Disabled Members	59,251,428	71,172,887	35,538,200	165,962,515
5. Retirees	1,104,620,726	2,927,164,979	650,492,245	4,682,277,950
6. Beneficiaries	72,541,773	85,385,425	50,068,913	207,996,111
7. Unclaimed Account Reserve	668,200	1,331,800	500,000	2,500,000
8. Total PVFB	$ 3,173,906,112	$ 9,402,233,560	$ 2,909,923,226	$ 15,486,062,898

TABLE 5 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF DECEMBER 31, 2003

	KP&F	Judges
1. Active employees		
a. Retirement Benefit	$ 1,012,376,216	$ 86,736,868
b. Pre-Retirement Death Benefit	25,619,225	2,543,912
c. Withdrawal Benefit	34,809,905	105,883
d. Disability Benefit	147,503,096	0
e. Total	1,220,308,442	89,386,663
2. Inactive Vested Members	35,010,530	1,362,476
3. Inactive Nonvested Members	9,519,666	86,742
4. Disabled Members	102,103,262	350,111
5. Retirees	551,568,958	34,234,299
6. Beneficiaries	74,938,556	7,527,877
7. Total PVFB	$ 1,993,449,414	$ 132,948,168

TABLE 6
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL LIABILITIES
AS OF DECEMBER 31, 2003

	State	School	Local	Total KPERS
1. Present Value of Future Benefits	$ 3,173,906,112	$ 9,402,233,560	$ 2,909,923,226	$ 15,486,062,898
2. Present Value of Future Normal Costs for Active Members				
a. Retirement Benefit	$ 278,706,505	$ 1,235,067,114	$ 460,055,846	$ 1,973,829,465
b. Pre-Retirement Death Benefit	9,154,126	21,973,454	16,139,512	47,267,092
c. Withdrawal Benefit	104,350,250	301,819,293	166,125,718	572,295,261
d. Disability Benefit	34,353,580	49,112,492	33,372,696	116,838,768
e. Total	426,564,461	1,607,972,353	675,693,772	2,710,230,586
3. Total Actuarial Liability (1) - (2e)	$ 2,747,341,651	$ 7,794,261,207	$ 2,234,229,454	$ 12,775,832,312

TABLE 6 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL LIABILITIES
AS OF DECEMBER 31, 2003

	KP&F	Judges
1. Present Value of Future Benefits	$ 1,993,449,414	$ 132,948,168
2. Present Value of Future Normal Costs for Active Members		
a. Retirement Benefit	$ 291,756,888	$ 30,158,922
b. Pre-Retirement Death Benefit	15,787,750	1,118,512
c. Withdrawal Benefit	44,272,346	114,034
d. Disability Benefit	79,475,172	0
e. Total	431,292,156	31,391,468
3. Total Actuarial Liability (1) - (2e)	$ 1,562,157,258	$ 101,556,700

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

The KPERS Omnibus Bill (SB520) passed by the 2004 Legislature gave the KPERS Board of Trustees authority to select the actuarial cost method and the amortization method for the unfunded actuarial liability (UAL) for all three Systems (KPERS, KP&F and Judges). The Board already had the authority to make decisions on the asset valuation method used by the Systems. At the Board of Trustees meeting on May 21, 2004, the Board adopted a resolution changing the actuarial cost method for all three Systems 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 prior cost method for KPERS was the Projected Unit Credit method. The Aggregate Actuarial Cost Method with Supplemental Unfunded Actuarial Liability (UAL) was used for KP&F prior to the December 31, 2003 valuation and the Frozen Entry Age Cost Method was used for Judges.

The contribution rates based on this December 31, 2003 actuarial valuation will be used to determine employer contribution rates to the Kansas Public Employees Retirement System for fiscal years beginning in 2006. In this context, the term "contribution rate" means the percentage, which is applied to a particular active member payroll to determine the actual employer contribution amount (i.e., in dollars) for the group.

KPERS

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

Legislation provides that the employer rates of contribution 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. 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 Reserve of 0.6% of members' compensation.

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. At the December 31, 2003 valuation date, twenty-nine (29) 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.

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 beginning in 2005. 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, 2003 valuation date, twenty-nine (29) 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.

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-nine (29) 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 13^{th} check permanent.

Contribution Rate Summary

The normal cost rate 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 13^{th} 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 FY2007 is shown in Table 9. The total actuarial contribution rates determined as of December 31, 2003, 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 Table 11. Table 12 shows the KP&F individual employer contribution rates for fiscal years beginning in 2005 and 2006 while Table 13 shows the calculation of the additional contribution rate due to amortization of prior service UAL or excess benefit liability for fiscal years beginning in 2006.

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 2006.

TABLE 7
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
NORMAL COST RATE
AS OF DECEMBER 31, 2003

	State	School	Local	Total KPERS
1. Normal Cost at Beginning of Year				
a. Retirement Benefit	$ 39,329,422	$ 153,032,053	$ 59,625,581	$ 251,987,056
b. Pre-Retirement Death Benefit	1,283,747	2,812,395	2,072,574	6,168,716
c. Withdrawal Benefit	13,695,267	35,679,754	19,707,531	69,082,552
d. Disability Benefit	4,815,116	6,294,151	4,390,472	15,499,739
e. Total	59,123,552	197,818,353	85,796,158	342,738,063
2. Covered Payroll	$ 833,252,904	$ 2,585,895,939	$ 1,212,174,026	$ 4,631,322,869
3. Normal Cost Rate [(1e) / (2)] $*1.08^{.5}$	7.37%	7.95%	7.36%	7.69%

TABLE 7 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
NORMAL COST RATE
AS OF DECEMBER 31, 2003

	KP&F	Judges
1. Normal Cost at Beginning of Year		
a. Retirement Benefit	$ 31,116,679	$ 3,660,267
b. Pre-Retirement Death Benefit	1,742,517	126,487
c. Withdrawal Benefit	4,666,674	15,135
d. Disability Benefit	8,656,959	0
e. Total	46,182,829	3,801,889
2. Covered Payroll	$ 324,682,693	$ 22,126,223
3. Normal Cost Rate [(1e) / (2)] $*1.08^{.5}$	14.78%	17.86%

TABLE 8
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL LIABILITY CONTRIBUTION RATES
AS OF DECEMBER 31, 2003

		State	School	Local	KPF	Judges
1.	Actuarial Liability	$ 2,747,341,651	$ 7,794,261,207	$ 2,234,229,454	$ 1,562,157,258	$ 101,556,700
2.	Actuarial Value of Assets	2,520,572,847	5,287,509,312	1,646,342,459	1,312,799,683	86,237,877
3.	Unfunded Actuarial Liability (UAL)	226,768,804	2,506,751,895	587,886,995	249,357,575	15,318,823
	a. UAL for 1998 COLA	15,503,561	37,956,993	11,102,032	9,738,032	0
	b. UAL for 13th Check (2003)	0	0	3,892,746	7,290,468	0
	c. Prior service and other local employer UAL *	0	0	4,423,821	40,942,361	0
	d. Remaining UAL	211,265,243	2,468,794,902	568,468,396	191,386,714	15,318,823
4.	Payment to Amortize UAL (assumed mid-year)					
	a. UAL for 1998 COLA	2,072,061	5,072,977	1,483,794	1,262,942 **	0
	b. UAL for 13th Check (2003)	0	0	520,268	974,380 **	0
	c. Remaining UAL	12,222,775	142,832,415	32,888,805	9,969,878 **	1,321,026
	d. Total	14,294,836	147,905,392	34,892,867	12,207,200 **	1,321,026
5.	Total Projected Payroll	$ 833,252,904	$ 2,585,895,939	$ 1,212,174,026	$ 292,371,794 **	$ 22,126,223
6.	Amortization Payment as a Percent of Payroll	1.72%	5.72%	2.88%	4.18% **	5.97%

* 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.

At the time the December 31, 2002 valuation report was prepared, the bonds had not been issued. Therefore, a preliminary debt service payment schedule was used. The bonds have now been issued and the final debt service payment schedule is reflected below.

	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 2005	1,005,519	1,944,099	240,898	22,108	3,212,624
FYE 2006	1,005,228	1,943,535	240,828	22,102	3,211,693
FYE 2007	1,005,257	1,943,594	240,835	22,102	3,211,788
FYE 2008	1,006,030	1,945,088	241,020	22,119	3,214,257
FYE 2009	1,005,007	1,943,109	240,775	22,097	3,210,988
FYE 2010	1,004,474	1,942,079	240,647	22,085	3,209,285
FYE 2011	1,005,952	1,944,937	241,001	22,118	3,214,008
FYE 2012	1,004,808	1,942,725	240,727	22,093	3,210,353
FYE 2013	1,004,464	1,942,060	240,645	22,085	3,209,254
FYE 2014	1,005,179	1,943,441	240,816	22,101	3,211,537
Projected Payroll for FYE 2007*	852,071,226	2,644,296,240	33,040,614	22,625,925	
Rate of Pay Required	0.12%	0.08%	0.76%	0.10%	

TABLE 10
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
ACTUARIAL EMPLOYER CONTRIBUTION RATES
FISCAL YEAR COMMENCING IN 2006

	Total Normal Cost	Employee Normal Cost	Employer Normal Cost	Unfunded Actuarial Liability	Debt Service Payment	Total*
State **	7.37%	4.00%	3.37%	1.72%	0.12%	5.21%
School	7.95%	4.00%	3.95%	5.72%	0.08%	9.75%
Local	7.36%	4.00%	3.36%	2.88%	0.00%	6.24%
KP&F Uniform Contribution Rate						
State***	14.78%	6.57%	8.21%	3.55%	0.76%	12.52%
Local***	14.78%	6.57%	8.21%	4.18%	0.00%	12.39%
Judges	17.86%	4.82%	13.04%	5.97%	0.10%	19.11%

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

** For Correctional Employees, employer contribution rates of 7.17% and 7.04% 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 11
LOCAL AFFILIATION COST FACTORS
FOR FISCAL YEAR BEGINNING IN 2006

Employer	Total Estimated 2006 Annual Payroll	1/1/2006 Unfunded Actuarial Liability **	Payment on 1/1/2006 Unfunded Liability	Payment on Unfunded Liability as a % of Payroll	Total Rate for Years Commencing in 2005*	Total Rate for Years Commencing in 2006*
St. Francis Housing Authority	$12,117	$7,437	$437	3.60%	6.86%	7.41%
City of Burden	$86,632	$14,665	$860	0.99%	4.14%	4.80%
City of Longton	$126,085	$17,830	$1,047	0.83%	5.18%	4.64%
Bourbon County RWD#2	$137,207	$103,331	$6,065	4.42%	8.79%	8.23%
Towanda Township	$36,857	$8,438	$494	1.34%	4.79%	5.15%
Ness City Public Library	$35,108	$2,829	$166	0.47%	3.88%	4.28%
City of Herndon	$8,667	$33,432	$1,963	22.65%	26.06%	26.46%
Hays Housing Authority	$50,181	$1,665	$100	0.20%	3.71%	4.01%
Haysville Community Library	$136,983	$187,719	$11,013	8.04%	13.41%	11.85%
Hamilton County Library	$51,429	$12,432	$730	1.42%	4.96%	5.23%
Ellis Public Library	$10,977	$4,720	$277	2.52%	6.00%	6.33%
Bucklin Public Library	$14,417	$11,751	$690	4.79%	8.01%	8.60%
Elkhart Cemetery District	$40,853	$1,661	$99	0.24%	3.68%	4.05%
Clay County Conservation District	$58,921	$52,287	$3,071	5.21%	14.36%	9.02%
City of Linn Valley	$28,035	$924	$54	0.19%	4.20%	4.00%
City of Blue Mound	$63,654	$2,630	$152	0.24%	3.64%	4.05%
Kansas Workers' Risk Coop for Counties	$267,868	$47,654	$2,788	1.04%	4.43%	4.85%
Lindsborg Community Library	$18,247	$3,288	$190	1.04%	4.31%	4.85%
City of North Newton	$275,114	$151,410	$8,759	3.18%	6.91%	6.99%
City of Arcadia	$23,070	$14,806	$856	3.71%	5.59%	7.52%
Four County Mental Health	$4,659,948	$1,619,334	$137,499	2.95%	6.89%	6.76%
City of Linwood	$48,638	$2,221	$129	0.26%	3.62%	4.07%
Cottonwood Inc.	$4,702,017	$1,055,331	$61,055	1.30%	4.99%	5.11%
Johnson County Fire District #2 Rural	$1,656,758	$412,756	$23,880	1.44%	4.76%	5.25%
Basehor Community Library	$89,154	$52,481	$3,036	3.41%	6.98%	7.22%
City of Gypsum	$38,073	$4,463	$259	0.68%	4.17%	4.49%
Greenleaf Housing Authority	$17,522	$20,944	$1,211	6.91%	14.75%	10.72%

TABLE 11 (cont.)
LOCAL AFFILIATION COST FACTORS
FOR FISCAL YEAR BEGINNING IN 2006

Employer	Total Estimated 2006 Annual Payroll	1/1/2006 Unfunded Actuarial Liability **	Payment on 1/1/2006 Unfunded Liability	Payment on Unfunded Liability as a % of Payroll	Total Rate for Years Commencing in 2005*	Total Rate for Years Commencing in 2006*
City of Bentley	$50,399	$35,869	$2,160	4.29%	7.60%	8.10%
Mulvane Public Library	$24,815	$12,863	$775	3.12%	5.63%	6.93%
The Center for Counseling and Consultation	$1,733,714	$1,081,304	$65,127	3.76%	7.17%	7.57%
City of Shawnee	$6,736,624	$9,773	$1,362	0.02%	3.43%	3.83%
Unified Government - Wyandotte Co./ KCK	$44,651,119	$570,073	$85,854	0.19%	3.61%	4.00%
Total	$65,891,203	$5,558,321	$422,156			

*Basic local employer contribution rates excluding Death and Disability contribution: FY 2005: 3.41% FY 2006: 3.81%

**Includes unfunded actuarial liability for prior service and for excess benefit liability

TABLE 12
KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS COMMENCING IN CALENDAR YEARS 2005 AND 2006

Employer	Total Rate for Fiscal Year Commencing in 2005	Recommended Total Rate for Fiscal Year Commencing in 2006
Douglas County Law Enforcement	14.54 %	15.99 %
Ford County	11.69	12.39
Franklin County Sheriff's Dept	11.69	12.39
Gray County Sheriff's Dept.	11.69	12.39
Harvey County Sheriff's Dept.	13.82	12.39
Johnson County Fire Dept.	11.69	12.39
Johnson County Fire No. 1	11.69	12.39
Johnson County Fire No. 2	11.69	12.39
Johnson County Park Commission	11.69	12.39
Johnson County Sheriff's Dept.	11.94	12.62
Labette County Sheriff's Dept.	14.56	14.98
Reno County Sheriff's Dept.	11.69	12.39
Riley County Law Enforcement	11.69	12.39
Sedgwick County Fire No. 1	12.07	12.75
Sedgwick County Sheriff's Dept.	11.95	12.74
Sedgwick County EMT's	12.16	12.85
Shawnee County Sheriff's Dept.	14.61	15.21
Sumner County Sheriff's Dept.	13.57	14.13
Unified Gov't of Wyandotte County	11.69	12.39
Unified Gov't of Wyandotte Co. - KCK	17.91	18.44
City of Abilene	11.69	12.39
City of Arkansas City	13.99	14.60
City of Atchison	13.30	13.96
City of Bonner Springs	11.69	12.39
City of Chanute	12.57	13.23
City of Cimarron	11.69	12.39
City of Coffeyville	18.22	18.94
City of Concordia	15.75	16.61
City of Derby	12.45	13.16
City of Dodge City	18.82	19.52
City of Emporia	14.69	15.38
City of Erie	11.69	12.39
City of Eudora	11.69	12.39
City of Fairway	12.24	12.89
City of Fort Scott	19.20	17.95

TABLE 12 (cont.)
KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS COMMENCING IN CALENDAR YEARS 2005 AND 2006

Employer	Total Rate for Fiscal Year Commencing in 2005	Recommended Total Rate for Fiscal Year Commencing in 2006
City of Herington	12.85 %	13.80 %
City of Hutchinson	18.14	18.88
City of Junction City	12.69	13.38
City of Lawrence	12.18	12.86
City of Leavenworth	12.43	13.10
City of Leawood	12.47	13.14
City of Lenexa	11.84	12.53
City of Manhattan	14.61	15.18
City of Merriam	12.20	12.86
City of McPherson	12.00	12.70
City of Mission	11.69	12.39
City of Newton EMTs	13.46	14.30
City of Newton	12.68	13.34
City of Olathe	11.77	12.47
City of Ottawa	11.69	12.39
City of Parsons	17.03	17.47
City of Pittsburg	15.24	15.88
City of Salina	15.10	15.69
City of Shawnee	12.18	12.85
City of Topeka	17.80	18.08
City of Wellington	15.35	15.87
City of Westwood	11.69	12.39
City of Winfield	16.08	17.00
Board of Regents Campus Police	11.99	12.52
Kansas Bureau of Investigation	12.96	13.46
Kansas Highway Patrol	13.90	14.25
Cowley County Sheriff's Dept	14.78	16.74
City of Gardner Public Safety Officers	11.69	12.39
City of Liberal Police & Firemen	11.69	12.39
City of Oswego	11.69	12.39
Leavenworth County	11.69	12.39
Pottawatomie County	11.69	12.39
City of Roeland Park	11.69	12.39
City of Edwardsville Police	15.10	15.28
City of Garden City	11.69	12.39
City of Lake Quivira	11.69	12.39

TABLE 12 (cont.)
KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS COMMENCING IN CALENDAR YEARS 2005 AND 2006

Employer	Total Rate for Fiscal Year Commencing in 2005	Recommended Total Rate for Fiscal Year Commencing in 2006
City of Paola	11.69	12.39
City of Winfield (EMS)	20.86	22.14
Miami County	11.69	12.39
Atchinson County	11.69	12.39
City of Park City	11.69	12.39
Dickinson County	11.69	12.39
Leavenworth County (EMS)	11.69	12.39
City of Basehor	11.69	12.39
City of Edwardsville Firemen	17.53	20.08
City of Marion	11.69	12.39
City of Overbrook	11.69	12.39
Leavenworth County Fire District #1	11.69	12.39
Topeka-Tecumseh Fire District	11.69	12.39

TABLE 13
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
FOR FISCAL YEARS BEGINNING IN 2006

Employer	Number of Employees	Total Estimated 2006 Payroll	Excess Benefit Liability	Payment on Excess Benefit Liability	Unfunded Prior Service Liability	Payment on Unfunded Liability*	Total Payment Amount	As Percent of Payroll
Douglas County Law Enforcement	81	$5,032,486	$0	$0	$1,760,466	$174,300	$174,300	3.60 %
Ford County	53	2,143,116	0	0	0	0	0	0.00
Franklin County Sheriff's Dept	40	1,717,039	0	0	0	0	0	0.00
Gray County Sheriff's Dept.	5	210,377	0	0	0	0	0	0.00
Harvey County Sheriff's Dept.	28	1,144,789	0	0	0	0	0	0.00
Johnson County Fire Dept.	151	9,278,310	0	0	0	0	0	0.00
Johnson County Fire No. 1	15	684,896	0	0	0	0	0	0.00
Johnson County Fire No. 2	64	4,542,923	0	0	0	0	0	0.00
Johnson County Park Commission	12	637,463	0	0	0	0	0	0.00
Johnson County Sheriff's Dept.	431	29,808,524	0	0	448,381	65,200	65,200	0.23
Labette County Sheriff's Dept.	18	639,785	0	0	192,284	15,956	15,956	2.59
Reno County Sheriff's Dept.	66	2,869,464	0	0	0	0	0	0.00
Riley County Law Enforcement	91	4,617,175	0	0	0	0	0	0.00
Sedgwick County Fire No. 1	130	7,334,134	0	0	5,882	25,600	5,882	0.36
Sedgwick County Sheriff's Dept.	308	15,589,676	1,012	145	433,831	52,300	52,445	0.35
Sedgwick County EMT's	130	6,768,212	0	0	193,523	30,000	30,000	0.46
Shawnee County Sheriff's Dept.	111	5,490,620	0	0	1,452,141	149,000	149,000	2.82
Sumner County Sheriff's Dept.	18	667,397	0	0	102,004	11,200	11,200	1.74
Unified Gov't of Wyandotte County	749	3,453,659	0	0	0	0	0	0.00
Unified Gov't of Wyandotte Co. - KCK	0	42,229,660	2,135,211	319,413	3,306,599	2,151,100	2,470,513	6.05
City of Abilene	22	967,212	0	0	0	0	0	0.00
City of Arkansas City	50	2,215,381	0	0	72,408	47,100	47,100	2.21
City of Atchison	43	1,828,720	0	0	42,440	27,600	27,600	1.57
City of Bonner Springs	25	1,129,426	0	0	0	0	0	0.00
City of Chanute	35	1,637,950	0	0	30,842	13,200	13,200	0.84
City of Cimarron	3	151,628	0	0	0	0	0	0.00

TABLE 13 (cont.)
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
FOR FISCAL YEARS BEGINNING IN 2006

Employer	Number of Employees	Total Estimated 2006 Payroll	Excess Benefit Liability	Payment on Excess Benefit Liability	Unfunded Prior Service Liability	Payment on Unfunded Liability*	Total Payment Amount	As Percent of Payroll
City of Coffeyville	43	$1,866,468	$0	$0	$898,366	$117,600	$117,600	6.55 %
City of Concordia	8	295,450	0	0	91,584	12,000	12,000	4.22
City of Derby	33	1,530,063	0	0	100,972	11,400	11,400	0.77
City of Dodge City	73	3,020,258	0	0	2,197,571	207,300	207,300	7.13
City of Emporia	91	4,680,977	0	0	979,462	134,772	134,772	2.99
City of Erie	4	109,546	0	0	0	0	0	0.00
City of Eudora	8	349,734	0	0	0	0	0	0.00
City of Fairway	9	561,681	0	0	4,157	2,700	2,700	0.50
City of Fort Scott	33	1,317,853	0	0	538,701	70,500	70,500	5.56
City of Herington	7	214,017	0	0	21,077	2,900	2,900	1.41
City of Hutchinson	152	7,425,820	7,578	1,204	4,733,430	462,500	463,704	6.49
City of Junction City	84	3,759,324	0	0	55,279	35,900	35,900	0.99
City of Lawrence	264	16,535,397	0	0	115,655	75,200	75,200	0.47
City of Leavenworth	108	5,288,562	85,592	12,552	118,282	23,900	36,452	0.71
City of Leawood	106	6,366,867	0	0	406,422	45,900	45,900	0.75
City of Lenexa	160	10,348,391	0	0	89,603	13,900	13,900	0.14
City of Manhattan	67	3,089,322	0	0	309,955	82,900	82,900	2.79
City of Merriam	48	3,009,542	0	0	109,288	13,700	13,700	0.47
City of McPherson	44	1,917,386	0	0	8,816	5,800	5,800	0.31
City of Mission	28	1,500,620	0	0	0	0	0	0.00
City of Newton EMTs	8	413,710	0	0	72,521	7,600	7,600	1.91
City of Newton	62	2,952,991	0	0	41,635	27,100	27,100	0.95
City of Olathe	240	17,195,131	0	0	79,105	13,200	13,200	0.08
City of Ottawa	46	2,427,428	0	0	0	0	0	0.00
City of Parsons	40	1,541,532	0	0	115,721	75,300	75,300	5.08
City of Pittsburg	69	2,903,505	0	0	745,649	97,600	97,600	3.49
City of Salina	161	8,024,170	141,370	22,179	1,782,392	233,300	255,479	3.30

TABLE 13 (cont.)
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
FOR FISCAL YEARS BEGINNING IN 2006

Employer	Number of Employees	Total Estimated 2006 Payroll	Excess Benefit Liability	Payment on Excess Benefit Liability	Unfunded Prior Service Liability	Payment on Unfunded Liability*	Total Payment Amount	As Percent of Payroll
City of Shawnee	137	$9,094,745	$137,837	$21,551	$151,953	$19,900	$41,451	0.46 %
City of Topeka	506	30,176,177	522,863	78,457	12,584,859	1,577,100	1,655,557	5.69
City of Wellington	34	1,621,318	0	0	414,899	54,300	54,300	3.48
City of Westwood	8	487,486	0	0	0	0	0	0.00
City of Winfield	39	1,879,982	0	0	715,997	83,400	83,400	4.61
Board of Regents Campus Police	118	4,836,611	0	0	0	0	0	0.00
Kansas Bureau of Investigation	79	4,703,091	0	0	115,069	42,600	42,600	0.94
Kansas Highway Patrol	456	25,826,201	0	0	1,162,072	430,100	430,100	1.73
Cowley County Sheriff's Dept	23	853,491	0	0	421,584	35,698	35,698	4.35
City of Gardner Public Safety Officers	23	1,207,851	0	0	0	0	0	0.00
City of Liberal Police & Firemen	53	2,350,846	0	0	0	0	0	0.00
City of Oswego	4	140,373	0	0	0	0	0	0.00
Leavenworth County	51	2,273,386	0	0	0	0	0	0.00
Pottawatomie County	19	740,772	0	0	0	0	0	0.00
City of Roeland Park	14	671,613	0	0	0	0	0	0.00
City of Edwardsville Police	15	655,889	0	0	234,800	18,237	18,237	2.89
City of Garden City	86	3,472,132	0	0	0	0	0	0.00
City of Lake Quivira	2	84,975	0	0	0	0	0	0.00
City of Paola	16	712,684	0	0	0	0	0	0.00
City of Winfield (EMS)	8	406,880	0	0	453,220	38,158	38,158	9.75
Miami County	44	2,187,005	0	0	0	0	0	0.00
Atchinson County	12	461,939	0	0	0	0	0	0.00
City of Park City	16	697,901	0	0	0	0	0	0.00
Dickinson County	15	574,719	0	0	0	0	0	0.00
Leavenworth County (EMS)	36	1,350,357	0	0	0	0	0	0.00
City of Basehor	5	201,113	0	0	0	0	0	0.00
City of Edwardsville Firemen	13	493,604	0	0	444,147	36,530	0	7.69
Total	6,507	$ 359,604,923	$ 3,031,464	$ 455,501	$ 38,355,044	$ 6,871,551	$ 7,270,804	

APPENDIX A
SUMMARY OF MEMBERSHIP DATA

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
ACTIVE MEMBER DATA

	12/31/2003	12/31/2002
State/School		
Number	105,102	105,043
Average Current Age	45.11	44.75
Average Service	11.08	10.81
Average Pay	$31,894	$31,483
State		
Number	24,933	24,934
Average Current Age	46.48	46.02
Average Service	12.30	12.00
Average Pay	$32,764	$32,965
School		
Number	80,169	80,109
Average Current Age	44.68	44.36
Average Service	10.70	10.44
Average Pay	$31,623	$31,021
Local		
Number	36,299	35,235
Average Current Age	44.53	44.30
Average Service	9.14	9.01
Average Pay	$32,739	$32,086
KPERS Total		
Number	141,401	140,278
Average Current Age	44.96	44.64
Average Service	10.59	10.36
Average Pay	$32,111	$31,634

APPENDIX A
SUMMARY OF MEMBERSHIP DATA

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
ACTIVE MEMBER DATA

	12/31/2003	12/31/2002
KP&F		
Number	6,494	6,548
Tier I	744	782
Tier II	5,750	5,766
Average Current Age	38.80	38.40
Average Service	10.95	10.59
Average Pay	$49,017	$47,580
Judges		
Number	250	248
Average Current Age	55.10	55.00
Average Service	11.30	11.06
Average Pay	$86,770	$86,116
System Total		
Number	148,145	147,074
Average Current Age	44.71	44.38
Average Service	10.60	10.37
Average Pay	$32,944	$32,436

KP&F

	12/31/2003	
Social Security Coverage	Yes	No
Police	3,227	964
Fire	1,104	858
Medical	333	8
Total Number	4,664	1,830
Percentage	71.8%	28.2%

APPENDIX A
SUMMARY OF MEMBERSHIP DATA

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
INACTIVE MEMBER DATA

	12/31/2003	12/31/2002
State		
vested inactive	1,935	1,769
nonvested inactive	2,883	2,784
deferred disabled	1,095	1,059
School		
vested inactive	4,409	4,238
nonvested inactive	19,505	19,589
deferred disabled	1,085	1,045
Local		
vested inactive	2,238	2,088
nonvested inactive	6,310	6,024
deferred disabled	753	726
KPERS Total		
vested inactive	8,582	8,095
nonvested inactive	28,698	28,397
deferred disabled	2,933	2,830
KP&F		
vested inactive	126	120
nonvested inactive	961	841
deferred disabled	0	0
Judges		
vested inactive	12	13
nonvested inactive	3	2
deferred disabled	0	0
System Total		
vested inactive	8,720	8,228
nonvested inactive	29,662	29,240
deferred disabled	2,933	2,830

APPENDIX A
SUMMARY OF MEMBERSHIP DATA

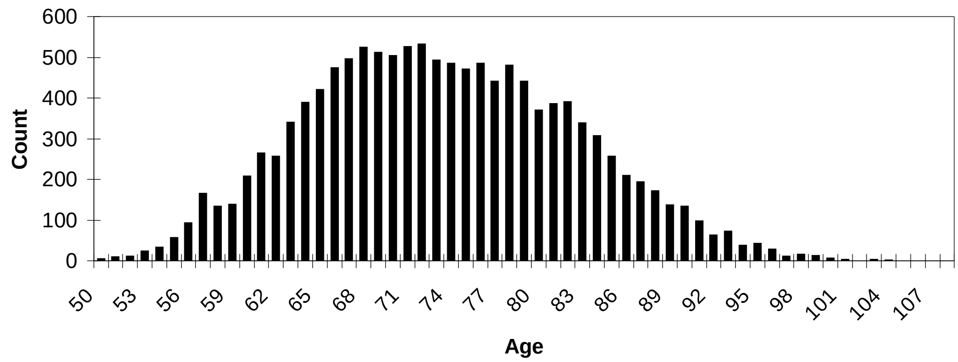
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
RETIREE AND BENEFICIARY MEMBER DATA

	12/31/2003	12/31/2002
State		
Number	14,137	13,247
Average Benefit	$9,994	$10,009
Average Age	72.81	73.14
School		
Number	30,093	29,151
Average Benefit	$11,063	$10,686
Average Age	72.81	73.00
Local		
Number	11,279	10,969
Average Benefit	$7,376	$7,166
Average Age	73.30	73.21
KPERS Total		
Number	55,509	53,367
Average Benefit	$10,042	$9,794
Average Age	72.91	73.08
KP&F		
Number	3,456	3,338
Average Benefit	$21,258	$20,941
Average Age	61.20	60.90
Judges		
Number	159	154
Average Benefit	$30,463	$29,856
Average Age	73.30	72.80
System Total		
Number	59,124	56,859
Average Benefit	$10,752	$10,503
Average Age	72.23	72.36

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2003

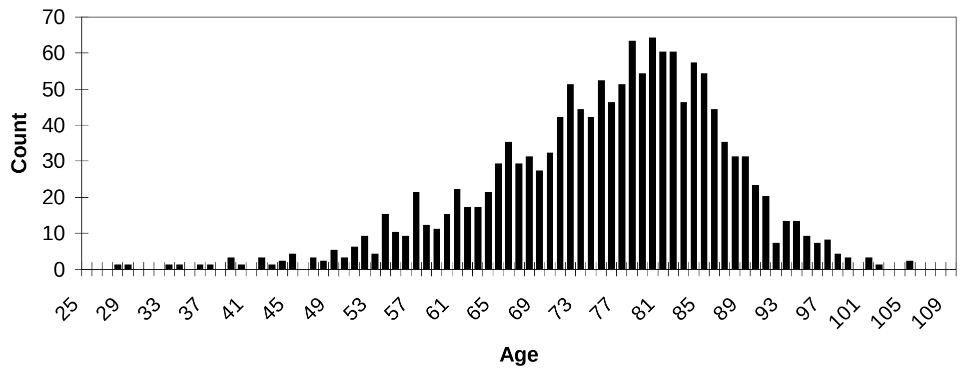
STATE

Retirees



Count:	12,660	Average age:	73.4	Average benefit:	$ 10,357

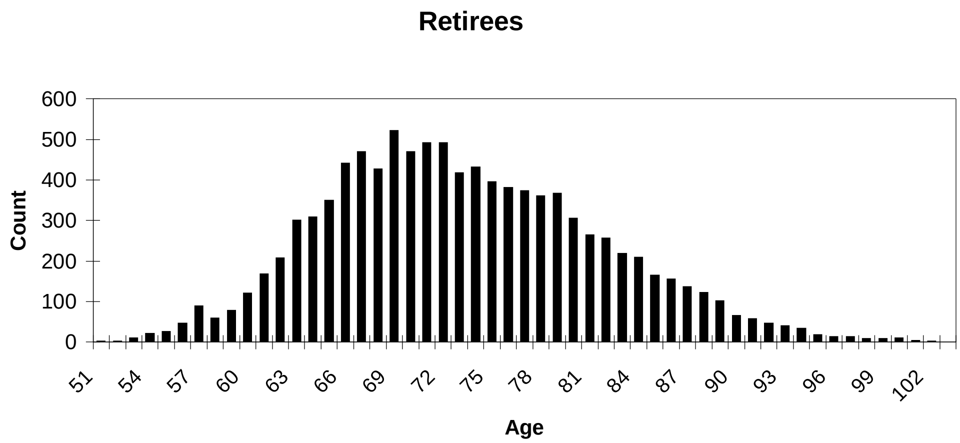
Beneficiaries



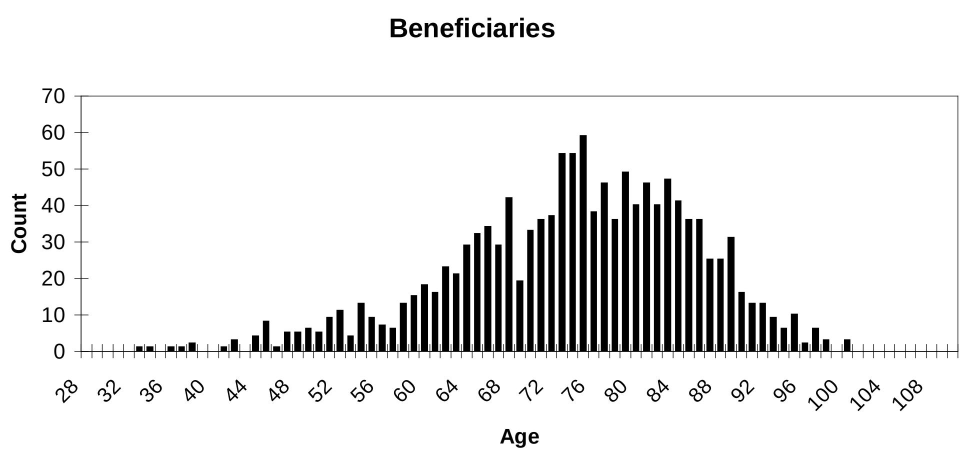
Count:	1,477	Average age:	74.9	Average benefit:	$ 6,887

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2003

LOCAL



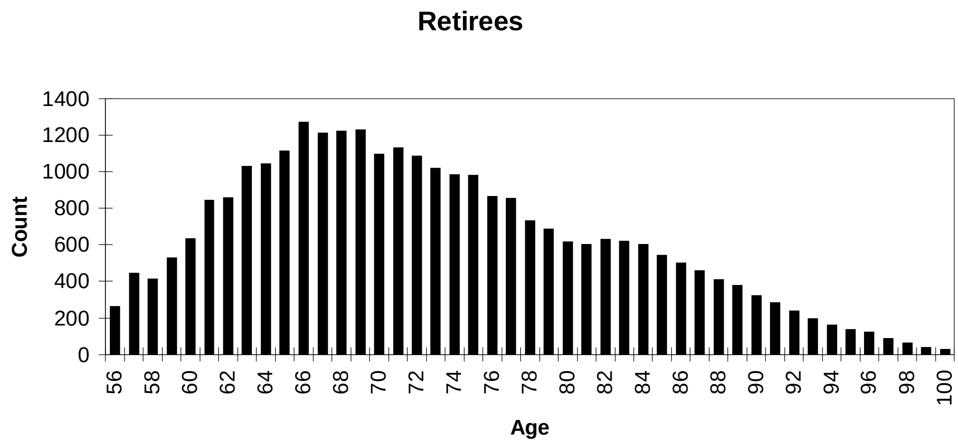
Count:	9,993	Average age:	73.2	Average benefit:	$ 7,665



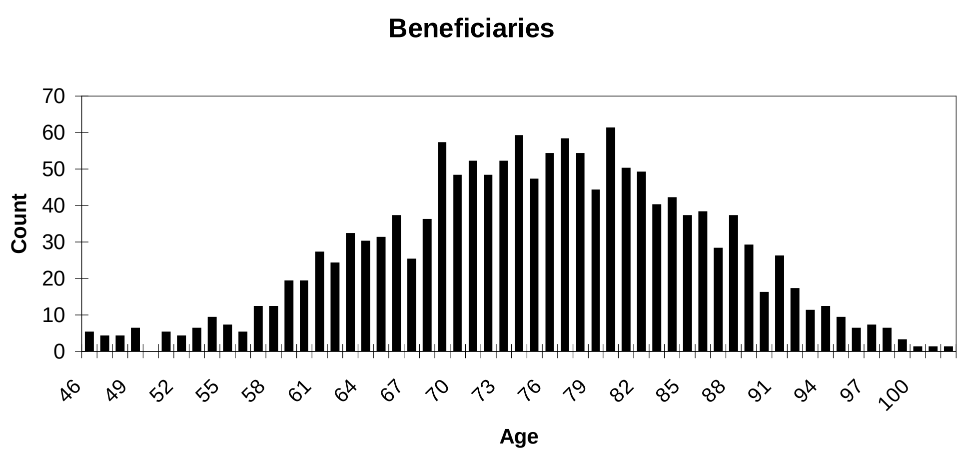
Count:	1,286	Average age:	74.1	Average benefit:	$ 5,120

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2003

SCHOOL



Count: 28,615 Average age: 72.7 Average benefit: $ 11,251

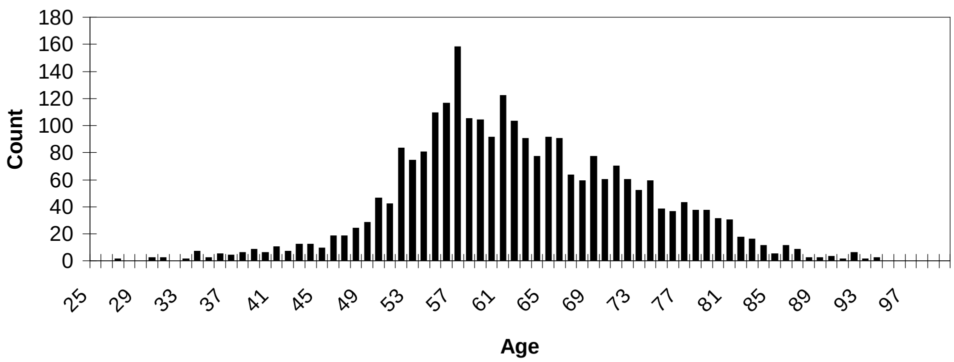


Count: 1,478 Average age: 74.9 Average benefit: $ 7,429

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2003

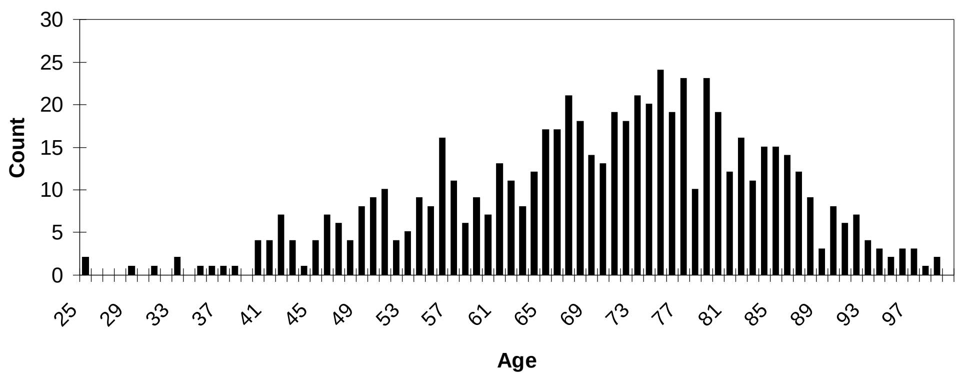
KP&F

Retirees



Count: 2,601 Average age: 62.5 Average benefit: $ 24,660

Beneficiaries



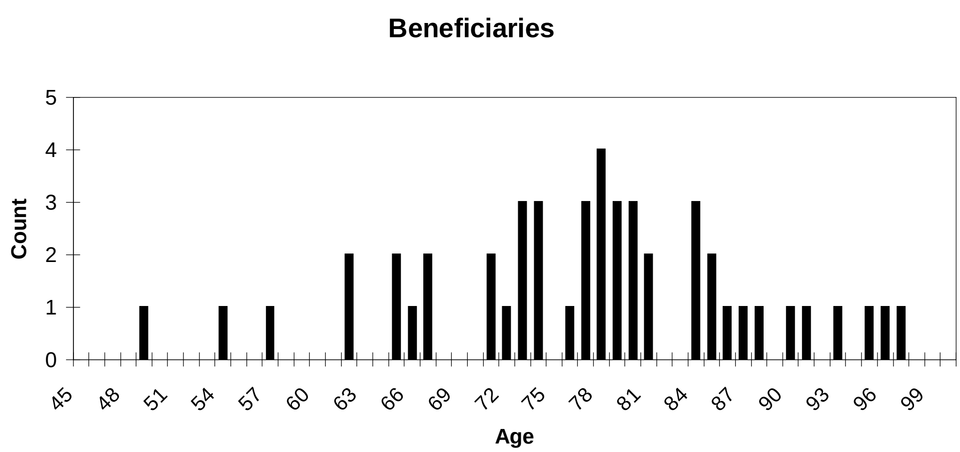
Note: 206 beneficiaries under age 25 not shown on graph

Count: 855 Average non-child age: 69.4 Average benefit: $10,909

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2003

JUDGES

Count: 110 Average age: 71.6 Average benefit: $ 34,973



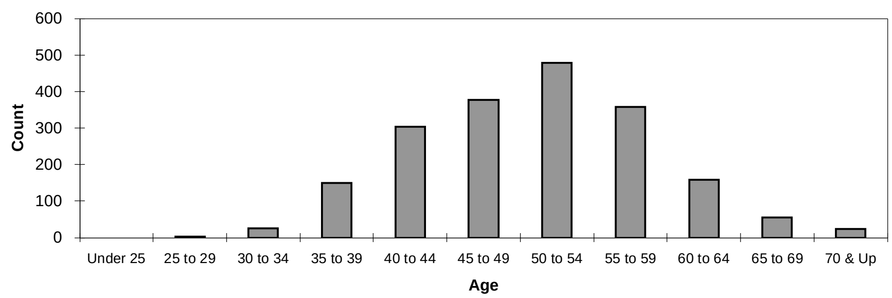
Count: 49 Average age: 77.0 Average benefit: $ 20,708

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2003

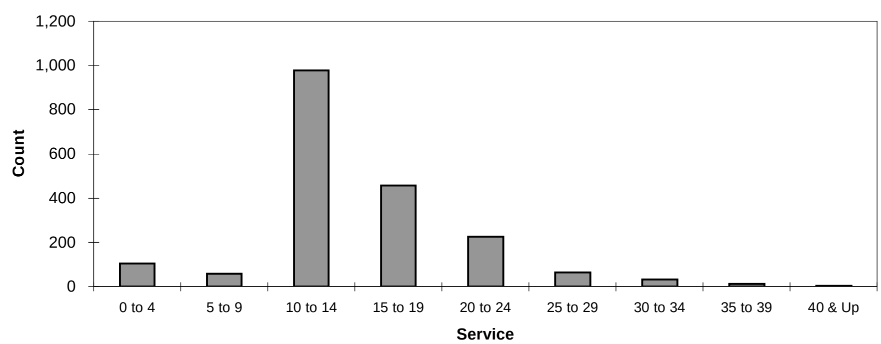
STATE

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	2	1	0	0	0	0	0	0	0	3
30 to 34	4	1	20	0	0	0	0	0	0	25
35 to 39	13	5	117	14	0	0	0	0	0	149
40 to 44	14	14	197	64	15	0	0	0	0	304
45 to 49	11	8	196	110	47	6	0	0	0	378
50 to 54	19	11	220	117	76	23	12	1	0	479
55 to 59	20	6	145	105	47	24	8	2	1	358
60 to 64	6	6	61	40	28	7	6	5	0	159
65 to 69	7	1	15	8	11	3	6	4	1	56
70 & Up	9	5	5	1	1	1	1	0	1	24
Total	105	58	976	459	225	64	33	12	3	1,935

Age Distribution



Service Distribution



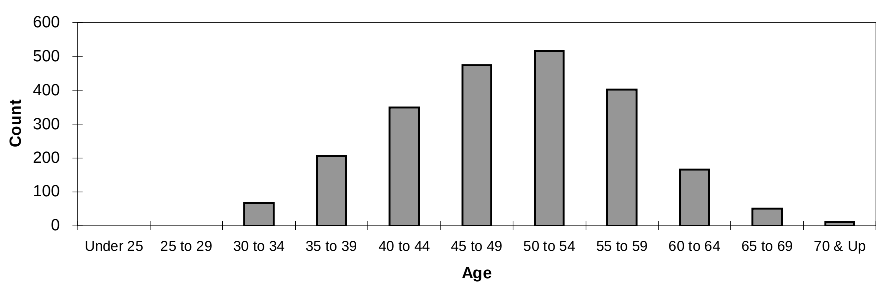
Nonvested: 2,883

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2003

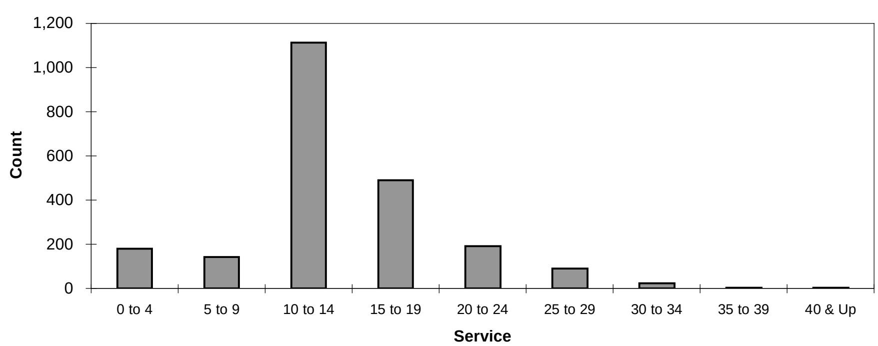
LOCAL

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	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	29	17	22	0	0	0	0	0	0	68
35 to 39	45	27	124	9	1	0	0	0	0	206
40 to 44	32	32	191	75	19	0	0	0	0	349
45 to 49	33	29	236	111	50	14	0	0	0	473
50 to 54	23	19	243	128	58	34	10	0	0	515
55 to 59	9	13	199	112	42	23	4	0	0	402
60 to 64	4	5	78	37	19	15	6	0	1	165
65 to 69	2	0	15	16	3	4	5	3	2	50
70 & Up	2	0	4	2	1	0	0	0	1	10
Total	179	142	1,112	490	193	90	25	3	4	2,238

Age Distribution



Service Distribution



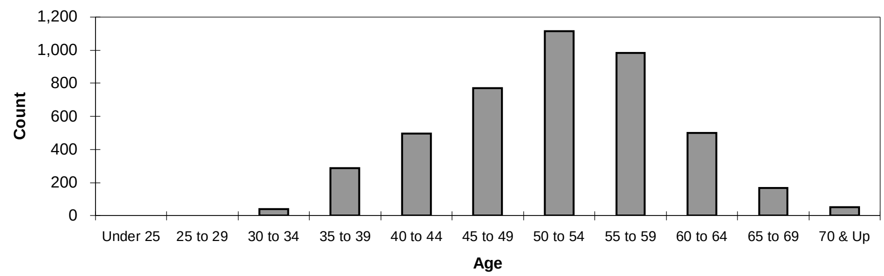
Nonvested: 6,310

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2003

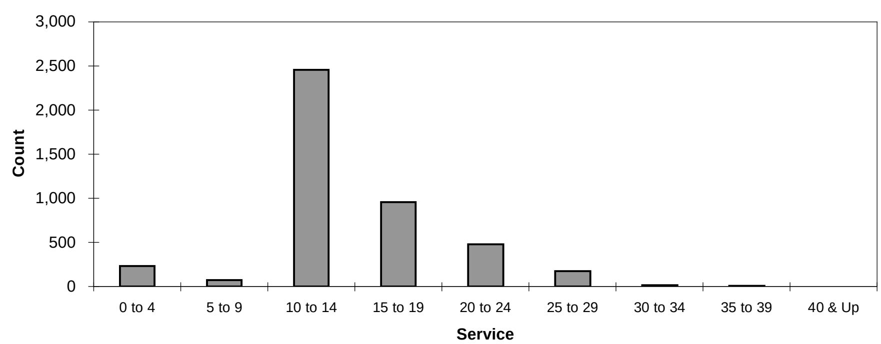
SCHOOL

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	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	1	0	39	0	0	0	0	0	0	40
35 to 39	5	4	264	15	0	0	0	0	0	288
40 to 44	5	3	367	110	10	0	0	0	0	495
45 to 49	3	2	480	185	90	10	1	0	0	771
50 to 54	12	2	587	268	172	65	7	0	0	1,113
55 to 59	9	1	472	255	152	81	8	3	0	981
60 to 64	103	28	198	107	44	15	1	3	0	499
65 to 69	67	28	33	17	13	7	3	1	0	169
70 & Up	30	8	13	2	0	0	0	0	0	53
Total	235	76	2,453	959	481	178	20	7	0	4,409

Age Distribution



Prior Service Distribution



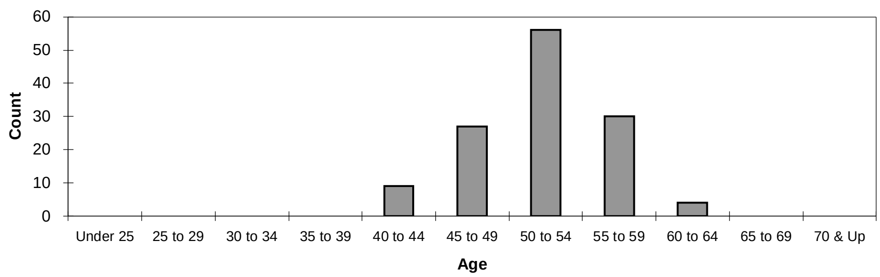
Nonvested: 19,505

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2003

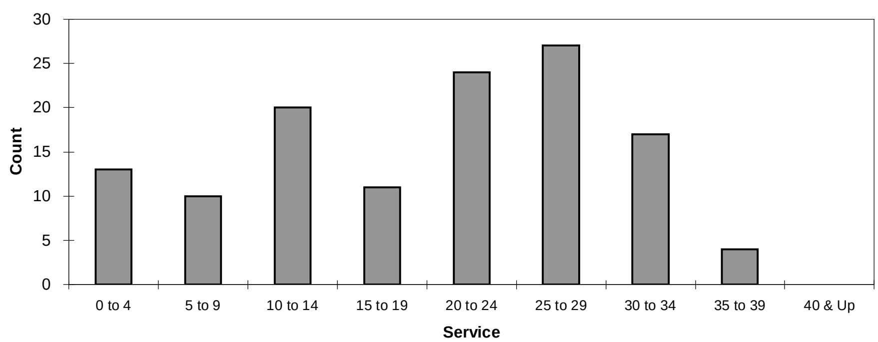
KP&F

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0
40 to 44	0	1	4	1	3	0	0	0	0	9
45 to 49	1	3	8	4	8	2	1	0	0	27
50 to 54	6	5	5	2	12	21	5	0	0	56
55 to 59	6	0	3	4	0	3	11	3	0	30
60 to 64	0	1	0	0	1	1	0	1	0	4
65 to 69	0	0	0	0	0	0	0	0	0	0
70 & Up	0	0	0	0	0	0	0	0	0	0
Total	13	10	20	11	24	27	17	4	0	126

Age Distribution



Service Distribution



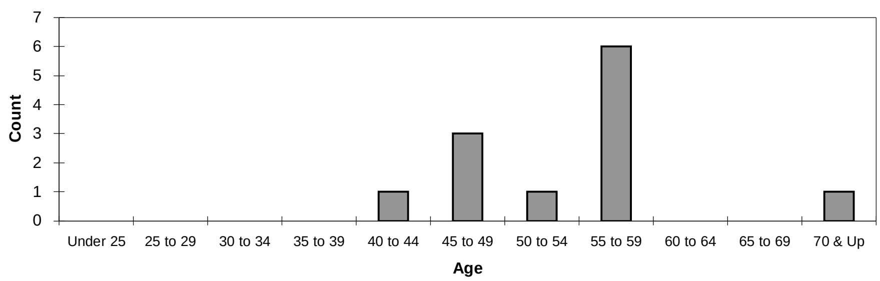
Nonvested: 961

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2003

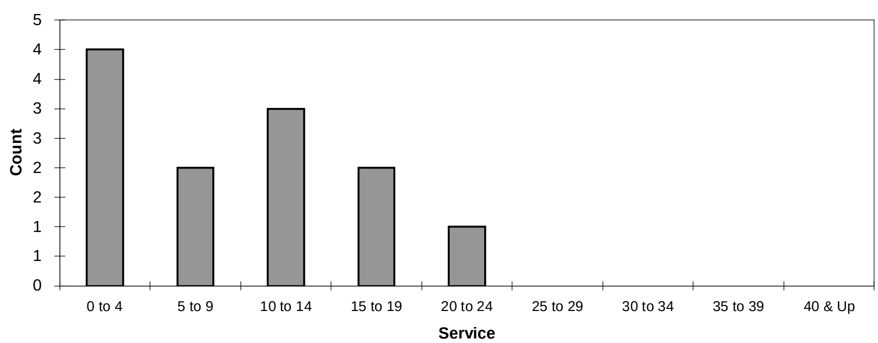
JUDGES

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

Age Distribution



Service Distribution



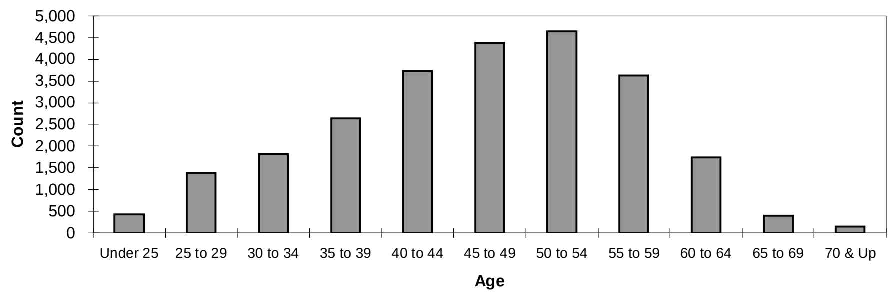
Nonvested: 3

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2003

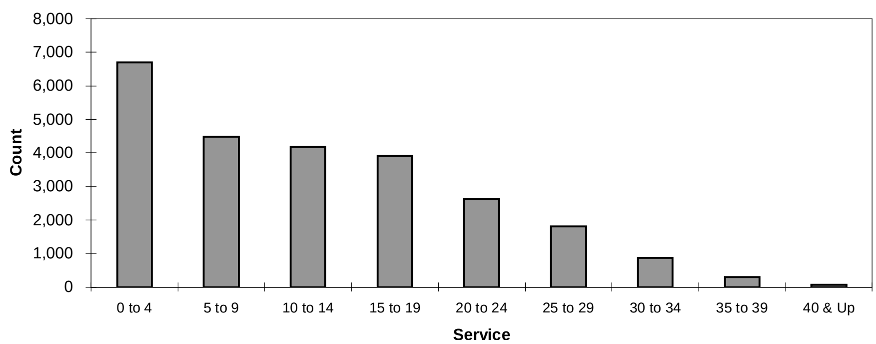
STATE

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	427	3	0	0	0	0	0	0	0	430
25 to 29	1,175	204	2	0	0	0	0	0	0	1,381
30 to 34	964	659	184	5	0	0	0	0	0	1,812
35 to 39	956	702	654	321	11	0	0	0	0	2,644
40 to 44	888	731	754	852	463	43	0	0	0	3,731
45 to 49	832	713	745	829	742	492	26	0	0	4,379
50 to 54	701	665	763	840	646	672	327	24	0	4,638
55 to 59	472	482	642	628	459	404	367	160	13	3,627
60 to 64	210	240	326	333	231	147	119	94	43	1,743
65 to 69	39	65	80	70	60	31	17	19	15	396
70 & Up	30	18	26	29	20	12	7	4	6	152
Total	6,694	4,482	4,176	3,907	2,632	1,801	863	301	77	24,933

Age Distribution



Service Distribution

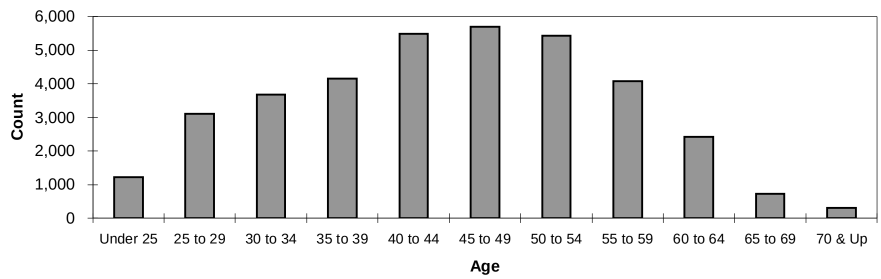


KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2003

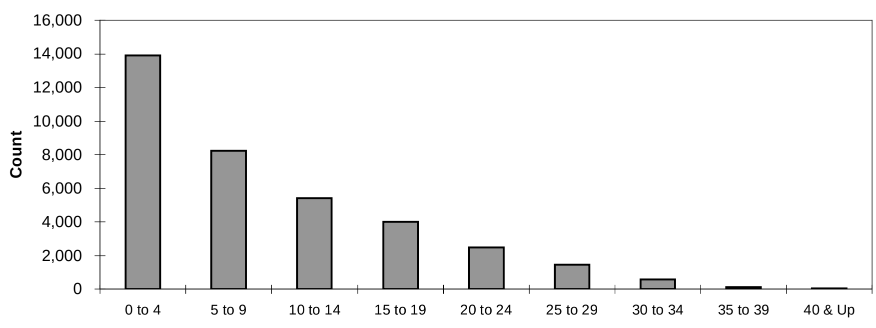
LOCAL

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	1,219	11	0	0	0	0	0	0	0	1,230
25 to 29	2,514	586	5	0	0	0	0	0	0	3,105
30 to 34	2,044	1,321	301	5	0	0	0	0	0	3,671
35 to 39	1,841	1,201	802	306	11	0	0	0	0	4,161
40 to 44	1,820	1,348	996	835	441	37	0	0	0	5,477
45 to 49	1,599	1,246	995	826	670	334	25	0	0	5,695
50 to 54	1,276	1,029	1,001	829	582	488	208	9	0	5,422
55 to 59	926	771	679	658	427	347	205	59	5	4,077
60 to 64	413	485	458	402	298	186	98	60	28	2,428
65 to 69	152	173	128	109	62	46	27	9	14	720
70 & Up	93	70	60	33	18	17	11	4	7	313
Total	13,897	8,241	5,425	4,003	2,509	1,455	574	141	54	36,299

Age Distribution



Service Distribution

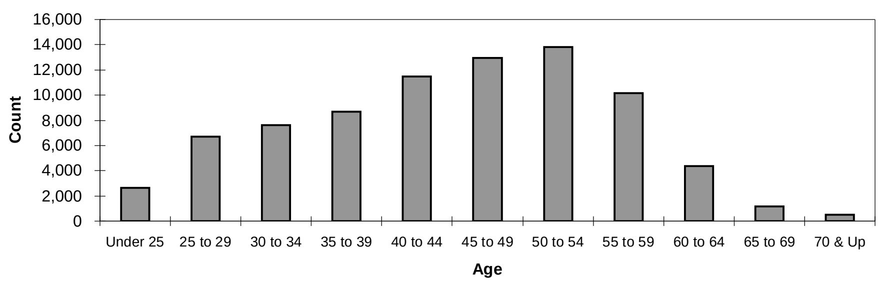


KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2003

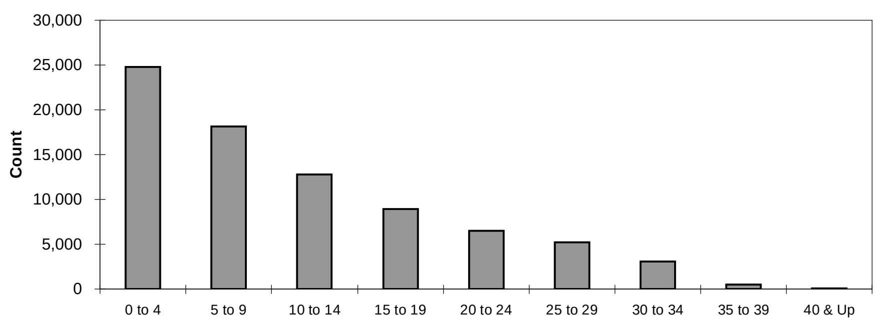
SCHOOL

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	2,579	48	0	0	0	0	0	0	0	2,627
25 to 29	5,009	1,720	11	0	0	0	0	0	0	6,740
30 to 34	3,112	3,522	1,002	11	0	0	0	0	0	7,647
35 to 39	3,156	2,302	2,372	847	16	0	0	0	0	8,693
40 to 44	3,563	2,851	1,913	2,103	1,016	26	0	0	0	11,472
45 to 49	2,809	2,983	2,468	1,552	1,914	1,208	22	0	0	12,956
50 to 54	2,073	2,251	2,486	2,052	1,456	2,177	1,327	3	0	13,825
55 to 59	1,341	1,387	1,546	1,571	1,400	1,255	1,377	257	3	10,137
60 to 64	695	676	675	670	607	461	297	278	38	4,397
65 to 69	274	262	222	128	110	77	47	17	32	1,169
70 & Up	161	134	98	47	22	16	12	6	10	506
Total	24,772	18,136	12,793	8,981	6,541	5,220	3,082	561	83	80,169

Age Distribution



Prior Service Distribution

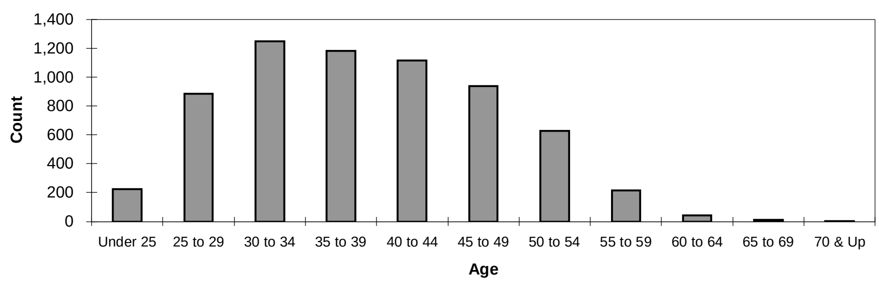


KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2003

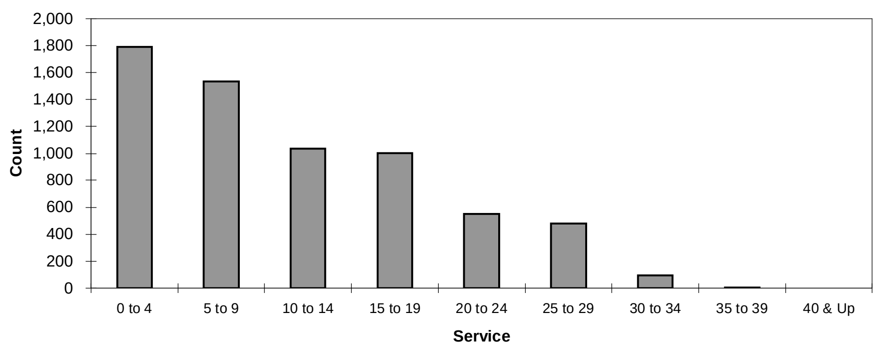
KP&F

	Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	223	0	0	0	0	0	0	0	0	223
25 to 29	667	218	0	0	0	0	0	0	0	885
30 to 34	460	646	140	1	0	0	0	0	0	1,247
35 to 39	211	368	415	188	2	0	0	0	0	1,184
40 to 44	112	164	262	426	148	4	0	0	0	1,116
45 to 49	63	72	109	221	247	224	4	0	0	940
50 to 54	31	41	61	117	121	202	55	0	0	628
55 to 59	16	16	36	38	28	48	32	2	0	216
60 to 64	8	5	10	11	4	3	0	2	0	43
65 to 69	2	2	2	1	0	1	1	0	0	9
70 & Up	0	3	0	0	0	0	0	0	0	3
Total	1,793	1,535	1,035	1,003	550	482	92	4	0	6,494

Age Distribution



Service Distribution

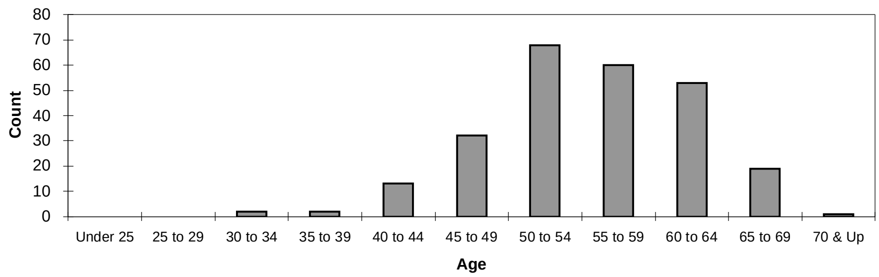


KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2003

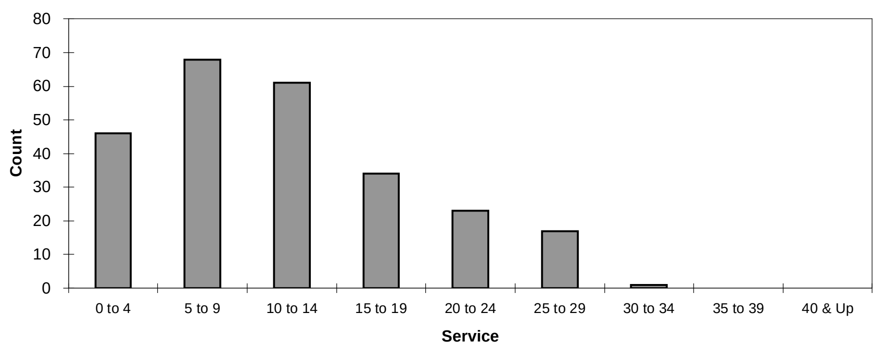
JUDGES

Age	Service: 0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	1	1	0	0	0	0	0	0	0	2
35 to 39	1	1	0	0	0	0	0	0	0	2
40 to 44	10	1	2	0	0	0	0	0	0	13
45 to 49	8	12	10	2	0	0	0	0	0	32
50 to 54	16	19	15	14	3	1	0	0	0	68
55 to 59	4	20	15	6	12	3	0	0	0	60
60 to 64	4	11	13	9	6	10	0	0	0	53
65 to 69	2	3	6	3	2	2	1	0	0	19
70 & Up	0	0	0	0	0	1	0	0	0	1
Total	46	68	61	34	23	17	1	0	0	250

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

<u>Normal Retirement</u>

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.

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 15 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 15 years of credited service, but hadn't reached retirement age at the time of death, the spouse may elect a monthly benefit to begin on the date the member first would have been eligible to retire 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 3.5%

Rates of Mortality

School (Male): 1994 GAM Male Table
School (Female): 1994 GAM Female Table -1
NonSchool (Male): 1994 GAM Male Table +2
NonSchool (Female): 1994 GAM Female Table +1

Disabled Life Mortality 1994 GAM Table Set forward 12 years

Rates of Salary Increase

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

*Includes general wage increase assumption of 4.0% (composed of 3.5% inflation and 0.50% productivity)

Rates of Termination

School – Male
Years of Service

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

School - Female

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

State - Male

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

State - Female

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

Local - Male

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

Local - Female

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

Retirement Rates

School

	Rule of 85	
Age	1st Year With 85 Points	After 1st Year With 85 Points
53	20%	10%
55	20%	15%
57	25%	15%
59	25%	25%
61	35%	35%

Early Retirement Age	Rate	Normal Retirement Age	Rate
55	3%	62	40%
56	3%	63	30%
57	3%	64	35%
58	5%	65	40%
59	10%	66	20%
60	10%	67	20%
61	20%	68	20%
		69	20%
		70	100%

State

	Rule of 85	
Age	1st Year With 85 Points	After 1st Year With 85 Points
53	17%	15%
55	17%	15%
57	17%	15%
59	15%	15%
61	30%	25%

Early Retirement Age	Early Retirement Rate	Normal Retirement Age	Normal Retirement Rate
55	3%	62	40%
56	3%	63	25%
57	3%	64	30%
58	3%	65	45%
59	5%	66	30%
60	7%	67	25%
61	20%	68	25%
		69	20%
		70	100%

Local

	Rule of 85	
Age	1st Year With 85 Points	After 1st Year With 85 Points
53	10%	5%
55	10%	10%
57	10%	10%
59	10%	15%
61	25%	25%

Early Retirement Age	Early Retirement Rate	Normal Retirement Age	Normal Retirement Rate
55	3%	62	35%
56	3%	63	25%
57	3%	64	25%
58	3%	65	40%
59	5%	66	20%
60	5%	67	20%
61	15%	68	20%
		69	20%
		70	100%

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

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

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

Rates of Disability

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

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

Probability of Vested Members Leaving Contributions With System

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

Marriage Assumption: 70% 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 3.5%

Rates of Mortality 1994 GAM Table*
*70% of preretirement deaths assumed to be service related

Disabled Life Mortality 1994 GAM Table Set forward 12 years

Rates of Salary Increase

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

*Includes general wage increase assumption of 4.0% (composed of 3.5% inflation and 0.50% productivity)

Rates of Termination

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

Tier II:

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

Retirement Rates

Tier I:

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

Tier II:

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

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

Rates of Disability

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

**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 3.5%

Rates of Mortality 1994 GAM Table

Rates of Salary Increase 5.5%

Rates of Termination None assumed

Disabled Life Mortality Same as Healthy Lives

Rates of Disability None assumed

Retirement Age Age 64 or current age, if greater

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

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.

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).