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**Kansas Public Employees  
Retirement System**

**Valuation Report as of December 31, 2011**





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# Cavanaugh Macdonald

CONSULTING, LLC

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July 5, 2012

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

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2011 for purposes of determining contribution rates for fiscal year 2015 for the State and 2014 for Local employers. In addition, this valuation certifies revised contribution rates for fiscal year 2014 for the State and School groups due to legislative changes in the statutory cap on employer contributions. The major findings of the valuation are contained in this report, which reflects the benefit provisions in place on December 31, 2011, as amended by Senate Substitute for House Bill 2333 (passed by the 2012 Legislature). Also, as a result of the last experience study, there are some changes to the actuarial assumptions and methods that are first reflected in this valuation. The specific impact of the legislative changes and assumption changes are discussed in the Board Summary section of this report.

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

We 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 individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C.

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Board of Trustees  
July 5, 2012  
Page 2

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

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

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

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

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

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

Sincerely,

A handwritten signature in blue ink that reads 'Patrice Beckham'.

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

A handwritten signature in blue ink that reads 'Brent A. Banister'.

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



## SECTION 1 – BOARD SUMMARY

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### 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, 2011 actuarial valuations for each of the Systems.

The primary purposes of performing actuarial valuations are to:

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

In response to concerns about KPERS long term funding, the 2012 Legislature passed Sub House Bill 2333 which was signed into law by the Governor on June 1, 2012. Sub House Bill 2333 creates a Tier 3 retirement plan for new members effective January 1, 2015 and includes benefit changes similar to those proposed last year in Sub House Bill 2194 for current Tier 1 and Tier 2 members. The bill also provides for increases in the employer contribution rate. These changes are intended to improve KPERS long term funding and increase KPERS’ sustainability.

The substantive changes to KPERS included in Sub House Bill 2333 include:

- **Employer Contribution Increases**
  - The law raises the cap on employer contribution rate increases from the current 0.60 percent per year to:

FY 2014	0.9%
FY 2015	1.0%
FY 2016	1.1%
FY 2017 and after	1.2%

The State will make additional contributions to fund the unfunded actuarial liability (UAL) of the State/School group until their funded ratio reaches at least 80%. The additional contribution stream, which comes from the Expanded Lottery Act Revenue Fund (ELARF), is determined as 50% of the money credited to the ELARF, after an annual reduction of \$10.5 million. Since the money credited to the ELARF will vary from year to year, the specific contribution amounts to KPERS are unknown at this time. The expectation is that the contributions will be around \$40 million per year when the first payment is made in FY 2014.

Sub House Bill 2333 also provides that 80% of the proceeds from excess real estate property sales will be used to pay down KPERS’ unfunded actuarial liability. Given the unpredictable nature of selling surplus state real estate, there is no reliable estimate available and, therefore, no proceeds have been assumed in the projections in this valuation.



## SECTION 1 – BOARD SUMMARY

- Tier 1 Members**

The law creates a 90 day election period for Tier 1 members of the system on July 1, 2013 to permit them to choose to (1) contribute 5% of compensation as employee contributions effective January 1, 2014 and 6% effective January 1, 2015 and receive a 1.85% multiplier for all years of future service or (2) continue to contribute 4% of compensation as employee contributions and receive a 1.40% multiplier for all years of future service. Changes in the benefit multiplier are effective January 1, 2014 and impact only future years of service. The election is subject to approval by the Internal Revenue Service, and if such approval is not granted, there will be no election and the default option (option 1 above) will apply. The provisions are summarized in the following table:

<u>Member Contribution Rate</u>	<u>Benefit Provisions</u>
5% effective January 1, 2014 and 6% effective January 1, 2015	Increase multiplier to 1.85% for future service only, effective January 1, 2014
or	
4% contribution rate	Multiplier is reduced to 1.40% for future service only, effective January 1, 2014

- Tier 2 Members**

Effective July 1, 2012, the cost of living adjustment (COLA) will be eliminated for Tier 2 members. However, those who retire after December 31, 2013 will receive a higher multiplier of 1.85% for all years of service, not just future years of service.

<u>Current Tier 2</u>	<u>Revised Tier 2</u>
6% contribution	6% contributions
1.75% multiplier	1.85% multiplier for all service starting January 1, 2014
Includes cost of living increase	Eliminate COLA if retiring after June 30, 2012 (no impact for members retiring before July 1,2012)

There was no impact on current KPERS retirees or inactive members who do not return to covered employment. There also were no changes to the plan provisions for KP&F or Judges.



## SECTION 1 – BOARD SUMMARY

### Tier 3 Members (effective January 1, 2015)

Sub House Bill 2333 creates a cash balance retirement plan (Tier 3) for new hires on or after January 1, 2015. Correctional officers are not included in this new tier, but will remain in KPERS Tier 2. A cash balance plan is a defined benefit plan, so the KPERS defined benefit plan remains an open plan. The projected benefits for members of all three tiers will be included in the actuarial valuations in 2015 and beyond. A single employer contribution rate, which includes the UAL payment and applies to the covered payroll of all three tiers, will be developed in the valuation.

The monthly benefit for Tier 3 members is based on the member’s account value which includes the employee’s contributions and an employer credit, along with interest credits. A short summary of the plan provisions is included below:

Tier 3 Cash Balance Plan Provisions	
Employee contributions	6%
Employer credit	Based on years of service 1-4 years: 3% of compensation 5-11 years: 4% of compensation 12-23 years: 5% of compensation 24 years+: 6% of compensation
Interest credits	Annual 5.25% guaranteed interest on employee and employer account balances. Possible additional interest credits of 0% to 4% may be granted by the KPERS Board based on KPERS’ actual investment returns and funding
Normal retirement age	Age 60 with 30 years of service or age 65 with 5 years of service
Retirement benefit	Guaranteed lifetime benefit based on account balance at retirement. Partial lump sum option up to 30% at normal retirement age

Given the effective date of Tier 3, there are no Tier 3 members included in the December 31, 2011 valuation, and therefore, there was no cost impact on the valuation results in this report. However, the changes for Tiers 1 and 2, along with increase in the statutory cap on the employer contribution rate in Sub House Bill 2333, did have an impact on the December 31, 2011 valuation results, as shown in the table on the following page. Please note that the cost impact of Sub House Bill 2333 was quantified before changes to the actuarial assumptions were made.





**SECTION 1 – BOARD SUMMARY**

	State/School		Local	
	Baseline	Sub HB 2333*	Baseline	Sub HB 2333*
Actuarial Liability	\$16,076	\$16,087	\$3,981	\$3,984
Actuarial Assets	9,107	9,107	2,436	2,436
Unfunded Actuarial Liability	\$6,969	\$6,980	\$1,545	\$ 1,548
<b>Funded Ratio</b>				
Actuarial Assets	56.6%	56.6%	61.2%	61.1%
Market Value Assets	52.8%	52.7%	57.3%	57.2%
<b>Actuarial Contribution Rate</b>				
Normal Cost	8.04%	8.43%	7.70%	8.05%
Member Contribution	<u>(4.27%)</u>	<u>(5.57%)</u>	<u>(4.33%)</u>	<u>(5.16%)</u>
Employer Normal Cost	3.77%	2.86%	3.37%	2.89%
UAL Contribution	<u>11.58%</u>	<u>11.60%</u>	<u>6.86%</u>	<u>6.87%</u>
Total Employer Rate	15.35%	14.46%	10.23%	9.76%
Statutory Contribution Rate for FY beginning 2014	10.57%	11.27%	8.54%	8.84%
Contribution Shortfall	4.78%	3.19%	1.69%	0.92%

*\*Before new assumptions reflected.*

The changes in the statutory cap in Sub House Bill 2333 are first effective for fiscal year 2014. Since the December 31, 2010 actuarial valuation set the employer contribution rate for the fiscal year ending June 30, 2014 for the State and School groups using the 0.6% cap, the statutory employer contribution rate must be recertified to reflect the new statutory cap for the State and School groups for FY 2014 of 0.9%. The following employer contribution rates should apply for the fiscal year beginning July 1, 2013 and ending June 30, 2014:

System	FY 2014 Contribution Rates		
	Actuarial	Statutory (Recertified due to Sub HB 2333)	Difference
State	9.82%	10.27%	(0.45%)
School	15.12%	10.27%	4.85%
Correctional Group Retirement Age 55	10.82%	10.74%	0.08%
Correctional Group Retirement Age 60	10.40%	10.40%	0.00%





## SECTION 1 – BOARD SUMMARY

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There were changes to both the actuarial assumptions and methods used in the December 31, 2011 actuarial valuation. The Board of Trustees adopted the new set of actuarial assumptions in July, 2011, following the completion of the Triennial Experience Study. The assumption changes made were modest and had a small impact on the normal cost and actuarial liability. The assumption changes, recommended by Cavanaugh Macdonald and adopted by the Board, include:

### **KPERS**

- Lower the pre-retirement mortality rates for females in both State and School.
- Adjust early retirement rates for State and School.
- Adjust the ultimate retirement rates under Rule of 85 for State.
- Adjust the retirement rates for the Correctional Groups (C55 and C60)
- Value the greater of the refund value or present value of accrued benefit upon termination for active Tier 2 members assumed to terminate in the future.
- Assume 12% of all future benefit payments will be paid as a lump sum.

### **KP&F**

- Adjust the retirement rates for both Tier 1 and Tier 2
- Assume 12% of all future benefit payments will be paid as a lump sum.

### **Judges**

- Lower retirement rates at most ages and extend rates down to ages 60.
- Assume 12% of all future benefit payments will be paid as a lump sum.

Overall, the assumption changes decreased the unfunded actuarial liability by \$64 million. The impact on the normal cost rate for each group was minor with the exception of the Judges where the assumption change decreased the normal cost rate by 1.16%. The Board also adopted one change to the actuarial methods, i.e. the requirement that the actuarial value of assets fall between 80% to 120% of market value (referred to as the “corridor”) was eliminated. This had no impact on the December 31, 2011 valuation results as the corridor did not apply this year.

The valuation results provide a “snapshot” view of the System’s financial condition on December 31, 2011. The unfunded actuarial liability (UAL), for the System as a whole, increased by \$964 million due to multiple factors. A detailed analysis of the change in the unfunded actuarial liability from December 31, 2010 to December 31, 2011 is shown on page 10.

In KPERS, the 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, was 0.60% prior to the passage of Sub House Bill 2333 by the 2012 legislature. The current statutory cap, as provided by Sub House Bill 2333, is 0.90% for fiscal year 2014, 1.0% for fiscal year 2015, 1.1% for fiscal year 2016 and 1.2% for fiscal year 2017 and later.



## SECTION 1 – BOARD SUMMARY

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

System	December 31, 2011 Valuation		
	Actuarial	Statutory	Difference
State <sup>1</sup>	10.80%	11.27%	(0.47%)
School <sup>1</sup>	15.41%	11.27%	4.14%
Local <sup>1</sup>	9.77%	8.84%	0.93%
Police & Fire - Uniform Rates <sup>2</sup>	19.92%	19.92%	0.00%
Judges	22.59%	22.59%	0.00%

System	December 31, 2010 Valuation		
	Actuarial	Statutory (Recertified*)	Difference
State	9.82%	10.27%*	(0.45%)
School	15.12%	10.27%*	4.85%
Local	9.43%	7.94%	1.49%
Police & Fire - Uniform Rates	17.26%	17.26%	0.00%
Judges	23.62%	23.62%	0.00%

<sup>1</sup> By statute, rates are allowed to increase by a maximum of 0.9% for FY 2014, 1.0% in FY 2015, 1.1% in FY 2016 and 1.2% in FY 2017 plus the cost of any benefit enhancements.

<sup>2</sup> For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 19.25% this year. 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)

The significant changes made to the benefits and contributions for members of Tiers 1 and 2 along with increases in the employer contribution rate in Sub House Bill 2333 and the creation of a new Tier 3, has improved the long term funding outlook for KPERS. This was somewhat offset by a rate of return of 0.08% for calendar year 2011. However, as of this valuation date, the State group is at the ARC Date and the School and Local groups are in actuarial balance (the statutory contribution rate is projected to converge with the actuarial required contribution (ARC) rate before the end of the amortization period (2033), if all actuarial assumptions are met in future years.

## EXPERIENCE - ALL SYSTEMS COMBINED

### December 31, 2010 – December 31, 2011

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, 2011. 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.



## SECTION 1 – BOARD SUMMARY

Changes in the Systems' assets and liabilities impacted the change in the actuarial contribution rates between the December 31, 2010 and December 31, 2011 actuarial valuations. On the following pages, each component is examined.

### MEMBERSHIP

The following table contains a summary of the changes in active members between the December 31, 2010 and December 31, 2011 actuarial valuations.

	State	School	Local	KP&F	Judges	Total
12/31/2010 (Starting count)	25,737	84,438	40,307	7,173	264	157,919
New actives	2,099	8,717	4,768	535	12	16,131
Nonvested Terminations	825	3,119	1,987	197	0	6,128
Elected Refund	688	1,277	1,300	91	1	3,357
Vested Terminations	<u>658</u>	<u>2,225</u>	<u>1,289</u>	<u>108</u>	<u>1</u>	<u>4,281</u>
Total Withdrawals	2,171	6,621	4,576	396	2	13,766
Deaths	52	101	71	9	1	234
Disabilities	76	108	71	42	0	297
Retirements	1,615	2,121	781	134	9	4,660
Other/Transfer	5	21	29	(16)	0	39
12/31/2011 (Ending count)	23,917	84,183	39,547	7,143	264	155,054

The size of the active membership held fairly constant for all groups except the State, where the active count decreased by 7%. The smaller active membership negatively impacts the funding of the UAL as the total covered payroll is lower, resulting in a higher UAL contribution rate.

### ASSETS

As of December 31, 2011, the System had total funds of \$12.5 billion on a market value basis, excluding assets held for the Group Insurance and Optional Life reserves. This was a decrease of \$400 million from the December 31, 2010 figure of \$12.9 billion.

The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The smoothing method calculates the difference between the actual return and the expected return (assumed rate of return) on the market value of assets each year. The difference is recognized equally over a five-year period. See Tables 3A through 3F and 4 for the detailed development of the actuarial value of assets as of December 31, 2011 for each group.



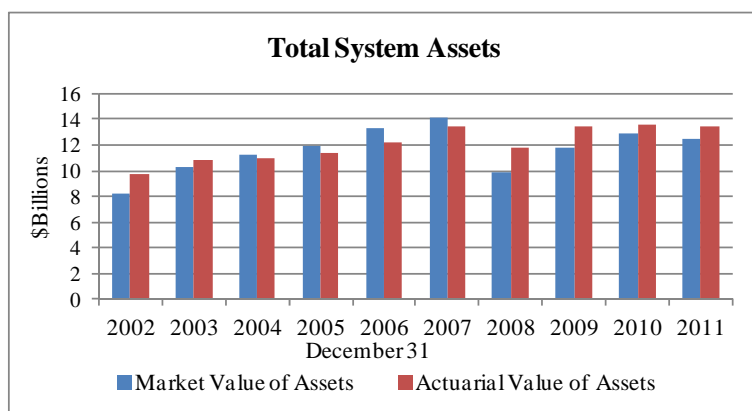
## SECTION 1 – BOARD SUMMARY

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

	Market Value \$(millions)	Actuarial Value \$(millions)
Assets, December 31, 2010	\$12,918	\$13,590
• Employer and Member Contributions	836	836
• Benefit Payments and Expenses	(1,264)	(1,264)
• Investment Income	(13)	217
Assets, December 31, 2011	\$12,477	\$13,379

The actuarial value of assets as of December 31, 2011, was \$13.379 billion. The annualized dollar-weighted rate of return for 2011, measured on the actuarial value of assets, was approximately 1.6% and measured on the market value of assets, as reported by KPERS, was 0.08%, net of fees.

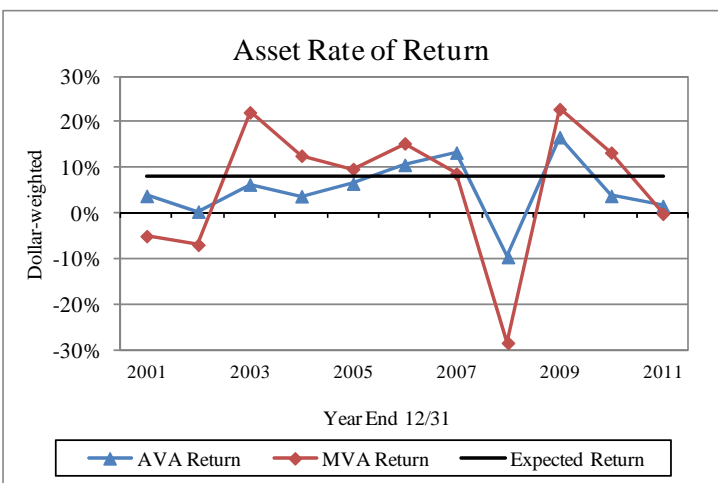
Due to the use of an asset smoothing method, there is \$902 million of net deferred investment loss experience that has not yet been recognized. This deferred investment loss will be reflected in the actuarial value of assets over the next four years, but may be offset by actual investment experience if it is more favorable than assumed.



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



## SECTION 1 – BOARD SUMMARY



*The rate of return on the actuarial (smoothed) value of assets has been less volatile than the market value return. Due to the deferred investment losses, the return on the actuarial value of assets is expected to be below 8% in the next few years, absent favorable investment experience.*

### LIABILITIES

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

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

	State	School	Local	KP&F	Judges	Total*
Actuarial Liability	\$ 3,913	\$12,114	\$3,978	\$2,449	\$ 153	\$ 22,607
Actuarial Value of Assets	<u>2,790</u>	<u>6,317</u>	<u>2,436</u>	<u>1,710</u>	<u>126</u>	<u>13,379</u>
Unfunded Actuarial Liability*	\$ 1,123	\$ 5,798	\$ 1,542	\$ 739	\$ 27	\$ 9,228

\*May not add due to rounding.

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

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

Other factors influencing the UAL from year to year include actual experience versus that expected based on the actuarial assumptions (on both assets and liabilities), changes in actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which



## SECTION 1 – BOARD SUMMARY

occurred during the prior plan year (calendar year 2011). All three of the KPERS groups, KP&F, and Judges had a liability gain for the year, largely from lower salary increases than expected. There was an experience loss from the investment return on the actuarial value of assets for all groups that was higher than the liability gain. The result was an overall actuarial loss for all groups.

Between December 31, 2010 and December 31, 2011 the change in the unfunded actuarial liabilities for the System as a whole was as follows (in millions):

	<b>\$ millions</b>
Unfunded Actuarial Liability, December 31, 2010	\$ 8,264
• effect of contribution cap/time lag	289
• expected increase due to amortization method	62
• loss from investment return on actuarial assets	852
• demographic experience <sup>1</sup>	(192)
• all other experience	2
• change in actuarial methods	0
• change in actuarial assumptions	(64)
• change in benefit provisions	15
Unfunded Actuarial Liability, December 31, 2011	\$ 9,228

<sup>1</sup>Liability gain is about 0.8% of total actuarial liability.

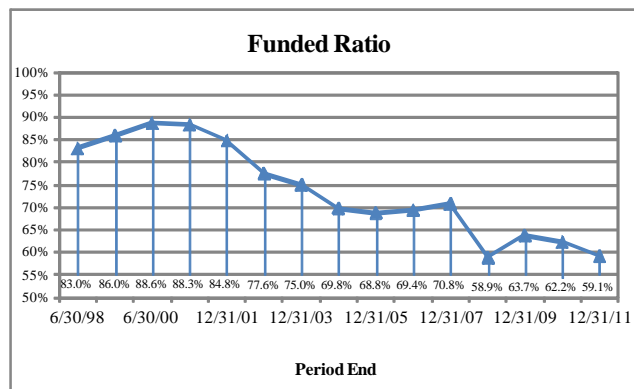
A detailed summary of the change in the unfunded actuarial liability by System is shown on page 19.

An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial liability. The funded status information is shown below (in millions).

	12/31/06	12/31/07	12/31/08	12/31/09	12/31/10	12/31/11
<b><i>Using Actuarial Value of Assets:</i></b>						
Funded Ratio (AVA/AL)	69%	71%	59%	64%	62%	59%
Unfunded Actuarial Liability (AL-AVA)	\$5,364	\$5,552	\$8,279	\$7,677	\$8,264	\$9,228
<b><i>Using Market Value of Assets:</i></b>						
Funded Ratio (MVA/AL)	76%	75%	49%	56%	59%	55%
Unfunded Actuarial Liability (AL-MVA)	\$4,184	\$4,817	\$10,250	\$9,384	\$8,936	\$10,130



## SECTION 1 – BOARD SUMMARY



*Due to strong investment returns, the funded status of the System generally improved in the latter part of the 1990's. Changes in actuarial assumptions and methods, coupled with investment returns below the assumed rate and contributions below the actuarial rate have significantly reduced the funded ratio.*

Given the current funded status of the System, the amount of the deferred investment loss, the amortization method, the amortization period, and the scheduled increases in employer contribution rates, the unfunded actuarial liability for the entire System is expected to grow for many years. The funded ratio is expected to decline as asset losses are recognized and then gradually improve.

### CONTRIBUTION RATES

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

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

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

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

The results of the December 31, 2011 valuation will set employer contribution rates for fiscal year 2015 for the State and 2014 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 (most recently in 2012), is 0.9% for fiscal year 2014, 1.0% in 2015, 1.1% in 2016, and 1.2% in 2017 and beyond for all three groups.





## SECTION 1 – BOARD SUMMARY

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

System	December 31, 2011 Valuation		Difference
	Actuarial	Statutory	
State <sup>1</sup>	10.80%	11.27%	(0.47%)
School <sup>1</sup>	15.41%	11.27%	4.14%
Local <sup>1</sup>	9.77%	8.84%	0.93%
Police & Fire - Uniform Rates <sup>2</sup>	19.92%	19.92%	0.00%
Judges	22.59%	22.59%	0.00%

<sup>1</sup> By statute, rates are allowed to increase by a maximum of 0.9% for FY 2014, 1.0% in FY 2015, 1.1% in FY 2016 and 1.2% in FY 2017 plus the cost of any benefit enhancements.

<sup>2</sup> For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 19.25% this year. 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	Statutory Rate
Retirement Age 55:	11.66%	11.66%
Retirement Age 60:	11.97%	11.40%

The change in the employer actuarial contribution rate from December 31, 2010 to December 31, 2011 and the primary components thereof are shown in the table on page 20.

Due to statutory caps, the full actuarial contribution rate is not contributed for the School and Local groups. The State reached the ARC date (statutory contribution rate is equal to or greater than the actuarial contribution rate) in the December 31, 2010 valuation and remains there in this valuation. Based on the current valuation, there is a difference (shortfall) between the actuarial and statutory contribution rates of 4.14% and 0.93% respectively for the School and Local groups. Assuming an 8% return on the market value of assets for 2012 and beyond, all other actuarial assumptions are met in the future, and the current provision for statutory caps on the employer contribution rate, the estimated ARC Date for the combined State/School group is FY2021 and for the Local group is FY2017.

### COMMENTS

The investment losses in 2008 are still impacting most public retirement systems. Favorable investment returns in 2009 and 2010 have helped alleviate some of the 2008 losses. However, the 2011 return of 0.08% has resulted in a setback to the funding improvement. Like most public retirement systems, KPERS uses an asset smoothing method to smooth out investment experience above and below the assumed rate of 8% per annum. Under the asset smoothing method, the difference between the actual and assumed investment experience is recognized equally over a five year period. Due to the asset smoothing method, the December 31, 2011 valuation reflected a return on the actuarial value of assets of about 2%

The deferred investment loss grew considerably since the last valuation, increasing from \$672 million last year to \$902 million this year. This deferred experience will flow through the asset valuation method in



## SECTION 1 – BOARD SUMMARY

the next four years and be recognized in the valuation process, absent investment experience above the 8% assumed rate of return. As the deferred losses are recognized, the funded ratio can be expected to decline and the UAL and the actuarial contribution rate to increase.

While the use of an asset smoothing method is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred (unrecognized) investment experience. To illustrate the impact of the deferred losses, the key valuation results are shown below for the State/School and KPF groups using both the actuarial value of assets and the pure market value. The impact would be similar for the other groups.

	State/School		KP&F	
	<u>Actuarial</u>	<u>Market</u>	<u>Actuarial</u>	<u>Market</u>
Actuarial Liability	\$16,027	\$16,027	\$2,449	\$2,449
Asset Value	9,107	8,481	1,710	1,597
Unfunded Actuarial Liability	6,920	7,546	739	852
Funded Ratio	57%	53%	70%	65%
Contribution Rate:				
Normal Cost Rate	8.41%	8.41%	14.49%	14.49%
UAL Payment	<u>11.50%</u>	<u>12.52%</u>	<u>12.30%</u>	<u>14.10%</u>
Total	19.91%	20.93%	26.79%	28.59%
Employee Rate	<u>5.57%</u>	<u>5.57%</u>	<u>6.87%</u>	<u>6.87%</u>
Employer Rate	14.34%	15.36%	19.92%	21.75%

The asset smoothing method impacts only the timing of when the actual market experience on the assets will be recognized. Due to a return of less than 1% in 2011 and the deferred investment experience from 2008, the actuarial value of assets now exceeds the pure market value by about 7%. If returns are not higher than the 8% expected over the next few years, the deferred investment experience will be recognized and the ultimate impact on the employer contribution rate can be expected to be similar to the column shown above based on the market value of assets. Also, please refer to the graphs later in this section that show the projected contribution rates assuming an 8% rate of return in all future years.

Over the last decade the development of a comprehensive plan to address the long-term funding of KPERS has been a high priority and significant changes have been made. HB 2014, which was passed by the 2003 Legislature, increased the statutory cap on the State/School employer contribution rate from 0.20% to 0.40% in 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 SB 520, which continued to address issues related to the long term funding of the System. It gave the KPERS Board of Trustees the authority to establish the actuarial cost method and amortization method/period. With this authority, the Board changed both the actuarial cost method and the asset valuation method with the December 31, 2003 actuarial valuation. SB 520 also increased the statutory cap for Local employers from 0.15% to 0.40% in FY2006, 0.50% in FY2007 and 0.60% in FY2008 and beyond.



## SECTION 1 – BOARD SUMMARY

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

The 2011 Legislature passed Senate Substitute for House Bill 2194 (Sub HB 2194). The intent of this law was to strengthen KPERS' long term funding and improve the sustainability of the system. The bill contained significant changes for both KPERS employers and current and future members. Sub HB 2194 raised the statutory cap on employer contribution rate increases from the current 0.60 percent to 0.9% in FY 2014, 1.0% in FY 2015, 1.1% in FY 2016 and ultimately to 1.2% in FY 2017. In addition, the law created an election period starting July 1, 2013 to permit Tier 1 members to choose between a 6% contribution rate with a 1.85% multiplier for all years of future service or a 4% contribution and a 1.40% multiplier for all years of future service. Changes were to be effective January 1, 2014 and impacted only future years of service. Sub HB 2194 also provided an election for Tier 2 members to choose between the 1.75% multiplier and losing the cost of living adjustment (COLA) for all service or a 1.40% multiplier for future years of service and maintaining the COLA. The multiplier change did not affect the service already earned by members, but the COLA loss was for all service credit over the member's entire career. Both the election for Tier 1 and Tier 2 were subject to approval by the Internal Revenue Service. If such approval was not granted, then no election would occur and the default option would apply. New employees automatically had a 6% contribution rate and the 1.75% multiplier with no COLA.

In addition, Sub HB 2194 established a 13 member KPERS Study Commission to study alternative plan designs during the last half of 2011 and make a recommendation for KPERS plan design that would provide for the long term sustainability of the System. The Commission report was due to the Legislature by January 6, 2012. Sub HB 2194 required that the report recommendations be voted on by the 2012 Legislature for the other provisions of Senate Substitute for HB 2194 to become effective. The 2012 Legislature did not move the Study Commission recommendation forward, but some of the other provisions were included in the bill that was ultimately passed in 2012, Senate Sub for House Bill 2333.

The 2012 Legislature passed Sub House Bill 2333, affecting new hires, current members and employers. The changes were made to improve KPERS' long term sustainability. The basic provisions of Sub House Bill 2333 include:

- ✓ Increased the statutory cap on employer contribution rates to 0.9% in FY 2014, 1.0% in FY 2015, 1.1% in FY 2016 and 1.2% in FY 2017 and beyond.
- ✓ Provides for an election by Tier 1 members depending on IRS approval. Tier 1 members may elect to increase their employee contributions to 5% of compensation effective January 1, 2014 and 6% effective January 1, 2015, with an increase in the benefit multiplier to 1.85% for future years of service only, or remain at a 4% employee contribution rate and receive a benefit multiplier of 1.4% for future years of service after January 1, 2014. Without IRS approval of the election, contributions and the multiplier will automatically increase.
- ✓ The cost of living adjustment (COLA) for Tier 2 members is eliminated effective July 1, 2012, but members who retire after December 31, 2013 will receive a 1.85% multiplier for all years of service.
- ✓ Creates a Cash Balance Plan for new hires beginning January 1, 2015. A cash balance plan is a type of defined benefit plan that includes some elements of a defined contribution plan and shares risk between the employer and employee. Each member has a hypothetical account that is credited with employee contributions, employer pay credits and interest credits. At retirement, the account balance is annuitized to create a guaranteed monthly benefit payable for the member's lifetime. Up to 30% of the account value at retirement may be paid as a lump sum.
- ✓ Beginning in FY 2014, the state will make additional contributions to help pay down KPERS' unfunded actuarial liability until the State/School group reaches a funded ratio of at least 80%.



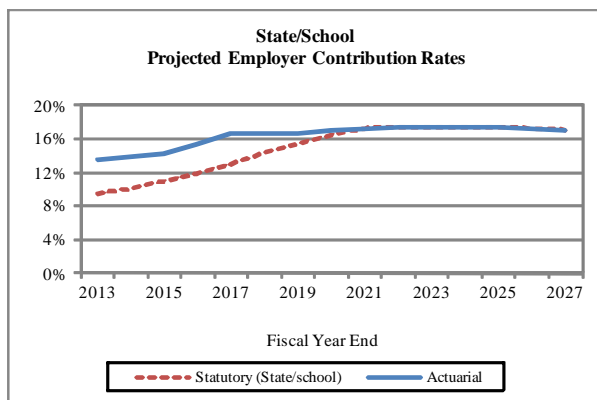
## SECTION 1 – BOARD SUMMARY

The revenue will come from the Expanded Lottery Act Revenues Fund (ELARF). Based on the formula, the initial contribution to KPERS in FY 2014 is expected to be around \$40 million.

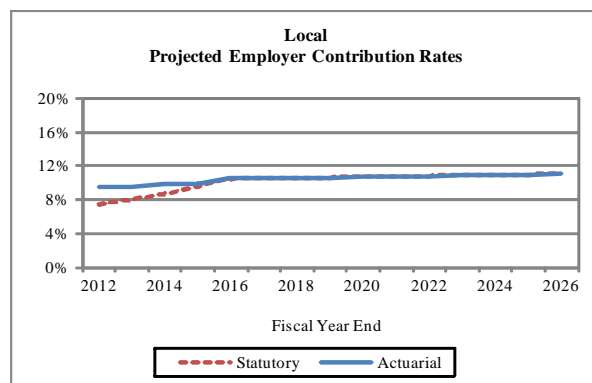
- ✓ If the State of Kansas sells surplus real estate, 80% of the proceeds will be used to pay down KPERS' unfunded actuarial liability until the System reaches an 80% funded ratio.

The changes in Sub House Bill 2333 are expected to improve KPERS long term funding and help all three groups attain a funded ratio of 100% by 2033. The actual funding progress will be heavily dependent on the actual investment experience of the System in future years.

The graphs below show the projected employer contributions assuming all actuarial assumptions are met in the future, including an 8% rate of return on the market value of assets.



*The ARC date for the State/School group is projected to occur in 2021 with an ARC rate of 17.26%, assuming all actuarial assumptions are met in future years. Future experience, especially investment returns, will heavily influence the ARC date and rate.*

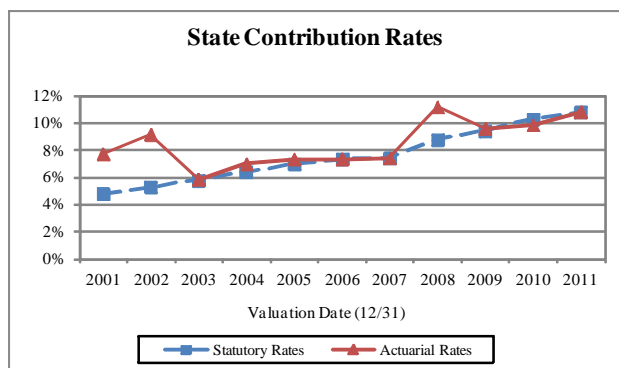


*The ARC date is projected to occur in approximately 2017 with an ARC rate of 10.49%, assuming all actuarial assumptions are met in future years, and the contribution rate remains level. Actual experience in future years will impact the ARC date and rate.*

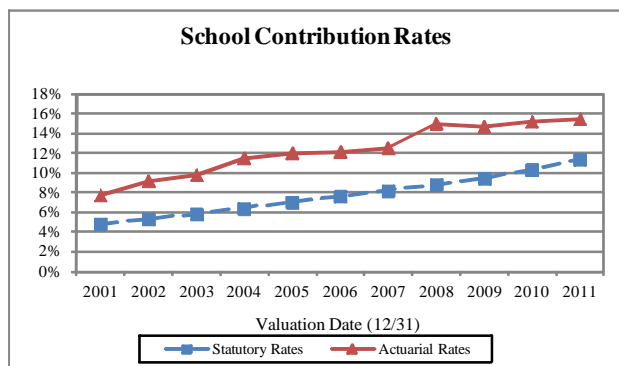


## SECTION 1 – BOARD SUMMARY

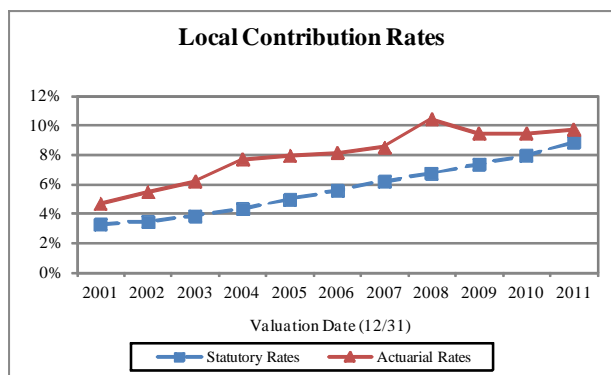
Historical contribution rates for each group are shown on the following pages. Please note that prior to the December 31, 2003 valuation, one contribution rate was developed for the State and School together as one group. Legislation passed in 2004 split the contribution rate calculations into two separate groups, although the statutory contributions are still determined on a combined basis. Significant changes in funding methods as well as a Pension Obligation Bond issue occurred in 2003 and actuarial assumptions were changed in the 2004, 2007 and 2011 valuations. These changes impact the comparability of contribution rates between various valuation dates.



*The split of the State group into a separate group with the 2003 valuation, coupled with the bond issue, lowered the actuarial contribution rate. The State's actuarial contribution rate continues to be less than the statutory contribution rate in this valuation.*



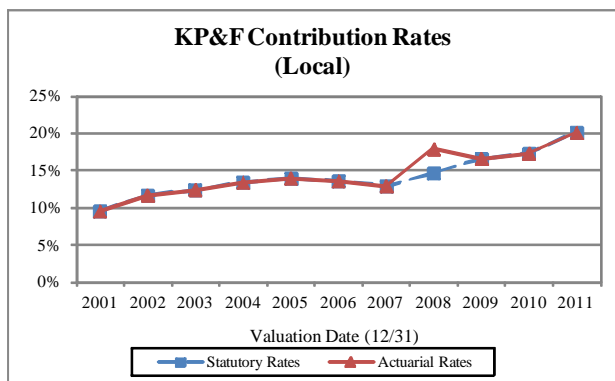
*Due to investment experience, changes in actuarial methods and assumptions, and the magnitude of the difference between the actuarial and statutory contribution rates, the funded status of the School group has declined and the actuarial contribution rate has generally increased over this period.*



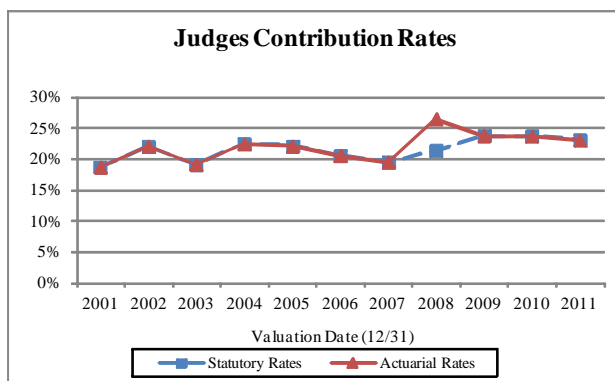
*The Local contribution rate has also been impacted by changes in actuarial assumptions and methods as well as investment performance. As a result, despite the significant changes in Sub House Bill 2333, the statutory contribution rate still exceeds the actuarial contribution rate.*



## SECTION 1 – BOARD SUMMARY



*Investment experience, coupled with a change in actuarial methodology, dramatically increased the contribution rates in the first half of the period. Investment experience in 2008 and 2011, which has still not been totally reflected, resulted in higher contribution rates in the last part of the period.*



*Significant changes in the actuarial assumptions in the 2004 valuation and investment experience over the last decade raised contribution rates, which have moderated somewhat in the last three years.*



**SECTION 1 – BOARD SUMMARY**

**SUMMARY OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY**

**DECEMBER 31, 2011 VALUATION**

(\$ millions)

	State	School	Local	KP&F	Judges	Total
<b>UAL in 12/31/2010 Valuation Report</b>	\$931.6	\$5,312.5	\$1,395.0	\$598.4	\$26.6	\$8,264.1 <sup>1</sup>
· Effect of contribution cap/timing	16.1	218.9	44.1	10.0	0.4	289.5
· Expected increase due to method	6.0	42.3	10.3	3.9	(0.5)	62.0
· Actual vs. expected experience						
· Investment return	187.1	410.2	141.2	106.7	7.4	852.6
· Demographic experience	(8.3)	(150.7)	(43.9)	13.8	(2.9)	(192.0)
· All other experience	(1.0)	4.4	(2.2)	0.0	0.6	1.8
· Change in actuarial assumptions	(9.2)	(50.3)	(5.9)	5.8	(4.8)	(64.4)
· Change in benefit provisions	0.5	10.3	3.8	0.0	0.0	14.6
<b>UAL in 12/31/2011 Valuation Report</b>	\$1,122.8	\$5,797.6	\$1,542.4	\$738.6	\$26.8	\$9,228.1 <sup>1</sup>

<sup>1</sup> May not add due to rounding.





SECTION 1 – BOARD SUMMARY

**SUMMARY OF  
CHANGES IN EMPLOYER ACTUARIAL CONTRIBUTION RATE  
BY SYSTEM  
AS OF DECEMBER 31, 2011**

Percentage of Payroll	State	School	Local	KP&F <sup>1</sup>	Judges
<b>Actuarial Contribution Rate in 12/31/2010 Valuation</b>	9.82%	15.12%	9.43%	17.26%	23.62%
<b>Change Due to Amortization of UAL</b>					
· effect of contribution cap/time lag	0.11	0.46	0.19	0.16	0.13
· amortization method	0.00	0.00	0.00	0.00	(0.36)
· investment experience	1.32	0.87	0.61	1.70	2.46
· liability experience	(0.06)	(0.32)	(0.19)	0.22	(0.96)
· all other experience	0.63	0.41	0.31	0.39	0.32
· change in assumptions	(0.06)	(0.11)	(0.03)	0.09	(1.60)
· change in benefit provisions	0.00	0.02	0.02	0.00	0.00
<b>Change in Normal Cost Rate</b>					
· change in benefit provisions	(0.90)	(0.91)	(0.48)	0.00	0.00
· change in assumptions	0.00	(0.03)	0.02	0.03	(1.16)
· all other experience	(0.06)	(0.10)	(0.11)	0.07	0.14 <sup>2</sup>
<b>Actuarial Contribution Rate in 12/31/2011 Valuation</b>	10.80%	15.41%	9.77%	19.92%	22.59%

<sup>1</sup> Contribution rate for Local employers only.

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



**SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL**  
as of  
**DECEMBER 31, 2011 VALUATION**

% (millions)	As Reported on Valuation Date									
	6/30/94	6/30/95	6/30/96	6/30/97	6/30/98	6/30/99	6/30/00	12/31/00	12/31/01	12/31/02
<b>Actual Experience vs. Assumed</b>										
• Investment	\$(102)	\$(143)	\$(280)	\$(323)	\$(413)	\$(369)	\$(441)	\$(23)	\$350	\$644
• Other	320	72	136	157	104	46	99	84	(9)	68
<b>Assumption Changes</b>	0	(96)	0	0	350	0	0	(206)	0	0
<b>Changes in Data/Procedures</b>	244	0	0	0	0	21	71	145**	5	177**
<b>Change in Cost Method</b>	0	0	0	0	0	0	0	0	0	0
<b>Effect of Contribution Cap/Lag</b>	*	95	70	63	54	78	66	60	115	143
<b>Amortization Method</b>	*	47	38	35	32	30	22	12	14	21
<b>Change in Benefit Provisions</b>	75	0	0	0	88	0	19	0	0	37
<b>Change in Actuarial Firm/Software</b>	0	0	0	0	0	0	0	0	0	0
<b>Bond Issue</b>	0	0	0	0	0	0	0	0	0	(41)
<b>Total</b>	\$537	\$(25)	\$(36)	\$(68)	\$215	\$(185)	\$(194)	\$72	\$475	\$1,049

\*Not calculated for this year.

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

Unfunded actuarial liability 12/31/11: \$ 9,228 million



**SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL**  
**as of**  
**DECEMBER 31, 2011 VALUATION (continued)**

\$(millions)	As Reported on Valuation Date									
	12/31/03	12/31/04	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09	12/31/10	12/31/11	Total
<b>Actual Experience vs. Assumed</b>										
• Investment	\$140	\$456	\$167	\$(293)	\$(626)	\$2,332	\$(1,011)	\$560	\$852	\$1,477
• Other	(32)	16	(84)	140	99	78	(70)	(334)	(190)	700
<b>Assumption Changes</b>	0	437	(5)	0	384	0	0	0	(64)	800
<b>Changes in Data/Procedures</b>	(286)***	0	0	0	0	0	0	0	0	377
<b>Change in Cost Method</b>	1,147	0	0	0	0	0	0	0	0	1,147
<b>Effect of Contribution Cap/Lag</b>	178	179	247	258	251	246	383	320	289	3,095
<b>Amortization Method</b>	47	68	84	83	78	71	96	68	62	908
<b>Change in Benefit Provisions</b>	3	1	0	24	2	0	0	0	15	264
<b>Change in Actuarial Firm/Software</b>	0	0	0	0	0	0	0	(27)	0	(27)
<b>Bond Issue</b>	(440)	0	0	0	0	0	0	0	0	(481)
<b>Total</b>	\$757	\$1,157	\$409	\$212	\$188	\$2,727	\$(602)	\$587	\$964	\$8,260

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

\*\*\* Change in asset valuation method.

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

Unfunded actuarial liability 12/31/11: \$ 9,228 million



## SUMMARY OF PRINCIPAL RESULTS

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**(STATE)**

	12/31/2011	12/31/2010	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	23,917	25,737	(7.1%)
Retired Members and Beneficiaries	17,801	16,375	8.7%
Inactive Members	<u>6,668</u>	<u>6,363</u>	4.8%
Total Members	<u><u>48,386</u></u>	<u><u>48,475</u></u>	(0.2%)
Projected Annual Salaries of Active Members	\$ 995,715,217	\$ 1,068,931,480	(6.8%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 226,681,537	\$ 196,294,538	15.5%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 3,912,831,792	\$ 3,814,570,078	2.6%
b. Assets for Valuation Purposes	2,790,034,778	2,882,964,798	(3.2%)
c. Unfunded Actuarial Liability (a) - (b)	1,122,797,014	931,605,280	20.5%
d. Funded Ratio (b) / (a)	71.3%	75.6%	(5.7%)
e. Market Value of Assets	2,596,503,599	2,730,474,235	(4.9%)
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	8.17%	7.72%	
Member	<u>5.57%</u>	<u>4.16%</u>	
Employer	2.60%	3.56%	
Amortization of Unfunded Actuarial and Debt Service	<u>8.20%</u>	<u>6.26%</u>	
Actuarial Contribution Rate	10.80%	9.82%	
Statutory Employer Contribution Rate*	<u>11.27%</u>	<u>10.27%</u>	

\* The 12/31/10 Statutory Employer Contribution Rate was originally certified at 9.97% under a 0.60% cap for FY 2014. The 12/31/10 Statutory Rate shown here reflects the higher 0.90% cap for FY 2014, established under 2012 Sub HB 2333. The Statutory Employer Contribution Rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.00% for FY 2015. This rate does not include the contribution rate for the Death and Disability Program. Any excess of the statutory over actuarial contribution rates applied to actual State payroll is deposited to the School assets.



## SUMMARY OF PRINCIPAL RESULTS

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**(SCHOOL)**

	12/31/2011	12/31/2010	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	84,183	84,438	(0.3%)
Retired Members and Beneficiaries	42,590	40,856	4.2%
Inactive Members	<u>23,969</u>	<u>24,125</u>	(0.6%)
Total Members	<u>150,742</u>	<u>149,419</u>	0.9%
Projected Annual Salaries of Active Members	\$ 3,314,667,112	\$ 3,315,448,958	(0.0%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 585,039,317	\$ 549,519,641	6.5%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 12,114,415,410	\$ 11,774,417,007	2.9%
b. Assets for Valuation Purposes	6,316,797,407	6,461,892,562	(2.2%)
c. Unfunded Actuarial Liability (a) - (b)	5,797,618,003	5,312,524,445	9.1%
d. Funded Ratio (b) / (a)	52.1%	54.9%	(5.0%)
e. Market Value of Assets	5,884,431,008	6,132,794,595	(4.0%)
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	8.48%	8.12%	
Member	<u>5.57%</u>	<u>4.17%</u>	
Employer	2.91%	3.95%	
Amortization of Unfunded Actuarial and Debt Service	<u>12.50%</u>	<u>11.17%</u>	
Actuarial Contribution Rate	15.41%	15.12%	
Statutory Employer Contribution Rate*	<u>11.27%</u>	<u>10.27%</u>	

\* The 12/31/10 Statutory Employer Contribution Rate was originally certified at 9.97% under a 0.60% cap for FY 2014. The 12/31/10 Statutory Rate shown here reflects the higher 0.90% cap for FY 2014, established under 2012 Sub HB 2333. The Statutory Employer Contribution Rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.00% for FY 2015. This rate does not include the contribution rate for the Death and Disability Program.



## SUMMARY OF PRINCIPAL RESULTS

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

	12/31/2011	12/31/2010	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	108,100	110,175	(1.9%)
Retired Members and Beneficiaries	60,391	57,231	5.5%
Inactive Members	<u>30,637</u>	<u>30,488</u>	0.5%
Total Members	<u><u>199,128</u></u>	<u><u>197,894</u></u>	0.6%
Projected Annual Salaries of Active Members	\$ 4,310,382,329	\$ 4,384,380,438	(1.7%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 811,720,854	\$ 745,814,179	8.8%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 16,027,247,202	\$ 15,588,987,085	2.8%
b. Assets for Valuation Purposes	9,106,832,185	9,344,857,360	(2.5%)
c. Unfunded Actuarial Liability (a) - (b)	6,920,415,017	6,244,129,725	10.8%
d. Funded Ratio (b) / (a)	56.8%	59.9%	(5.2%)
e. Market Value of Assets	8,480,934,607	\$ 8,863,268,830	(4.3%)
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	8.41%	8.03%	
Member	<u>5.57%</u>	<u>4.17%</u>	
Employer	2.84%	3.86%	
Amortization of Unfunded Actuarial and Debt Service	<u>11.50%</u>	<u>9.97%</u>	
Actuarial Contribution Rate	14.34%	13.83%	
Statutory Employer Contribution Rate*	<u>11.27%</u>	<u>10.27%</u>	

\* The 12/31/10 Statutory Employer Contribution Rate was originally certified at 9.97% under a 0.60% cap for FY 2014. The 12/31/10 Statutory Rate shown here reflects the higher 0.90% cap for FY 2014, established under 2012 Sub HB 2333. The Statutory Employer Contribution Rate in this valuation may not exceed last year's rate by more than the statutory rate increase limit of 1.00% for FY 2015. This rate does not include the contribution rate for the Death and Disability Program.



## SUMMARY OF PRINCIPAL RESULTS

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**(LOCAL)**

	12/31/2011	12/31/2010	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	39,547	40,307	(1.9%)
Retired Members and Beneficiaries	15,606	14,893	4.8%
Inactive Members	<u>13,629</u>	<u>12,383</u>	10.1%
Total Members	<u><u>68,782</u></u>	<u><u>67,583</u></u>	1.8%
Projected Annual Salaries of Active Members	\$ 1,619,998,225	\$ 1,638,534,481	(1.1%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 152,644,779	\$ 140,605,126	8.6%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 3,978,621,325	\$ 3,793,642,968	4.9%
b. Assets for Valuation Purposes	2,436,265,719	2,398,637,171	1.6%
c. Unfunded Actuarial Liability (a) - (b)	1,542,355,606	1,395,005,797	10.6%
d. Funded Ratio (b) / (a)	61.2%	63.2%	(3.2%)
e. Market Value of Assets	2,280,627,100	2,295,447,057	(0.6%)
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	8.07%	7.68%	
Member	<u>5.16%</u>	<u>4.20%</u>	
Employer	2.91%	3.48%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>6.86%</u>	<u>5.95%</u>	
Actuarial Contribution Rate	9.77%	9.43%	
Statutory Employer Contribution Rate*	<u>8.84%</u>	<u>7.94%</u>	

\* Statutory Employer Contribution Rate exceeds last year's rate by the statutory rate increase limit of 0.90%. This rate does not include the contribution rate for the Death and Disability Program.





## SUMMARY OF PRINCIPAL RESULTS

**KANSAS POLICE AND FIREMEN'S RETIREMENT SYSTEM**

	12/31/2011 Valuation	12/31/2010 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	7,143	7,173	(0.4%)
Retired Members and Beneficiaries	4,315	4,168	3.5%
Inactive Members	1,405	1,350	4.1%
Total Members	<u>12,863</u>	<u>12,691</u>	1.4%
Projected Annual Salaries of Active Members	\$ 442,203,582	\$ 442,880,358	(0.2%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 119,510,150	\$ 111,857,782	6.8%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 2,448,619,763	\$ 2,319,324,940	5.6%
b. Assets for Valuation Purposes	1,710,009,435	1,720,933,933	(0.6%)
c. Unfunded Actuarial Liability (a) - (b)	738,610,328	598,391,007	23.4%
d. Funded Ratio (b) / (a)	69.8%	74.2%	(5.9%)
e. Market Value of Assets	1,597,092,196	1,639,025,889	(2.6%)
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	14.49%	14.39%	
Member	<u>6.87%</u>	<u>6.79%</u>	
Employer	7.62%	7.60%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>12.30%</u>	<u>9.66%</u>	
Actuarial Contribution Rate (Local Employers)	19.92%	17.26%	
Statutory Employer Contribution Rate*	<u>19.92%</u>	<u>17.26%</u>	

\* 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.



## SUMMARY OF PRINCIPAL RESULTS

KANSAS RETIREMENT SYSTEM FOR JUDGES

	12/31/2011 Valuation	12/31/2010 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	264	264	0.0%
Retired Members and Beneficiaries	215	206	4.4%
Inactive Members	<u>7</u>	<u>10</u>	(30.0%)
Total Members	<u>486</u>	<u>480</u>	1.3%
Projected Annual Salaries of Active Members	\$ 28,878,075	\$ 28,253,001	2.2%
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 8,033,939	\$ 7,535,849	6.6%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 152,681,742	\$ 151,828,310	0.6%
b. Assets for Valuation Purposes	125,912,822	125,229,654	0.5%
c. Unfunded Actuarial Liability (a) - (b)	26,768,920	26,598,656	0.6%
d. Funded Ratio (b) / (a)	82.5%	82.5%	(0.0%)
e. Market Value of Assets	117,969,801	119,835,012	(1.6%)
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	19.46%	20.48%	
Member	<u>5.77%</u>	<u>5.82%</u>	
Employer	13.69%	14.66%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>8.90%</u>	<u>8.96%</u>	
Actuarial Contribution Rate	22.59%	23.62%	
Statutory Employer Contribution Rate*	<u>22.59%</u>	<u>23.62%</u>	

\* 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

	12/31/2011 Valuation	12/31/2010 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	155,054	157,919	(1.8) %
Retired Members and Beneficiaries	80,527	76,498	5.3
Inactive Members	<u>45,678</u>	<u>44,231</u>	3.3
Total Members	<u>281,259</u>	<u>278,648</u>	0.9
Projected Annual Salaries of Active Members	\$ 6,401,462,211	\$ 6,494,048,278	(1.4)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 1,091,909,722	\$ 1,005,812,936	8.6
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 22,607,170,032	\$ 21,853,783,303	3.4
b. Assets for Valuation Purposes	13,379,020,161	13,589,658,118	(1.5)
c. Unfunded Actuarial Liability (a) - (b)	9,228,149,871	8,264,125,184	11.7
d. Funded Ratio (b) / (a)	59.2%	62.2%	(4.8)
e. Market Value of Assets	12,476,623,704	12,917,576,788	(3.4)



## SECTION 2 – SCOPE OF THE REPORT

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This report presents the actuarial valuation of the Kansas Public Employees Retirement System (KPERS) as of December 31, 2011. This valuation was prepared at the request of the System’s Board of Trustees.

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

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the System. Sections 4 and 5 describe how the obligations of the System are to be met under the actuarial cost method in use.

This report includes several appendices:

- Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on December 31, 2011, as amended by Senate Substitute for House Bill 2333 which was passed by the 2012 Legislature.
- Appendix C A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- Appendix D A glossary of actuarial terms.



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## SECTION 3 – ASSETS

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### **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, 2011 the market value of assets (excluding receivables) for the Retirement System was \$12.477 billion. Table 1 is a comparison, at market values, of System assets as of December 31, 2011, and December 31, 2010, in total and by investment category. Table 2 summarizes the change in the market value of assets from December 31, 2010 to December 31, 2011 by System.

### **Actuarial Value of Assets**

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

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

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

Tables 3A through 3F and Table 4 show the development of the actuarial value of assets (AVA) as of December 31, 2011.



**SECTION 3 – ASSETS**

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

	December 31, 2011			December 31, 2010		
	<u>Amount</u>	<u>% of</u>		<u>Amount</u>	<u>% of</u>	
	(\$ Millions)	Total		(\$ Millions)	Total	
Cash & Equivalents	\$ 380	3.0	%	\$ 711	5.5	%
Alternative Investments	400	3.2		364	2.8	
Real Estate	1,036	8.3		811	6.3	
Real Return	0	0.0		1,443	11.1	
Fixed Income	2,998	24.0		2,153	16.6	
Domestic Equity	4,574	36.5		3,780	29.2	
International Equity	3,133	25.0		3,699	28.5	
<b>Subtotal</b>	<b>\$ 12,521</b>	<b>100.0</b>	<b>%</b>	<b>\$ 12,961</b>	<b>100.0</b>	<b>%</b>
Administrative Reserves	(17)			(18)		
Group Insurance and Optional Life Reserves	(27)			(25)		
<b>Net Assets</b>	<b>\$ 12,477</b>			<b>\$ 12,918</b>		
Receivables	0			0		
<b>Adjusted Net Assets</b>	<b>\$ 12,477</b>			<b>\$ 12,918</b>		

Allocation of Net Assets on December 31, 2011:

State	\$ 2,597
School	5,884
Local	2,281
KP&F	1,597
Judges	118
Total Net Assets	\$ 12,477 <sup>1</sup>

<sup>1</sup> May not add due to rounding





SECTION 3 – ASSETS

TABLE 2
SUMMARY OF CHANGES IN KPERS ASSETS
DURING PERIOD ENDED DECEMBER 31, 2011

(Market Value)

Table with 5 columns: Description, State, School, Local, Total KPERS. Rows include Market Value of Assets as of January 1, 2011\*, Contributions (Employee, Employer, etc.), Total Investment Income, Less Benefits (Annuity, etc.), Net Increase in Assets, Receivables, and Market Value of Assets as of December 31, 2011\*.

\* Note: Assets exclude insurance and administrative reserves.



SECTION 3 – ASSETS

TABLE 2 (cont.)  
SUMMARY OF CHANGES IN KPERS ASSETS  
DURING PERIOD ENDED DECEMBER 31, 2011

(Market Value)

	KPERS	KP&F	Judges	Total
Market Value of Assets as of January 1, 2011*	\$ 11,158,715,887	\$ 1,639,025,889	\$ 119,835,012	\$ 12,917,576,788
Contributions:				
Employee	245,487,860	30,049,229	1,475,103	277,012,192
Employee service purchases	12,217,334	532,454	0	12,749,788
Employer	473,405,041	66,767,099	5,599,677	545,771,817
Miscellaneous	159,551	3,945	0	163,496
Total Contributions	<u>731,269,786</u>	<u>97,352,727</u>	<u>7,074,780</u>	<u>835,697,293</u>
Total Investment Income	(10,955,508)	(1,617,374)	(18,895)	(12,591,777)
Total Income	<u>720,314,278</u>	<u>95,735,353</u>	<u>7,055,885</u>	<u>823,105,516</u>
Less Benefits:				
Annuity Retirement Benefits	(927,170,954)	(117,345,203)	(7,989,930)	(1,052,506,087)
Partial Lump Sum Benefits	(129,882,727)	(14,208,424)	(905,727)	(144,996,878)
Retirant Dividends	(2,182,050)	(1,003,481)	(23,467)	(3,208,998)
Withdrawals	(48,959,902)	(4,185,379)	0	(53,145,281)
Death Benefits	(9,272,825)	(926,559)	(1,972)	(10,201,356)
Total Benefits	<u>(1,117,468,458)</u>	<u>(137,669,046)</u>	<u>(8,921,096)</u>	<u>(1,264,058,600)</u>
Receivables	0	0	0	0
Net Increase in Assets	(397,154,180)	(41,933,693)	(1,865,211)	(440,953,084)
Market Value of Assets as of December 31, 2011*	\$ 10,761,561,707	\$ 1,597,092,196	\$ 117,969,801	\$ 12,476,623,704

\* Note: Assets exclude insurance and administrative reserves.



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

	Plan Year End			
	12/31/2008	12/31/2009	12/31/2010	12/31/2011
1. Market Value of Assets, beginning of year	\$ 3,094,367,129	\$ 2,127,412,725	\$ 2,506,018,054	\$ 2,730,474,235
2. Contributions during year	104,032,160	115,003,572	124,819,016	132,268,023
3. Benefits during year	(206,616,684)	(210,170,449)	(226,652,537)	(263,576,296)
4. Expected net investment income	243,524,930	166,459,575	196,486,466	213,286,652
5. Transfers and receivables	0	0	0	0
6. Expected Value of Assets, end of year	3,235,307,535	2,198,705,423	2,600,670,999	2,812,452,613
7. Market Value of Assets, end of year	2,127,412,725	2,506,018,054	2,730,474,235	2,596,503,599
8. Excess (shortfall) of net investment income	\$ (1,107,894,810)	\$ 307,312,631	\$ 129,803,236	\$ (215,949,014)



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

	<u>12/31/2008</u>	<u>12/31/2009</u>	<u>12/31/2010</u>	<u>12/31/2011</u>
1. Market Value of Assets, beginning of year	\$ 6,863,242,512	\$ 4,749,398,735	\$ 5,624,405,754	\$ 6,132,794,595
2. Contributions during year	351,288,652	379,318,453	400,933,168	418,768,791
3. Benefits during year	(542,872,662)	(565,041,695)	(625,144,165)	(661,126,303)
4. Expected net investment income	541,543,467	372,665,886	441,156,554	481,115,765
5. Transfers and receivables	0	0	0	0
6. Expected Value of Assets, end of year	7,213,201,969	4,936,341,379	5,841,351,311	6,371,552,848
7. Market Value of Assets, end of year	4,749,398,735	5,624,405,754	6,132,794,595	5,884,431,008
8. Excess (shortfall) of net investment income	\$ (2,463,803,234)	\$ 688,064,375	\$ 291,443,284	\$ (487,121,840)



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

	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>	<b>12/31/2011</b>
1. Market Value of Assets, beginning of year	\$ 9,957,609,641	\$ 6,876,811,460	\$ 8,130,423,808	\$ 8,863,268,830
2. Contributions during year	455,320,812	494,322,025	525,752,184	551,036,814
3. Benefits during year	(749,489,346)	(775,212,144)	(851,796,702)	(924,702,599)
4. Expected net investment income	785,068,397	539,125,461	637,643,020	694,402,417
5. Transfers and receivables	0	0	0	0
6. Expected Value of Assets, end of year	10,448,509,504	7,135,046,802	8,442,022,310	9,184,005,461
7. Market Value of Assets, end of year	6,876,811,460	8,130,423,808	8,863,268,830	8,480,934,607
8. Excess (shortfall) of net investment income	\$ (3,571,698,044)	\$ 995,377,006	\$ 421,246,520	\$ (703,070,854)



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

	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>	<b>12/31/2011</b>
1. Market Value of Assets, beginning of year	\$ 2,339,695,800	\$ 1,659,523,521	\$ 2,033,031,884	\$ 2,295,447,057
2. Contributions during year	129,967,365	153,054,256	168,473,093	180,232,972
3. Benefits during year	(148,142,237)	(157,112,798)	(175,768,640)	(192,765,859)
4. Expected net investment income	186,462,655	132,602,663	162,356,343	183,144,093
5. Transfers and receivables	0	0	0	0
6. Expected Value of Assets, end of year	2,507,983,583	1,788,067,642	2,188,092,680	2,466,058,263
7. Market Value of Assets, end of year	1,659,523,521	2,033,031,884	2,295,447,057	2,280,627,100
8. Excess (shortfall) of net investment income	\$ (848,460,062)	\$ 244,964,242	\$ 107,354,377	\$ (185,431,163)



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

	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>	<b>12/31/2011</b>
1. Market Value of Assets, beginning of year	\$ 1,749,740,089	\$ 1,232,995,979	\$ 1,484,548,360	\$ 1,639,025,889
2. Contributions during year	89,951,185	92,025,361	89,342,304	97,352,727
3. Benefits during year	(112,958,046)	(118,344,181)	(129,496,994)	(137,669,046)
4. Expected net investment income	139,076,637	97,607,178	117,188,581	129,540,442
5. Transfers and receivables	0	0	0	0
6. Expected Value of Assets, end of year	1,865,809,865	1,304,284,337	1,561,582,251	1,728,250,013
7. Market Value of Assets, end of year	1,232,995,979	1,484,548,360	1,639,025,889	1,597,092,196
8. Excess (shortfall) of net investment income	\$ (632,813,886)	\$ 180,264,023	\$ 77,443,638	\$ (131,157,817)



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

	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>	<b>12/31/2011</b>
1. Market Value of Assets, beginning of year	\$ 120,840,352	\$ 87,017,852	\$ 106,498,558	\$ 119,835,012
2. Contributions during year	7,371,737	7,328,809	6,867,326	7,074,780
3. Benefits during year	(6,787,124)	(7,635,319)	(7,633,884)	(8,921,096)
4. Expected net investment income	9,690,163	6,949,404	8,489,812	9,514,369
5. Transfers and receivables	0	0	0	0
6. Expected Value of Assets, end of year	131,115,128	93,660,746	114,221,812	127,503,065
7. Market Value of Assets, end of year	87,017,852	106,498,558	119,835,012	117,969,801
8. Excess (shortfall) of net investment income	\$ (44,097,276)	\$ 12,837,812	\$ 5,613,200	\$ (9,533,264)





SECTION 3 – ASSETS

TABLE 4
DEVELOPMENT OF ACTUARIAL VALUE OF NET ASSETS

Table with 6 columns: Description, State/School, State, School, Local, Total KPERS. Rows include investment income excess/shortfall, deferral of excess, market value of assets, and actuarial value of assets.



SECTION 3 – ASSETS

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

	Total KPERs	KP&F	Judges	Total
1. Excess (shortfall) of investment income				
a. Year ending 12/31/11	\$ (888,502,017)	\$ (131,157,817)	\$ (9,533,264)	\$ (1,029,193,098)
b. Year ending 12/31/10	528,600,897	77,443,638	5,613,200	611,657,735
c. Year ending 12/31/09	1,240,341,248	180,264,023	12,837,812	1,433,443,083
d. Year ending 12/31/08	(4,420,158,106)	(632,813,886)	(44,097,276)	(5,097,069,268)
e. Total	\$ (3,539,717,978)	\$ (506,264,042)	\$ (35,179,528)	\$ (4,081,161,548)
2. Deferral of excess (shortfall) of investment income				
a. Year ending 12/31/11 (80%)	(710,801,613)	(104,926,254)	(7,626,611)	(823,354,478)
b. Year ending 12/31/10 (60%)	317,160,538	46,466,183	3,367,920	366,994,641
c. Year ending 12/31/09 (40%)	496,136,499	72,105,609	5,135,125	573,377,233
d. Year ending 12/31/08 (20%)	(884,031,621)	(126,562,777)	(8,819,455)	(1,019,413,853)
e. Total	\$ (781,536,197)	\$ (112,917,239)	\$ (7,943,021)	\$ (902,396,457)
3. Market Value of Assets, end of year	\$ 10,761,561,707	\$ 1,597,092,196	\$ 117,969,801	\$ 12,476,623,704
4. Actuarial Value of Assets, end of year (3) - (2e)	\$ 11,543,097,904	\$ 1,710,009,435	\$ 125,912,822	\$ 13,379,020,161
5. Actuarial Value divided by Market Value (4)/(3)	107.3%	107.1%	106.7%	107.2%



## SECTION 4 – SYSTEM LIABILITIES

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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, 2011. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 5 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 5 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits expected to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and, if an optional benefit is chosen, for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of the 2010 Triennial Experience Study. This set of assumptions, as shown in Appendix C, was adopted by the Board in July 2011 and is first used for the December 31, 2011 valuation.

The liabilities reflect the benefit structure in place as of December 31, 2011 and changes to benefits and contributions passed by the 2012 Legislature in Senate Substitute for House Bill 2333. Please see the Board Summary section of this report for further discussion on this topic.

### **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, 2011**

	State	School	Local	Total KPERS
1. Active employees				
a. Retirement Benefit	\$ 2,067,327,513	\$ 7,926,333,084	\$ 2,964,672,562	\$ 12,958,333,159
b. Pre-Retirement Death Benefit	24,168,989	53,998,236	54,343,612	132,510,837
c. Withdrawal Benefit	104,680,188	315,753,825	186,623,255	607,057,268
d. Disability Benefit	104,689,435	213,705,853	138,747,552	457,142,840
e. Total	<u>2,300,866,125</u>	<u>8,509,790,998</u>	<u>3,344,386,981</u>	<u>14,155,044,104</u>
2. Inactive Vested Members	137,665,995	294,344,922	214,890,935	646,901,852
3. Inactive Nonvested Members	8,336,557	26,900,881	19,463,846	54,701,284
4. Disabled Members	85,838,129	94,284,396	61,951,396	242,073,921
5. Retirees	1,867,575,731	5,303,595,713	1,268,248,074	8,439,419,518
6. Beneficiaries	104,742,644	140,085,507	80,577,677	325,405,828
7. Unclaimed Account Reserve	<u>668,200</u>	<u>1,331,800</u>	<u>500,000</u>	<u>2,500,000</u>
8. Total PVFB	<u>\$ 4,505,693,381</u>	<u>\$ 14,370,334,217</u>	<u>\$ 4,990,018,909</u>	<u>\$ 23,866,046,507</u>



**TABLE 5 (cont.)**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**PRESENT VALUE OF FUTURE BENEFITS (PVFB)**  
**AS OF DECEMBER 31, 2011**

	KP&F	Judges
1. Active employees		
a. Retirement Benefit	\$ 1,523,272,276	\$ 116,216,526
b. Pre-Retirement Death Benefit	19,990,617	1,228,334
c. Withdrawal Benefit	42,707,175	0
d. Disability Benefit	154,445,795	0
e. Total	1,740,415,863	117,444,860
2. Inactive Vested Members	69,429,368	1,435,889
3. Inactive Nonvested Members	14,053,144	0
4. Disabled Members	102,697,703	0
5. Retirees	984,740,498	59,269,000
6. Beneficiaries	103,622,980	11,097,187
7. Total PVFB	\$ 3,014,959,556	\$ 189,246,936



**TABLE 6**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL LIABILITIES**  
**AS OF DECEMBER 31, 2011**

	State	School	Local	Total KPERS
1. Present Value of Future Benefits	\$ 4,505,693,381	\$ 14,370,334,217	\$ 4,990,018,909	\$ 23,866,046,507
2. Present Value of Future Normal Costs for Active Members				
a. Retirement Benefit	\$ 424,895,697	\$ 1,809,970,787	\$ 731,450,486	\$ 2,966,316,970
b. Pre-Retirement Death Benefit	7,740,652	18,304,082	19,193,252	45,237,986
c. Withdrawal Benefit	117,118,967	356,062,948	207,855,351	681,037,266
d. Disability Benefit	43,106,273	71,580,990	52,898,495	167,585,758
e. Total	<u>592,861,589</u>	<u>2,255,918,807</u>	<u>1,011,397,584</u>	<u>3,860,177,980</u>
3. Total Actuarial Liability (1) - (2e)	<u>\$ 3,912,831,792</u>	<u>\$ 12,114,415,410</u>	<u>\$ 3,978,621,325</u>	<u>\$ 20,005,868,527</u>



**TABLE 6 (cont.)**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL LIABILITIES**  
**AS OF DECEMBER 31, 2011**

	<b>KP&amp;F</b>	<b>Judges</b>
1. Present Value of Future Benefits	\$ 3,014,959,556	\$ 189,246,936
2. Present Value of Future Normal Costs for Active Members		
a. Retirement Benefit	\$ 416,711,249	\$ 36,049,925
b. Pre-Retirement Death Benefit	12,798,876	515,269
c. Withdrawal Benefit	53,858,539	0
d. Disability Benefit	82,971,129	0
e. Total	<u>566,339,793</u>	<u>36,565,194</u>
3. Total Actuarial Liability (1) - (2e)	<u>\$ 2,448,619,763</u>	<u>\$ 152,681,742</u>



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## **SECTION 5 – EMPLOYER CONTRIBUTIONS**

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The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 4 and 6 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a fully closed down fund, where no further contributions are anticipated.

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

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

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

### **Description of Rate Components**

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

The contribution rates based on this December 31, 2011 actuarial valuation will be used to determine employer contribution rates to the Kansas Public Employees Retirement System for fiscal years beginning in 2014 (July 1, 2014 to June 30, 2015 for the State and calendar year 2014 for Local employers).

### **KPERS**

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

Legislation provides that the employer contribution rates recommended by the Board of Trustees for all groups cannot increase more than the statutory cap. This cap was increased in Senate Substitute for House Bill 2333, passed by the 2012 Legislature, to 0.90% for FY 2014, 1.0% for FY 2015, 1.1% for FY 2016 and 1.2% for FY 2017 and later. The prior limit on the statutory cap for the State/School group was 0.40% in FY 2006, 0.50% in FY 2007, and 0.60% in FY 2008 through FY 2013. The prior limit for the Local group was 0.40% in 2006, 0.50% in 2007, and 0.60% in 2008 through 2013. The 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



## SECTION 5 – EMPLOYER CONTRIBUTIONS

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shown in these rates, the total contribution rates for KPERS employers include the statutory employer contribution to the KPERS Group Life Insurance.

There are several components of the unfunded actuarial liability (UAL) 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 13<sup>th</sup> check for pre-July 2, 1987 retirees a permanent benefit is funded over a 10 year period, with the first contribution in 2005 (1 year remaining in FY 2014, the fiscal year for which this valuation sets the contribution rate). The increase in the UAL due to the \$300 one-time payment to retirees in 2007 and 2008 is amortized over 10 years (applies only to Local employers as the State fully funded the increased liability for the \$300 one-time payment for its members in both 2007 and 2008). The remainder of the UAL is amortized over a period originally set at 40 years beginning July 1, 1993. At the December 31, 2011 valuation date, twenty-one (21) years remain in that period.

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

The actuarial contribution rate for KPERS is comprised of the normal cost rate and a contribution toward the unfunded actuarial liability. In previous valuations, the State and School contribution rate included 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<sup>th</sup> check a permanent benefit. Effective FY 2015, there are no further debt service payments due for these bonds.

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



## SECTION 5 – EMPLOYER CONTRIBUTIONS

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is amortized over 15 years. The increase in the unfunded actuarial liability for Local employers resulting from 2003 legislation which made the 13<sup>th</sup> check for pre-July 2, 1987 retirees a permanent benefit is funded over a 10 year period with the first contribution in 2005 (1 year remains as of FY 2014, the fiscal year for which this valuation sets the contribution rate). The increase in the unfunded actuarial liability due to the \$300 one-time payment to retirees in 2007 and 2008 is amortized over 10 years (applies only to Local employers as the State fully funded the increased liability for the \$300 one-time payment for its members in both 2007 and 2008). The remainder of the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993. At the December 31, 2011 valuation date, twenty-one (21) years remain in that period.

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

### **Judges**

The actuarial contribution rate for the Judges is comprised of the normal cost rate and a contribution toward the unfunded actuarial liability. The UAL is amortized over a 40 year period established in 1993 with payments determined as a level dollar amount. As of this valuation date, twenty-one (21) years remain. In previous valuations, the contribution rate included an additional contribution 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<sup>th</sup> check a permanent benefit. Effective FY 2015, there are no further debt service payments due for these bonds.

### **Contribution Rate Summary**

The normal cost rates for each System are developed in Table 7. Table 8 develops the actuarial contribution rate for the unfunded actuarial liability. Bonds were issued in 2003 by the State to finance the increase in the actuarial liability due to legislation making the 13<sup>th</sup> check for pre-July 2, 1987 retirees a permanent benefit. The debt service payment on the bonds was paid by an additional employer contribution to the System, effective July 1, 2004 through June 30, 2014. For FY 2015, no payment is due so the debt service contribution rate for FY2015 shown in Table 9 is 0%. The total actuarial contribution rates determined as of December 31, 2011, are presented in Table 10. The contribution rates for local employers who affiliated with KPERs for prior service and are amortizing the payment of that liability over a period of years are shown in Tables 11A and 11B. Table 12 shows the KP&F individual employer contribution rates for fiscal years beginning in 2013 and 2014 while Tables 13 and 14 show the calculation of the additional contribution rate due to amortization of prior service UAL or excess benefit liability for fiscal years beginning in 2014.

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 2014.



**TABLE 7**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**NORMAL COST RATE**  
**AS OF DECEMBER 31, 2011**

	State	School	State/School	Local
1. Normal Cost Rate				
a. Retirement Benefit	5.88%	6.77%	6.57%	5.82%
b. Pre-Retirement Death Benefit	0.11%	0.07%	0.08%	0.16%
c. Withdrawal Benefit	1.59%	1.36%	1.41%	1.66%
d. Disability Benefit	0.59%	0.28%	0.35%	0.43%
e. Total	8.17%	8.48%	8.41%	8.07%
2. Estimated Covered Payroll for 2012	\$ 995,715,217	\$ 3,314,667,112	\$ 4,310,382,329	\$ 1,619,998,225
3. Normal Cost for 2012	\$ 81,349,933	\$ 281,083,771	\$ 362,433,704	\$ 130,733,857



**TABLE 7 (cont.)**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**NORMAL COST RATE**  
**AS OF DECEMBER 31, 2011**

	<b>KP&amp;F</b>	<b>Judges</b>
1. Normal Cost Rate		
a. Retirement Benefit	10.62%	19.18%
b. Pre-Retirement Death Benefit	0.35%	0.28%
c. Withdrawal Benefit	1.38%	0.00%
d. Disability Benefit	2.14%	0.00%
e. Total	14.49%	19.46%
2. Estimated Covered Payroll for 2012	\$ 442,203,582	\$ 28,878,075
3. Normal Cost for 2012	\$ 64,075,299	\$ 5,619,673



**TABLE 8**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**UNFUNDED ACTUARIAL LIABILITY CONTRIBUTION RATES**  
**AS OF DECEMBER 31, 2011**

	State	School	Local	KPF		Judges
1. Actuarial Liability	\$ 3,912,831,792	\$ 12,114,415,410	\$ 3,978,621,325	\$ 2,448,619,763		\$ 152,681,742
2. Actuarial Value of Assets	<u>2,790,034,778</u>	<u>6,316,797,407</u>	<u>2,436,265,719</u>	<u>1,710,009,435</u>		<u>125,912,822</u>
3. Unfunded Actuarial Liability (UAL)	1,122,797,014	5,797,618,003	1,542,355,606	738,610,328		26,768,920
a. UAL for 1998 COLA	2,728,710	6,680,635	1,954,017	1,621,554		0
b. UAL for 13th Check (2003)	0	0	685,144	1,283,108		0
c. UAL for 2007 One Time Payment	0	0	1,043,453	355,632		0
d. UAL for 2008 One Time Payment	0	0	1,214,071	424,033		0
e. Prior service and other local employer UAL*	0	0	3,704,406	12,408,764		0
f. Remaining UAL	1,120,068,304	5,790,937,368	1,533,754,514	722,517,237		26,768,920
4. Payment to Amortize UAL (assumed mid-year)						
a. UAL for 1998 COLA	2,835,759	6,942,720	2,030,674	1,728,423	**	0
b. UAL for 13th Check (2003)	0	0	712,023	1,333,507	**	0
c. UAL for 2007 One Time Payment	0	0	233,548	79,599	**	0
d. UAL for 2008 One Time Payment	0	0	230,610	80,545	**	0
e. Remaining UAL	<u>78,769,762</u>	<u>407,252,626</u>	<u>107,862,599</u>	<u>45,641,135</u>	**	<u>2,571,520</u>
f. Total	81,605,521	414,195,346	111,069,455	48,863,208	**	2,571,520
5. Total Estimated Payroll for 2012	\$ 995,715,217	\$ 3,314,667,112	\$ 1,619,998,225	\$ 397,224,845	**	\$ 28,878,075
6. Amortization Payment as a Percent of Payroll	8.20%	12.50%	6.86%	12.30%	**	8.90%

\* 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.



SECTION 5 – EMPLOYER CONTRIBUTIONS

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.

Table with 6 columns: Category, State, School, KPF (state), Judges, Total. Rows include Original Bond Issue Proceeds, Scheduled Payments\* (FYE 2015), Projected Payroll for FYE 2015\*\*, and Rate of Pay Required.

\* Last scheduled debt service payment is for FYE 2014. Therefore, no payment is required for FYE 2015.

\*\* Assumes 1.5% annual payroll growth



**TABLE 10**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL EMPLOYER CONTRIBUTION RATES**  
**FISCAL YEAR COMMENCING IN 2014**

	<b>Total Normal Cost</b>	<b>Employee Normal Cost</b>	<b>Employer Normal Cost</b>	<b>Unfunded Actuarial Liability</b>	<b>Debt Service Payment</b>	<b>Total Employer Contribution*</b>
State	8.17%	5.57%	2.60%	8.20%	0.00%	10.80%
Correctional Employees - Normal Retirement Age 55						11.66%
Correctional Employees - Normal Retirement Age 60						11.97%
School	8.48%	5.57%	2.91%	12.50%	0.00%	15.41%
State/School	8.41%	5.57%	2.84%	11.50%	0.00%	14.34%
Local	8.07%	5.16%	2.91%	6.86%	0.00%	9.77%
KP&F Uniform Contribution Rate						
State **	14.49%	6.87%	7.62%	11.63%	0.00%	19.25%
Local **	14.49%	6.87%	7.62%	12.30%	0.00%	19.92%
Judges	19.46%	5.77%	13.69%	8.90%	0.00%	22.59%

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

\*\* The total contribution rate for each employer is equal to the appropriate uniform contribution rate (state or local) plus an additional rate, if applicable, required to amortize the unfunded past service liability or the 15% excess benefit liability, determined separately for each employer. (See Table 12)





**TABLE 11A  
LOCAL AFFILIATION COST FACTORS  
FOR FISCAL YEAR BEGINNING IN 2014**

<b>Employer</b>	<b>Year Affiliated</b>	<b>Projected 2014 Annual Payroll</b>	<b>Projected 1/1/2014 Unfunded Actuarial Liability</b>	<b>Projected 1/1/2014 Excess Benefit Liability</b>	<b>Payment on 1/1/2014 Unfunded Liabilities<sup>2</sup></b>	<b>Payment on Unfunded Liability as % of Payroll</b>	<b>Total Rate for Years Commencing<sup>1</sup> in 2014</b>
St. Francis Housing Authority	1999	\$15,847	\$8,293	\$0	\$597	3.77%	12.61%
City of Burden	1999	58,515	16,367	0	1,177	2.01%	10.85%
City of Longton	1999	65,206	19,884	0	1,432	2.20%	11.04%
Bourbon County RWD#2	1999	242,350	115,257	0	8,300	3.42%	12.26%
Towanda Township	1999	34,371	9,423	0	677	1.97%	10.81%
Hays Housing Authority	2000	44,464	1,830	0	137	0.31%	9.15%
Haysville Community Library	2000	206,504	209,441	0	15,072	7.30%	16.14%
Hamilton County Library	2000	104,494	13,867	0	998	0.96%	9.80%
Ellis Public Library	2000	29,089	5,266	0	379	1.30%	10.14%
Bucklin Public Library	2000	18,827	13,098	0	945	5.02%	13.86%
Elkhart Cemetery District	2000	50,806	1,839	0	135	0.27%	9.11%
City of Linn Valley	2000	92,555	1,028	0	74	0.08%	8.92%
City of Blue Mound	2000	96,486	2,966	0	208	0.22%	9.06%
Kansas Workers' Risk Coop for Counties	2000	311,327	53,265	0	3,816	1.23%	10.07%
Lindsborg Community Library	2002	22,825	3,761	0	260	1.14%	9.98%
City of North Newton	2002	310,259	170,477	0	11,988	3.86%	12.70%
City of Arcadia	2002	102,478	16,677	0	1,172	1.14%	9.98%
City of Linwood	2003	72,249	2,498	0	176	0.24%	9.08%
Johnson County Fire District #2 Rural	2003	2,587,360	464,721	0	32,681	1.26%	10.10%
Basehor Community Library	2003	257,648	59,090	0	4,155	1.61%	10.45%
City of Gypsum	2003	62,555	5,022	0	354	0.57%	9.41%
Greenleaf Housing Authority	2003	13,039	23,585	0	1,658	12.71%	21.55%
City of Bentley	2004	94,256	39,321	0	2,956	3.14%	11.98%
Mulvane Public Library	2004	51,976	14,099	0	1,060	2.04%	10.88%
The Center for Counseling and Consultation	2004	3,008,335	1,185,240	0	89,131	2.96%	11.80%
Doniphan County RFD #2	2005	80,891	9,417	0	708	0.87%	9.71%



**TABLE 11A (cont.)  
LOCAL AFFILIATION COST FACTORS  
FOR FISCAL YEAR BEGINNING IN 2014**

<b>Employer</b>	<b>Year Affiliated</b>	<b>Projected 2014 Annual Payroll</b>	<b>Projected 1/1/2014 Unfunded Actuarial Liability</b>	<b>Projected 1/1/2014 Excess Benefit Liability</b>	<b>Payment on 1/1/2014 Unfunded Liabilities<sup>2</sup></b>	<b>Payment on Unfunded Liability as % of Payroll</b>	<b>Total Rate for Years Commencing<sup>1</sup> in 2014</b>
City of Denison	2005	\$49,701	\$20,782	\$0	\$1,563	3.14%	11.98%
Stanton County Recreation Commission	2005	68,033	25,597	0	1,924	2.83%	11.67%
City of Salina	NA	14,248,712	0	66,292	68,892	0.48%	9.32%
City of Shawnee	NA	8,699,143	0	61,030	63,331	0.73%	9.57%
Unified Government - Wyandotte Co./ KCK	NA	62,900,346	0	451,542	266,795	0.42%	9.26%
City of Emporia	NA	6,527,995	0	1,560	1,622	0.02%	8.86%
City of Leavenworth	NA	6,190,685	0	1,912	1,988	0.03%	8.87%
<b>Total</b>		<b>\$106,719,326</b>	<b>\$2,512,111</b>	<b>\$582,336</b>	<b>\$586,360</b>		

<sup>1</sup> Basic local employer contribution rates excluding Death and Disability contribution: FY 2013: 7.94%

FY 2014: 8.84%

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



**TABLE 11B  
LOCAL AFFILIATION COST FACTORS - AFFILIATION AFTER 1/1/06  
FOR FISCAL YEAR BEGINNING IN 2014**

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

<b>Employer</b>	<b>Year Affiliated</b>	<b>Unfunded Actuarial Liability on Jan 1 Following Affiliation</b>	<b>Annual Payment Due January 1 to Amortize Unfunded Liability</b>	<b>Final Payment Year</b>
Nippawalla Township	2006	\$4,158	\$356	2032
City of Vermillion	2006	3,950	338	2032
Oaklawn Improvement District	2010	128,006	11,619	2033
Stockton Recreation Commission	2010	1,245	113	2032
Golden Prarie Extension District #12	2011	1,246	185	2033



**TABLE 12**  
**KP&F**  
**EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS**  
**COMMENCING IN CALENDAR YEARS 2013 AND 2014**

<b>Employer</b>	<b>Total Rate for Fiscal Year Commencing in 2013</b>	<b>Recommended Total Rate for Fiscal Year Commencing in 2014</b>
Douglas County Law Enforcement	19.96 %	22.62 %
Ford County	17.26	19.92
Franklin County Sheriff's Dept	17.26	19.92
Gray County Sheriff's Dept.	17.26	19.92
Harvey County Sheriff's Dept.	17.26	19.92
Johnson County Fire Dept.	17.26	19.92
Johnson County Fire No. 1	17.26	19.92
Johnson County Fire No. 2	17.26	19.92
Johnson County Park Commission	17.26	19.92
Johnson County Sheriff's Dept.	17.43	20.11
Labette County Sheriff's Dept.	19.37	22.24
Reno County Sheriff's Dept.	17.26	19.92
Riley County Law Enforcement	17.26	19.92
Sedgwick County Fire No. 1	17.26	19.92
Sedgwick County Sheriff's Dept.	17.59	20.28
Sedgwick County EMT's	17.60	20.08
Shawnee County Sheriff's Dept.	19.53	22.26
Sumner County Sheriff's Dept.	18.50	21.33
Unified Gov't of Wyandotte County	17.26	19.92
Unified Gov't of Wyandotte Co. - KCK	23.45	28.63
City of Abilene	17.26	19.92
City of Arkansas City	17.26	19.92
City of Atchison	18.22	23.50
City of Bonner Springs	17.26	19.92
City of Chanute	17.26	19.92
City of Cimarron	17.26	19.92
City of Coffeyville	22.51	24.89
City of Concordia	20.26	22.98
City of Derby	17.26	19.92
City of Dodge City	22.74	25.73
City of Emporia	17.26	19.92
City of Erie	17.26	19.92
City of Eudora	17.26	19.92
City of Fairway	17.26	19.92
City of Fort Scott	22.84	25.48
City of Herington	18.00	20.65
City of Hutchinson	17.26	19.92



**KP&F**  
**EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS**  
**COMMENCING IN CALENDAR YEARS 2013 AND 2014**

<b>Employer</b>	<b>Total Rate for Fiscal Year Commencing in 2013</b>	<b>Recommended Total Rate for Fiscal Year Commencing in 2014</b>
City of Junction City	17.26 %	19.92 %
City of Lawrence	17.26	19.92
City of Leavenworth	18.29	21.22
City of Leawood	17.81	20.49
City of Lenexa	17.38	19.97
City of Manhattan	17.26	19.92
City of Merriam	17.26	19.92
City of McPherson	17.26	19.92
City of Mission	17.26	22.39
City of Newton EMTs	19.75	23.42
City of Newton	17.26	19.92
City of Olathe	17.30	19.92
City of Ottawa	17.26	19.92
City of Parsons	17.26	19.92
City of Pittsburg	20.13	22.66
City of Salina	21.03	25.51
City of Shawnee	20.46	26.57
City of Topeka	17.26	19.92
City of Wellington	20.40	23.14
City of Westwood	17.26	19.92
City of Winfield	20.76	23.69
Board of Regents Campus Police	17.14	19.25
Kansas Bureau of Investigation	17.14	19.25
Kansas Highway Patrol	17.14	19.25
Cowley County Sheriff's Dept	17.26	19.92
City of Gardner Public Safety Officers	17.26	19.92
City of Liberal Police & Firemen	17.26	19.92
City of Oswego	17.26	19.92
Leavenworth County	17.26	19.92
Pottawatomie County	17.26	19.92
City of Roeland Park	17.26	19.92
City of Edwardsville Police	19.64	21.87
City of Garden City	17.26	19.92
City of Lake Quivira	17.26	19.92
City of Paola	17.26	19.92
City of Winfield (EMS)	24.38	27.01
Miami County	17.26	19.92



**TABLE 12 (cont.)**  
**KP&F**  
**EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS**  
**COMMENCING IN CALENDAR YEARS 2013 AND 2014**

<b>Employer</b>	<b>Total Rate for Fiscal Year Commencing in 2013</b>	<b>Recommended Total Rate for Fiscal Year Commencing in 2014</b>
Atchinson County	17.26 %	19.92 %
City of Park City	17.26	19.92
Dickinson County	17.26	19.92
Leavenworth County (EMS)	17.26	19.92
City of Basehor	17.26	19.92
City of Edwardsville Firemen	21.53	24.56
City of Marion	17.26	19.92
City of Overbrook	17.26	19.92
Leavenworth County Fire District #1	17.26	19.92
Shawnee Heights Fire District	17.26	19.92
City of Lansing	17.26	19.92
State Fire Marshall	17.14	19.25
Seward County	17.26	19.92
City of Hays	17.26	19.92
Ellis County	17.26	19.92
City of Baldwin City	17.26	19.92
McPherson County	17.26	19.92
City of Spring Hill	17.26	19.92
City of Andover	17.26	19.92
Kearny County	17.26	19.92
Neosho County	17.26	19.92
Clark County	17.26	19.92
City of Wakefield	17.26	19.92
Russell County	17.26 *	19.92 *
City of Rossville	17.26	19.92
City of Goddard	17.26	19.92
City of El Dorado	17.26	19.92
Northwest Consolidated Fire District	17.26	19.92
City of Girard	17.26	19.92
City of Overland Park	17.26	19.92
City of Victoria	17.26	19.92

\* This employer will pay off their unfunded actuarial liability according to a fixed schedule in addition to the contribution rate shown here.



**TABLE 13A**  
**KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES**  
**PRIOR SERVICE LIABILITY**  
**FOR FISCAL YEARS BEGINNING IN 2014**

<b>Employer</b>	<b>1/1/2012 Unfunded Prior Service Liability</b>	<b>Payment on Unfunded Liability*</b>
Douglas County Law Enforcement	\$1,256,219	\$181,138
Ford County	0	0
Franklin County Sheriff's Dept	0	0
Gray County Sheriff's Dept.	0	0
Harvey County Sheriff's Dept.	0	0
Johnson County Fire Dept.	0	0
Johnson County Fire No. 1	0	0
Johnson County Fire No. 2	0	0
Johnson County Park Commission	0	0
Johnson County Sheriff's Dept.	80,933	67,758
Labette County Sheriff's Dept.	172,608	16,582
Reno County Sheriff's Dept.	0	0
Riley County Law Enforcement	0	0
Sedgwick County Fire No. 1	0	0
Sedgwick County Sheriff's Dept.	202,192	54,352
Sedgwick County EMT's	13,571	14,103
Shawnee County Sheriff's Dept.	976,163	154,845
Sumner County Sheriff's Dept.	60,139	11,639
Unified Gov't of Wyandotte County	0	0
Unified Gov't of Wyandotte Co. - KCK	0	0
City of Abilene	0	0
City of Arkansas City	0	0
City of Atchison	0	0
City of Bonner Springs	0	0
City of Chanute	0	0
City of Cimarron	0	0
City of Coffeyville	311,875	122,214
City of Concordia	31,666	12,471
City of Derby	0	0
City of Dodge City	1,686,179	215,432
City of Emporia	0	0
City of Erie	0	0
City of Eudora	0	0
City of Fairway	0	0
City of Fort Scott	187,227	73,266
City of Herington	5,699	3,014
City of Hutchinson	0	0
City of Junction City	0	0
City of Lawrence	0	0
	0	0



**TABLE 13A (cont.)**  
**KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES**  
**PRIOR SERVICE LIABILITY**  
**FOR FISCAL YEARS BEGINNING IN 2014**

<b>Employer</b>	<b>1/1/2012 Unfunded Prior Service Liability</b>	<b>Payment on Unfunded Liability*</b>
City of Leawood	\$224,980	\$47,701
City of Lenexa	6,172	6,414
City of Manhattan	0	0
City of Merriam	0	0
City of McPherson	0	0
City of Mission	0	0
City of Newton EMTs	46,925	7,898
City of Newton	0	0
City of Olathe	0	0
City of Ottawa	0	0
City of Parsons	0	0
City of Pittsburg	258,957	101,429
City of Salina	619,037	242,452
City of Shawnee	52,652	20,681
City of Topeka	0	0
City of Wellington	144,177	56,430
City of Westwood	0	0
City of Winfield	367,197	86,672
Board of Regents Campus Police	0	0
Kansas Bureau of Investigation	0	0
Kansas Highway Patrol	0	0
Cowley County Sheriff's Dept	0	0
City of Gardner Public Safety Officers	0	0
City of Liberal Police & Firemen	0	0
City of Oswego	0	0
Leavenworth County	0	0
Pottawatomie County	0	0
City of Roeland Park	0	0
City of Edwardsville Police	225,099	18,952
City of Garden City	0	0
City of Lake Quivira	0	0
City of Paola	0	0
City of Winfield (EMS)	400,537	39,655
Miami County	0	0
Atchinson County	0	0
City of Park City	0	0
Dickinson County	0	0
Leavenworth County (EMS)	0	0
City of Basehor	0	0
City of Edwardsville Firemen	402,444	37,963





**TABLE 13A (cont.)**  
**KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES**  
**PRIOR SERVICE LIABILITY**  
**FOR FISCAL YEARS BEGINNING IN 2014**

<b>Employer</b>	<b>1/1/2012 Unfunded Prior Service Liability</b>	<b>Payment on Unfunded Liability*</b>
City of Marion	\$0	\$0
City of Overbrook	0	0
Leavenworth County Fire District #1	0	0
Shawnee Heights Fire District	0	0
City of Lansing	0	0
State Fire Marshall	0	0
Seward County	0	0
City of Hays	0	0
Ellis County	0	0
City of Baldwin City	0	0
City of Spring Hill	0	0
City of Andover	0	0
Kearny County	0	0
Neosho County	0	0
Clark County	0	0
City of Wakefield	0	0
City of Rossville	0	0
City of Goddard	0	0
City of El Dorado	0	0
Northwest Consolidated Fire District	0	0
City of Girard	0	0
City of Overland Park	0	0
City of Victoria	0	0
<b>Total</b>	<b>\$ 7,732,648</b>	<b>\$ 1,593,061</b>

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



**TABLE 13B  
 KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES  
 PRIOR SERVICE LIABILITY - AFFILIATION AFTER 1/1/06  
 FOR FISCAL YEAR BEGINNING IN 2014**

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

<b>Employer</b>	<b>Year Affiliated</b>	<b>Unfunded Actuarial Liability on Jan 1 Following Affiliation</b>	<b>Annual Payment Due January 1 to Amortize Unfunded Liability</b>	<b>Final Payment Year</b>
McPherson County	2007	\$457	\$63	2017

Only employers with remaining obligations are shown.



**TABLE 14**  
**KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES**  
**FOR FISCAL YEARS BEGINNING IN 2014**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2014 Payroll</b>	<b>Projected 1/1/2012 Excess Benefit Liability</b>	<b>Payment on Excess Benefit Liability*</b>	<b>Payment on Unfunded Liability (Table 13)</b>	<b>Total Payment Amount</b>	<b>As Percent of Payroll</b>
Douglas County Law Enforcement	85	\$6,699,077	\$0	\$0	\$181,138	\$181,138	2.70 %
Ford County	50	2,765,333	0	0	0	0	0.00
Franklin County Sheriff's Dept	48	2,633,830	0	0	0	0	0.00
Gray County Sheriff's Dept.	10	487,894	0	0	0	0	0.00
Harvey County Sheriff's Dept.	20	935,208	0	0	0	0	0.00
Johnson County Fire Dept.	156	11,476,674	0	0	0	0	0.00
Johnson County Fire No. 1	29	1,817,673	0	0	0	0	0.00
Johnson County Fire No. 2	67	6,282,469	0	0	0	0	0.00
Johnson County Park Commission	17	991,337	0	0	0	0	0.00
Johnson County Sheriff's Dept.	454	36,122,343	0	0	67,758	67,758	0.19
Labette County Sheriff's Dept.	16	713,373	0	0	16,582	16,582	2.32
Reno County Sheriff's Dept.	40	2,386,950	0	0	0	0	0.00
Riley County Law Enforcement	101	6,794,144	0	0	0	0	0.00
Sedgwick County Fire No. 1	133	9,566,662	0	0	0	0	0.00
Sedgwick County Sheriff's Dept.	238	15,269,745	271	145	54,352	54,497	0.36
Sedgwick County EMT's	151	8,950,677	0	0	14,103	14,103	0.16
Shawnee County Sheriff's Dept.	109	6,610,406	0	0	154,845	154,845	2.34
Sumner County Sheriff's Dept.	17	826,726	0	0	11,639	11,639	1.41
Unified Gov't of Wyandotte County	841	4,388,490	0	0	0	0	0.00
Unified Gov't of Wyandotte Co. - KCK	0	60,530,008	3,852,864	5,272,785	0	5,272,785	8.71
City of Abilene	21	1,069,304	0	0	0	0	0.00
City of Arkansas City	48	2,865,687	0	0	0	0	0.00
City of Atchison	39	1,812,052	25,614	64,960	0	64,960	3.58
City of Bonner Springs	22	1,360,166	0	0	0	0	0.00
City of Chanute	31	1,703,887	0	0	0	0	0.00
City of Cimarron	0	0	0	0	0	0	0.00
City of Coffeyville	45	2,460,025	0	0	122,214	122,214	4.97
City of Concordia	8	407,881	0	0	12,471	12,471	3.06
City of Derby	59	3,381,775	0	0	0	0	0.00



**TABLE 14 (cont.)  
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES  
FOR FISCAL YEARS BEGINNING IN 2014**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2014 Payroll</b>	<b>Projected 1/1/2012 Excess Benefit Liability</b>	<b>Payment on Excess Benefit Liability*</b>	<b>Payment on Unfunded Liability (Table 13)</b>	<b>Total Payment Amount</b>	<b>As Percent of Payroll</b>
City of Dodge City	65	\$3,706,907	\$0	\$0	\$215,432	\$215,432	5.81 %
City of Emporia	88	5,074,187	0	0	0	0	0.00
City of Erie	2	90,920	0	0	0	0	0.00
City of Eudora	7	447,607	0	0	0	0	0.00
City of Fairway	9	642,081	0	0	0	0	0.00
City of Fort Scott	31	1,317,876	0	0	73,266	73,266	5.56
City of Herington	9	410,096	0	0	3,014	3,014	0.73
City of Hutchinson	143	9,513,038	0	0	0	0	0.00
City of Junction City	101	5,593,742	0	0	0	0	0.00
City of Lawrence	284	23,536,176	0	0	0	0	0.00
City of Leavenworth	118	6,522,183	42,149	85,010	0	85,010	1.30
City of Leawood	108	8,388,300	0	0	47,701	47,701	0.57
City of Lenexa	165	11,683,937	0	0	6,414	6,414	0.05
City of Manhattan	65	3,764,529	0	0	0	0	0.00
City of Merriam	50	3,485,894	0	0	0	0	0.00
City of McPherson	49	2,648,284	0	0	0	0	0.00
City of Mission	28	1,825,170	37,141	45,020	0	45,020	2.47
City of Newton EMTs	3	225,643	0	0	7,898	7,898	3.50
City of Newton	75	4,802,323	0	0	0	0	0.00
City of Olathe	276	21,781,337	0	0	0	0	0.00
City of Ottawa	45	2,803,574	0	0	0	0	0.00
City of Parsons	43	2,002,509	0	0	0	0	0.00
City of Pittsburg	73	3,701,870	0	0	101,429	101,429	2.74
City of Salina	163	11,197,034	246,951	383,547	242,452	625,999	5.59
City of Shawnee	139	10,215,434	470,810	658,152	20,681	678,833	6.65
City of Topeka	520	37,424,635	0	0	0	0	0.00
City of Wellington	32	1,754,471	0	0	56,430	56,430	3.22
City of Westwood	7	499,914	0	0	0	0	0.00
City of Winfield	40	2,296,663	0	0	86,672	86,672	3.77



**TABLE 14 (cont.)  
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES  
FOR FISCAL YEARS BEGINNING IN 2014**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2014 Payroll</b>	<b>Projected 1/1/2012 Excess Benefit Liability</b>	<b>Payment on Excess Benefit Liability*</b>	<b>Payment on Unfunded Liability (Table 13)</b>	<b>Total Payment Amount</b>	<b>As Percent of Payroll</b>	<b>%</b>
Board of Regents Campus Police	144	\$7,385,548	\$0	\$0	\$0	\$0	0.00	
Kansas Bureau of Investigation	73	5,350,698	0	0	0	0	0.00	
Kansas Highway Patrol	482	32,566,017	0	0	0	0	0.00	
Cowley County Sheriff's Dept	25	1,190,275	0	0	0	0	0.00	
City of Gardner Public Safety Officers	25	1,551,562	0	0	0	0	0.00	
City of Liberal Police & Firemen	65	3,160,382	0	0	0	0	0.00	
City of Oswego	5	136,476	0	0	0	0	0.00	
Leavenworth County	50	2,700,132	0	0	0	0	0.00	
Pottawatomie County	25	1,211,141	0	0	0	0	0.00	
City of Roeland Park	13	781,689	0	0	0	0	0.00	
City of Edwardsville Police	15	973,410	0	0	18,952	18,952	1.95	
City of Garden City	89	4,815,132	0	0	0	0	0.00	
City of Lake Quivira	0	0	0	0	0	0	0.00	
City of Paola	13	757,073	0	0	0	0	0.00	
City of Winfield (EMS)	9	559,111	0	0	39,655	39,655	7.09	
Miami County	46	2,636,797	0	0	0	0	0.00	
Atchinson County	8	391,246	0	0	0	0	0.00	
City of Park City	16	834,303	0	0	0	0	0.00	
Dickinson County	16	760,876	0	0	0	0	0.00	
Leavenworth County (EMS)	35	1,629,199	0	0	0	0	0.00	
City of Basehor	9	452,996	0	0	0	0	0.00	
City of Edwardsville Firemen	14	817,377	0	0	37,963	37,963	4.64	
City of Marion	3	135,822	0	0	0	0	0.00	
City of Overbrook	2	86,450	0	0	0	0	0.00	
Leavenworth County Fire District #1	5	296,694	0	0	0	0	0.00	
Shawnee Heights Fire District	10	622,618	0	0	0	0	0.00	
City of Lansing	17	868,148	0	0	0	0	0.00	
State Fire Marshall	10	555,096	0	0	0	0	0.00	
Seward County	27	1,458,766	0	0	0	0	0.00	



**TABLE 14 (cont.)**  
**KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES**  
**FOR FISCAL YEARS BEGINNING IN 2014**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2014 Payroll</b>	<b>Projected 1/1/2012 Excess Benefit Liability</b>	<b>Payment on Excess Benefit Liability*</b>	<b>Payment on Unfunded Liability (Table 13)</b>	<b>Total Payment Amount</b>	<b>As Percent of Payroll</b>	
City of Hays	54	\$2,890,083	\$0	\$0	\$0	\$0	0.00	%
Ellis County	43	2,337,114	0	0	0	0	0.00	
City of Baldwin City	9	500,287	0	0	0	0	0.00	
McPherson County	1	22,945	0	0	**	**	0.00	
City of Spring Hill	11	508,164	0	0	0	0	0.00	
City of Andover	34	1,795,689	0	0	0	0	0.00	
Kearny County	18	959,175	0	0	0	0	0.00	
Neosho County	15	644,943	0	0	0	0	0.00	
Clark County	6	281,043	0	0	0	0	0.00	
City of Wakefield	1	47,717	0	0	0	0	0.00	
Russell County	9	396,409	0	0	**	**	0.00	
City of Rossville	2	82,391	0	0	0	0	0.00	
City of Goddard	11	471,476	0	0	0	0	0.00	
City of El Dorado	41	2,085,324	0	0	0	0	0.00	
Northwest Consolidated Fire District	14	636,266	0	0	0	0	0.00	
City of Girard			0	0	0	0	0.00	
City of Overland Park			0	0	0	0	0.00	
City of Victoria			0	0	0	0	0.00	
<b>Total</b>	<b>7,113</b>	<b>\$ 477,010,188</b>	<b>\$ 4,675,801</b>	<b>\$ 6,509,619</b>	<b>\$ 1,593,061</b>	<b>\$ 8,102,680</b>		

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

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



## SECTION 6 – ACCOUNTING AND OTHER INFORMATION

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### SECTION 6

#### ACCOUNTING AND OTHER INFORMATION

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

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

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

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

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



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

**Schedule of Funding Progress**  
(\$ in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percent of Covered Payroll ((b-a)/c)
12/31/2006	\$12,189,197	\$17,552,791	\$5,363,593	69%	\$5,599,193	96%
12/31/2007	13,433,115	18,984,915	5,551,800	71%	5,949,228	93%
12/31/2008	11,827,619	20,106,787	8,279,168	59%	6,226,526	133%
12/31/2009	13,461,221	21,138,206	7,676,985	64%	6,532,496	118%
12/31/2010	13,589,658	21,853,783	8,264,125	62%	6,494,048	127%
12/31/2011	13,379,020	22,607,170	9,228,150	59%	6,401,462	144%





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

	<b>KPERS System</b>	<b>KP&amp; F System</b>	<b>Judges System</b>
Valuation Date	12/31/11	12/31/11	12/31/11
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent Closed	Level Percent Closed	Level Dollar Closed
Remaining Amortization Period	21 years	21 years	21 years
Asset Valuation Method	Difference between actual return and expected return on market value recognized evenly over five-year period.		
Actuarial Assumptions:			
Investment Rate of Return	8.0%	8.0%	8.0%
Projected Salary Increases	4.0% - 12.0%	4.0% - 12.5%	4.5%
Cost of Living Adjustment	None	None	None



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

**Schedule of Employer Contributions**

For the Fiscal Year Ended June 30

Year	Annual Required Contribution	Percentage Contributed
2007	\$531,292,151	63.9%
2008	607,662,300	65.1%
2009	660,833,664	68.0%
2010	682,062,413	72.1%
2011	709,964,322	74.1%
2012	841,096,691	67.2% *

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

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



**TABLE 17**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**PROJECTED BENEFIT PAYMENTS**

Year	State	School	Local	Total KPERS	KP&F	Judges	Total
2012	\$269,011,000	\$718,593,000	\$214,217,000	\$1,201,821,000	\$149,587,000	\$10,589,000	\$1,361,997,000
2013	276,650,000	757,371,000	222,033,000	1,256,054,000	150,674,000	11,175,000	1,417,903,000
2014	287,232,000	802,747,000	236,414,000	1,326,393,000	158,715,000	12,159,000	1,497,267,000
2015	297,769,000	845,946,000	252,854,000	1,396,569,000	166,544,000	12,803,000	1,575,916,000
2016	308,891,000	889,445,000	270,377,000	1,468,713,000	176,013,000	13,423,000	1,658,149,000
2017	320,808,000	932,560,000	288,590,000	1,541,958,000	185,030,000	14,246,000	1,741,234,000
2018	333,246,000	975,098,000	308,102,000	1,616,446,000	194,568,000	15,204,000	1,826,218,000
2019	345,294,000	1,016,681,000	328,824,000	1,690,799,000	204,000,000	15,931,000	1,910,730,000
2020	356,498,000	1,058,400,000	349,305,000	1,764,203,000	214,193,000	16,489,000	1,994,885,000
2021	367,943,000	1,100,151,000	370,178,000	1,838,272,000	224,733,000	17,272,000	2,080,277,000
2022	378,808,000	1,139,636,000	391,126,000	1,909,570,000	234,678,000	18,055,000	2,162,303,000
2023	388,408,000	1,179,152,000	411,642,000	1,979,202,000	244,521,000	18,649,000	2,242,372,000
2024	396,895,000	1,218,074,000	431,518,000	2,046,487,000	256,273,000	19,079,000	2,321,839,000
2025	405,371,000	1,255,832,000	451,103,000	2,112,306,000	267,387,000	19,493,000	2,399,186,000
2026	411,716,000	1,293,166,000	470,199,000	2,175,081,000	278,044,000	19,818,000	2,472,943,000
2027	417,239,000	1,328,289,000	488,038,000	2,233,566,000	289,653,000	19,856,000	2,543,075,000
2028	421,863,000	1,363,318,000	504,331,000	2,289,512,000	299,909,000	19,887,000	2,609,308,000
2029	424,918,000	1,398,601,000	520,547,000	2,344,066,000	310,847,000	20,128,000	2,675,041,000
2030	427,243,000	1,431,284,000	535,063,000	2,393,590,000	321,499,000	19,948,000	2,735,037,000
2031	429,352,000	1,463,315,000	550,417,000	2,443,084,000	332,622,000	19,721,000	2,795,427,000
2032	430,921,000	1,494,838,000	564,626,000	2,490,385,000	342,602,000	19,425,000	2,852,412,000
2033	430,819,000	1,525,439,000	577,673,000	2,533,931,000	351,972,000	18,973,000	2,904,876,000
2034	430,528,000	1,553,102,000	590,070,000	2,573,700,000	360,841,000	18,404,000	2,952,945,000
2035	429,112,000	1,581,293,000	601,793,000	2,612,198,000	367,995,000	17,790,000	2,997,983,000
2036	427,812,000	1,609,701,000	612,815,000	2,650,328,000	374,894,000	17,175,000	3,042,397,000

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



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**HISTORICAL SUMMARY OF MEMBERS**

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

**KPERS**

Valuation		Active Members						Number			Act/Ret Ratio
		Average		Entry Age	Service	Annual Pay (\$)	Pay Increase	Deferred Disabled*	Inactives	Retired	
Date December 31	Total Count	Number	Age								
2000	222,968	137,086	44.2	34.1	10.1	30,307	N/A		34,667	51,215	2.68
2001	229,185	139,253	44.4	34.2	10.2	31,279	3.2%		37,175	52,757	2.64
2002	234,023	140,498	44.7	34.3	10.4	31,634	1.1%		39,420	54,105	2.60
2003	237,123	141,401	45.0	34.4	10.6	32,111	1.5%	2,933	37,280	55,509	2.55
2004	238,375	140,779	45.3	34.4	10.8	32,937	2.6%	3,004	37,191	57,401	2.45
2005	241,684	142,047	45.3	34.4	10.9	33,724	2.4%	3,099	37,015	59,523	2.39
2006	245,555	144,227	45.4	34.6	10.8	35,284	4.6%	3,007	36,513	61,808	2.33
2007	249,624	146,406	45.5	34.7	10.8	36,924	4.6%	2,911	37,140	63,167	2.32
2008	255,427	148,569	45.6	34.7	10.9	38,087	3.1%	2,823	37,567	66,468	2.24
2009	264,280	153,386	45.4	34.7	10.7	38,749	1.7%	2,781	39,212	68,901	2.23
2010	265,477	150,482	45.6	34.9	10.7	40,109	3.5%	2,749	40,122	72,124	2.09
2011	267,713	147,647	45.6	34.4	11.2	40,166	0.1%	2,711	41,358	75,997	1.94

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



**HISTORICAL SUMMARY OF MEMBERS  
(continued)**

**KP&F**

Valuation		Active Members						Number			Act/Ret Ratio
		Average		Entry Age	Service	Annual Pay (\$)	Pay Increase	Deferred Disabled*	Inactives	Retired	
Date December 31	Total Count	Number	Age								
2000	10,083	6,258	38.1	27.7	10.4	44,511	N/A		794	3,031	2.06
2001	10,471	6,405	38.3	27.7	10.6	46,483	4.4%		855	3,211	1.99
2002	10,847	6,548	38.4	27.8	10.6	47,580	2.4%		961	3,338	1.96
2003	11,007	6,464	38.8	27.9	11.0	49,017	3.0%	0	1,087	3,456	1.87
2004	11,528	6,721	38.9	28.0	11.0	51,014	4.1%	187	1,062	3,558	1.89
2005	11,719	6,772	38.9	27.9	11.0	52,222	2.4%	194	1,099	3,654	1.85
2006	12,070	6,965	39.0	28.1	11.0	53,939	3.3%	186	1,134	3,785	1.84
2007	12,210	7,137	39.1	28.1	11.0	56,068	3.9%	175	1,143	3,755	1.90
2008	12,499	7,242	39.1	28.0	11.1	57,800	3.1%	173	1,175	3,909	1.85
2009	12,556	7,179	39.5	28.1	11.4	60,287	4.3%	181	1,136	4,060	1.77
2010	12,691	7,173	39.6	28.2	11.4	61,805	2.5%	181	1,169	4,168	1.72
2011	12,863	7,143	39.6	27.9	11.7	61,907	0.2%	197	1,208	4,315	1.66

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



**HISTORICAL SUMMARY OF MEMBERS  
(continued)**

**JUDGES**

Valuation		Active Members						Number		Act/Ret Ratio
Date December 31	Total Count	Number	Age	Average		Annual Pay (\$)	Pay Increase	Inactives	Retired	
				Entry Age	Service					
2000	411	247	54.2	43.5	10.8	84,794		14	150	1.65
2001	417	252	54.4	43.9	10.5	85,625	1.0%	18	147	1.71
2002	417	248	55.0	43.9	11.1	86,116	0.6%	15	154	1.64
2003	424	250	55.1	43.8	11.3	86,770	0.8%	15	159	1.56
2004	435	251	55.5	43.9	11.6	88,761	2.3%	18	166	1.51
2005	444	254	55.7	44.1	11.6	90,585	2.1%	19	171	1.47
2006	447	257	56.2	44.2	11.9	96,743	6.8%	18	172	1.49
2007	455	261	56.6	44.8	11.8	101,732	5.2%	14	180	1.45
2008	463	262	57.1	45.2	11.9	104,159	2.4%	11	190	1.38
2009	483	266	57.1	45.6	11.5	105,709	1.5%	14	203	1.31
2010	480	264	57.8	45.7	12.1	107,019	1.2%	10	206	1.28
2011	486	264	58.1	45.5	12.6	109,387	2.2%	7	215	1.23



**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**SUMMARY OF DATA FILE RECONCILIATION**

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

Records on the in-pay data file	94,071
Removed deaths prior to 12/31/11	(13,544)
Records used in the valuation	80,527
Records on the not-in-pay data file	223,992
Records removed because the member has received all benefits or is in a non-benefiting group	(23,260)
Records used in the valuation	200,732

These records are allocated as follows:

	<b>State</b>	<b>School</b>	<b>Local</b>	<b>KP&amp;F</b>	<b>Judges</b>
Active members	23,917	84,183	39,547	7,143	264
Inactive vested members	3,580	8,915	4,821	396	7
Inactive nonvested members	<u>3,088</u>	<u>15,054</u>	<u>8,808</u>	<u>1,009</u>	<u>0</u>
Total Not-in pay	30,585	108,152	53,176	8,548	271
Retirees and beneficiaries	17,801	42,590	15,606	4,315	215
<b>TOTAL</b>	<b>48,386</b>	<b>150,742</b>	<b>68,782</b>	<b>12,863</b>	<b>486</b>





## SUMMARY OF MEMBERSHIP DATA

### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTIVE MEMBER DATA

	12/31/2011	12/31/2010	Change
<b>State/School</b>			
Number	108,100	110,175	(1.9%)
Average Current Age	45.68	45.71	(0.1%)
Average Service	11.67	11.66	0.1%
Average Pay	\$39,874	\$39,795	0.2%
<b>State</b>			
Number	23,917	25,737	(7.1%)
Average Current Age	46.77	46.94	(0.4%)
Average Service	12.16	12.38	(1.8%)
Average Pay	\$41,632	\$41,533	0.2%
<b>School</b>			
Number	84,183	84,438	(0.3%)
Average Current Age	45.37	45.33	0.1%
Average Service	11.53	11.44	0.8%
Average Pay	\$39,375	\$39,265	0.3%
<b>Local</b>			
Number	39,547	40,307	(1.9%)
Average Current Age	45.30	45.19	0.2%
Average Service	10.09	9.89	2.0%
Average Pay	\$40,964	\$40,651	0.8%
<b>KPERS Total</b>			
Number	147,647	150,482	(1.9%)
Average Current Age	45.58	45.57	0.0%
Average Service	11.25	11.19	0.5%
Average Pay	\$40,166	\$40,024	0.4%



**SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
ACTIVE MEMBER DATA

	12/31/2011	12/31/2010	Change
<b>KP&amp;F</b>			
Number	7,143	7,173	(0.4%)
Tier I	373	434	(14.1%)
Tier II	6,770	6,739	0.5%
Average Current Age	39.56	39.61	(0.1%)
Average Service	11.66	11.65	0.1%
Average Pay	\$61,907	\$61,743	0.3%
<b>Judges</b>			
Number	264	264	0.0%
Average Current Age	58.08	57.79	0.5%
Average Service	12.57	12.31	2.1%
Average Pay	\$109,387	\$107,019	2.2%
<b>System Total</b>			
Number	155,054	157,919	(1.8%)
Average Current Age	45.32	45.32	0.0%
Average Service	11.27	11.21	0.5%
Average Pay	\$41,285	\$41,123	0.4%



## SUMMARY OF MEMBERSHIP DATA

### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM INACTIVE MEMBER DATA

	12/31/2011	12/31/2010	Change
<b>State</b>			
inactive vested	2,639	2,443	8.0%
inactive nonvested	3,088	2,967	4.1%
deferred disabled	941	953	(1.3%)
<b>School</b>			
inactive vested	7,893	6,898	14.4%
inactive nonvested	15,054	16,196	(7.1%)
deferred disabled	1,022	1,031	(0.9%)
<b>Local</b>			
inactive vested	4,073	3,485	16.9%
inactive nonvested	8,808	8,133	8.3%
deferred disabled	748	765	(2.2%)
<b>KPERS Total</b>			
inactive vested	14,605	12,826	13.9%
inactive nonvested	26,950	27,296	(1.3%)
deferred disabled	2,711	2,749	(1.4%)
<b>KP&amp;F</b>			
inactive vested	199	174	14.4%
inactive nonvested	1,009	995	1.4%
deferred disabled	197	181	8.8%
<b>Judges</b>			
inactive vested	7	10	(30.0%)
inactive nonvested	0	0	
deferred disabled	0	0	
<b>System Total</b>			
inactive vested	14,811	13,010	13.8%
inactive nonvested	27,959	28,291	(1.2%)
deferred disabled	2,908	2,930	(0.8%)



## SUMMARY OF MEMBERSHIP DATA

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

	12/31/2011	12/31/2010	Change
<b>State</b>			
Number	17,801	16,375	8.7%
Average Benefit	\$12,734	\$11,987	6.2%
Average Age	72.51	73.27	(1.0%)
<b>School</b>			
Number	42,590	40,856	4.2%
Average Benefit	\$13,737	\$13,450	2.1%
Average Age	72.02	72.03	(0.0%)
<b>Local</b>			
Number	15,606	14,893	4.8%
Average Benefit	\$9,781	\$9,441	3.6%
Average Age	72.59	72.76	(0.2%)
<b>KPERS Total</b>			
Number	75,997	72,124	5.4%
Average Benefit	\$12,690	\$12,290	3.2%
Average Age	72.25	72.46	(0.3%)
<b>KP&amp;F</b>			
Number	4,315	4,168	3.5%
Average Benefit	\$27,696	\$26,837	3.2%
Average Age	65.32	64.80	0.8%
<b>Judges</b>			
Number	215	206	4.4%
Average Benefit	\$37,367	\$36,582	2.1%
Average Age	74.50	74.45	0.1%
<b>System Total</b>			
Number	80,527	76,498	5.3%
Average Benefit	\$13,560	\$13,148	3.1%
Average Age	71.89	72.05	(0.2%)

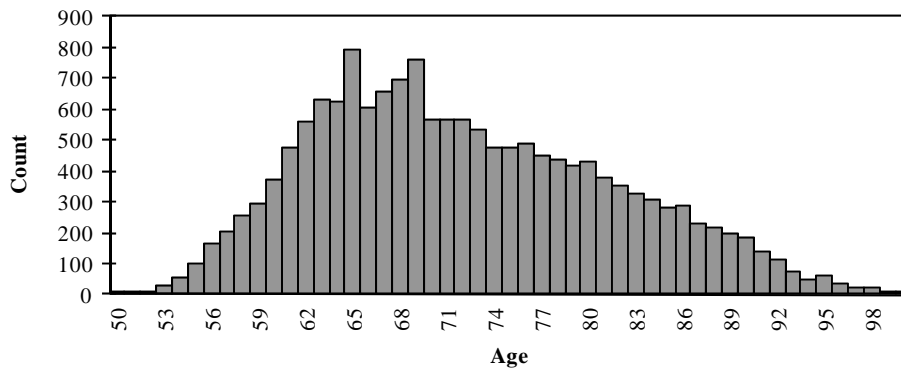


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2011

**STATE**

**Retirees**



Count: 16,030    Average age: 72.1    Average benefit: \$13,228

**Beneficiaries**



Count: 1,771    Average age: 76.5    Average benefit: \$8,264

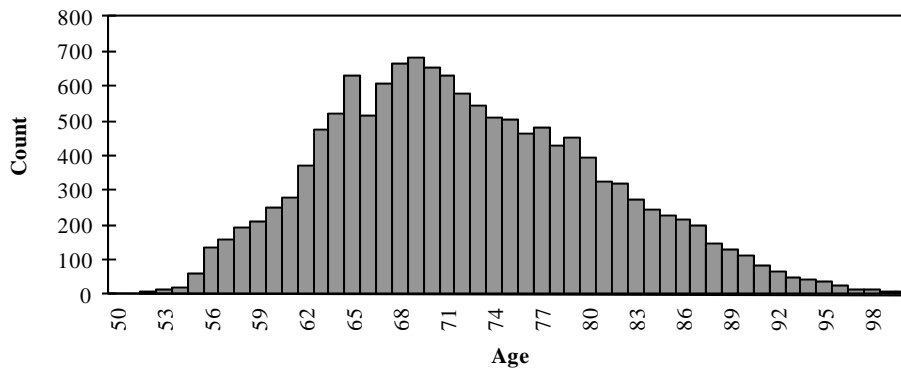


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2011

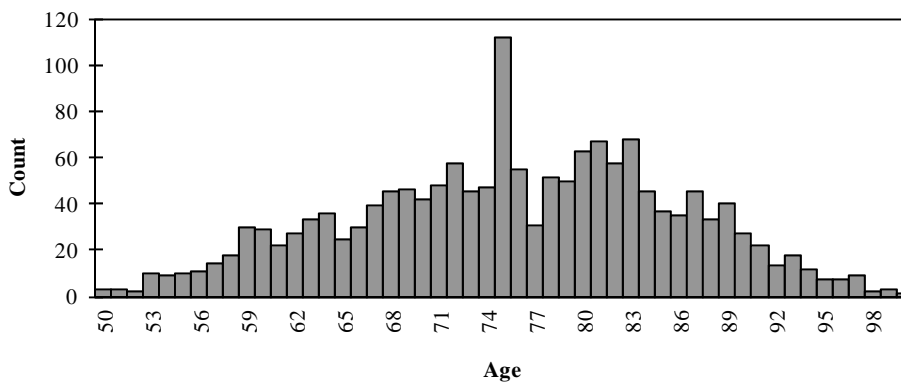
**LOCAL**

**Retirees**



Count: 13,988    Average age: 72.7    Average benefit: \$10,164

**Beneficiaries**



Count: 1,618    Average age: 75.0    Average benefit: \$6,475

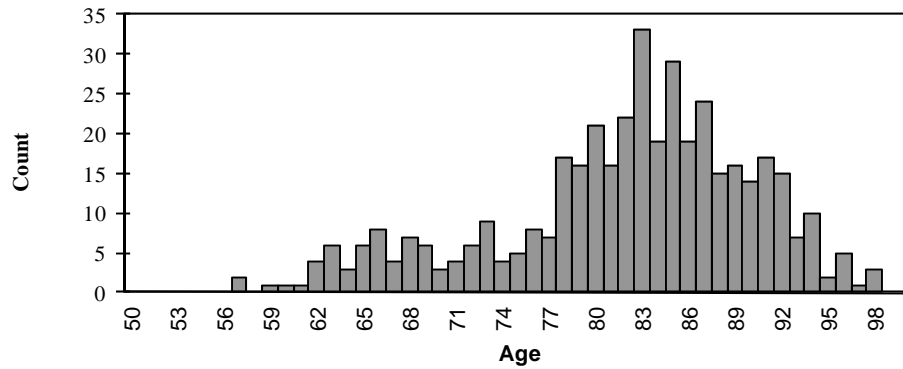


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2011

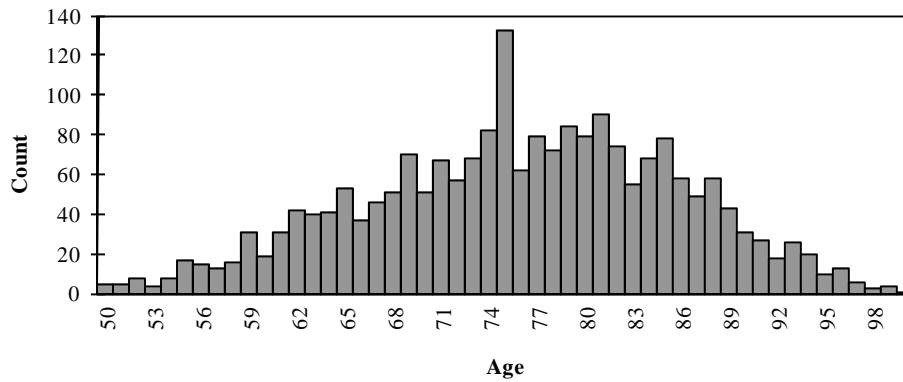
**SCHOOL**

**Retirees**



Count: 40,454    Average age: 71.8    Average benefit: \$14,008

**Beneficiaries**



Count: 2,136    Average age: 75.6    Average benefit: \$8,599

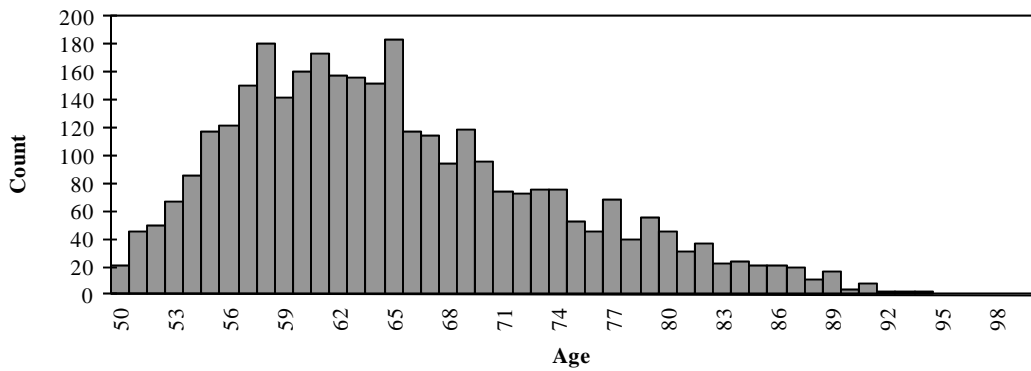


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2011

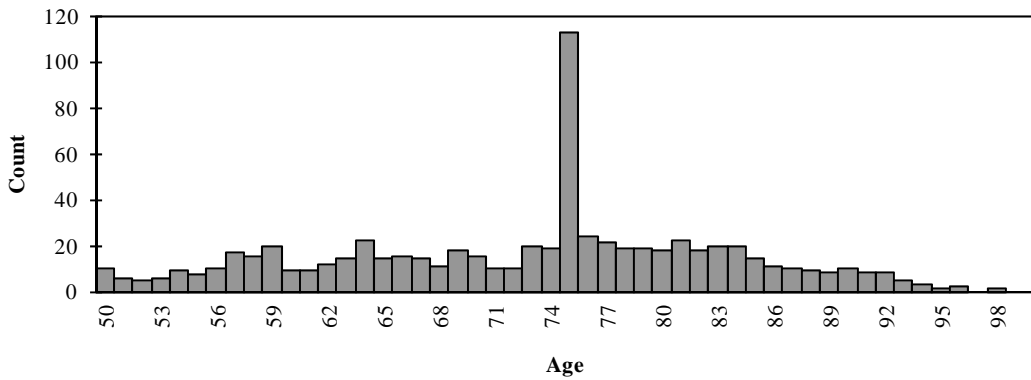
**KP&F**

**Retirees**



Count: 3,473      Average age: 64.3      Average benefit: \$30,851

**Beneficiaries**



Count: 842      Average age: 65.3      Average benefit: \$14,685



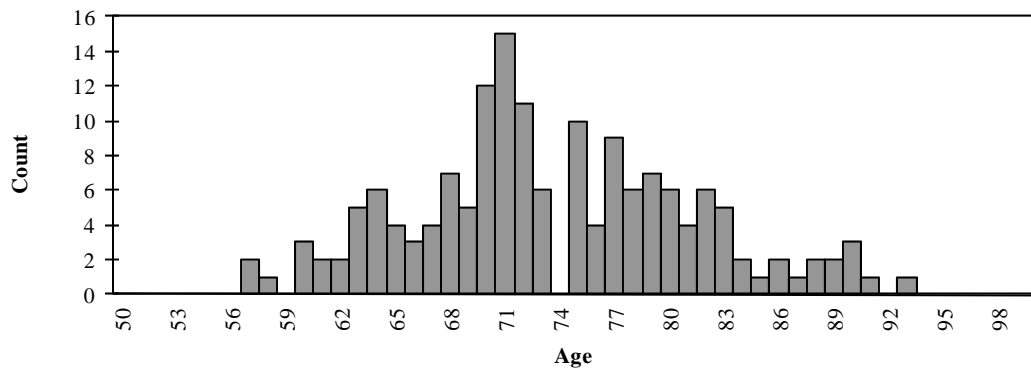


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2011

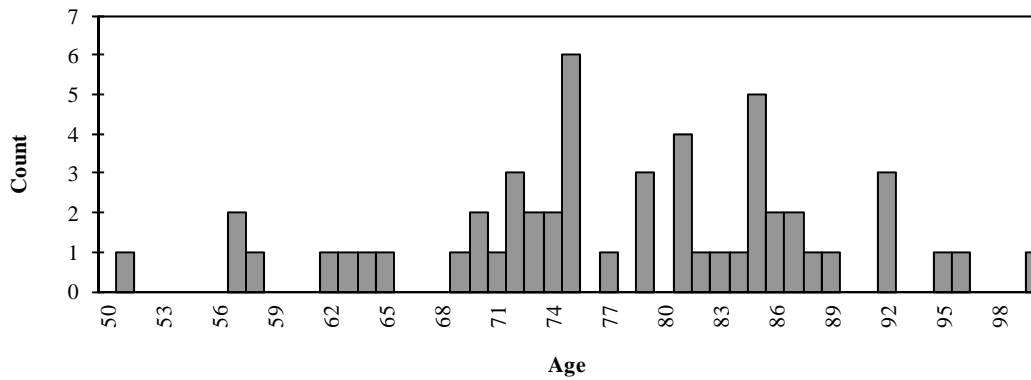
**JUDGES**

**Retirees**



Count: 160      Average age: 73.6      Average benefit: \$40,935

**Beneficiaries**



Count: 55      Average age: 77.1      Average benefit: \$26,987



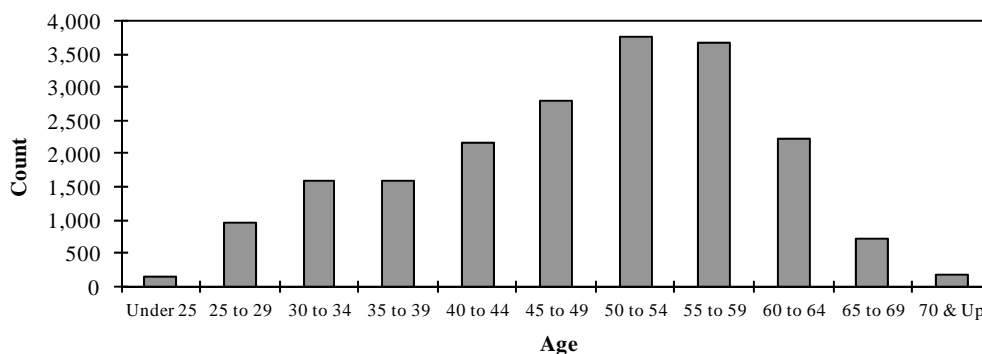
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

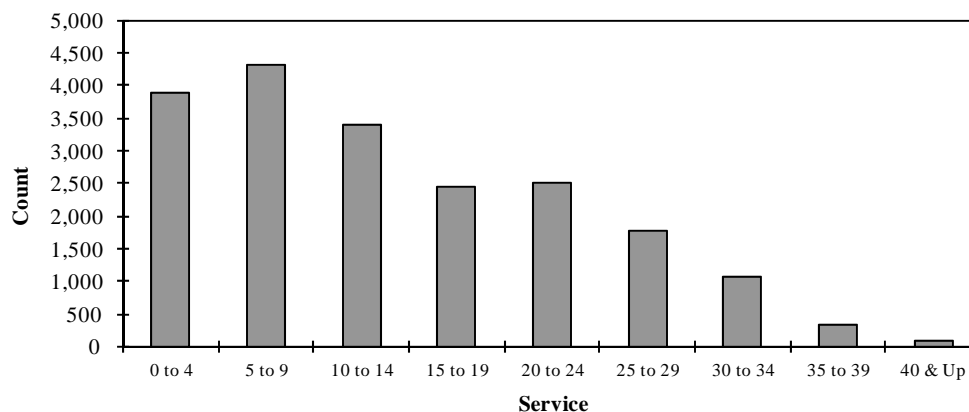
**STATE - Tier 1**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	138	2	0	0	0	0	0	0	0	140
25 to 29	676	271	2	0	0	0	0	0	0	949
30 to 34	702	712	188	1	0	0	0	0	0	1,603
35 to 39	446	576	514	69	1	0	0	0	0	1,606
40 to 44	424	555	575	463	134	8	0	0	0	2,159
45 to 49	352	531	501	488	606	286	19	0	0	2,783
50 to 54	436	555	578	491	657	642	408	7	0	3,774
55 to 59	377	568	540	501	613	511	417	135	1	3,663
60 to 64	236	387	355	313	365	226	164	145	38	2,229
65 to 69	64	127	107	97	111	68	50	32	48	704
70 & Up	20	26	29	20	25	17	11	7	14	169
<b>Total</b>	<b>3,871</b>	<b>4,310</b>	<b>3,389</b>	<b>2,443</b>	<b>2,512</b>	<b>1,758</b>	<b>1,069</b>	<b>326</b>	<b>101</b>	<b>19,779</b>

**Age Distribution**



**Service Distribution**





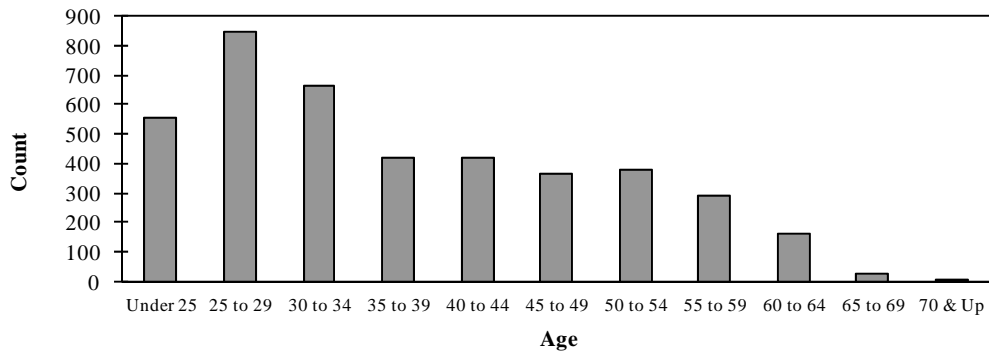
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

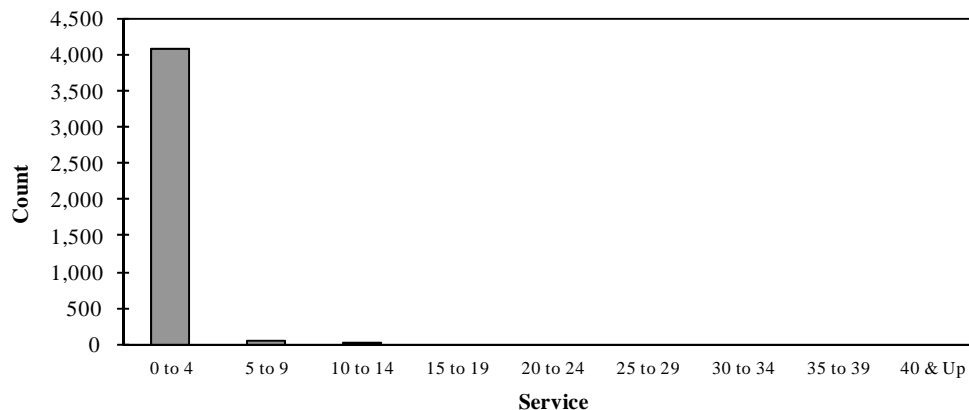
**STATE - Tier 2**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	554	0	0	0	0	0	0	0	0	554
25 to 29	846	2	0	0	0	0	0	0	0	848
30 to 34	657	7	0	0	0	0	0	0	0	664
35 to 39	412	7	3	0	0	0	0	0	0	422
40 to 44	408	11	1	0	0	0	0	0	0	420
45 to 49	360	7	1	0	0	0	0	0	0	368
50 to 54	369	6	2	0	0	0	0	0	0	377
55 to 59	278	9	2	0	0	0	0	0	0	289
60 to 64	158	1	1	0	0	0	0	0	0	160
65 to 69	27	0	1	0	0	0	0	0	0	28
70 & Up	7	1	0	0	0	0	0	0	0	8
<b>Total</b>	<b>4,076</b>	<b>51</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,138</b>

**Age Distribution**



**Service Distribution**





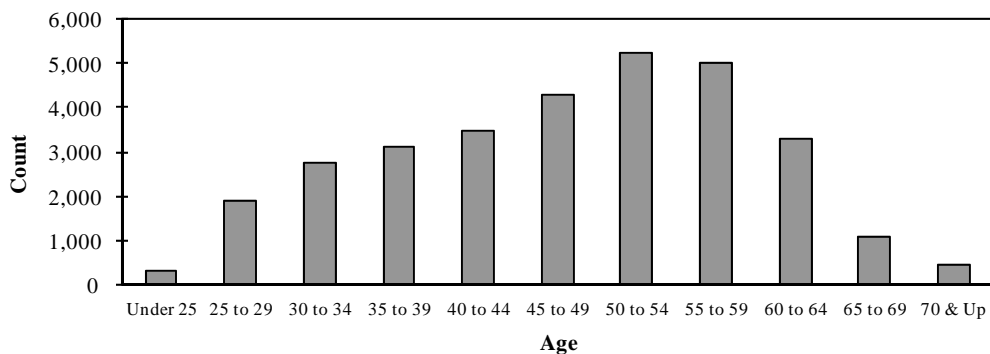
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

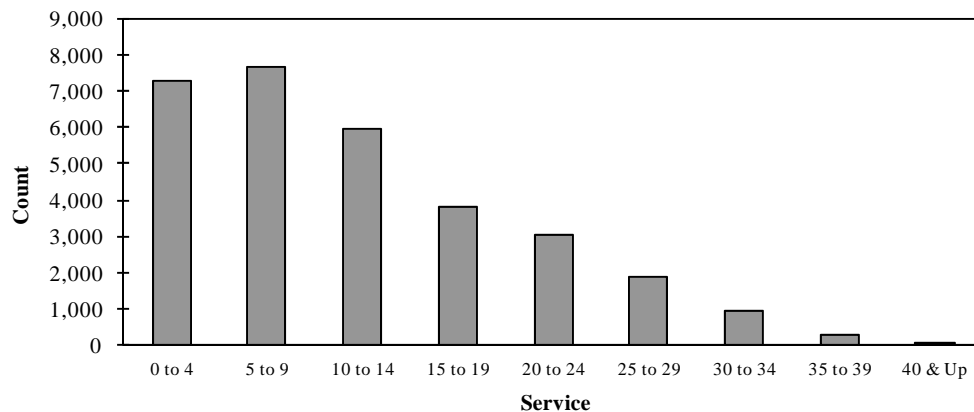
**LOCAL - Tier 1**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	308	6	0	0	0	0	0	0	0	314
25 to 29	1,429	485	6	0	0	0	0	0	0	1,920
30 to 34	1,155	1,273	326	2	0	0	0	0	0	2,756
35 to 39	883	1,102	946	205	0	0	0	0	0	3,136
40 to 44	751	980	931	616	205	3	0	0	0	3,486
45 to 49	779	914	929	710	696	257	27	0	0	4,312
50 to 54	729	961	1,029	806	736	625	345	7	0	5,238
55 to 59	613	943	908	789	722	559	335	131	10	5,010
60 to 64	407	673	581	467	511	301	190	120	35	3,285
65 to 69	138	224	226	171	126	88	49	33	26	1,081
70 & Up	86	101	84	67	38	29	13	9	11	438
<b>Total</b>	<b>7,278</b>	<b>7,662</b>	<b>5,966</b>	<b>3,833</b>	<b>3,034</b>	<b>1,862</b>	<b>959</b>	<b>300</b>	<b>82</b>	<b>30,976</b>

**Age Distribution**



**Service Distribution**





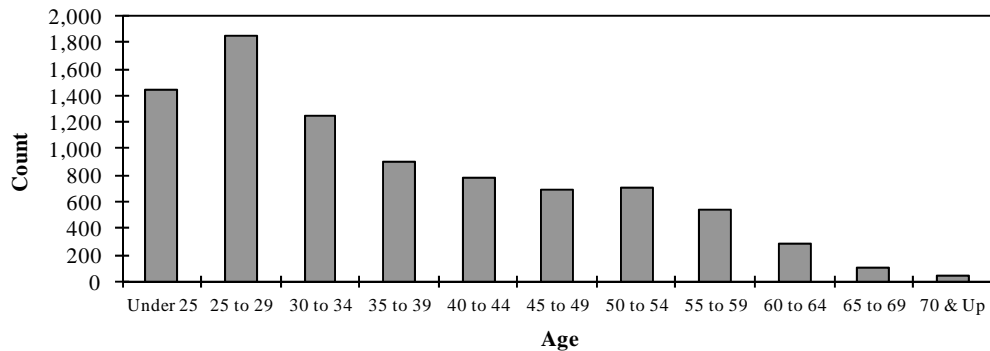
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

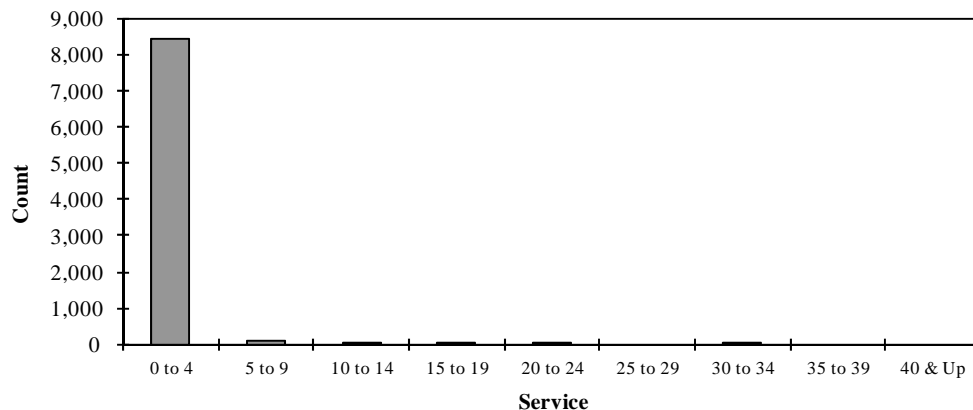
**LOCAL - Tier 2**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	1,447	0	0	0	0	0	0	0	0	1,447
25 to 29	1,833	10	0	0	0	0	0	0	0	1,843
30 to 34	1,225	20	1	0	0	0	0	0	0	1,246
35 to 39	872	23	2	1	0	0	0	0	0	898
40 to 44	769	15	0	0	0	0	0	0	0	784
45 to 49	680	13	3	0	0	0	0	0	0	696
50 to 54	692	5	2	0	0	0	1	0	0	700
55 to 59	526	7	3	0	2	0	0	0	0	538
60 to 64	269	7	2	0	0	0	0	0	0	278
65 to 69	88	7	1	0	0	0	0	0	0	96
70 & Up	45	0	0	0	0	0	0	0	0	45
<b>Total</b>	<b>8,446</b>	<b>107</b>	<b>14</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>8,571</b>

**Age Distribution**



**Service Distribution**





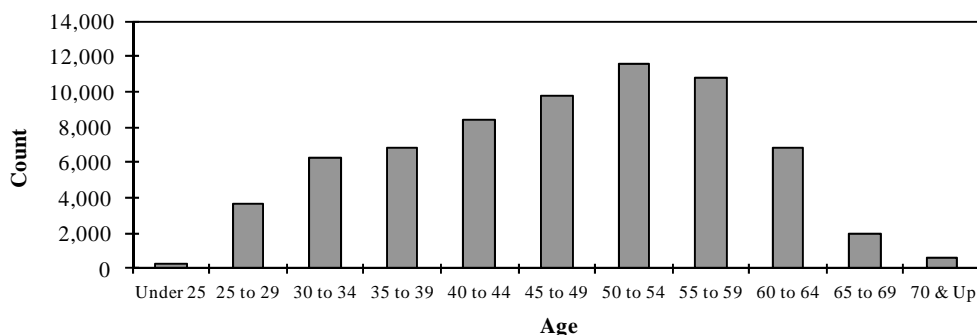
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

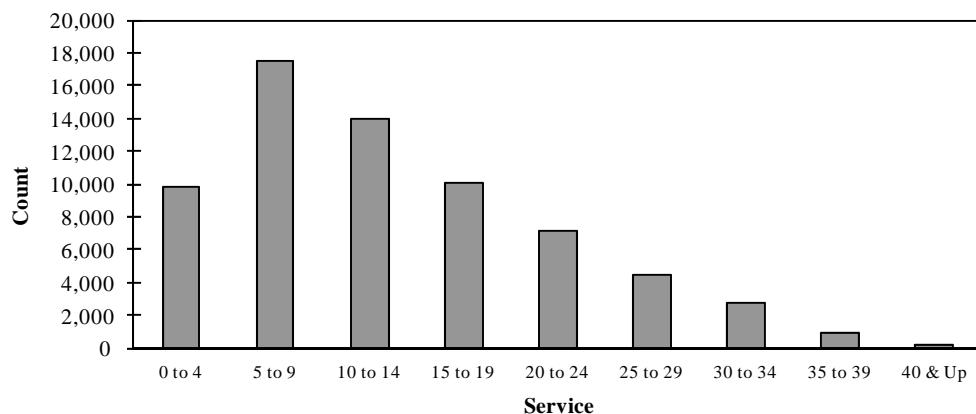
**SCHOOL - Tier 1**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	197	28	0	0	1	0	0	0	0	226
25 to 29	2,249	1,395	13	1	0	0	0	0	0	3,658
30 to 34	1,258	4,121	869	6	0	0	0	0	0	6,254
35 to 39	1,154	2,099	3,061	485	0	0	0	0	0	6,799
40 to 44	1,270	2,228	2,041	2,426	414	6	0	0	0	8,385
45 to 49	1,130	2,339	2,043	1,653	2,066	522	17	0	0	9,770
50 to 54	1,023	2,083	2,358	1,927	1,488	1,937	711	4	0	11,531
55 to 59	733	1,543	1,906	2,020	1,668	1,158	1,408	356	1	10,793
60 to 64	523	1,043	1,140	1,214	1,189	682	464	459	90	6,804
65 to 69	211	399	361	285	250	156	109	68	72	1,911
70 & Up	87	198	134	88	43	35	16	7	26	634
<b>Total</b>	<b>9,835</b>	<b>17,476</b>	<b>13,926</b>	<b>10,105</b>	<b>7,119</b>	<b>4,496</b>	<b>2,725</b>	<b>894</b>	<b>189</b>	<b>66,765</b>

**Age Distribution**



**Service Distribution**





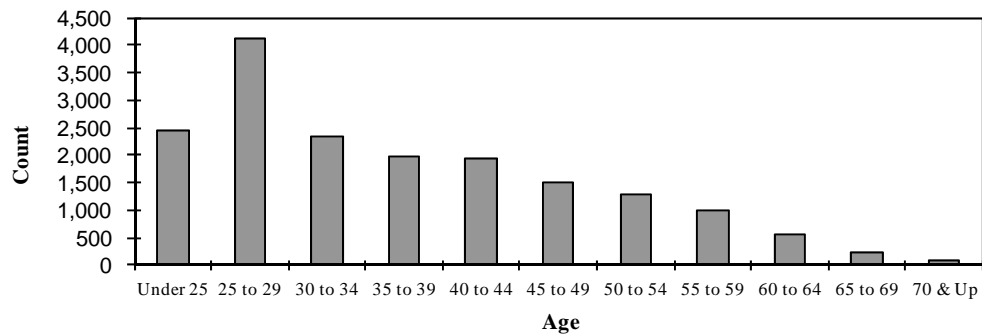
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

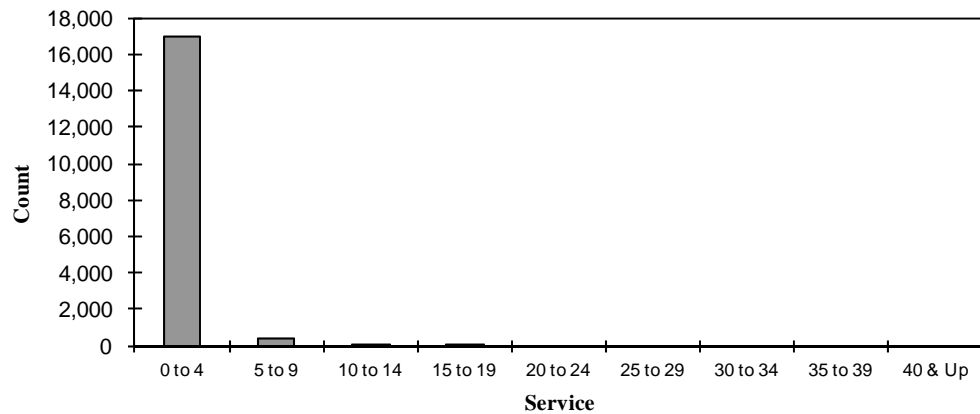
**SCHOOL - Tier 2**

Age	Service										Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up		
Under 25	2,435	1	0	0	0	0	0	0	0	0	2,436
25 to 29	4,083	26	0	0	0	0	0	0	0	0	4,109
30 to 34	2,236	90	1	0	0	0	0	0	0	0	2,327
35 to 39	1,884	74	16	0	0	0	0	0	0	0	1,974
40 to 44	1,885	55	5	0	0	0	0	0	0	0	1,945
45 to 49	1,452	56	7	0	0	0	0	0	0	0	1,515
50 to 54	1,220	44	5	1	0	0	0	0	0	0	1,270
55 to 59	953	24	4	0	0	0	0	0	0	0	981
60 to 64	533	13	1	0	0	0	0	0	0	0	547
65 to 69	214	4	0	0	0	0	0	0	0	0	218
70 & Up	96	0	0	0	0	0	0	0	0	0	96
<b>Total</b>	<b>16,991</b>	<b>387</b>	<b>39</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17,418</b>

**Age Distribution**



**Service Distribution**





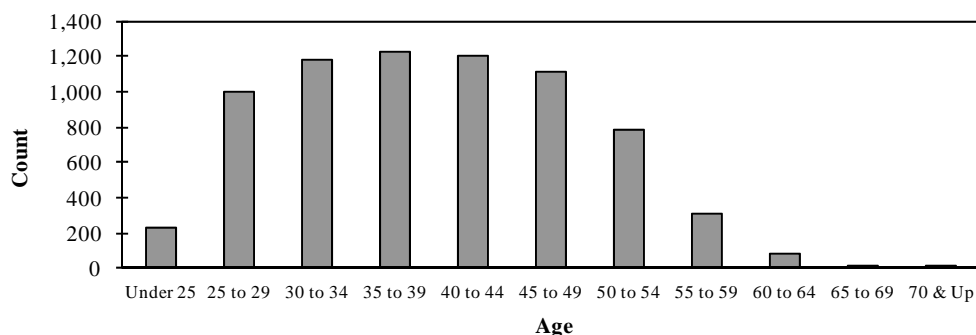
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

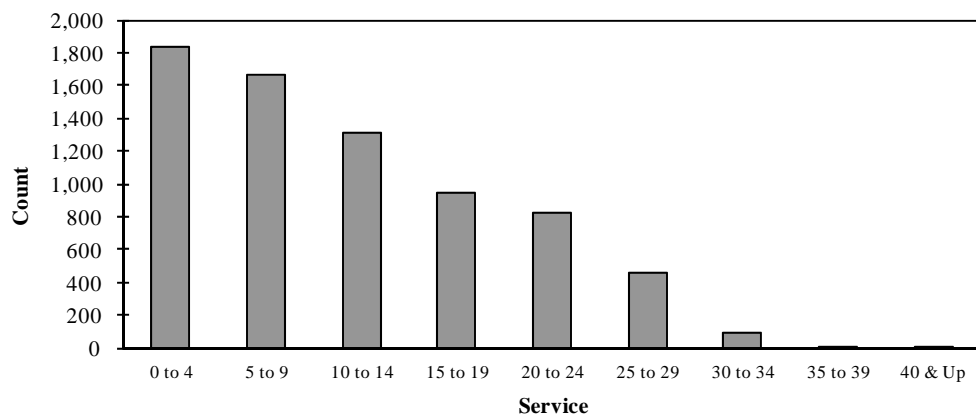
**KP&F**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	232	0	0	0	0	0	0	0	0	232
25 to 29	749	248	0	0	0	0	0	0	0	997
30 to 34	409	623	151	1	0	0	0	0	0	1,184
35 to 39	230	346	524	120	1	0	0	0	0	1,221
40 to 44	101	210	361	406	120	2	0	0	0	1,200
45 to 49	67	121	154	236	392	142	2	0	0	1,114
50 to 54	30	63	72	121	215	232	53	0	0	786
55 to 59	17	32	29	41	74	69	37	5	0	304
60 to 64	3	20	14	14	17	11	6	2	0	87
65 to 69	0	5	3	3	0	0	1	0	3	15
70 & Up	0	3	0	0	0	0	0	0	0	3
<b>Total</b>	<b>1,838</b>	<b>1,671</b>	<b>1,308</b>	<b>942</b>	<b>819</b>	<b>456</b>	<b>99</b>	<b>7</b>	<b>3</b>	<b>7,143</b>

**Age Distribution**



**Service Distribution**







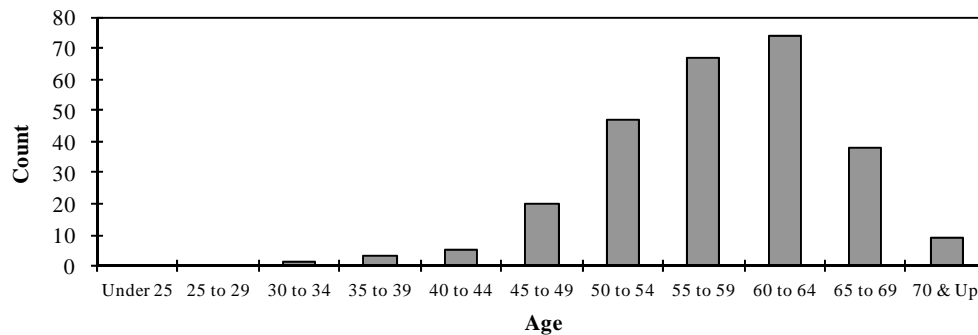
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2011

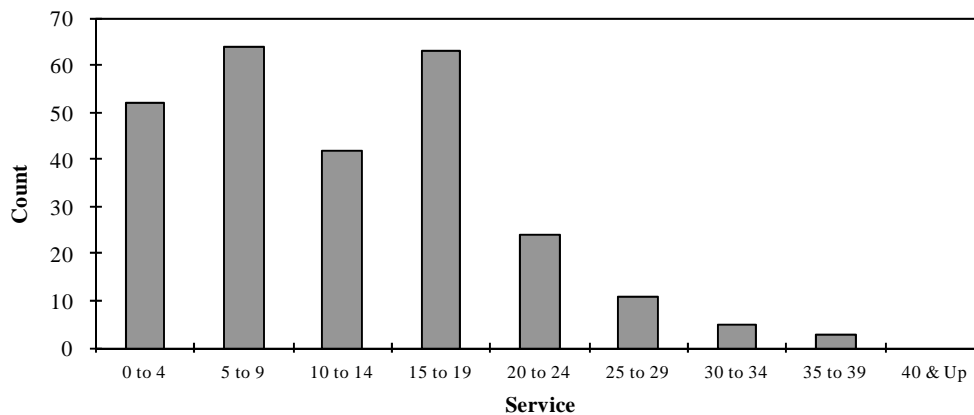
**JUDGES**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	1	0	0	0	0	0	0	0	0	1
35 to 39	2	0	0	1	0	0	0	0	0	3
40 to 44	3	2	0	0	0	0	0	0	0	5
45 to 49	12	7	1	0	0	0	0	0	0	20
50 to 54	12	22	9	3	1	0	0	0	0	47
55 to 59	16	14	14	16	5	2	0	0	0	67
60 to 64	4	12	11	25	12	6	4	0	0	74
65 to 69	1	7	5	15	4	3	1	2	0	38
70 & Up	1	0	2	3	2	0	0	1	0	9
<b>Total</b>	<b>52</b>	<b>64</b>	<b>42</b>	<b>63</b>	<b>24</b>	<b>11</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>264</b>

**Age Distribution**



**Service Distribution**





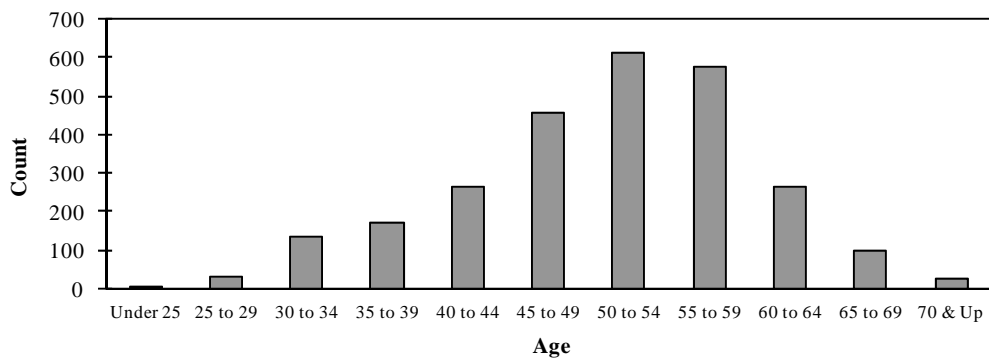
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS**

as of December 31, 2011

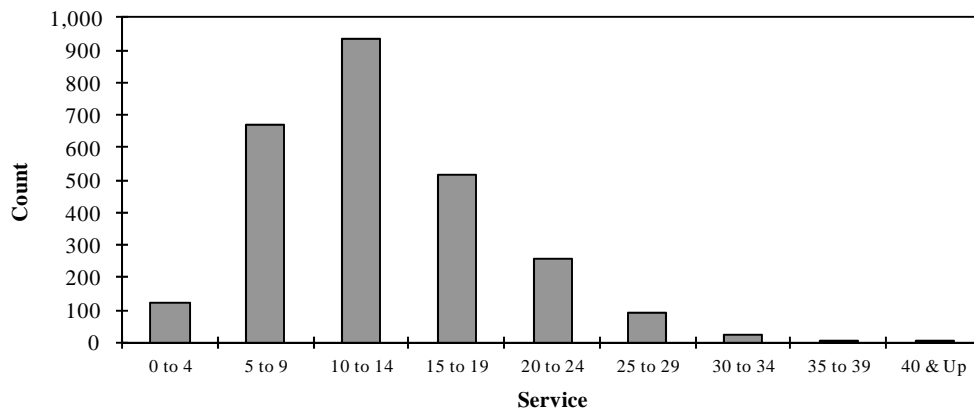
**STATE**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	1	0	0	0	0	0	0	0	0	1
25 to 29	9	20	0	0	0	0	0	0	0	29
30 to 34	17	103	16	0	0	0	0	0	0	136
35 to 39	17	97	54	4	0	0	0	0	0	172
40 to 44	13	82	129	37	5	0	0	0	0	266
45 to 49	5	93	194	116	39	10	0	0	0	457
50 to 54	5	109	216	159	74	40	10	0	0	613
55 to 59	10	95	225	133	81	25	5	3	0	577
60 to 64	5	51	85	53	45	15	6	3	2	265
65 to 69	29	21	14	12	11	4	3	2	3	99
70 & Up	13	2	4	3	1	0	1	0	0	24
<b>Total</b>	<b>124</b>	<b>673</b>	<b>937</b>	<b>517</b>	<b>256</b>	<b>94</b>	<b>25</b>	<b>8</b>	<b>5</b>	<b>2,639</b>

**Age Distribution**



**Service Distribution**



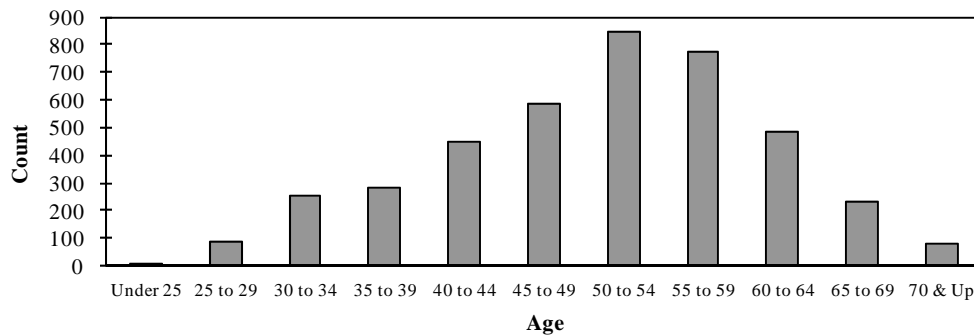


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS**  
as of December 31, 2011

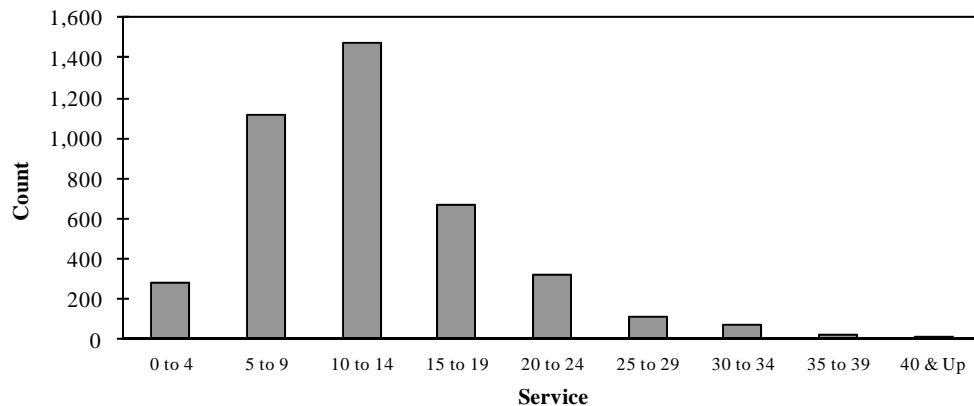
**LOCAL**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	1	0	0	0	0	0	0	0	1
25 to 29	29	57	1	0	0	0	0	0	0	87
30 to 34	38	195	19	0	0	0	0	0	0	252
35 to 39	16	139	119	10	0	0	0	0	0	284
40 to 44	17	149	205	73	4	0	0	0	1	449
45 to 49	21	140	247	134	40	4	0	0	0	586
50 to 54	10	133	370	193	94	28	19	1	0	848
55 to 59	10	147	305	155	83	43	22	5	1	771
60 to 64	17	105	154	79	65	29	20	11	4	484
65 to 69	68	44	45	17	33	9	8	5	3	232
70 & Up	54	6	7	4	1	3	2	0	2	79
<b>Total</b>	<b>280</b>	<b>1,116</b>	<b>1,472</b>	<b>665</b>	<b>320</b>	<b>116</b>	<b>71</b>	<b>22</b>	<b>11</b>	<b>4,073</b>

**Age Distribution**



**Service Distribution**





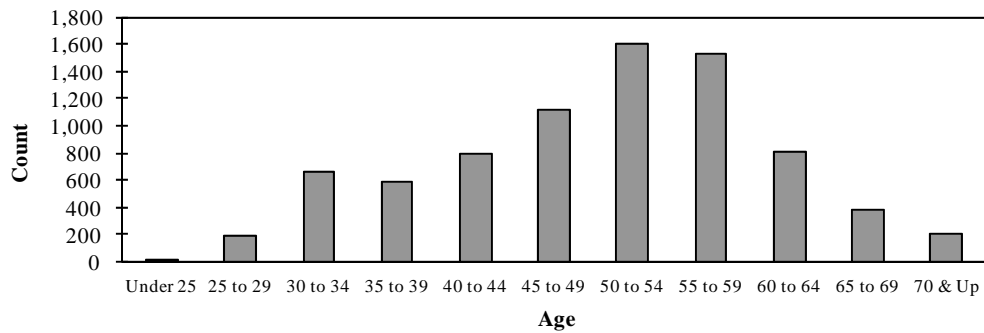
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS**

as of December 31, 2011

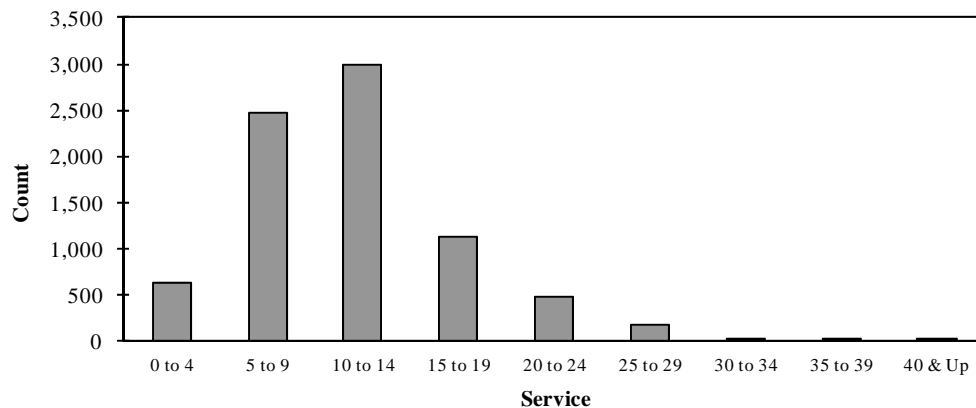
**SCHOOL**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	2	3	0	1	0	0	0	0	0	6
25 to 29	48	143	1	0	0	0	0	0	0	192
30 to 34	69	546	43	0	0	0	0	0	0	658
35 to 39	40	291	250	15	0	0	0	0	0	596
40 to 44	42	304	346	99	5	0	0	0	0	796
45 to 49	41	292	529	174	70	10	0	0	0	1,116
50 to 54	31	319	708	321	149	62	11	0	0	1,601
55 to 59	12	271	692	317	154	72	13	2	0	1,533
60 to 64	14	192	336	164	75	22	2	2	1	808
65 to 69	184	73	62	30	17	5	5	2	2	380
70 & Up	149	27	16	7	4	2	1	0	1	207
<b>Total</b>	<b>632</b>	<b>2,461</b>	<b>2,983</b>	<b>1,128</b>	<b>474</b>	<b>173</b>	<b>32</b>	<b>6</b>	<b>4</b>	<b>7,893</b>

**Age Distribution**



**Service Distribution**





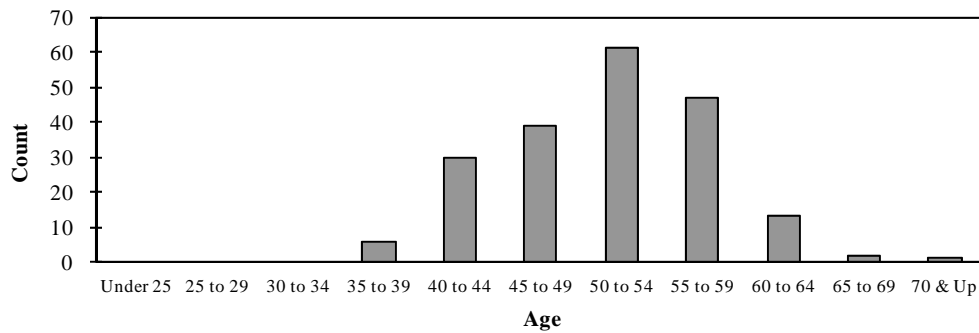
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS**

as of December 31, 2011

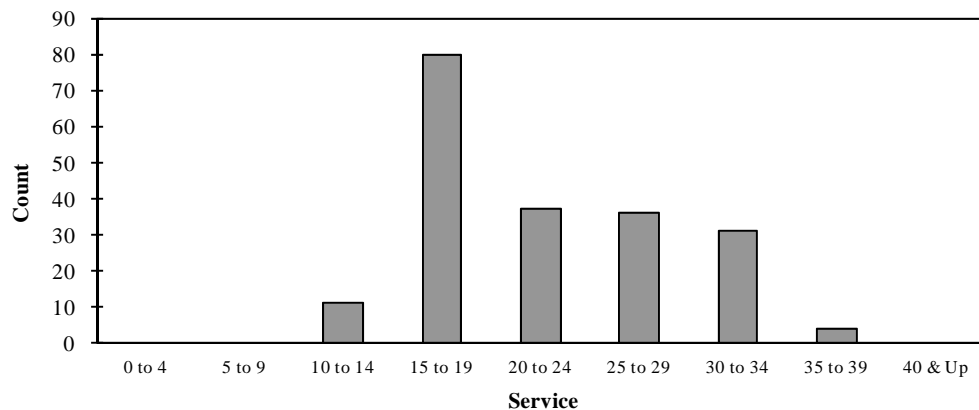
**KP&F**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	1	5	0	0	0	0	0	6
40 to 44	0	0	3	25	2	0	0	0	0	30
45 to 49	0	0	2	21	10	6	0	0	0	39
50 to 54	0	0	2	15	19	11	13	1	0	61
55 to 59	0	0	2	12	2	15	13	3	0	47
60 to 64	0	0	1	1	3	3	5	0	0	13
65 to 69	0	0	0	1	0	1	0	0	0	2
70 & Up	0	0	0	0	1	0	0	0	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>80</b>	<b>37</b>	<b>36</b>	<b>31</b>	<b>4</b>	<b>0</b>	<b>199</b>

**Age Distribution**



**Service Distribution**





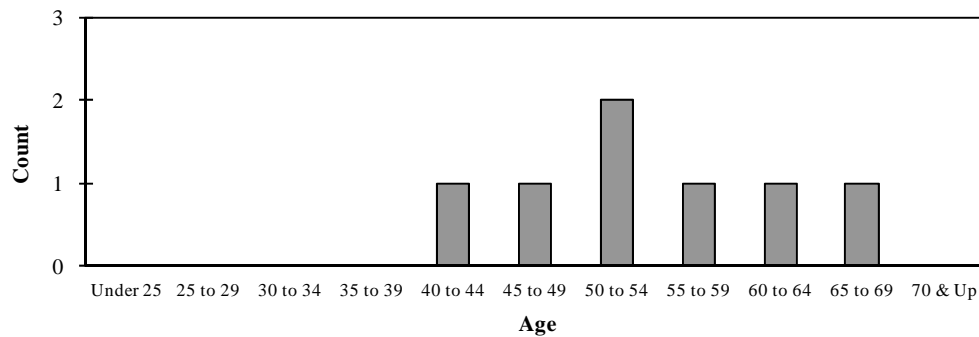
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS**

as of December 31, 2011

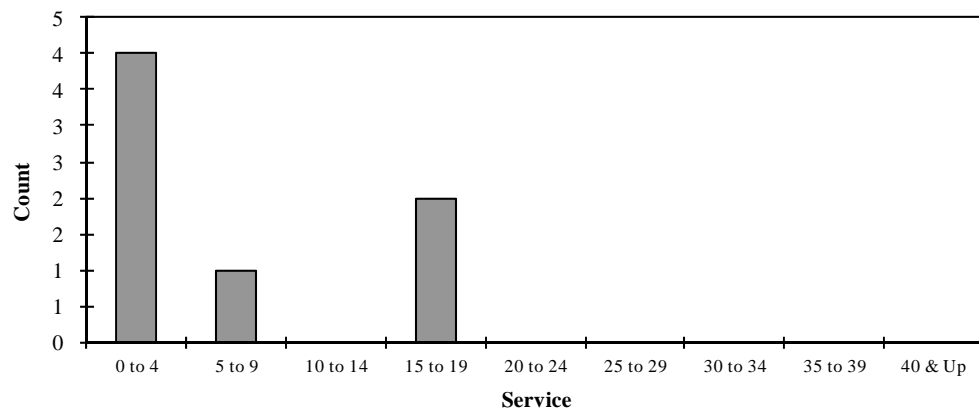
**JUDGES**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0
40 to 44	1	0	0	0	0	0	0	0	0	1
45 to 49	1	0	0	0	0	0	0	0	0	1
50 to 54	2	0	0	0	0	0	0	0	0	2
55 to 59	0	1	0	0	0	0	0	0	0	1
60 to 64	0	0	0	1	0	0	0	0	0	1
65 to 69	0	0	0	1	0	0	0	0	0	1
70 & Up	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>

**Age Distribution**



**Service Distribution**





## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### 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 who work at least 630 hours per year or 3.5 hours per day for at least 180 days are eligible for membership. Effective July 1, 2009, all employees become KPERs members on their date of employment. Prior to July 1, 2009 only School employees were covered immediately. There was a one-year service requirement for the State and Local group. Those who retire under the provisions of the Retirement System may not become contributing members again.

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

\* Members who participate on or after July 1, 2009 are referred to as Tier 2 members.

This valuation reflects the benefit structure in place as of December 31, 2011, as amended by Senate Sub House Bill 2333, passed by the 2012 Legislature. Only changes that impact Tier 1 and Tier 2 members are included in this summary of provisions. Tier 3 benefits are not included as there were no such members in the valuation.

### Normal Retirement

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

**Tier 2:** (a) Age 65 with 5 years of credited service or (b) age 60 with 30 years of credited service.

**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 and before July 1, 2009, Final Average Salary equals the average of the three highest years of service, excluding add-ons, such as sick and annual leave. Effective July 1, 2009



## **APPENDIX B – SUMMARY OF PLAN PROVISIONS**

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(Tier 2), Final Average Salary equals the average of the five highest years of salary, excluding additional compensation.

**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 –**

**Tier 1:** Participating service credit is 1.75% of Final Average Salary for years of service prior to January 1, 2014. For members who make employee contributions at 5% or 6%, participating service credit is 1.85% of Final Average Salary for years of service after December 31, 2013.

**Tier 2:** For members retiring prior to January 1, 2014, participating service credit is 1.75% of Final Average Salary for all years of service. For those retiring on or after January 1, 2014, participating service credit is 1.85% for all years of service.

### **Early Retirement**

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

**Benefit – Tier 1:** 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.

**Tier 2:** The normal retirement benefit is reduced actuarially for early commencement. The reduction factor is 35% at age 60 and 57.5% at age 55. If the member has 30 years of credited service, the early retirement reduction is less (50% of regular reduction).

### **Vesting Requirements**

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

**Benefit** – 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 31 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





## **APPENDIX B – SUMMARY OF PLAN PROVISIONS**

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Average Salary is adjusted by the actuarial salary increase assumption rates in existence during the member's period of disability prior to July 1, 1993, 5% per year to July, 1998 and the change in CPI-U less 1%, not to exceed 4% after July, 1998.

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

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

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

### **Member Contributions**

Prior to January 1, 2014, member contributions are 4% of compensation for Tier 1. If the IRS approves an election for Tier 1 members, they will have a choice to elect to contribute: (1) 5% beginning January 1, 2014 and 6% effective January 1, 2015 and receive a 1.85% multiplier for future years of service or (2) remain at a contribution rate of 4% and receive a 1.40% multiplier for future years of service. The member contribution rate for Tier 2 is 6% of compensation. Interest is credited to members' contribution accounts on June 30 each year, based on the account balance as of the preceding December 31. Those who became members prior to July 1, 1993, have interest credited to their accounts at the rate of 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.



## **APPENDIX B – SUMMARY OF PLAN PROVISIONS**

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### **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.

### **Cost of Living Adjustments (COLAs)**

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

## **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.



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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**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.



## **APPENDIX B – SUMMARY OF PLAN PROVISIONS**

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

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

### **Classifications**

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

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

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

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

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

### **Member Contributions**

Member contributions are 7% of compensation. For members with 32 years of credited service, the contribution rate is reduced to 2% of compensation.

Brazelton members contribute .008% with a Social Security offset. Benefits payable to these members are reduced by one-half of original Social Security benefits accruing from employment with the participating employer.

### **Employer Contributions**

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



## KANSAS JUDGES RETIREMENT SYSTEM

### Normal Retirement

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

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

### Early Retirement

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

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

### Vesting Requirements

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

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

### Other Benefits

**Disability Benefits** – These benefits are payable if a member is defined as totally and permanently disabled as certified by the Supreme Court. The disability benefit, payable until age 65, is 3.5% of Final Average Salary for each year of service (minimum of 25% and maximum of 70% of Final Average Salary). Benefits are recalculated when the member reaches retirement age based on participating service credit for the period of disability. If a judge is disabled for at least five years immediately preceding retirement, the judge’s Final Average Salary is adjusted.

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

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



## **APPENDIX B – SUMMARY OF PLAN PROVISIONS**

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**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

<b>Rate of Investment Return</b>	8.0%
<b>Price Inflation</b>	3.0%
<b>Rates of Mortality: Post-retirement</b>	The RP-2000 Healthy Annuitant table was first adjusted by an age setback or set forward. Rates were further adjusted to fit actual experience.

#### Starting Table

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

#### Sample Rates (2000)

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

<b>Pre-retirement</b>	School Males: 70 % of RP-2000 M Employees -2 School Females: 50% of RP-2000 F Employees -2 State Males: 70% of RP-2000 M Employees +2 State Females: 50% of RP-2000 F Employees +0 Local Males: 90% of RP-2000 M Employees +2 Local Females: 90% of RP-2000 F Employees -1
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<b>Disabled Life Mortality</b>	RP-2000 Disabled Life Table with same age adjustments as used for Retiree Mortality.
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## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

### Rates of Salary Increase

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

\*Includes general wage increase assumption of 4.0% (composed of 3.0% inflation and 1.0% productivity)

### Rates of Termination

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





**APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

**Retirement Rates**

**School**

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

**Early Retirement**

<u>Age</u>	<u>Rate</u>
55	5%
56	5%
57	8%
58	10%
59	12%
60	15%
61	24%

**Normal Retirement**

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

**State**

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

**Early Retirement**

<u>Age</u>	<u>Rate</u>
55	5%
56	5%
57	5%
58	6%
59	10%
60	10%
61	20%

**Normal Retirement**

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



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

### Local

<u>Age</u>	<u>Rule of 85</u>	
	<u>1st Year</u>	<u>After 1st Year</u>
	<u>With 85 Points</u>	<u>With 85 Points</u>
53	11%	7%
55	13%	10%
57	13%	10%
59	15%	12%
61	25%	25%

<u>Early Retirement</u>		<u>Normal Retirement</u>	
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55	5%	62	25%
56	5%	63	20%
57	5%	64	30%
58	5%	65	35%
59	7%	66	25%
60	7%	67-74	20%
61	20%	75	100%

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

<u>Age</u>	<u>Rate</u>
55	10%
58	10%
60	15%
62	35%
65	100%

- For correctional employees with an age 60 normal retirement date -

<u>Age</u>	<u>Rate</u>
60	10%
62	25%
62	45%
63	25%
64	35%
65	100%

- For TIAA employees – Age 66.

### Rates of Disability

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

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



**APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

**Probability of Vested Members Leaving Contributions With System**

Tier 1:

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

Tier 2: Members are assumed to elect to take a refund if it is more valuable than the deferred annuity. The comparison is based on 8% interest and a 50% Male/50% Female blend of the RP-2000 Combined Mortality Table, projected to 2045 (static).

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

Tier 1 Election: All Tier 1 members are assumed to elect the default option of the increased multiplier coupled with increased contributions.

**KP&F**

<b>Rate of Investment Return</b>	8.0%														
<b>Price Inflation</b>	3.0%														
<b>Rates of Mortality:</b>															
<b>Post-retirement</b>	RP-2000 Healthy Annuitant Table														
<b>Pre-retirement</b>	90% of RP-2000 Employee Table* *70% of preretirement deaths assumed to be service related.														
<b>Disabled Life Mortality</b>	RP-2000 Disabled Life Table														
<b>Rates of Salary Increase</b>	<table border="1"> <thead> <tr> <th><u>Years of Service</u></th> <th><u>Rate of Increase*</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>12.5%</td> </tr> <tr> <td>5</td> <td>7.0%</td> </tr> <tr> <td>10</td> <td>4.9%</td> </tr> <tr> <td>15</td> <td>4.3%</td> </tr> <tr> <td>20</td> <td>4.0%</td> </tr> <tr> <td>25</td> <td>4.0%</td> </tr> </tbody> </table>	<u>Years of Service</u>	<u>Rate of Increase*</u>	1	12.5%	5	7.0%	10	4.9%	15	4.3%	20	4.0%	25	4.0%
<u>Years of Service</u>	<u>Rate of Increase*</u>														
1	12.5%														
5	7.0%														
10	4.9%														
15	4.3%														
20	4.0%														
25	4.0%														
	*Includes general wage increase assumption of 4.0% (composed of 3.0% inflation and 1.0% productivity)														



**APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

**Rates of Termination**

Tier 1: 3% for ages less than 41; 0% thereafter

	<u>Years of Service</u>	<u>Rate</u>
Tier 2:	1	13.0%
	5	6.0%
	10	2.5%
	15	1.0%
	20	1.0%
	25	0.0%

**Retirement Rates**

Tier 1:	<u>Early Retirement</u>		<u>Normal Retirement</u>	
	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
	50	5%	55	40%
	51	5%	56	40%
	52	5%	57	40%
	53	10%	58	35%
	54	30%	59	45%
			60	50%
			61	20%
			62	100%

Tier 2:	<u>Early Retirement</u>		<u>Normal Retirement</u>	
	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
	50	10%	50	25%
	51	10%	53	25%
	52	10%	55	25%
	53	10%	58	20%
	54	20%	60	25%
			61	25%
			62	25%
			63	100%

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



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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

\*90% assumed to be service-connected under KP & F Tier 1.

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

### Judges

<b>Rate of Investment Return</b>	8.0%	
<b>Price Inflation</b>	3.0%	
<b>Rates of Mortality:</b>		
<b>Post-retirement</b>	RP-2000 Healthy Annuitant Table, set back two years	
<b>Pre-retirement</b>	70% of RP-2000 Employee Table, set back two years	
<b>Rates of Salary Increase</b>	4.5%	
<b>Rates of Termination</b>	None assumed	
<b>Disabled Life Mortality</b>	RP-2000 Disabled Life Table, set back two years	
<b>Rates of Disability</b>	None assumed	
<b>Retirement Rates</b>		
	<u>Age</u>	<u>Rate</u>
	60-61	10%
	62-65	20%
	66-69	30%
	70+	100%

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



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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### TECHNICAL VALUATION PROCEDURES

#### Data Procedures

##### *In-pay members:*

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

If a beneficiary birth date is needed but not supplied, males are assumed to be 3 years older than females.

##### *Not in-pay members:*

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

<u>System</u>	<u>Active member age at hire</u>	<u>Inactive member age at valuation</u>
KPERS	34.7	50
KP&F	27.5	49
Judges	43.4	54

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

Salaries for first year members are annualized.

#### Other Valuation Procedures

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

Benefits above the projected IRC Section 415 limit for active participants are assumed to be immaterial for the valuation.

The compensation limitation under IRC Section 401(a)(17) is considered in this valuation. On a projected basis, the impact of this limitation is insignificant.

Salary increases are assumed to apply to annual amounts.

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



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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### 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 13<sup>th</sup> 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.



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## APPENDIX D – GLOSSARY OF TERMS

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<b>Actuarial Accrued Liability</b>	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”.
<b>Actuarial Assumptions</b>	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.
<b>Accrued Service</b>	Service credited under the system which was rendered before the date of the actuarial valuation.
<b>Actuarial Equivalent</b>	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.
<b>Actuarial Cost Method</b>	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”.
<b>Experience Gain (Loss)</b>	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
<b>Actuarial Present Value</b>	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.
<b>Amortization</b>	Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with lump sum payment.
<b>Normal Cost</b>	The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.



## APPENDIX D – GLOSSARY OF TERMS

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**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).