



**Cavanaugh Macdonald**  
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**Kansas Public Employees  
Retirement System**

**Valuation Report as of December 31, 2010**





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# Cavanaugh Macdonald

CONSULTING, LLC

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July 6, 2010

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 performed an actuarial valuation of the Kansas Public Employees Retirement System as of December 31, 2010 for purposes of determining contribution rates for fiscal year 2014 for the State and 2013 for Local employers. The major findings of the valuation are contained in this report. This report reflects the benefit provisions in place on December 31, 2010. There was no change to the actuarial assumptions or methods from the prior valuation.

This is the first actuarial valuation prepared by Cavanaugh Macdonald Consulting, LLC (CMC). As part of our transition work, we replicated the December 31, 2009 actuarial valuation. Results were well within acceptable limits, but as is typical in a takeover situation, there were differences in the key valuation results. CMC's calculation of the total System actuarial liability was \$21.112 billion compared to \$21.138 billion in the December 31, 2009 valuation. There was more variance in the normal cost rates, which is quite typical. Based on our experience of replicating valuation results from other software programs, these differences are neither unusual nor significant. It is very common for differences in valuation results to occur due to the use of different pension valuation software.

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 6, 2011  
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 Glenn Deck, 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  
Consulting Actuary

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

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



## SECTION 1 – BOARD SUMMARY

### OVERVIEW

The Kansas Public Employees Retirement System is an umbrella organization which administers the following three statewide pension groups: the Kansas Public Employees Retirement System (KPERS), the Kansas Police and Firemen’s Retirement System (KP&F) and the Kansas Retirement System for Judges (Judges). This report presents the results of the December 31, 2010 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.

This is the first actuarial valuation prepared by Cavanaugh Macdonald Consulting, LLC (CMC). As part of our transition work, we replicated the December 31, 2009 actuarial valuation. Results were well within acceptable limits, but as is typical in a takeover situation, there were differences in the key valuation results. Our results for the present value of future benefits (PVFB) and actuarial liability (AL) were very close. There was more variance in the normal cost rates, which is common. Based on our experience of replicating valuation results from other software programs, these differences are neither unusual nor significant. It is very common for differences in valuation results to occur simply due to the use of different pension valuation software. A summary of the replication results is shown below. All dollar amounts are shown in millions.

	PVFB	Actuarial Liability	Normal Cost
<b>State</b>			
Milliman	4,301	3,697	8.20%
CMC	4,285	3,681	7.73%
% Change	-0.38%	-0.41%	-5.78%
<b>School</b>			
Milliman	13,686	11,437	8.65%
CMC	13,637	11,408	8.10%
% Change	-0.36%	-0.25%	-6.28%
<b>Local</b>			
Milliman	4,650	3,625	8.14%
CMC	4,643	3,626	7.65%
% Change	-0.15%	0.03%	-6.01%



**SECTION 1 – BOARD SUMMARY**

	<b>PVFB</b>	<b>Actuarial Liability</b>	<b>Normal Cost</b>
<b>KP&amp;F</b>			
Milliman	2,812	2,232	14.71%
CMC	2,824	2,249	14.33%
% Change	0.41%	0.74%	-2.61%
<b>Judges</b>			
Milliman	188	148	19.97%
CMC	186	148	20.32%
% Change	-1.01%	0.06%	1.76%

Senate Substitute for HB 2194 was passed by the 2011 Legislature and signed by the Governor. The intent of this law was to strengthen KPERS’ long term funding and improve the sustainability of the system. This bill contained significant changes for both KPERS employers and current and future members. The bill established a 13 member KPERS Study Commission to study alternative plan designs during the remainder of 2011 and make a recommendation for plan design that will provide for the long term sustainability of the System. The Commission report is due to the Legislature by January 6, 2012. Report recommendations must be voted on in the 2012 Legislature for the other parts of the bill to become effective. Because of this contingency, the benefit and contribution changes included in Senate Substitute for HB 2194 are not reflected in the formal valuation results included in this report. However, due to the importance of this legislation and the dramatic impact it has on the long term funding of KPERS, key valuation results that reflect the impact of Senate Substitute for HB 2194 are included in this report. Due to the uncertainty related to whether the election option will be available to members and how members will make such an election if available, the results of the impact of Senate Substitute for HB 2194 are shown using the default options for both Tier 1 and Tier 2 members.

The substantive changes to KPERS included in Senate Substitute for HB 2194 include:

- **Employer Contribution Increases**
  - Raises the cap on employer contribution rate increases from the current 0.60 percent to:

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



## SECTION 1 – BOARD SUMMARY

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- **Tier 1 Members**

The law creates a 90 day 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 are effective January 1, 2014 and impact only future service. The election is subject to approval by the Internal Revenue Service. If such approval is not granted, there will be no election and the default option will apply. The provisions are summarized in the following table:

<u>Member Contribution Rate</u>	<u>Benefit Provisions</u>	
6% contribution	1.85% multiplier	Default option
or		
4% contribution	1.4% multiplier	

- **Tier 2 Members**

The law also provides for a 90 day election period starting July 1, 2013 to permit Tier 2 members at that time 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 keeping the COLA. The multiplier change does not affect the service already earned by the members, but the COLA loss is for all service credit over the member’s entire career. Changes are effective January 1, 2014. Similar to Tier 1, the election is subject to approval by the Internal Revenue Service. If such approval is not granted, there will be no election and the default option will apply. New employees will automatically have a 6% contribution rate and the 1.75% multiplier with no COLA.

<u>Member Contribution Rate</u>	<u>Benefit Provisions</u>	
6% contribution	1.75% multiplier Lose COLA (for all service)	Default option
or		
6% contribution	1.40% multiplier Keep COLA	

Inactive members returning to KPERS covered employment after July 2013 will receive the default option. Senate Substitute for HB 2194 also provides that 80% of the proceeds from excess real estate property sales will be used to pay down KPERS’ unfunded actuarial liability.

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



**SECTION 1 – BOARD SUMMARY**

The following table illustrates the impact of Senate Substitute for HB 2194 on the results of the December 31, 2010 actuarial valuation:

	State/School		Local	
	Baseline	HB 2194	Baseline	HB 2194
Actuarial Liability	\$15,589	\$15,581	\$3,794	\$3,790
Actuarial Assets	9,345	9,345	2,399	2,399
Unfunded Actuarial Liability	\$6,244	\$6,236	\$1,395	\$ 1,391
<b>Funded Ratio</b>				
Actuarial Assets	59.9%	60.0%	63.2%	63.2%
Market Value Assets	56.9%	56.9%	60.5%	60.5%
<b>Actuarial Contribution Rate</b>				
Normal Cost	8.03%	8.43%	7.68%	8.05%
Member Contribution	<u>(4.17%)</u>	<u>(6.00%)</u>	<u>(4.20%)</u>	<u>(6.00%)</u>
Employer Normal Cost	3.86%	2.43%	3.48%	2.05%
UAL Contribution	<u>9.97%</u>	<u>9.98%</u>	<u>5.95%</u>	<u>5.94%</u>
Total Employer Rate	13.83%	12.41%	9.43%	7.99%
Statutory Contribution Rate for FY beginning 2013	9.97%	10.27%	7.94%	7.94%
Contribution Shortfall	3.86%	2.14%	1.49%	0.05%

There were no changes in the actuarial assumptions or methods used in the valuation since last year. The valuation results provide a “snapshot” view of the System’s financial condition on December 31, 2010. The unfunded actuarial liability, for the System as a whole, increased by \$587 million due to various factors. A detailed analysis of the change in the unfunded actuarial liability from December 31, 2009 to December 31, 2010 is shown on page 9.

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, is currently 0.60% for the State, School and Local groups.





## 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, 2010 Valuation <sup>3</sup>		
	Actuarial	Statutory	Difference
State <sup>1</sup>	9.82%	9.97%	(0.15%)
School <sup>1</sup>	15.12%	9.97%	5.15%
Local <sup>1</sup>	9.43%	7.94%	1.49%
Police & Fire - Uniform Rates <sup>2</sup>	17.26%	17.26%	0.00%
Judges	23.62%	23.62%	0.00%

System	December 31, 2009 Valuation		
	Actuarial	Statutory	Difference
State <sup>1</sup>	9.55%	9.37%	0.18%
School <sup>1</sup>	14.69%	9.37%	5.32%
Local <sup>1</sup>	9.44%	7.34%	2.10%
Police & Fire - Uniform Rates <sup>2</sup>	16.54%	16.54%	0.00%
Judges	23.75%	23.75%	0.00%

<sup>1</sup> By statute, rates are allowed to increase by a maximum of 0.60% 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 17.12% this year, which includes a payment of 0.52% for the debt service payment on the bonds issued for the 13<sup>th</sup> check. The uniform rate does not include the payment required to amortize the unfunded past service liability or any 15% excess benefit liability determined separately for each employer. (See Table 13)

<sup>3</sup> The provisions of Senate Substitute for HB 2194, including changes to the statutory cap, are not reflected in this valuation.

Over the last decade, a significant amount of time and effort has been devoted to improving the long-term funding outlook for KPERS. As a result of legislative changes, Board action and investment performance from 2003 to 2007, the System's long-term funding outlook improved, although the positive results for the System were highly dependent on attaining the 8% assumption in future years. Modeling indicated that investment returns below the 8% assumption could change the long-term funding outlook, particularly for the School group. The negative investment experience in 2008 was a significant setback in the System's long-term funding. Although the investment returns in 2009 and 2010 were very strong (about 23% in 2009 and 13% in 2010) it has not fully reversed the damage done by the 2008 investment experience. 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.

The actuarial value of assets is about 5% higher than the pure market value or \$672 million, down significantly from \$1.7 billion last year. This is due not only to the strong returns in 2010, but also to the use of an asset smoothing method and the delayed reflection of market experience in the actuarial value of assets. The deferred losses from 2008 will be reflected in the actuarial value of assets over the next two years. However, the net impact of the deferred experience on the actuarial value of assets in future years will depend on actual investment experience during that period.



## SECTION 1 – BOARD SUMMARY

### EXPERIENCE - ALL SYSTEMS COMBINED

#### December 31, 2009 – December 31, 2010

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, 2010. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and employers in the future to balance the System assets and liabilities.

Changes in the Systems' assets and liabilities impacted the change in the actuarial contribution rates between the December 31, 2009 and December 31, 2010 actuarial valuations. On the following pages each component is examined and quantified.

### MEMBERSHIP

The following table contains a summary of the changes in active members between the December 31, 2009 and December 31, 2010 actuarial valuations.

	State	School	Local	KP&F	Judges	Total
12/31/2009 (Starting count)	26,005	86,048	41,333	7,179	266	160,831
New actives	2,478	7,974	4,530	514	3	15,499
Nonvested Terminations	707	3,445	2,118	184	0	6,454
Elected Refund	742	1,591	1,486	98	2	3,919
Vested Terminations	<u>529</u>	<u>2,055</u>	<u>1,072</u>	<u>74</u>	<u>1</u>	<u>3,731</u>
Total Withdrawals	1,978	7,091	4,676	356	3	14,104
Deaths	67	119	61	6	0	253
Disabilities	91	113	71	14	0	289
Retirements	698	2,296	774	141	2	3,911
Other/Transfer	88	35	26	(3)	0	146
12/31/2010 (Ending count)	25,737	84,438	40,307	7,173	264	157,919

### ASSETS

As of December 31, 2010, the System had total funds when measured on a market value basis, of \$12.9 billion, excluding assets held for the Group Insurance and Optional Life reserves. This was an increase of \$1.1 billion from the December 31, 2009 figure of \$11.8 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



## SECTION 1 – BOARD SUMMARY

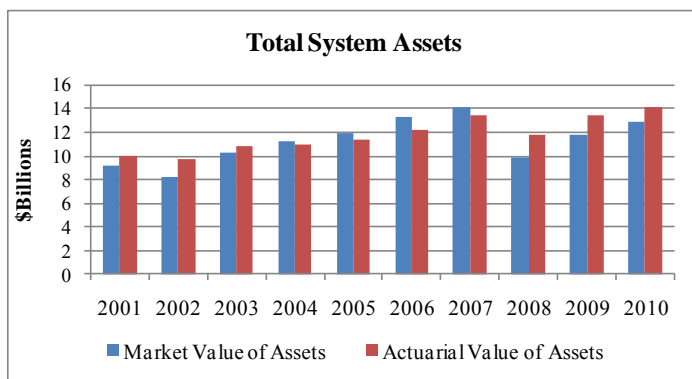
of assets each year. The difference is recognized equally over a five-year period. The resulting value must be no less than 80% of market and no more than 120% of market. See Tables 3A through 3F and 4 for the detailed development of the actuarial value of assets as of December 31, 2010 for each group.

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, 2009	\$11,755	\$13,461
• Employer and Member Contributions	790	790
• Benefit Payments and Expenses	(1,165)	(1,165)
• Investment Income	1,538	504
Preliminary Asset Value, December 31, 2010	\$12,918	\$13,590
Application of Corridor	N/A	N/A
Final Asset Value, December 31, 2010	\$12,918	\$13,590

The actuarial value of assets as of December 31, 2010, was \$13.590 billion. The annualized dollar-weighted rate of return for 2010, measured on the actuarial value of assets, was approximately 3.9% and measured on the market value of assets, as reported by KPERS, was 13.4%, net of investment and administrative expenses.

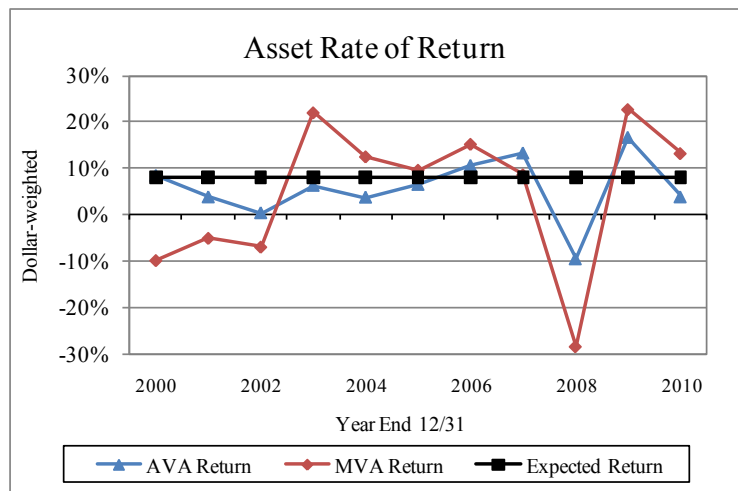
Due to the use of an asset smoothing method, there is about \$672 million of net deferred investment loss experience that has not yet been recognized. This deferred investment loss will gradually be reflected in the actuarial value of assets over the next two years, but may be offset by actual investment experience if 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	\$3,815	\$11,774	\$3,794	\$2,319	\$ 152	\$ 21,854
Actuarial Value of Assets	2,883	6,462	2,399	1,721	125	13,590
Unfunded Actuarial Liability	\$ 932	\$ 5,313	\$1,395	\$ 598	\$ 27	\$ 8,264

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

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

Other factors influencing the UAL from year to year include actual experience versus that expected based on the actuarial assumptions (on both assets and liabilities), changes in actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (calendar year 2010). All three of the KPERS groups, KP&F, and Judges



## SECTION 1 – BOARD SUMMARY

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.

Between December 31, 2009 and December 31, 2010 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, 2009	\$ 7,677
• effect of contribution cap/time lag	320
• expected increase due to amortization method	68
• loss from investment return on actuarial assets	560
• demographic experience <sup>1</sup>	(375)
• all other experience	41
• change in actuarial firm/valuation software	(27)
• change in actuarial assumptions	0
• change in benefit provisions	0
Unfunded Actuarial Liability, December 31, 2010	\$ 8,264

<sup>1</sup>Liability gain is about 1.7% of total actuarial liability.

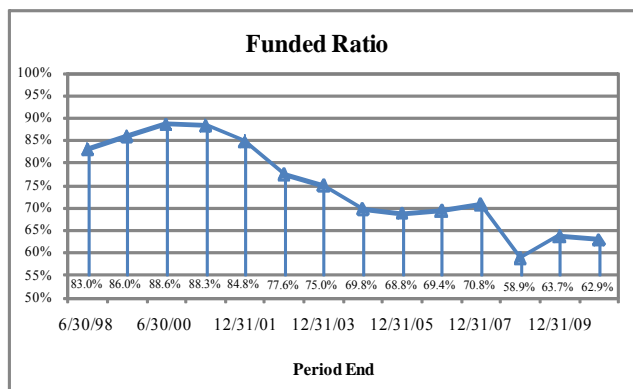
A detailed summary of the change in the unfunded actuarial liability by System is shown on page 18.

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. There was a change in actuarial assumptions in the 2004 and 2007 valuations, which impacted the UAL and the funded status. The funded status information is shown below (in millions).

	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09	12/31/10
<b><i>Using Actuarial Value of Assets:</i></b>						
Funded Ratio (AVA/AL)	69%	69%	71%	59%	64%	62%
Unfunded Actuarial Liability (AL-AVA)	\$5,152	\$5,364	\$5,552	\$8,279	\$7,677	\$8,264
<b><i>Using Market Value of Assets:</i></b>						
Funded Ratio (MVA/AL)	72%	76%	75%	49%	56%	59%
Unfunded Actuarial Liability (AL-MVA)	\$4,583	\$4,184	\$4,817	\$10,250	\$9,384	\$8,936



## 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 (particularly in 2008) significantly reduced the funded ratio. Strong investment performance in the last two years has increased 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 contribution rates in the December 31, 2010 valuation will set rates for fiscal year end 2014 for the State and 2013 for Local employers.

In KPERS, State, School and Local employers do not necessarily contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. The statutory cap, which has been changed periodically, is currently 0.60% for all groups.

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



## SECTION 1 – BOARD SUMMARY

System	December 31, 2010 Valuation <sup>3</sup>		Difference
	Actuarial	Statutory	
State <sup>1</sup>	9.82%	9.97%	(0.15%)
School <sup>1</sup>	15.12%	9.97%	5.15%
Local <sup>1</sup>	9.43%	7.94%	1.49%
Police & Fire - Uniform Rates <sup>2</sup>	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 0.60% 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 17.12% this year, which includes a payment of 0.52% for the debt service payment on the bonds issued for the 13<sup>th</sup> check. The uniform rate does not include the payment required to amortize the unfunded past service liability or any 15% excess benefit liability determined separately for each employer. (See Table 13)

<sup>3</sup> The provisions of Senate Substitute for HB 2194, including changes to the statutory cap, are not reflected in this valuation.

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:	10.82%	10.44%
Retirement Age 60:	10.40%	10.30%

The change in the actuarial contribution rate from December 31, 2009 to December 31, 2010 and the primary components thereof are shown in the table on page 19.

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 the actuarial contribution rate) with this valuation. Based on the current valuation, there is a difference (shortfall) between the actuarial and statutory contribution rates of 5.15% and 1.49% respectively for the School and Local groups. Assuming an 8% return on the market value of assets for 2011 and beyond, all other actuarial assumptions are met in the future, and the current level of statutory caps on the employer contribution rate, the estimated ARC Date for the School group is FY2031 and for the Local group is FY18.

### COMMENTS

The investment return for 2010 was +13%, which helped to offset part of the impact of the deferred investment loss. This contributes to a modest improvement in the long-term funding of KPERS. While the investment return in 2010 was well above the 8% assumed rate, there are still some deferred investment losses which have not been recognized in the valuation process. As of December 31, 2010, the actuarial value of assets exceeds the market value of assets by about 5%, or \$672 million. This deferred experience will flow through the asset valuation method in the next two 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 slightly and the UAL and the actuarial contribution rate to increase. Despite strong investment returns in 2009 and 2010, KPERS continues to face a significant long-term funding challenge, particularly with the School group. The changes incorporated into Senate Substitute for HB 2194 will make significant changes to improve the



## SECTION 1 – BOARD SUMMARY

long term funding and sustainability of KPERS. These provisions, however, do not become effective unless the 2012 Legislature takes certain required actions.

The System utilizes an asset smoothing method in the valuation process. While this 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	\$15,589	\$15,589	\$2,319	\$2,319
Asset Value	9,345	8,863	1,702	1,639
Unfunded Actuarial Liability	6,244	6,726	617	680
Funded Ratio	60%	57%	74%	71%
Contribution Rate:				
Normal Cost Rate	8.03%	8.03%	14.39%	14.39%
UAL Payment	<u>9.97%</u>	<u>10.72%</u>	<u>9.66%</u>	<u>10.92%</u>
Total	18.00%	18.75%	24.05%	25.31%
Employee Rate	<u>4.17%</u>	<u>4.17%</u>	<u>6.79%</u>	<u>6.79%</u>
Employer Rate	13.83%	14.58%	17.26%	18.52%

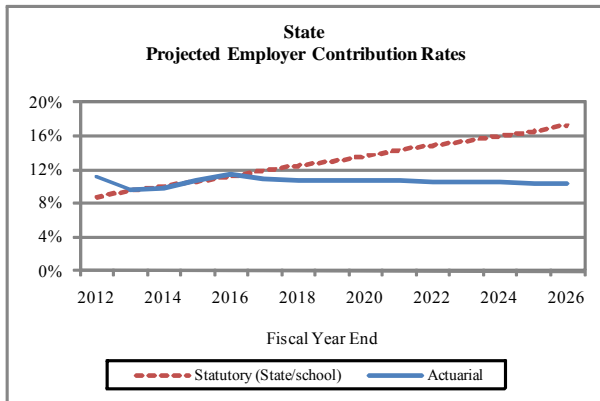
The asset smoothing method impacts only the timing of when the actual market experience on the assets will be recognized. Due to a return of over 13% in 2010, the actuarial value of assets now only exceeds the pure market value by about 5% (due to the remaining deferred investment experience from 2008). If there are not higher returns than 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 on the following page that show projected contribution rates assuming an 8% rate of return in all future years.

Actual investment returns over the next few years will determine exactly how the System's funding will be affected and the magnitude of the increase in the unfunded actuarial liability and the actuarial contribution rate. The negative return in 2008 had a substantial, negative impact on the System's long-term funding. Investment experience was favorable in 2009 and 2010 (23% and 13% respectively versus 8% assumed), which has mitigated the impact of the 2008 investment loss. However, the System is not yet in the same position it would have been if the 8% assumption had been earned in 2008, 2009 and 2010. While the System has sufficient assets to pay benefits for many years into the future, the long-term actuarial soundness of the System will be impacted if returns do not exceed 8%, contributions increase, benefits decrease, or some combination occurs. The contribution and benefit changes included in Senate Substitute for HB 2194 help to address the long term funding of the KPERS group. If these changes are adopted by the 2012 Legislature or other comparable measures, KPERS funding will improve over the next twenty years. However, the System's funding, particularly the School group, is heavily dependent on actual investment returns in future years.

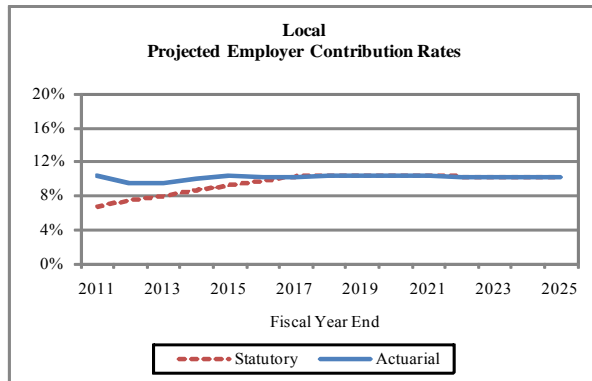




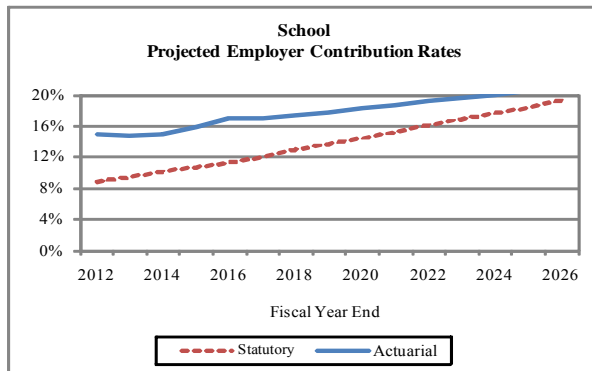
## SECTION 1 – BOARD SUMMARY



*The State group is at the ARC date with this valuation (contribution rate for FY 2014). The actuarial contribution rate is expected to be less than the statutory rate for the combined State/School group for the remainder of the amortization period.*



*The ARC date is projected to occur in approximately 2017 with an ARC rate of 10.27%, 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.*

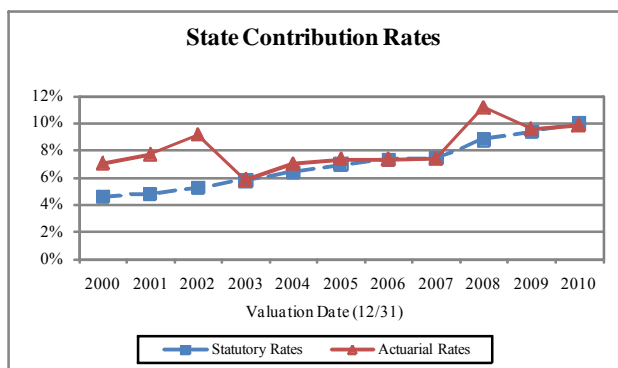


*The ARC date is projected to occur in approximately 2031 at a rate of 20.02%. Future experience, especially investment returns, will heavily influence the ARC date and rate.*

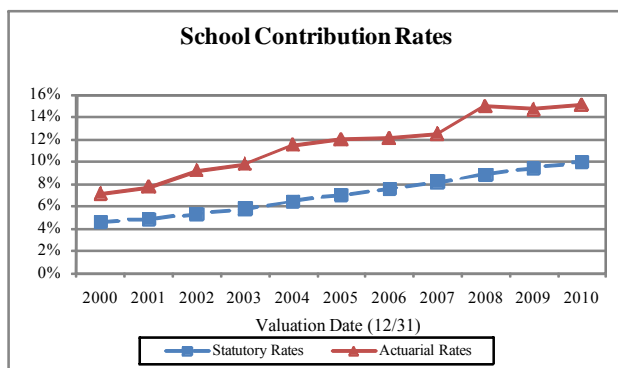


## SECTION 1 – BOARD SUMMARY

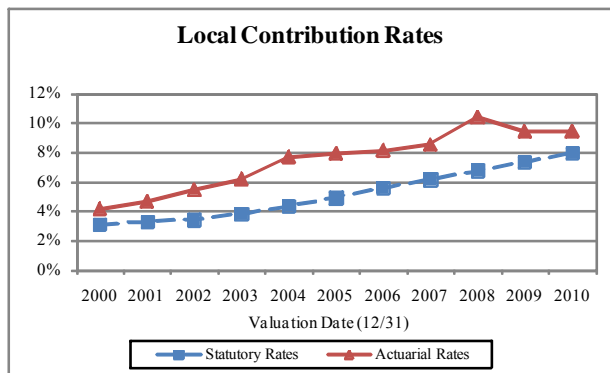
Historical contribution rates for each group are shown on the following pages. Please note that prior to the December 31, 2003 valuation, one contribution rate was developed for the State and School together as one group. Legislation passed in 2004 split the contribution rate calculations into two separate 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 both the 2004 and 2007 valuations. These changes impact the comparability of contribution rates between various valuation dates.



*The split of the State group into a separate group with the 2003 valuation, coupled with the bond issue, lowered the actuarial contribution rate. The State's actuarial contribution rate is less than the statutory contribution rate in this valuation due to another year of strong investment performance in 2010.*



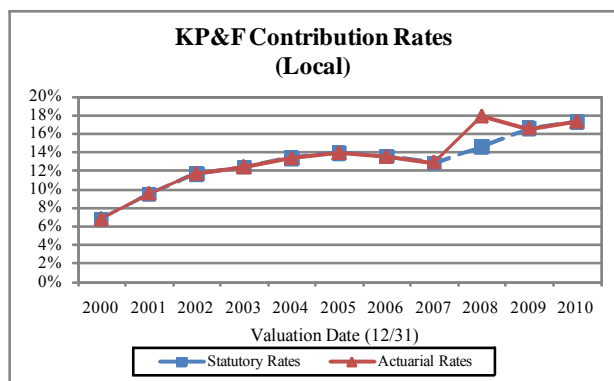
*Due to investment experience, changes in actuarial methods and assumptions, and the magnitude of the difference between the actuarial and statutory contribution rates, the funded status of the School group has declined and the actuarial contribution rate has generally increased.*



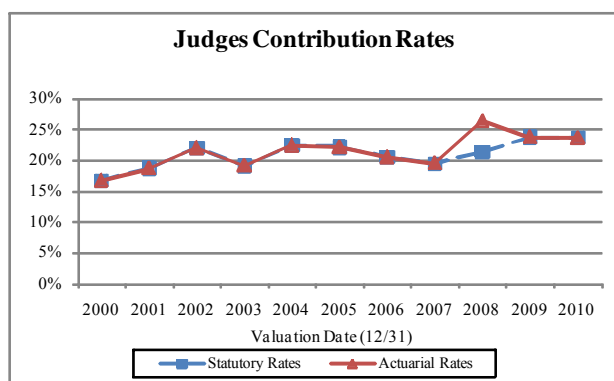
*The Local contribution rate has also been impacted by changes in actuarial assumptions and methods as well as investment performance. As a result, the statutory contribution rate still exceeds the actuarial contribution rate. Legislation passed in 2004 provided for increased statutory caps, under which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



## 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, which has still not been totally reflected, resulted in higher contribution rates in the last three valuations.*



*Significant changes in the actuarial assumptions in the 2004 valuation and investment experience in 2008 resulted in higher contribution rates in the last three years.*

Over the last decade the development of a comprehensive plan to address the long-term funding of KPERS has been a high priority. HB 1214, 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.

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.



## SECTION 1 – BOARD SUMMARY

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The 2011 Legislature passed Senate Substitute for HB 2194. The intent of this law was to strengthen KPERS' long term funding and improve the sustainability of the system. This bill contained significant changes for both KPERS employers and current and future members. In addition, the bill established a 13 member KPERS Study Commission to study alternative plan designs during the remainder of 2011 and make a recommendation for KPERS plan design that will provide for the long term sustainability of the System. The Commission report is due to the Legislature by January 6, 2012. Report recommendations must be voted on in the 2012 Legislature for the other provisions of Senate Substitute for HB 2194 to become effective. Therefore, the benefit and contribution changes included in Senate Substitute for HB 2194 are not reflected in the formal valuation results included in this report.

Senate Substitute for HB 2194 raises the statutory cap on employer contribution rate increases from the current 0.60 percent. The first increase is to 0.9% in FY2014, 1.0% in FY 2015, 1.1% in FY 2016 and ultimately to 1.2% in FY 2017.

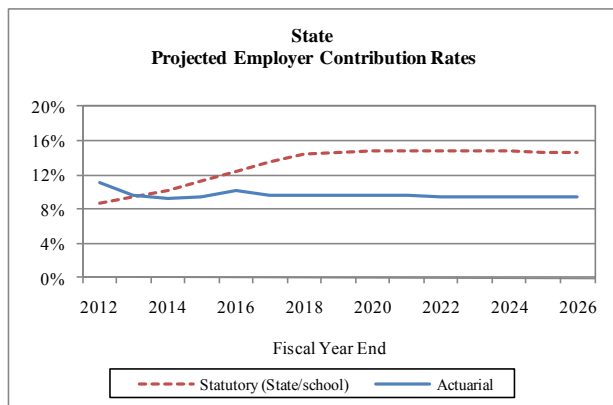
In addition, the law creates a 90 day election period starting July 1, 2013 to permit Tier 1 members to choose between a 6% contribution rate with a 1.85% multiplier for all years of future service or a 4% contribution and a 1.40% multiplier for all years of future service. Changes are effective January 1, 2014 and impact only future service. The law also provides for a 90 day election period starting July 1, 2013 to permit Tier 2 members at that time 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 keeping the COLA. The multiplier change does not affect the service already earned by the members, but the COLA loss is for all service credit over the member's entire career. Changes are effective January 1, 2014. Both the election for Tier 1 and Tier 2 are subject to approval by the Internal Revenue Service. If such approval is not granted, there will be no election and the default option will apply. New employees will automatically have a 6% contribution rate and the 1.75% multiplier with no COLA.

Inactive members returning to KPERS covered employment after July 2013 will receive the default option. Senate Substitute for HB 2194 also provides that 80% of the proceeds from excess real estate property sales will be used to pay down KPERS' unfunded actuarial liability

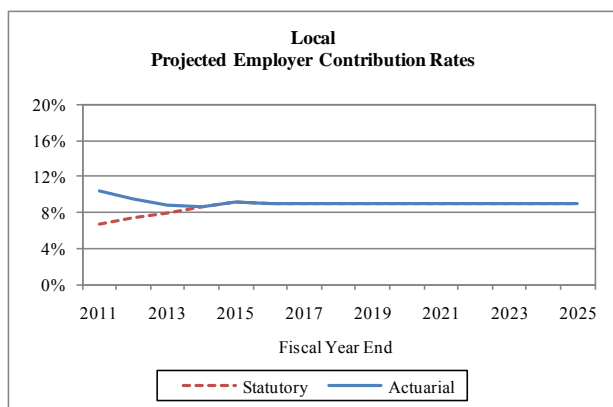
We performed long term funding projections using the December 31, 2010 valuation, but reflecting the provisions of Senate Substitute for HB 2194. The impact of Senate Substitute for HB 2194, assuming all members elect the default provisions, is shown on the graphs on the following page:



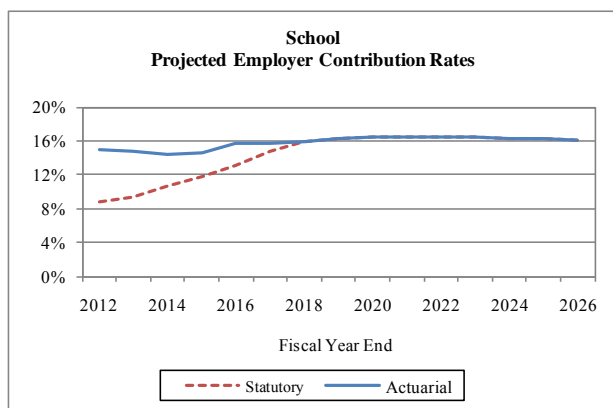
## SECTION 1 – BOARD SUMMARY



The contribution rate for the State is projected to be about 1% lower than under current plan provisions if Senate Substitute for HB 2194 becomes effective. The difference in the statutory contribution rate (red dashed line) and State actuarial contribution rate (blue solid line) times State payroll will be paid to the School group. This will improve the School group's funding more quickly.



Under Senate Substitute for HB 2194, the ARC date is projected to occur in approximately 2014 at a rate of 8.65%. This assumes that all actuarial assumptions are met in future years. Actual experience in future years, particularly investment returns, will impact the ARC date and rate.



Under Senate Substitute for HB 2194 the ARC date is much earlier (FY 2018) than the baseline projection (FY 2031). The projected ARC rate in FY 2018 is 14.46%. Future experience, especially investment returns, will influence the movement in the ARC date and rate.



**SECTION 1 – BOARD SUMMARY**

**SUMMARY OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY**

**DECEMBER 31, 2010 VALUATION**

(\$ millions)

	State	School	Local	KP&F	Judges	Total
<b>UAL in 12/31/2009 Valuation Report</b>	\$806.2	\$4,998.8	\$1,315.5	\$530.3	\$26.1	\$7,677.0 <sup>1</sup>
· Effect of contribution cap/timing	21.0	222.6	56.1	18.3	2.0	320.0
· Expected increase due to method	6.7	49.9	12.5	(0.3)	(0.4)	68.4
· Actual vs. expected experience						
· Investment return	132.7	258.5	87.8	75.2	5.3	559.5
· Demographic experience	(32.0)	(230.8)	(79.3)	(27.5)	(5.7)	(375.3)
· All other experience	12.0	42.6	1.5	(14.2)	(0.8)	41.1
· Change in actuarial firm/valuation software	(15.0)	(29.1)	0.9	16.6	0.1	(26.5)
· Change in benefit provisions	0.0	0.0	0.0	0.0	0.0	0.0
<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>

<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, 2010**

Percentage of Payroll	State	School	Local	KP&F1	Judges
<b>Actuarial Contribution Rate in 12/31/2009 Valuation</b>	9.55%	14.69%	9.44%	16.54%	23.75%
<b>Change Due to Amortization of UAL</b>					
· effect of contribution cap/time lag	0.13	0.46	0.23	0.28	0.67
· amortization method	0.00	0.00	0.00	0.00	(0.34)
· investment experience	0.85	0.53	0.37	1.16	1.77
· liability experience	(0.20)	(0.48)	(0.33)	(0.42)	(1.90)
· all other experience	0.07	0.51	0.18	(0.24)	(0.88)
· change in actuarial firm/valuation software	(0.10)	(0.06)	0.00	0.26	0.03
· change in benefit provisions	0.00	0.00	0.00	0.00	0.00
<b>Change in Normal Cost Rate</b>					
· change in benefit provisions	0.00	0.00	0.00	0.00	0.00
· change in actuarial firm/valuation software	(0.47)	(0.55)	(0.49)	(0.38)	0.35
· all other experience	(0.01)	0.02	0.03	0.06	0.16 <sup>2</sup>
<b>Actuarial Contribution Rate in 12/31/2010 Valuation</b>	9.82%	15.12%	9.43%	17.26%	23.62%

<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, 2010 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)	\$(360)	\$(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)	\$(164)	\$72	\$475	\$1,049

\*Not calculated for this year.

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

Unfunded actuarial liability 12/31/10: \$ 8,264 million





**SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL**  
as of  
**DECEMBER 31, 2010 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	Total
<b>Actual Experience vs. Assumed</b>									
• Investment	\$140	\$456	\$167	\$(293)	\$(626)	\$2,332	\$(1,011)	560	\$634
• Other	(32)	16	(84)	139	99	78	(70)	(334)	889
<b>Assumption Changes</b>	0	437	(5)	0	384	0	0	0	864
<b>Changes in Data/Procedures</b>	(286)***	0	0	0	0	0	0	0	377
<b>Change in Cost Method</b>	1,147	0	0	0	0	0	0	0	1,147
<b>Effect of Contribution Cap/Lag</b>	178	179	247	258	251	246	383	320	2,806
<b>Amortization Method</b>	47	68	84	83	78	71	96	68	846
<b>Change in Benefit Provisions</b>	3	1	0	24	2	0	0	0	249
<b>Change in Actuarial Firm/Software</b>	0	0	0	0	0	0	0	(27)	(27)
<b>Bond Issue</b>	(440)	0	0	0	0	0	0	0	(481)
<b>Total</b>	\$757	\$1,157	\$409	\$211	\$188	\$2,727	\$(602)	587	\$7,304

\*\* 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 12/31/10: \$ 8,264 million



## SUMMARY OF PRINCIPAL RESULTS

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

	12/31/2010	12/31/2009	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	25,737	26,005	(1.0%)
Retired Members and Beneficiaries	16,375	15,936	2.8%
Inactive Members	6,363	5,863	8.5%
	<hr/>	<hr/>	
Total Members	48,475	47,804	1.4%
	<hr/> <hr/>	<hr/> <hr/>	
Projected Annual Salaries of Active Members	\$ 1,068,931,480	\$ 1,048,674,951	1.9%
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 196,294,538	\$ 186,322,148	5.4%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 3,814,570,078	\$ 3,696,501,526	3.2%
b. Assets for Valuation Purposes	2,882,964,798	2,890,275,842	(0.3%)
c. Unfunded Actuarial Liability (a) - (b)	931,605,280	806,225,684	15.6%
d. Funded Ratio (b) / (a)	75.6%	78.2%	(3.3%)
e. Market Value of Assets	2,730,474,235	2,506,018,054	9.0%
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	7.72%	8.20%	
Member	<u>4.16%</u>	<u>4.04%</u>	
Employer	3.56%	4.16%	
Amortization of Unfunded Actuarial and Debt Service	<u>6.26%</u>	<u>5.39%</u>	
Actuarial Contribution Rate	9.82%	9.55%	
Statutory Employer Contribution Rate*	<u>9.97%</u>	<u>9.37%</u>	

\* Statutory Employer Contribution Rate may not exceed last year's rate by more than rate increase limit of 0.60%. This rate does not include the contribution rate for the Death and Disability Program. Any excess of the statutory over actuarial contribution rates times actual State payroll is deposited to the School assets.



## SUMMARY OF PRINCIPAL RESULTS

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

	12/31/2010	12/31/2009	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	84,438	86,048	(1.9%)
Retired Members and Beneficiaries	40,856	38,878	5.1%
Inactive Members	24,125	24,958	(3.3%)
	<hr/>	<hr/>	
Total Members	149,419	149,884	(0.3%)
	<hr/> <hr/>	<hr/> <hr/>	
Projected Annual Salaries of Active Members	\$ 3,315,448,958	\$ 3,352,328,403	(1.1%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 549,519,641	\$ 509,617,413	7.8%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 11,774,417,007	\$ 11,437,206,665	2.9%
b. Assets for Valuation Purposes	6,461,892,562	6,438,367,288	0.4%
c. Unfunded Actuarial Liability (a) - (b)	5,312,524,445	4,998,839,377	6.3%
d. Funded Ratio (b) / (a)	54.9%	56.3%	(2.5%)
e. Market Value of Assets	6,132,794,595	5,624,405,754	9.0%
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	8.12%	8.65%	
Member	<u>4.17%</u>	<u>4.07%</u>	
Employer	3.95%	4.58%	
Amortization of Unfunded Actuarial and Debt Service	<u>11.17%</u>	<u>10.11%</u>	
Actuarial Contribution Rate	15.12%	14.69%	
Statutory Employer Contribution Rate*	<u>9.97%</u>	<u>9.37%</u>	

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



## SUMMARY OF PRINCIPAL RESULTS

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

	12/31/2010	12/31/2009	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	110,175	112,053	(1.7%)
Retired Members and Beneficiaries	57,231	54,814	4.4%
Inactive Members	30,488	30,821	(1.1%)
	<hr/>	<hr/>	
Total Members	<u>197,894</u>	<u>197,688</u>	0.1%
Projected Annual Salaries of Active Members	\$ 4,384,380,438	\$ 4,401,003,354	(0.4%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 745,814,179	\$ 695,939,561	7.2%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 15,588,987,085	\$ 15,133,708,191	3.0%
b. Assets for Valuation Purposes	9,344,857,360	9,328,643,130	0.2%
c. Unfunded Actuarial Liability (a) - (b)	6,244,129,725	5,805,065,061	7.6%
d. Funded Ratio (b) / (a)	59.9%	61.6%	(2.8%)
e. Market Value of Assets	8,863,268,830	\$ 8,130,423,808	9.0%
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	8.03%	8.54%	
Member	<u>4.17%</u>	<u>4.07%</u>	
Employer	3.86%	4.47%	
Amortization of Unfunded Actuarial and Debt Service	<u>9.97%</u>	<u>8.99%</u>	
Actuarial Contribution Rate	13.83%	13.46%	
Statutory Employer Contribution Rate*	<u>9.97%</u>	<u>9.37%</u>	

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



## SUMMARY OF PRINCIPAL RESULTS

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

	12/31/2010	12/31/2009	
	Valuation	Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	40,307	41,333	(2.5%)
Retired Members and Beneficiaries	14,893	14,087	5.7%
Inactive Members	12,383	11,172	10.8%
	<hr/>	<hr/>	
Total Members	<u>67,583</u>	<u>66,592</u>	1.5%
Projected Annual Salaries of Active Members	\$ 1,638,534,481	\$ 1,661,357,024	(1.4%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 140,605,126	\$ 127,657,737	10.1%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 3,793,642,968	\$ 3,624,727,632	4.7%
b. Assets for Valuation Purposes	2,398,637,171	2,309,262,337	3.9%
c. Unfunded Actuarial Liability (a) - (b)	1,395,005,797	1,315,465,295	6.0%
d. Funded Ratio (b) / (a)	63.2%	63.7%	(0.8%)
e. Market Value of Assets	2,295,447,057	2,033,031,884	12.9%
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	7.68%	8.14%	
Member	<u>4.20%</u>	<u>4.07%</u>	
Employer	3.48%	4.07%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>5.95%</u>	<u>5.37%</u>	
Actuarial Contribution Rate	9.43%	9.44%	
Statutory Employer Contribution Rate*	<u>7.94%</u>	<u>7.34%</u>	

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



## SUMMARY OF PRINCIPAL RESULTS

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

	12/31/2010 Valuation	12/31/2009 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	7,173	7,179	(0.1%)
Retired Members and Beneficiaries	4,168	4,060	2.7%
Inactive Members	1,350	1,317	2.5%
	12,691	12,556	
Total Members	12,691	12,556	1.1%
Projected Annual Salaries of Active Members	\$ 442,880,358	\$ 441,454,916	0.3%
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 111,857,782	\$ 105,015,030	6.5%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 2,319,324,940	\$ 2,232,037,029	3.9%
b. Assets for Valuation Purposes	1,720,933,933	1,701,719,235	1.1%
c. Unfunded Actuarial Liability (a) - (b)	598,391,007	530,317,794	12.8%
d. Funded Ratio (b) / (a)	74.2%	76.2%	(2.7%)
e. Market Value of Assets	1,639,025,889	1,484,548,360	10.4%
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	14.39%	14.71%	
Member	<u>6.79%</u>	<u>6.52%</u>	
Employer	7.60%	8.19%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>9.66%</u>	<u>8.35%</u>	
Actuarial Contribution Rate (Local Employers)	17.26%	16.54%	
Statutory Employer Contribution Rate*	<u>17.26%</u>	<u>16.54%</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

	12/31/2010 Valuation	12/31/2009 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	264	266	(0.8%)
Retired Members and Beneficiaries	206	203	1.5%
Inactive Members	10	14	(28.6%)
	<hr/>	<hr/>	
Total Members	480	483	(0.6%)
	<hr/> <hr/>	<hr/> <hr/>	
Projected Annual Salaries of Active Members	\$ 28,253,001	\$ 28,681,056	(1.5%)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 7,535,849	\$ 7,312,743	3.1%
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 151,828,310	\$ 147,733,263	2.8%
b. Assets for Valuation Purposes	125,229,654	121,596,003	3.0%
c. Unfunded Actuarial Liability (a) - (b)	26,598,656	26,137,260	1.8%
d. Funded Ratio (b) / (a)	82.5%	82.3%	0.2%
e. Market Value of Assets	119,835,012	106,498,558	12.5%
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost			
Total	20.48%	19.97%	
Member	<u>5.82%</u>	<u>4.75%</u>	
Employer	14.66%	15.22%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>8.96%</u>	<u>8.53%</u>	
Actuarial Contribution Rate	23.62%	23.75%	
Statutory Employer Contribution Rate*	<u>23.62%</u>	<u>23.75%</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

	12/31/2010 Valuation	12/31/2009 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	157,919	160,831	(1.8) %
Retired Members and Beneficiaries	76,498	73,164	4.6
Inactive Members	44,231	43,324	2.1
Total Members	278,648	277,319	0.5
Projected Annual Salaries of Active Members	\$ 6,494,048,278	\$ 6,532,496,350	(0.6)
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 1,005,812,936	\$ 935,925,071	7.5
<b>2. ASSETS AND LIABILITIES</b>			
a. Total Actuarial Liability	\$ 21,853,783,303	\$ 21,138,206,114	3.4
b. Assets for Valuation Purposes	13,589,658,118	13,461,220,705	1.0
c. Unfunded Actuarial Liability (a) - (b)	8,264,125,184	7,676,985,409	7.6
d. Funded Ratio (b) / (a)	62.2%	63.7%	(2.4)
e. Market Value of Assets	12,917,576,788	11,754,502,610	9.9





## 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, 2010. 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, 2010. As discussed in the Board Summary, the provisions of Senate Substitute for HB 2194 are not reflected in this valuation.
- 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, 2010 the market value of assets (excluding receivables) for the Retirement System was \$12.918 billion. Table 1 is a comparison, at market values, of System assets as of December 31, 2010, and December 31, 2009, in total and by investment category. Table 2 summarizes the change in the market value of assets from December 31, 2009 to December 31, 2010 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. The resulting value must not be less than 80% of market value and no more than 120% of market value (referred to as the 80%-120% corridor).

Tables 3A through 3F and Table 4 show the development of the actuarial value of assets (AVA) as of December 31, 2010.



## SECTION 3 – ASSETS

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

	<u>December 31, 2010</u>			<u>December 31, 2009</u>		
	<u>Amount</u> (\$ Millions)	<u>% of</u> <u>Total</u>		<u>Amount</u> (\$ Millions)	<u>% of</u> <u>Total</u>	
Cash & Equivalents	\$ 711	5.5 %		\$ 1,100	9.3 %	
Alternative Investments	364	2.8		388	3.3	
Real Estate	811	6.3		687	5.8	
Real Return	1,443	11.1		1,246	10.6	
Fixed Income	2,153	16.6		2,154	18.3	
Domestic Equity	3,780	29.2		3,009	25.5	
International Equity	3,699	28.5		3,211	27.2	
<b>Subtotal</b>	<b>\$ 12,961</b>	<b>100.0 %</b>		<b>\$ 11,795</b>	<b>100.0 %</b>	
Administrative Reserves	(18)			(18)		
Group Insurance and Optional Life Reserves	(25)			(22)		
<b>Net Assets</b>	<b>\$ 12,918</b>			<b>\$ 11,755</b>		
Receivables	0			0		
<b>Adjusted Net Assets</b>	<b>\$ 12,918</b>			<b>\$ 11,755</b>		

Allocation of Net Assets on December 31, 2010:

State	\$ 2,730
School	6,133
Local	2,295
KP&F	1,639
Judges	120
Total Net Assets	\$ 12,918 <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, 2010

(Market Value)

Table with 5 columns: Description, State, School, Local, Total KPERS. Rows include Market Value of Assets as of January 1, 2010\*, Contributions (Employee, Employer, etc.), Total Investment Income, Less Benefits (Annuity Retirement, etc.), Net Increase in Assets, and Market Value of Assets as of December 31, 2010\*.

\* Note: Assets exclude insurance and administrative reserves.



SECTION 3 – ASSETS

TABLE 2 (cont.)  
SUMMARY OF CHANGES IN KPERS ASSETS  
DURING PERIOD ENDED DECEMBER 31, 2010

(Market Value)

	KPERS	KP&F	Judges	Total
Market Value of Assets as of January 1, 2010*	\$ 10,163,455,692	\$ 1,484,548,360	\$ 106,498,558	\$ 11,754,502,610
Contributions:				
Employee	240,500,859	30,055,075	1,460,763	272,016,697
Employee service purchases	12,030,628	641,510	0	12,672,138
Employer	441,653,001	58,637,564	5,406,563	505,697,128
Miscellaneous	40,789	8,155	0	48,944
Total Contributions	<u>694,225,277</u>	<u>89,342,304</u>	<u>6,867,326</u>	<u>790,434,907</u>
Total Investment Income	<u>1,328,600,260</u>	<u>194,632,219</u>	<u>14,103,012</u>	<u>1,537,335,491</u>
Total Income	<u>2,022,825,537</u>	<u>283,974,523</u>	<u>20,970,338</u>	<u>2,327,770,398</u>
Less Benefits:				
Annuity Retirement Benefits	(858,043,142)	(109,688,069)	(7,394,630)	(975,125,841)
Partial Lump Sum Benefits	(115,003,632)	(14,680,075)	(191,246)	(129,874,953)
Retirant Dividends	(2,538,335)	(1,051,447)	(24,572)	(3,614,354)
Withdrawals	(37,358,614)	(3,379,445)	(3,102)	(40,741,161)
Death Benefits	(14,621,619)	(697,958)	(20,334)	(15,339,911)
Total Benefits	<u>(1,027,565,342)</u>	<u>(129,496,994)</u>	<u>(7,633,884)</u>	<u>(1,164,696,220)</u>
Receivables	0	0	0	0
Net Increase in Assets	995,260,195	154,477,529	13,336,454	1,163,074,178
Market Value of Assets as of December 31, 2010*	\$ 11,158,715,887	\$ 1,639,025,889	\$ 119,835,012	\$ 12,917,576,788

\* 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			
	12/31/2007	12/31/2008	12/31/2009	12/31/2010
1. Market Value of Assets, beginning of year	\$ 2,947,274,021	\$ 3,094,367,129	\$ 2,127,412,725	\$ 2,506,018,054
2. Contributions during year	97,593,959	104,032,160	115,003,572	124,819,016
3. Benefits during year	(196,796,956)	(206,616,684)	(210,170,449)	(226,652,537)
4. Expected net investment income	231,890,140	243,524,930	166,459,575	196,486,466
5. Transfers and receivables	2,220,000	0	0	0
6. Expected Value of Assets, end of year	3,082,181,164	3,235,307,535	2,198,705,423	2,600,670,999
7. Market Value of Assets, end of year	3,094,367,129	2,127,412,725	2,506,018,054	2,730,474,235
8. Excess (shortfall) of net investment income	\$ 12,185,965	\$ (1,107,894,810)	\$ 307,312,631	\$ 129,803,236



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

	<u>12/31/2007</u>	<u>12/31/2008</u>	<u>12/31/2009</u>	<u>12/31/2010</u>
1. Market Value of Assets, beginning of year	\$ 6,501,191,800	\$ 6,863,242,512	\$ 4,749,398,735	\$ 5,624,405,754
2. Contributions during year	312,360,158	351,288,652	379,318,453	400,933,168
3. Benefits during year	(519,171,843)	(542,872,662)	(565,041,695)	(625,144,165)
4. Expected net investment income	511,982,021	541,543,467	372,665,886	441,156,554
5. Transfers and receivables	4,730,000	0	0	0
6. Expected Value of Assets, end of year	6,811,092,136	7,213,201,969	4,936,341,379	5,841,351,311
7. Market Value of Assets, end of year	6,863,242,512	4,749,398,735	5,624,405,754	6,132,794,595
8. Excess (shortfall) of net investment income	\$ 52,150,376	\$ (2,463,803,234)	\$ 688,064,375	\$ 291,443,284





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

	<b>12/31/2007</b>	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>
1. Market Value of Assets, beginning of year	\$ 9,448,465,821	\$ 9,957,609,641	\$ 6,876,811,460	\$ 8,130,423,808
2. Contributions during year	409,954,117	455,320,812	494,322,025	525,752,184
3. Benefits during year	(715,968,799)	(749,489,346)	(775,212,144)	(851,796,702)
4. Expected net investment income	743,872,161	785,068,397	539,125,461	637,643,020
5. Transfers and receivables	6,950,000	0	0	0
6. Expected Value of Assets, end of year	9,893,273,300	10,448,509,504	7,135,046,802	8,442,022,310
7. Market Value of Assets, end of year	9,957,609,641	6,876,811,460	8,130,423,808	8,863,268,830
8. Excess (shortfall) of net investment income	\$ 64,336,341	\$ (3,571,698,044)	\$ 995,377,006	\$ 421,246,520



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

	<b>12/31/2007</b>	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>
1. Market Value of Assets, beginning of year	\$ 2,176,385,696	\$ 2,339,695,800	\$ 1,659,523,521	\$ 2,033,031,884
2. Contributions during year	116,832,356	129,967,365	153,054,256	168,473,093
3. Benefits during year	(143,255,820)	(148,142,237)	(157,112,798)	(175,768,640)
4. Expected net investment income	173,074,250	186,462,655	132,602,663	162,356,343
5. Transfers and receivables	0	0	0	0
6. Expected Value of Assets, end of year	2,323,036,482	2,507,983,583	1,788,067,642	2,188,092,680
7. Market Value of Assets, end of year	2,339,695,800	1,659,523,521	2,033,031,884	2,295,447,057
8. Excess (shortfall) of net investment income	\$ 16,659,318	\$ (848,460,062)	\$ 244,964,242	\$ 107,354,377



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

	<b>12/31/2007</b>	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>
1. Market Value of Assets, beginning of year	\$ 1,632,582,900	\$ 1,749,740,089	\$ 1,232,995,979	\$ 1,484,548,360
2. Contributions during year	90,227,912	89,951,185	92,025,361	89,342,304
3. Benefits during year	(108,568,763)	(112,958,046)	(118,344,181)	(129,496,994)
4. Expected net investment income	129,887,112	139,076,637	97,607,178	117,188,581
5. Transfers and receivables	90,000	0	0	0
6. Expected Value of Assets, end of year	1,744,219,161	1,865,809,865	1,304,284,337	1,561,582,251
7. Market Value of Assets, end of year	1,749,740,089	1,232,995,979	1,484,548,360	1,639,025,889
8. Excess (shortfall) of net investment income	\$ 5,520,928	\$ (632,813,886)	\$ 180,264,023	\$ 77,443,638



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

	12/31/2007	12/31/2008	12/31/2009	12/31/2010
1. Market Value of Assets, beginning of year	\$ 111,406,613	\$ 120,840,352	\$ 87,017,852	\$ 106,498,558
2. Contributions during year	6,909,103	7,371,737	7,328,809	6,867,326
3. Benefits during year	(6,672,286)	(6,787,124)	(7,635,319)	(7,633,884)
4. Expected net investment income	8,921,819	9,690,163	6,949,404	8,489,812
5. Transfers and receivables	20,000	0	0	0
6. Expected Value of Assets, end of year	120,585,249	131,115,128	93,660,746	114,221,812
7. Market Value of Assets, end of year	120,840,352	87,017,852	106,498,558	119,835,012
8. Excess (shortfall) of net investment income	\$ 255,103	\$ (44,097,276)	\$ 12,837,812	\$ 5,613,200



SECTION 3 – ASSETS

**TABLE 4  
DEVELOPMENT OF ACTUARIAL VALUE OF NET ASSETS**

	State/School	State	School	Local	Total KPERS
1. Excess (shortfall) of investment income					
a. Year ending 12/31/10	\$ 421,246,520	\$ 129,803,236	\$ 291,443,284	\$ 107,354,377	\$ 528,600,897
b. Year ending 12/31/09	995,377,006	307,312,631	688,064,375	244,964,242	1,240,341,248
c. Year ending 12/31/08	(3,571,698,044)	(1,107,894,810)	(2,463,803,234)	(848,460,062)	(4,420,158,106)
d. Year ending 12/31/07	64,336,341	12,185,965	52,150,376	16,659,318	80,995,659
e. Total	\$ (2,090,738,177)	\$ (658,592,978)	\$ (1,432,145,199)	\$ (479,482,125)	\$ (2,570,220,302)
2. Deferral of excess (shortfall) of investment income					
a. Year ending 12/31/10 (80%)	336,997,216	103,842,589	233,154,627	85,883,502	422,880,718
b. Year ending 12/31/09 (60%)	597,226,204	184,387,579	412,838,625	146,978,545	744,204,749
c. Year ending 12/31/08 (40%)	(1,428,679,218)	(443,157,924)	(985,521,294)	(339,384,025)	(1,768,063,243)
d. Year ending 12/31/07 (20%)	12,867,268	2,437,193	10,430,075	3,331,864	16,199,132
e. Total	\$ (481,588,530)	\$ (152,490,563)	\$ (329,097,967)	\$ (103,190,114)	\$ (584,778,644)
3. Market Value of Assets, end of year	\$ 8,863,268,830	\$ 2,730,474,235	\$ 6,132,794,595	\$ 2,295,447,057	\$ 11,158,715,887
4. Preliminary Actuarial Value of Assets, end of year (3) - (2e)	\$ 9,344,857,360	\$ 2,882,964,798	\$ 6,461,892,562	\$ 2,398,637,171	\$ 11,743,494,531
5. Smoothing corridor					
a. 80% of market value	7,090,615,064	2,184,379,388	4,906,235,676	1,836,357,646	8,926,972,709
b. 120% of market value	10,635,922,596	3,276,569,082	7,359,353,514	2,754,536,468	13,390,459,064
6. Actuarial Value of Assets, end of year (4), but not <(5a) and not >(5b)	\$ 9,344,857,360	\$ 2,882,964,798	\$ 6,461,892,562	\$ 2,398,637,171	\$ 11,743,494,531
7. Actuarial Value divided by market value (6)/(3)	105.4%	105.6%	105.4%	104.5%	105.2%



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 12/31/10	\$ 528,600,897	\$ 77,443,638	\$ 5,613,200	\$ 611,657,735
b. Year ending 12/31/09	1,240,341,248	180,264,023	12,837,812	1,433,443,083
c. Year ending 12/31/08	(4,420,158,106)	(632,813,886)	(44,097,276)	(5,097,069,268)
d. Year ending 12/31/07	80,995,659	5,520,928	255,103	86,771,690
e. Total	\$ (2,570,220,302)	\$ (369,585,297)	\$ (25,391,161)	\$ (2,965,196,760)
2. Deferral of excess (shortfall) of investment income				
a. Year ending 12/31/10 (80%)	422,880,718	61,954,910	4,490,560	489,326,188
b. Year ending 12/31/09 (60%)	744,204,749	108,158,414	7,702,687	860,065,850
c. Year ending 12/31/08 (40%)	(1,768,063,243)	(253,125,554)	(17,638,910)	(2,038,827,707)
d. Year ending 12/31/07 (20%)	16,199,132	1,104,186	51,021	17,354,339
e. Total	\$ (584,778,644)	\$ (81,908,044)	\$ (5,394,642)	\$ (672,081,330)
3. Market Value of Assets, end of year	\$ 11,158,715,887	\$ 1,639,025,889	\$ 119,835,012	\$ 12,917,576,788
4. Preliminary Actuarial Value of Assets, end of year (3) - (2e)	\$ 11,743,494,531	\$ 1,720,933,933	\$ 125,229,654	\$ 13,589,658,118
5. Smoothing corridor				
a. 80% of market value	8,926,972,709	1,311,220,711	95,868,010	10,334,061,431
b. 120% of market value	13,390,459,064	1,966,831,067	143,802,015	15,501,092,146
6. Actuarial Value of Assets, end of year (4), but not <(5a) and not >(5b)	\$ 11,743,494,531	\$ 1,720,933,933	\$ 125,229,654	\$ 13,589,658,118
7. Actuarial Value divided by market value (6)/(3)	105.2%	105.0%	104.5%	105.2%



## 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, 2010. 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 2007 Triennial Experience Study. This set of assumptions, as shown in Appendix C, was adopted by the Board in November 2007 and was first used for the December 31, 2007 valuation.

The liabilities reflect the benefit structure in place as of December 31, 2010. The changes to benefits and contributions passed by the 2011 Legislature in Senate Substitute for HB 2194 are not reflected in this valuation as they do not become effective without further action. 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, 2010**

	State	School	Local	Total KPERS
1. Active employees				
a. Retirement Benefit	\$ 2,246,830,828	\$ 7,851,016,578	\$ 2,921,787,664	\$ 13,019,635,070
b. Pre-Retirement Death Benefit	30,183,922	67,236,463	54,795,949	152,216,334
c. Withdrawal Benefit	102,427,834	298,676,890	177,122,718	578,227,442
d. Disability Benefit	109,480,644	208,564,977	137,219,646	455,265,267
e. Total	<u>2,488,923,228</u>	<u>8,425,494,908</u>	<u>3,290,925,977</u>	<u>14,205,344,113</u>
2. Inactive Vested Members	157,163,065	279,453,290	170,988,368	607,604,723
3. Inactive Nonvested Members	8,339,917	29,738,182	19,349,397	57,427,496
4. Disabled Members	85,828,134	95,119,224	60,479,080	241,426,438
5. Retirees	1,571,806,099	4,991,044,218	1,160,610,628	7,723,460,945
6. Beneficiaries	99,766,298	129,923,111	77,501,518	307,190,927
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>\$ 4,412,494,941</u>	<u>\$ 13,952,104,733</u>	<u>\$ 4,780,354,968</u>	<u>\$ 23,144,954,642</u>





**TABLE 5 (cont.)**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**PRESENT VALUE OF FUTURE BENEFITS (PVFB)**  
**AS OF DECEMBER 31, 2010**

	<b>KP&amp;F</b>	<b>Judges</b>	
1. Active employees			
a. Retirement Benefit	\$ 1,511,553,479	\$ 117,546,980	
b. Pre-Retirement Death Benefit	20,670,420	1,022,824	
c. Withdrawal Benefit	42,817,924	0	
d. Disability Benefit	155,863,317	0	
e. Total	1,730,905,140	118,569,804	
2. Inactive Vested Members	53,153,184	2,033,914	
3. Inactive Nonvested Members	13,279,201	0	
4. Disabled Members	98,241,979	0	
5. Retirees	893,247,559	56,330,196	
6. Beneficiaries	99,572,206	10,774,091	
7. Total PVFB	\$ 2,888,399,269	\$ 187,708,005	



**TABLE 6**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL LIABILITIES**  
**AS OF DECEMBER 31, 2010**

	State	School	Local	Total KPERS
1. Present Value of Future Benefits	\$ 4,412,494,941	\$ 13,952,104,733	\$ 4,780,354,968	\$ 23,144,954,642
2. Present Value of Future Normal Costs for Active Members				
a. Retirement Benefit	\$ 436,605,103	\$ 1,769,157,898	\$ 728,738,618	\$ 2,934,501,619
b. Pre-Retirement Death Benefit	8,940,141	21,904,081	18,947,428	49,791,650
c. Withdrawal Benefit	108,689,525	317,738,512	186,854,168	613,282,205
d. Disability Benefit	43,690,094	68,887,235	52,171,786	164,749,115
e. Total	<u>597,924,863</u>	<u>2,177,687,726</u>	<u>986,712,000</u>	<u>3,762,324,589</u>
3. Total Actuarial Liability (1) - (2e)	<u>\$ 3,814,570,078</u>	<u>\$ 11,774,417,007</u>	<u>\$ 3,793,642,968</u>	<u>\$ 19,382,630,053</u>



**TABLE 6 (cont.)**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL LIABILITIES**  
**AS OF DECEMBER 31, 2010**

	<b>KP&amp;F</b>	<b>Judges</b>
1. Present Value of Future Benefits	\$ 2,888,399,269	\$ 187,708,005
2. Present Value of Future Normal Costs for Active Members		
a. Retirement Benefit	\$ 419,052,577	\$ 35,449,591
b. Pre-Retirement Death Benefit	13,101,650	430,104
c. Withdrawal Benefit	53,424,212	0
d. Disability Benefit	83,495,890	0
e. Total	<u>569,074,329</u>	<u>35,879,695</u>
3. Total Actuarial Liability (1) - (2e)	<u>\$ 2,319,324,940</u>	<u>\$ 151,828,310</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, 2010 actuarial valuation will be used to determine employer contribution rates to the Kansas Public Employees Retirement System for fiscal years beginning in 2013 (July 1, 2013 to June 30, 2014 for the State and calendar year 2013 for Local employers).

### **KPERS**

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

Legislation provides that the employer rates of contribution for the State and School recommended by the Board of Trustees for all groups cannot increase more than 0.60% since FY2008 (the limit was 0.40% in FY2006 and 0.50% in FY2007) and later. Contribution rates for the Local group can not increase more than 0.60% since 2008 (the limit was 0.40% in 2006 and 0.50% in 2007). Such limits on the increase in the statutory contribution rate do not apply to the increase in the employer contribution rate for benefit enhancements. Although not shown in these rates, the total contribution rates for KPERS employers include the statutory employer contribution to the KPERS Group Life Insurance.



## SECTION 5 – EMPLOYER CONTRIBUTIONS

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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, with the first contribution in 2005 (2 years remaining in FY2013, the fiscal year for which this valuation sets the contribution rate). The increase in the unfunded actuarial liability due to the \$300 one-time payment to retirees in 2007 and 2008 is amortized over 10 years (Local only). The State funded the increased liability for the \$300 one-time payment for its members in both 2007 and 2008. The remainder of the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993. At the December 31, 2010 valuation date, twenty-two (22) years remain in that period.

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

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

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 (2 years remain as of FY2013, the fiscal year for which this valuation sets the contribution rate). The increase in the unfunded actuarial liability due to the \$300 one-time payment to retirees in 2007 and 2008 is amortized over 10 years (Local only). The State funded the increased liability for the \$300 one-time payment for its members in both 2007 and 2008. The remainder of the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993. At the December 31, 2010 valuation date, twenty-two (22) 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-two (22) years remain. The contribution rate includes an additional contribution necessary to pay the debt service payment on the bonds issued by the State in 2003 to finance the increase in liability from making the 13<sup>th</sup> check a permanent benefit.

### **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 is to be paid by an additional employer contribution to the System, effective July 1, 2004. The development of this debt service contribution rate for FY2014 is shown in Table 9. The total actuarial contribution rates determined as of December 31, 2010, 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 2011 and 2012 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 2013.

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 2013.



**TABLE 7**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**NORMAL COST RATE**  
**AS OF DECEMBER 31, 2010**

	State	School	State/School	Local
1. Normal Cost Rate				
a. Retirement Benefit	5.66%	6.57%	6.35%	5.66%
b. Pre-Retirement Death Benefit	0.12%	0.09%	0.10%	0.15%
c. Withdrawal Benefit	1.38%	1.19%	1.24%	1.45%
d. Disability Benefit	0.56%	0.27%	0.34%	0.42%
e. Total	7.72%	8.12%	8.03%	7.68%
2. Estimated Covered Payroll for 2011	\$ 1,068,931,480	\$ 3,315,448,958	\$ 4,384,380,438	\$ 1,638,534,481
3. Normal Cost for 2011	\$ 82,521,510	\$ 269,214,455	\$ 351,735,965	\$ 125,839,448





**TABLE 7 (cont.)**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**NORMAL COST RATE**  
**AS OF DECEMBER 31, 2010**

	<b>KP&amp;F</b>	<b>Judges</b>
1. Normal Cost Rate		
a. Retirement Benefit	10.57%	20.24%
b. Pre-Retirement Death Benefit	0.35%	0.25%
c. Withdrawal Benefit	1.35%	0.00%
d. Disability Benefit	2.12%	0.00%
e. Total	14.39%	20.49%
2. Estimated Covered Payroll for 2011	\$ 442,880,358	\$ 28,253,001
3. Normal Cost for 2011	\$ 63,730,484	\$ 5,789,040



**TABLE 8**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**UNFUNDED ACTUARIAL LIABILITY CONTRIBUTION RATES**  
**AS OF DECEMBER 31, 2010**

	State	School	Local	KPF		Judges
1. Actuarial Liability	\$ 3,814,570,078	\$ 11,774,417,007	\$ 3,793,642,968	\$ 2,319,324,940		\$ 151,828,310
2. Actuarial Value of Assets	<u>2,882,964,798</u>	<u>6,461,892,562</u>	<u>2,398,637,171</u>	<u>1,720,933,933</u>		<u>125,229,654</u>
3. Unfunded Actuarial Liability (UAL)	931,605,280	5,312,524,445	1,395,005,797	598,391,007		26,598,656
a. UAL for 1998 COLA	5,150,343	12,609,460	3,688,138	3,158,800		0
b. UAL for 13th Check (2003)	0	0	1,293,186	2,421,877		0
c. UAL for 2007 One Time Payment	0	0	1,182,249	402,937		0
d. UAL for 2008 One Time Payment	0	0	1,337,510	467,146		0
e. Prior service and other local employer UAL*	0	0	3,822,583	16,097,612		0
f. Remaining UAL	926,454,937	5,299,914,985	1,383,682,131	575,842,634		26,598,656
4. Payment to Amortize UAL (assumed mid-year)						
a. UAL for 1998 COLA	2,726,691	6,675,691	1,952,572	1,661,946	**	0
b. UAL for 13th Check (2003)	0	0	684,638	1,282,218	**	0
c. UAL for 2007 One Time Payment	0	0	224,566	76,537	**	0
d. UAL for 2008 One Time Payment	0	0	221,741	77,447	**	0
e. Remaining UAL	<u>63,217,140</u>	<u>361,642,484</u>	<u>94,416,277</u>	<u>35,287,768</u>	**	<u>2,509,089</u>
f. Total	65,943,831	368,318,175	97,499,794	38,385,916	**	2,509,089
5. Total Estimated Payroll for 2011	\$ 1,068,931,480	\$ 3,315,448,958	\$ 1,638,534,481	\$ 397,832,782	**	\$ 28,253,001
6. Amortization Payment as a Percent of Payroll	6.17%	11.11%	5.95%	9.66%	**	8.88%

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

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



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

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

	State	School	KPF (state)	Judges	Total
Original Bond Issue Proceeds	\$ 7,793,450	\$ 15,068,078	\$ 1,867,119	\$ 171,353	\$ 24,900,000
Scheduled Payments					
FYE 2014	1,005,138	1,943,362	240,806	22,100	3,211,406
Projected Payroll for FYE 2014*	1,109,468,491	3,441,180,489	46,755,912	29,319,083	
Rate of Pay Required	0.09%	0.06%	0.52%	0.08%	

\* Assumes 1.5% annual payroll growth



**TABLE 10**  
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL EMPLOYER CONTRIBUTION RATES**  
**FISCAL YEAR COMMENCING IN 2013**

	<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	7.72%	4.16%	3.56%	6.17%	0.09%	9.82%
Correctional Employees - Normal Retirement Age 55						10.82%
Correctional Employees - Normal Retirement Age 60						10.40%
School	8.12%	4.17%	3.95%	11.11%	0.06%	15.12%
State/School	8.03%	4.17%	3.86%	9.90%	0.07%	13.83%
Local	7.68%	4.20%	3.48%	5.95%	0.00%	9.43%
KP&F Uniform Contribution Rate						
State **	14.39%	6.79%	7.60%	9.00%	0.52%	17.12%
Local **	14.39%	6.79%	7.60%	9.66%	0.00%	17.26%
Judges	20.49%	5.82%	14.66%	8.88%	0.08%	23.62%

\* 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 2013**

<b>Employer</b>	<b>Year Affiliated</b>	<b>Projected 2013 Annual Payroll</b>	<b>Projected 1/1/2013 Unfunded Actuarial Liability</b>	<b>Projected 1/1/2013 Excess Benefit Liability</b>	<b>Payment on 1/1/2013 Unfunded Liabilities<sup>2</sup></b>	<b>Payment on Unfunded Liability as % of Payroll</b>
St. Francis Housing Authority	1999	\$17,776	\$8,232	\$0	\$574	3.23%
City of Burden	1999	\$131,107	\$16,243	\$0	\$1,132	0.86%
City of Longton	1999	\$59,825	\$19,737	\$0	\$1,377	2.30%
Bourbon County RWD#2	1999	\$224,883	\$114,399	\$0	\$7,981	3.55%
Towanda Township	1999	\$25,118	\$9,351	\$0	\$651	2.59%
City of Herndon	1999	NA	\$5,896	\$0	\$5,895	<sup>3</sup>
Hays Housing Authority	2000	\$63,114	\$1,821	\$0	\$131	0.21%
Haysville Community Library	2000	\$177,022	\$207,871	\$0	\$14,492	8.19%
Hamilton County Library	2000	\$93,106	\$13,764	\$0	\$960	1.03%
Ellis Public Library	2000	\$28,948	\$5,227	\$0	\$364	1.26%
Bucklin Public Library	2000	\$19,302	\$13,002	\$0	\$908	4.71%
Elkhart Cemetery District	2000	\$46,720	\$1,828	\$0	\$130	0.28%
Clay County Conservation District	2000	NA	(\$0)	\$0	\$0	<sup>3</sup>
City of Linn Valley	2000	\$91,697	\$1,021	\$0	\$72	0.08%
City of Blue Mound	2000	\$88,183	\$2,938	\$0	\$200	0.23%
Kansas Workers' Risk Coop for Counties	2000	\$310,387	\$52,850	\$0	\$3,669	1.18%
Lindsborg Community Library	2002	\$6,059	\$3,723	\$0	\$250	4.13%
City of North Newton	2002	\$354,476	\$168,940	\$0	\$11,527	3.25%
City of Arcadia	2002	\$95,006	\$16,526	\$0	\$1,126	1.19%
City of Linwood	2003	\$66,966	\$2,476	\$0	\$169	0.25%
Johnson County Fire District #2 Rural	2003	\$2,662,985	\$460,535	\$0	\$31,424	1.18%
Basehor Community Library	2003	\$245,325	\$58,558	\$0	\$3,995	1.63%
City of Gypsum	2003	\$62,457	\$4,977	\$0	\$340	0.54%
Greenleaf Housing Authority	2003	\$15,242	\$23,372	\$0	\$1,594	10.46%
City of Bentley	2004	\$82,770	\$39,144	\$0	\$2,843	3.43%
Mulvane Public Library	2004	\$66,094	\$14,035	\$0	\$1,020	1.54%



**TABLE 11A (cont.)  
LOCAL AFFILIATION COST FACTORS  
FOR FISCAL YEAR BEGINNING IN 2013**

<b>Employer</b>	<b>Year Affiliated</b>	<b>Projected 2013 Annual Payroll</b>	<b>Projected 1/1/2013 Unfunded Actuarial Liability</b>	<b>Projected 1/1/2013 Excess Benefit Liability</b>	<b>Payment on 1/1/2013 Unfunded Liabilities<sup>2</sup></b>	<b>Payment on Unfunded Liability as % of Payroll</b>
The Center for Counseling and Consultation	2004	\$2,454,589	\$1,179,912	\$0	\$85,703	3.49%
Crawford County RWD #2	2005	\$37,394	\$0	\$0	\$0	0.00%
Doniphan County RFD #2	2005	\$78,330	\$9,374	\$0	\$680	0.87%
City of Denison	2005	\$50,972	\$20,689	\$0	\$1,503	2.95%
Stanton County Recreation Commission	2005	\$32,851	\$25,481	\$0	\$1,850	5.63%
City of Salina	NA	\$14,523,273	\$0	\$108,054	\$66,133	0.46%
City of Shawnee	NA	\$8,722,978	\$0	\$107,523	\$63,331	0.73%
Unified Government - Wyandotte Co./ KCK	NA	\$60,025,075	\$0	\$656,849	\$272,659	0.45%
City of Emporia	NA	\$6,122,065	\$0	\$3,006	\$1,622	0.03%
City of Leavenworth	NA	\$6,344,974	\$0	\$3,683	\$1,988	0.03%
<b>Total</b>		<b>\$103,427,067</b>	<b>\$2,501,921</b>	<b>\$879,114</b>	<b>\$588,294</b>	

<sup>1</sup> Basic local employer contribution rates excluding Death and Disability contribution:

FY 2012: 7.34%

FY 2013: 7.94%

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

<sup>3</sup> This entity will pay off their unfunded actuarial liability according to a fixed schedule. Payments are as of January 1.



**TABLE 11B  
LOCAL AFFILIATION COST FACTORS - AFFILIATION AFTER 1/1/06  
FOR FISCAL YEAR BEGINNING IN 2013**

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



**TABLE 12**  
**KP&F**  
**EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS**  
**COMMENCING IN CALENDAR YEARS 2012 AND 2013**

<b>Employer</b>	<b>Total Rate for Fiscal Year Commencing in 2012</b>	<b>Recommended Total Rate for Fiscal Year Commencing in 2013</b>
Douglas County Law Enforcement	19.32 %	19.96 %
Ford County	16.54	17.26
Franklin County Sheriff's Dept	16.54	17.26
Gray County Sheriff's Dept.	16.54	17.26
Harvey County Sheriff's Dept.	16.54	17.26
Johnson County Fire Dept.	16.54	17.26
Johnson County Fire No. 1	16.54	17.26
Johnson County Fire No. 2	16.54	17.26
Johnson County Park Commission	16.54	17.26
Johnson County Sheriff's Dept.	16.71	17.43
Labette County Sheriff's Dept.	18.82	19.37
Reno County Sheriff's Dept.	16.54	17.26
Riley County Law Enforcement	16.54	17.26
Sedgwick County Fire No. 1	16.54	17.26
Sedgwick County Sheriff's Dept.	16.88	17.59
Sedgwick County EMT's	16.88	17.60
Shawnee County Sheriff's Dept.	18.94	19.53
Sumner County Sheriff's Dept.	17.86	18.50
Unified Gov't of Wyandotte County	16.54	17.26
Unified Gov't of Wyandotte Co. - KCK	20.35	23.45
City of Abilene	16.54	17.26
City of Arkansas City	16.54	17.26
City of Atchison	17.54	18.22
City of Bonner Springs	16.54	17.26
City of Chanute	16.54	17.26
City of Cimarron	16.54	17.26
City of Coffeyville	21.56	20.37
City of Concordia	19.84	20.26
City of Derby	16.54	17.26
City of Dodge City	21.92	27.33
City of Emporia	16.54	17.26
City of Erie	16.54	17.26
City of Eudora	16.54	17.26
City of Fairway	16.54	17.26
City of Fort Scott	22.13	22.84
City of Herington	17.31	18.00
City of Hutchinson	16.54	17.26





**KP&F  
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS  
COMMENCING IN CALENDAR YEARS 2012 AND 2013**

<b>Employer</b>	<b>Total Rate for Fiscal Year Commencing in 2012</b>	<b>Recommended Total Rate for Fiscal Year Commencing in 2013</b>
City of Junction City	16.54 %	17.26 %
City of Lawrence	16.54	17.26
City of Leavenworth	17.56	18.29
City of Leawood	17.13	17.81
City of Lenexa	16.66	17.38
City of Manhattan	16.54	17.26
City of Merriam	16.54	17.26
City of McPherson	16.54	17.26
City of Mission	16.54	17.26
City of Newton EMTs	19.12	19.75
City of Newton	16.54	17.26
City of Olathe	16.60	17.30
City of Ottawa	16.54	17.26
City of Parsons	16.54	17.26
City of Pittsburg	19.43	20.13
City of Salina	19.81	21.03
City of Shawnee	18.37	20.46
City of Topeka	16.54	17.26
City of Wellington	19.45	20.40
City of Westwood	16.54	17.26
City of Winfield	20.15	20.76
Board of Regents Campus Police	16.43	17.14
Kansas Bureau of Investigation	16.43	17.14
Kansas Highway Patrol	16.43	17.14
Cowley County Sheriff's Dept	16.54	17.26
City of Gardner Public Safety Officers	16.54	17.26
City of Liberal Police & Firemen	16.54	17.26
City of Oswego	16.54	17.26
Leavenworth County	16.54	17.26
Pottawatomie County	16.54	17.26
City of Roeland Park	16.54	17.26
City of Edwardsville Police	18.75	19.64
City of Garden City	16.54	17.26
City of Lake Quivira	16.54	17.26
City of Paola	16.54	17.26
City of Winfield (EMS)	22.48	24.38
Miami County	16.54	17.26



**TABLE 12 (cont.)  
KP&F  
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS  
COMMENCING IN CALENDAR YEARS 2012 AND 2013**

<b>Employer</b>	<b>Total Rate for Fiscal Year Commencing in 2012</b>	<b>Recommended Total Rate for Fiscal Year Commencing in 2013</b>
Atchinson County	16.54 %	17.26 %
City of Park City	16.54	17.26
Dickinson County	16.54	17.26
Leavenworth County (EMS)	16.54	17.26
City of Basehor	16.54	17.26
City of Edwardsville Firemen	22.25	21.53
City of Marion	16.54	17.26
City of Overbrook	16.54	17.26
Leavenworth County Fire District #1	16.54	17.26
Shawnee Heights Fire District	16.54	17.26
City of Lansing	16.54	17.26
State Fire Marshall	16.43	17.14
Seward County	16.54	17.26
City of Hays	16.54	17.26
Ellis County	16.54	17.26
City of Baldwin City	16.54	17.26
McPherson County	16.54	17.26
City of Spring Hill	16.54	17.26
City of Andover	16.54	17.26
Kearny County	16.54	17.26
Neosho County	16.54	17.26
Clark County	16.54	17.26
City of Wakefield	16.54	17.26
Russell County	16.54 *	17.26 *
City of Rossville	16.54	17.26
City of Goddard	16.54	17.26
City of El Dorado	16.54	17.26
Northwest Consolidated Fire District	16.54	17.26
City of Girard	16.54	17.26
City of Overland Park	16.54	17.26
City of Victoria	16.54	17.26

\* 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 2013**

<b>Employer</b>	<b>1/1/2011 Unfunded Prior Service Liability</b>	<b>Payment on Unfunded Liability*</b>
Douglas County Law Enforcement	\$1,337,466	\$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.	140,138	67,758
Labette County Sheriff's Dept.	175,778	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.	239,515	54,352
Sedgwick County EMT's	42,566	31,177
Shawnee County Sheriff's Dept.	1,052,855	154,845
Sumner County Sheriff's Dept.	66,884	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	406,373	122,214
City of Concordia	41,320	12,471
City of Derby	0	0
City of Dodge City	1,768,577	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	243,858	73,266
City of Herington	8,177	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 2013**

<b>Employer</b>	<b>1/1/2011 Unfunded Prior Service Liability</b>	<b>Payment on Unfunded Liability*</b>
City of Leawood	\$254,215	\$47,701
City of Lenexa	19,615	14,445
City of Manhattan	0	0
City of Merriam	0	0
City of McPherson	0	0
City of Mission	0	0
City of Newton EMTs	51,049	7,898
City of Newton	0	0
City of Olathe	8,367	8,695
City of Ottawa	0	0
City of Parsons	0	0
City of Pittsburg	337,375	101,429
City of Salina	806,482	242,452
City of Shawnee	68,652	20,681
City of Topeka	0	0
City of Wellington	187,797	56,430
City of Westwood	0	0
City of Winfield	423,397	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	226,662	18,952
City of Garden City	0	0
City of Lake Quivira	0	0
City of Paola	0	0
City of Winfield (EMS)	409,026	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	409,163	37,963



**TABLE 13A (cont.)**  
**KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES**  
**PRIOR SERVICE LIABILITY**  
**FOR FISCAL YEARS BEGINNING IN 2013**

<b>Employer</b>	<b>1/1/2011 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>\$ 8,725,307</b>	<b>\$ 1,626,861</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 2013**

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
Russell County	2009	\$144,903	\$12,937	2031

Only employers with remaining obligations are shown.



**TABLE 14  
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES  
FOR FISCAL YEARS BEGINNING IN 2013**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2013 Payroll</b>	<b>Projected 1/1/2011 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	84	\$6,697,188	\$0	\$0	\$181,138	\$181,138	2.70 %
Ford County	49	2,523,081	0	0	0	0	0.00
Franklin County Sheriff's Dept	48	2,452,738	0	0	0	0	0.00
Gray County Sheriff's Dept.	10	486,348	0	0	0	0	0.00
Harvey County Sheriff's Dept.	20	1,085,536	0	0	0	0	0.00
Johnson County Fire Dept.	162	11,856,946	0	0	0	0	0.00
Johnson County Fire No. 1	29	1,803,533	0	0	0	0	0.00
Johnson County Fire No. 2	67	6,142,770	0	0	0	0	0.00
Johnson County Park Commission	17	843,888	0	0	0	0	0.00
Johnson County Sheriff's Dept.	473	38,778,169	0	0	67,758	67,758	0.17
Labette County Sheriff's Dept.	17	784,049	0	0	16,582	16,582	2.11
Reno County Sheriff's Dept.	46	2,860,685	0	0	0	0	0.00
Riley County Law Enforcement	98	6,572,451	0	0	0	0	0.00
Sedgwick County Fire No. 1	138	9,925,100	0	0	0	0	0.00
Sedgwick County Sheriff's Dept.	252	16,692,007	390	145	54,352	54,497	0.33
Sedgwick County EMT's	148	9,212,471	0	0	31,177	31,177	0.34
Shawnee County Sheriff's Dept.	110	6,821,285	0	0	154,845	154,845	2.27
Sumner County Sheriff's Dept.	19	941,008	0	0	11,639	11,639	1.24
Unified Gov't of Wyandotte County	835	4,453,040	0	0	0	0	0.00
Unified Gov't of Wyandotte Co. - KCK	0	61,508,150	6,418,452	3,806,399	0	3,806,399	6.19
City of Abilene	21	1,022,230	0	0	0	0	0.00
City of Arkansas City	47	2,695,047	0	0	0	0	0.00
City of Atchison	41	1,989,282	25,020	19,129	0	19,129	0.96
City of Bonner Springs	24	1,515,669	0	0	0	0	0.00
City of Chanute	33	1,955,506	0	0	0	0	0.00
City of Cimarron	0	0	0	0	0	0	0.00
City of Coffeyville	67	3,931,445	0	0	122,214	122,214	3.11
City of Concordia	8	416,177	0	0	12,471	12,471	3.00
City of Derby	51	3,037,338	0	0	0	0	0.00



**TABLE 14 (cont.)  
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES  
FOR FISCAL YEARS BEGINNING IN 2013**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2013 Payroll</b>	<b>Projected 1/1/2011 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	42	\$2,138,455	\$0	\$0	\$215,432	\$215,432	10.07 %
City of Emporia	88	5,439,861	0	0	0	0	0.00
City of Erie	3	101,226	0	0	0	0	0.00
City of Eudora	9	532,382	0	0	0	0	0.00
City of Fairway	9	763,880	0	0	0	0	0.00
City of Fort Scott	32	1,313,757	0	0	73,266	73,266	5.58
City of Herington	9	407,218	0	0	3,014	3,014	0.74
City of Hutchinson	154	10,001,914	0	0	0	0	0.00
City of Junction City	98	5,762,967	0	0	0	0	0.00
City of Lawrence	271	23,262,063	0	0	0	0	0.00
City of Leavenworth	115	6,604,074	104,487	68,028	0	68,028	1.03
City of Leawood	110	8,698,672	0	0	47,701	47,701	0.55
City of Lenexa	168	12,039,184	0	0	14,445	14,445	0.12
City of Manhattan	66	3,960,029	0	0	0	0	0.00
City of Merriam	50	3,683,657	0	0	0	0	0.00
City of McPherson	48	2,650,605	0	0	0	0	0.00
City of Mission	28	1,985,984	0	0	0	0	0.00
City of Newton EMTs	4	316,802	0	0	7,898	7,898	2.49
City of Newton	78	4,892,136	0	0	0	0	0.00
City of Olathe	273	22,415,325	0	0	8,695	8,695	0.04
City of Ottawa	47	3,011,153	0	0	0	0	0.00
City of Parsons	42	1,853,213	0	0	0	0	0.00
City of Pittsburg	71	3,535,728	0	0	101,429	101,429	2.87
City of Salina	161	11,582,953	271,560	194,587	242,452	437,039	3.77
City of Shawnee	139	10,941,314	502,075	329,572	20,681	350,253	3.20
City of Topeka	499	36,604,342	0	0	0	0	0.00
City of Wellington	33	1,795,835	0	0	56,430	56,430	3.14
City of Westwood	7	513,080	0	0	0	0	0.00
City of Winfield	42	2,478,449	0	0	86,672	86,672	3.50





**TABLE 14 (cont.)  
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES  
FOR FISCAL YEARS BEGINNING IN 2013**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2013 Payroll</b>	<b>Projected 1/1/2011 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	142	\$6,798,364	\$0	\$0	\$0	\$0	0.00	%
Kansas Bureau of Investigation	76	6,056,701	0	0	0	0	0.00	
Kansas Highway Patrol	519	36,637,959	0	0	0	0	0.00	
Cowley County Sheriff's Dept	23	1,094,043	0	0	0	0	0.00	
City of Gardner Public Safety Officers	23	1,538,313	0	0	0	0	0.00	
City of Liberal Police & Firemen	58	2,837,223	0	0	0	0	0.00	
City of Oswego	5	191,321	0	0	0	0	0.00	
Leavenworth County	55	3,012,191	0	0	0	0	0.00	
Pottawatomie County	26	1,238,339	0	0	0	0	0.00	
City of Roeland Park	15	1,000,312	0	0	0	0	0.00	
City of Edwardsville Police	11	797,053	0	0	18,952	18,952	2.38	
City of Garden City	91	4,947,363	0	0	0	0	0.00	
City of Lake Quivira	1	35,133	0	0	0	0	0.00	
City of Paola	15	850,975	0	0	0	0	0.00	
City of Winfield (EMS)	9	557,133	0	0	39,655	39,655	7.12	
Miami County	48	2,757,357	0	0	0	0	0.00	
Atchinson County	11	439,877	0	0	0	0	0.00	
City of Park City	16	904,008	0	0	0	0	0.00	
Dickinson County	16	785,358	0	0	0	0	0.00	
Leavenworth County (EMS)	34	1,670,272	0	0	0	0	0.00	
City of Basehor	12	574,329	0	0	0	0	0.00	
City of Edwardsville Firemen	14	888,561	0	0	37,963	37,963	4.27	
City of Marion	3	144,605	0	0	0	0	0.00	
City of Overbrook	2	88,687	0	0	0	0	0.00	
Leavenworth County Fire District #1	5	285,369	0	0	0	0	0.00	
Shawnee Heights Fire District	10	655,179	0	0	0	0	0.00	
City of Lansing	17	882,358	0	0	0	0	0.00	
State Fire Marshall	10	552,462	0	0	0	0	0.00	
Seward County	27	1,471,510	0	0	0	0	0.00	



**TABLE 14 (cont.)  
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES  
FOR FISCAL YEARS BEGINNING IN 2013**

<b>Employer</b>	<b>Number of Employees</b>	<b>Total Estimated 2013 Payroll</b>	<b>Projected 1/1/2011 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>
City of Hays	55	\$3,187,778	\$0	\$0	\$0	\$0	0.00	
Ellis County	46	2,476,017	0	0	0	0	0.00	
City of Baldwin City	8	441,306	0	0	0	0	0.00	
McPherson County	1	24,008	0	0	**	**	0.00	
City of Spring Hill	11	598,882	0	0	0	0	0.00	
City of Andover	35	1,847,561	0	0	0	0	0.00	
Kearny County	17	792,092	0	0	0	0	0.00	
Neosho County	14	577,494	0	0	0	0	0.00	
Clark County	6	267,495	0	0	0	0	0.00	
City of Wakefield	1	48,673	0	0	0	0	0.00	
Russell County	9	366,850	0	0	**	**	0.00	
City of Rossville	2	90,080	0	0	0	0	0.00	
City of Goddard	8	365,844	0	0	0	0	0.00	
City of El Dorado	0	0	0	0	0	0	0.00	
Northwest Consolidated Fire District	14	621,519	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>7,131</b>	<b>\$ 489,687,346</b>	<b>\$ 7,321,983</b>	<b>\$ 4,417,860</b>	<b>\$ 1,626,861</b>	<b>\$ 6,044,721</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)
12/31/2005	\$11,339,293	\$16,491,762	\$5,152,469	69%	\$5,270,351	98%
12/31/2006	12,189,197	17,552,791	5,363,593	69%	5,599,193	96%
12/31/2007	13,433,115	18,984,915	5,551,800	71%	5,949,228	93%
12/31/2008	11,827,619	20,106,787	8,279,168	59%	6,226,526	133%
12/31/2009	13,461,221	21,138,206	7,676,985	64%	6,532,496	118%
12/31/2010	13,589,658	21,853,783	8,264,125	62%	6,494,048	127%



**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	12/31/10	12/31/10	12/31/10
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	22 years	22 years	22 years
Asset Valuation Method	Difference between actual return and expected return on market value recognized evenly over five-year period. Value must be within corridor of 80% - 120% of market value.		
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
2006	\$471,424,006	63.4%
2007	531,292,151	63.9%
2008	607,662,300	65.1%
2009	660,833,664	68.0%
2010	682,062,413	72.1%
2011	686,960,068	74.1% *

\*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
2011	\$223,117,000	\$608,359,000	\$170,910,000	\$1,002,386,000	\$124,521,000	\$8,711,000	\$1,135,618,000
2012	237,359,000	657,256,000	185,380,000	1,079,995,000	132,234,000	10,007,000	1,222,236,000
2013	252,135,000	706,005,000	200,864,000	1,159,004,000	140,106,000	11,129,000	1,310,239,000
2014	265,986,000	754,090,000	215,468,000	1,235,544,000	148,333,000	12,096,000	1,395,973,000
2015	280,398,000	801,356,000	232,066,000	1,313,820,000	157,023,000	13,000,000	1,483,843,000
2016	295,449,000	850,138,000	251,184,000	1,396,771,000	166,543,000	13,838,000	1,577,152,000
2017	310,848,000	899,207,000	271,611,000	1,481,666,000	176,544,000	14,667,000	1,672,877,000
2018	326,241,000	948,521,000	293,270,000	1,568,032,000	187,059,000	15,571,000	1,770,662,000
2019	341,472,000	997,227,000	316,099,000	1,654,798,000	197,589,000	16,457,000	1,868,844,000
2020	356,039,000	1,045,630,000	339,265,000	1,740,934,000	208,767,000	17,179,000	1,966,880,000
2021	370,279,000	1,093,369,000	362,581,000	1,826,229,000	220,126,000	17,912,000	2,064,267,000
2022	384,001,000	1,139,951,000	386,486,000	1,910,438,000	231,932,000	18,678,000	2,161,048,000
2023	396,698,000	1,185,381,000	410,119,000	1,992,198,000	243,576,000	19,255,000	2,255,029,000
2024	408,152,000	1,230,122,000	433,221,000	2,071,495,000	255,757,000	19,736,000	2,346,988,000
2025	418,738,000	1,273,761,000	455,755,000	2,148,254,000	268,367,000	20,200,000	2,436,821,000
2026	428,167,000	1,316,296,000	478,094,000	2,222,557,000	280,900,000	20,526,000	2,523,983,000
2027	436,032,000	1,357,343,000	499,276,000	2,292,651,000	293,676,000	20,711,000	2,607,038,000
2028	442,390,000	1,397,231,000	518,959,000	2,358,580,000	306,115,000	20,771,000	2,685,466,000
2029	447,476,000	1,436,141,000	537,637,000	2,421,254,000	318,380,000	20,747,000	2,760,381,000
2030	451,066,000	1,473,421,000	554,860,000	2,479,347,000	330,679,000	20,598,000	2,830,624,000
2031	454,165,000	1,509,499,000	571,725,000	2,535,389,000	342,919,000	20,328,000	2,898,636,000
2032	456,201,000	1,544,489,000	587,757,000	2,588,447,000	354,665,000	20,011,000	2,963,123,000
2033	457,397,000	1,578,083,000	602,590,000	2,638,070,000	365,632,000	19,612,000	3,023,314,000
2034	457,879,000	1,609,852,000	616,927,000	2,684,658,000	375,970,000	19,030,000	3,079,658,000
2035	457,312,000	1,640,110,000	630,283,000	2,727,705,000	385,217,000	18,398,000	3,131,320,000

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						Deferred Disabled*	Inactives	Retired	
Date December 31	Total Count	Number	Age	Entry Age	Service	Annual Pay (\$)	Pay Increase				
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

\*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								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

\*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



**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	89,553
Removed deaths prior to 12/31/10	(13,055)
Records used in the valuation	76,498
Records on the not-in-pay data file	223,428
Records removed because the member has received all benefits or is in a non-benefiting group	(21,278)
Records used in the valuation	202,150

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	25,737	84,438	40,307	7,173	264
Vested inactive members	3,396	7,929	4,250	355	10
Nonvested inactive members	<u>2,967</u>	<u>16,196</u>	<u>8,133</u>	<u>995</u>	<u>0</u>
Total Not-in pay	32,100	108,563	52,690	8,523	274
Retirees and beneficiaries	16,375	40,856	14,893	4,168	206
TOTAL	48,475	149,419	67,583	12,691	480



## SUMMARY OF MEMBERSHIP DATA

### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM ACTIVE MEMBER DATA

	12/31/2010	12/31/2009	Change
<b>State/School</b>			
Number	110,175	112,053	(1.7%)
Average Current Age	45.71	45.59	0.3%
Average Service	11.66	11.22	3.9%
Average Pay*	\$39,795	\$38,506	3.3%
<b>State</b>			
Number	25,737	26,005	(1.0%)
Average Current Age	46.94	46.87	0.2%
Average Service	12.38	12.12	2.1%
Average Pay*	\$41,533	\$39,535	5.1%
<b>School</b>			
Number	84,438	86,048	(1.9%)
Average Current Age	45.33	45.20	0.3%
Average Service	11.44	10.94	4.5%
Average Pay*	\$39,265	\$38,195	2.8%
<b>Local</b>			
Number	40,307	41,333	(2.5%)
Average Current Age	45.19	44.85	0.8%
Average Service	9.89	9.34	5.9%
Average Pay*	\$40,651	\$39,406	3.2%
<b>KPERS Total</b>			
Number	150,482	153,386	(1.9%)
Average Current Age	45.57	45.39	0.4%
Average Service	11.19	10.71	4.4%
Average Pay*	\$40,024	\$38,749	3.3%

\*Due to different valuation software, average pay numbers are not directly comparable.



**SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
ACTIVE MEMBER DATA

	<b>12/31/2010</b>	<b>12/31/2009</b>	<b>Change</b>
<b>KP&amp;F</b>			
Number	7,173	7,179	(0.1%)
Tier I	434	500	(13.2%)
Tier II	6,739	6,679	0.9%
Average Current Age	39.61	39.50	0.3%
Average Service	11.65	11.43	1.9%
Average Pay*	\$61,743	\$60,287	2.4%
<b>Judges</b>			
Number	264	266	(0.8%)
Average Current Age	57.79	57.06	1.3%
Average Service	12.31	11.51	6.9%
Average Pay*	\$107,019	\$105,709	1.2%
<b>System Total</b>			
Number	157,919	160,831	(1.8%)
Average Current Age	45.32	45.14	0.4%
Average Service	11.21	10.75	4.3%
Average Pay*	\$41,123	\$39,821	3.3%

\*Due to different valuation software, average pay numbers are not directly comparable.



## SUMMARY OF MEMBERSHIP DATA

### KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM INACTIVE MEMBER DATA

	12/31/2010	12/31/2009	Change
<b>State</b>			
inactive vested	2,443	2,182	12.0%
inactive nonvested	2,967	2,712	9.4%
deferred disabled	953	969	(1.7%)
<b>School</b>			
inactive vested	6,898	5,859	17.7%
inactive nonvested	16,196	18,068	(10.4%)
deferred disabled	1,031	1,031	0.0%
<b>Local</b>			
inactive vested	3,485	2,996	16.3%
inactive nonvested	8,133	7,395	10.0%
deferred disabled	765	781	(2.0%)
<b>KPERS Total</b>			
inactive vested	12,826	11,037	16.2%
inactive nonvested	27,296	28,175	(3.1%)
deferred disabled	2,749	2,781	(1.2%)
<b>KP&amp;F</b>			
inactive vested	174	150	16.0%
inactive nonvested	995	986	0.9%
deferred disabled	181	181	0.0%
<b>Judges</b>			
inactive vested	10	14	(28.6%)
inactive nonvested	0	0	
deferred disabled	0	0	
<b>System Total</b>			
inactive vested	13,010	11,201	16.2%
inactive nonvested	28,291	29,161	(3.0%)
deferred disabled	2,930	2,962	(1.1%)



## SUMMARY OF MEMBERSHIP DATA

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

	12/31/2010	12/31/2009	Change
<b>State</b>			
Number	16,375	15,936	2.8%
Average Benefit	\$11,987	\$11,692	2.5%
Average Age	73.27	72.83	0.6%
<b>School</b>			
Number	40,856	38,878	5.1%
Average Benefit	\$13,450	\$13,108	2.6%
Average Age	72.03	72.08	(0.1%)
<b>Local</b>			
Number	14,893	14,087	5.7%
Average Benefit	\$9,441	\$9,062	4.2%
Average Age	72.76	72.91	(0.2%)
<b>KPERS Total</b>			
Number	72,124	68,901	4.7%
Average Benefit	\$12,290	\$11,953	2.8%
Average Age	72.46	72.42	0.1%
<b>KP&amp;F</b>			
Number	4,168	4,060	2.7%
Average Benefit	\$26,837	\$25,866	3.8%
Average Age	64.80	63.70	1.7%
<b>Judges</b>			
Number	206	203	1.5%
Average Benefit	\$36,582	\$36,023	1.6%
Average Age	74.45	74.00	0.6%
<b>System Total</b>			
Number	76,498	73,164	4.6%
Average Benefit	\$13,148	\$12,792	2.8%
Average Age	72.05	71.94	0.1%



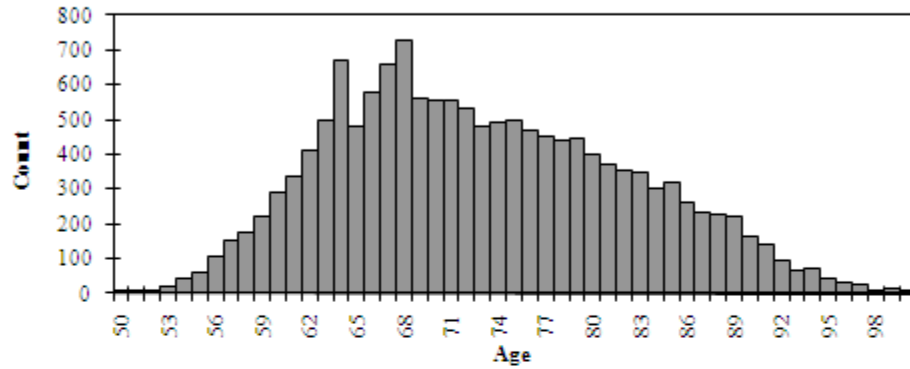


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2010

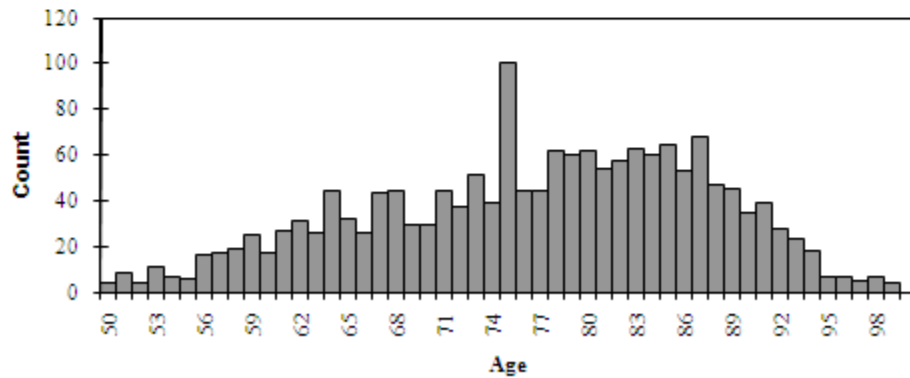
**STATE**

**Retirees**



Count: 14,655 Average age: 72.9 Average benefit: \$ 12,437

**Beneficiaries**



Count: 1,720 Average age: 76.2 Average benefit: \$ 8,158

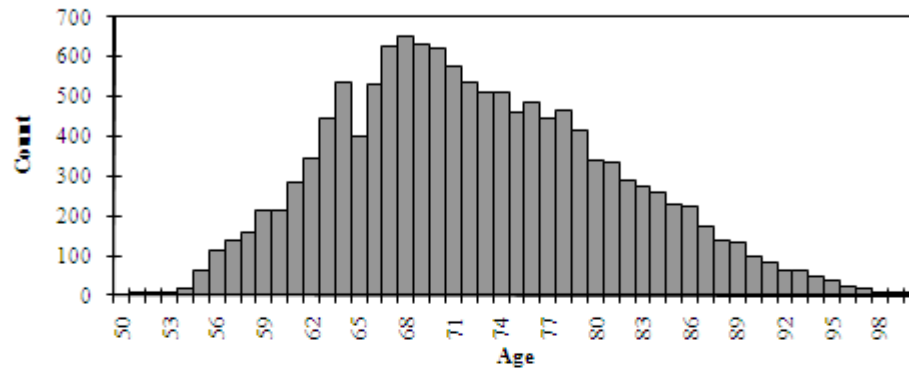


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2010

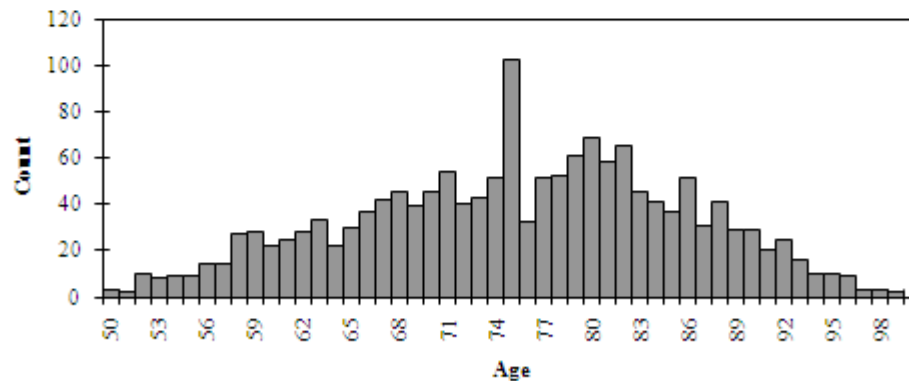
**LOCAL**

**Retirees**



Count: 13,298 Average age: 72.7 Average benefit: \$ 9,818

**Beneficiaries**



Count: 1,595 Average age: 74.8 Average benefit: \$ 6,295

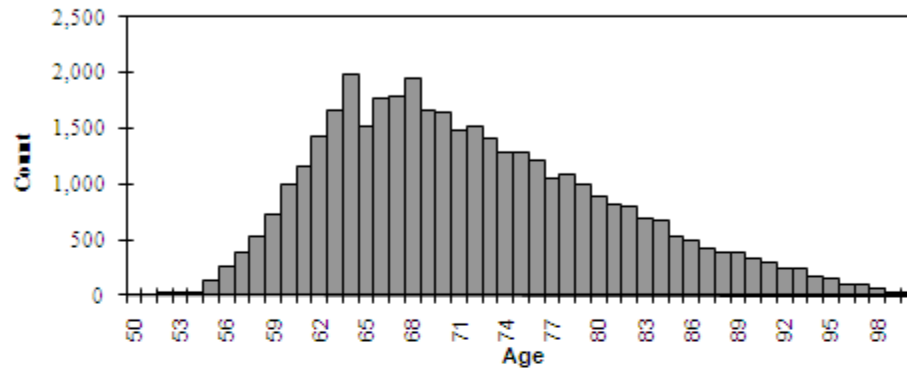


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES**

as of December 31, 2010

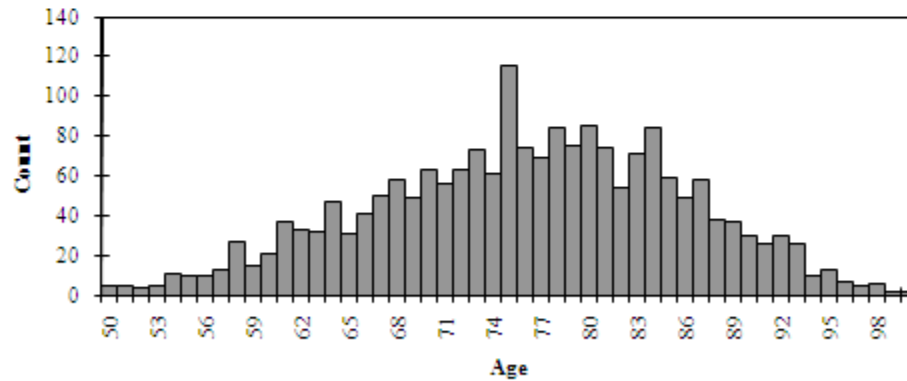
**SCHOOL**

**Retirees**



Count: 38,829    Average age: 71.8    Average benefit: \$ 13,710

**Beneficiaries**



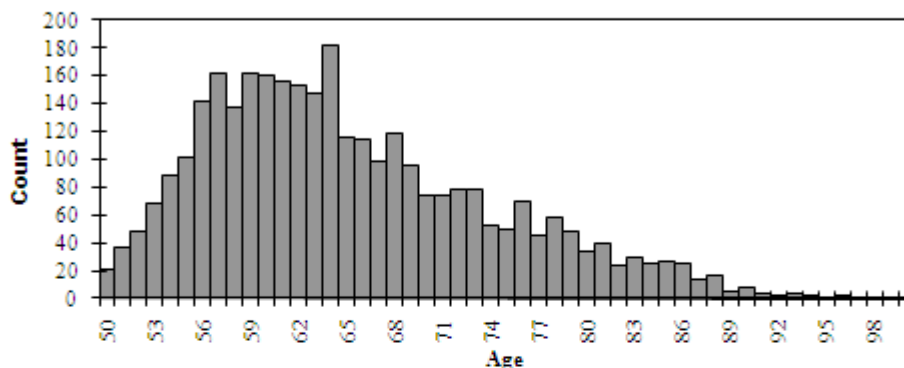
Count: 2,027    Average age: 75.7    Average benefit: \$ 8,464



**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES  
as of December 31, 2010**

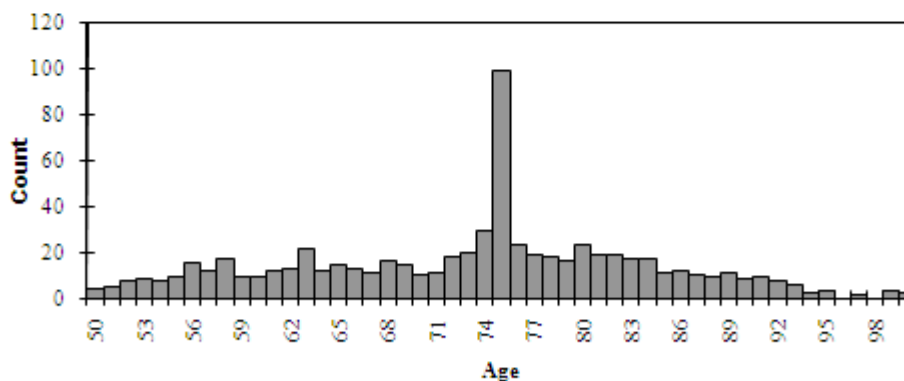
**KP&F**

**Retirees**



Count: 3,333 Average age: 64.2 Average benefit: \$ 30,010

**Beneficiaries**



Count: 835 Average age: 64.8 Average benefit: \$ 14,171

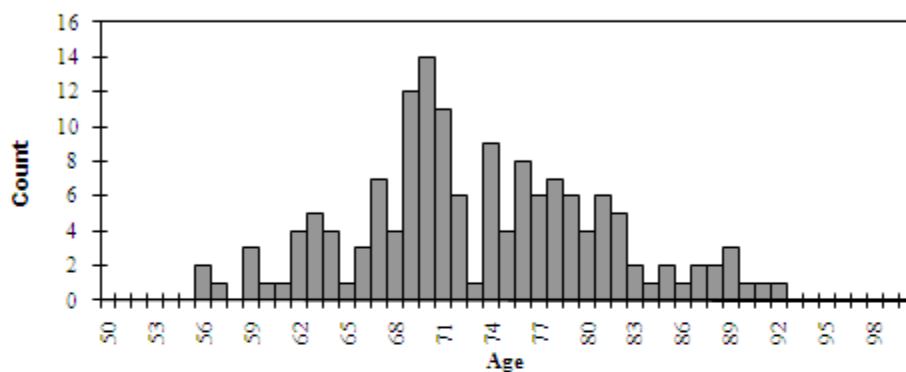
Approximately 75 beneficiaries were missing a date of birth and were assumed to be 75 years old.



**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF RETIREES AND BENEFICIARIES  
as of December 31, 2010**

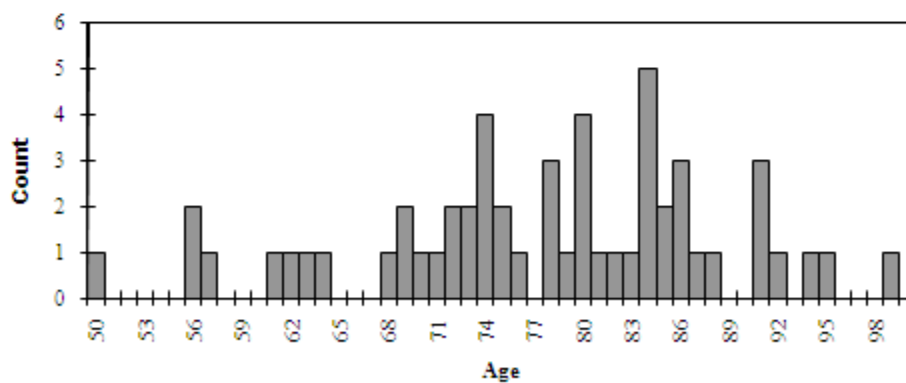
**JUDGES**

**Retirees**



Count: 151    Average age: 73.2    Average benefit: \$ 40,307

**Beneficiaries**



Count: 55    Average age: 77.9    Average benefit: \$ 26,355



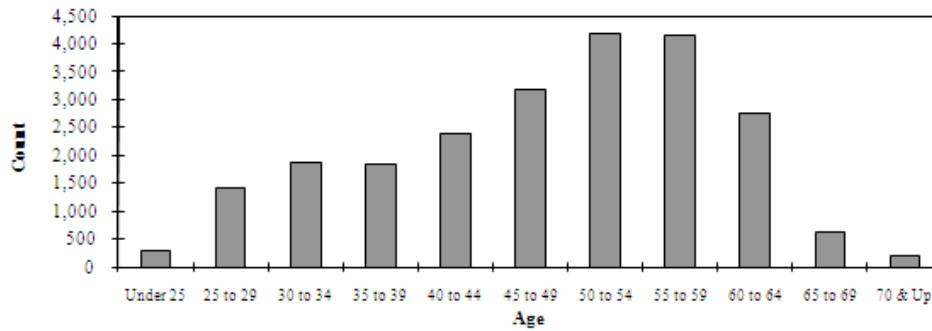
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS  
as of December 31, 2010**

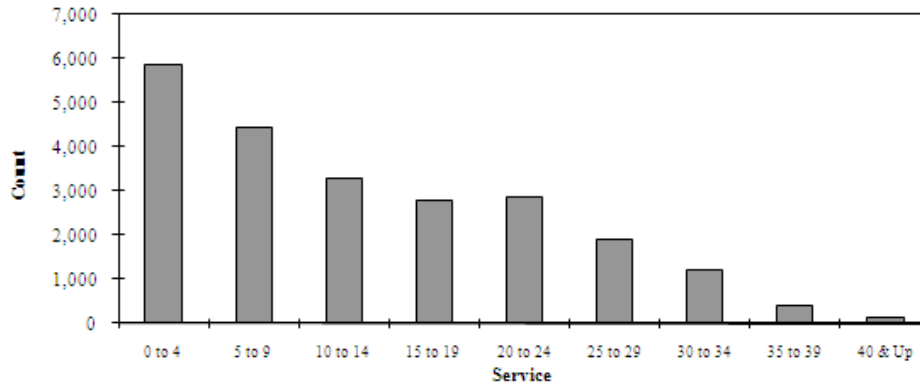
**STATE - Tier 1**

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	297	3	0	0	0	0	0	0	0	300
25 to 29	1,161	261	2	0	0	0	0	0	0	1,424
30 to 34	981	747	148	0	0	0	0	0	0	1,876
35 to 39	668	580	501	92	0	0	0	0	0	1,841
40 to 44	634	538	530	492	175	7	0	0	0	2,376
45 to 49	556	591	485	534	699	303	23	0	0	3,191
50 to 54	627	614	570	559	679	683	450	9	0	4,191
55 to 59	543	588	533	553	727	517	501	171	11	4,144
60 to 64	305	389	378	412	469	312	205	199	84	2,753
65 to 69	64	110	105	107	85	57	38	35	34	635
70 & Up	24	27	42	25	44	20	9	8	11	210
<b>Total</b>	<b>5,860</b>	<b>4,448</b>	<b>3,294</b>	<b>2,774</b>	<b>2,878</b>	<b>1,899</b>	<b>1,226</b>	<b>422</b>	<b>140</b>	<b>22,941</b>

**Age Distribution**



**Service Distribution**





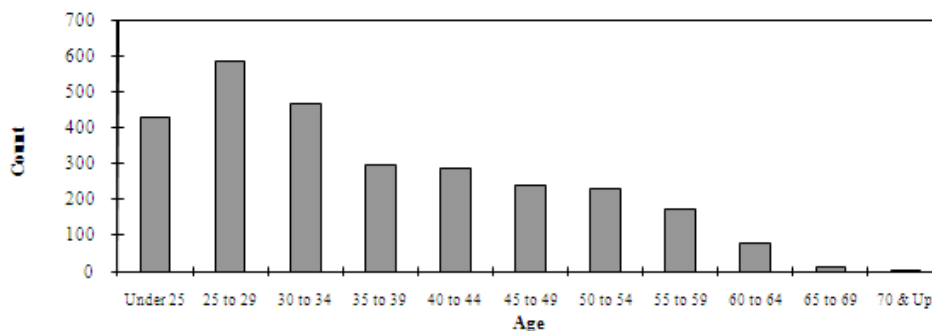
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS  
as of December 31, 2010**

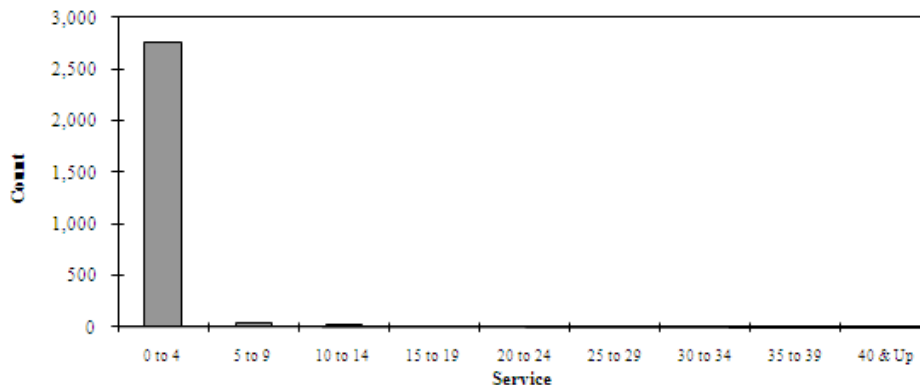
**STATE - Tier 2**

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	426	0	0	0	0	0	0	0	0	426
25 to 29	585	1	0	0	0	0	0	0	0	586
30 to 34	459	8	0	0	0	0	0	0	0	467
35 to 39	287	7	1	0	0	0	0	0	0	295
40 to 44	278	6	0	0	0	0	0	0	0	284
45 to 49	238	3	0	0	0	0	0	0	0	241
50 to 54	223	6	1	0	0	0	0	0	0	230
55 to 59	171	4	0	0	0	0	0	0	0	175
60 to 64	74	2	0	0	0	0	0	0	0	76
65 to 69	12	2	0	0	0	0	0	0	0	14
70 & Up	2	0	0	0	0	0	0	0	0	2
<b>Total</b>	<b>2,755</b>	<b>39</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,796</b>

**Age Distribution**



**Service Distribution**





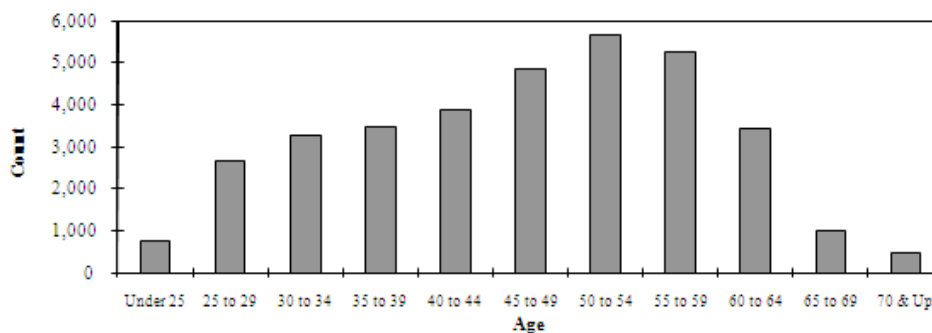
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS  
as of December 31, 2010**

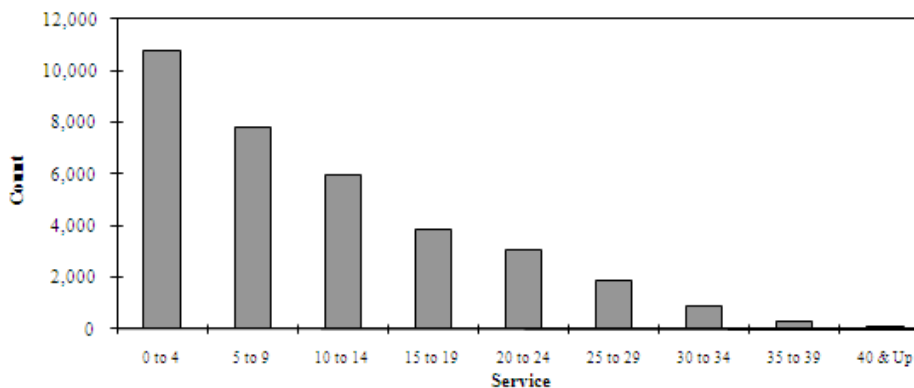
**LOCAL - Tier 1**

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	726	8	0	0	0	0	0	0	0	734
25 to 29	2,180	482	5	0	0	0	0	0	0	2,667
30 to 34	1,649	1,255	359	4	0	0	0	0	0	3,267
35 to 39	1,267	1,108	924	173	2	0	0	0	0	3,474
40 to 44	1,076	1,000	933	632	208	4	0	0	0	3,853
45 to 49	1,123	975	958	749	711	307	33	0	0	4,856
50 to 54	1,080	1,020	1,056	795	736	638	320	9	1	5,655
55 to 59	869	948	870	821	746	530	315	134	5	5,238
60 to 64	554	714	560	497	480	276	192	116	34	3,423
65 to 69	163	177	203	155	140	69	32	24	20	983
70 & Up	95	97	100	62	40	29	17	7	9	456
<b>Total</b>	<b>10,782</b>	<b>7,784</b>	<b>5,968</b>	<b>3,888</b>	<b>3,063</b>	<b>1,853</b>	<b>909</b>	<b>290</b>	<b>69</b>	<b>34,606</b>

**Age Distribution**



**Service Distribution**







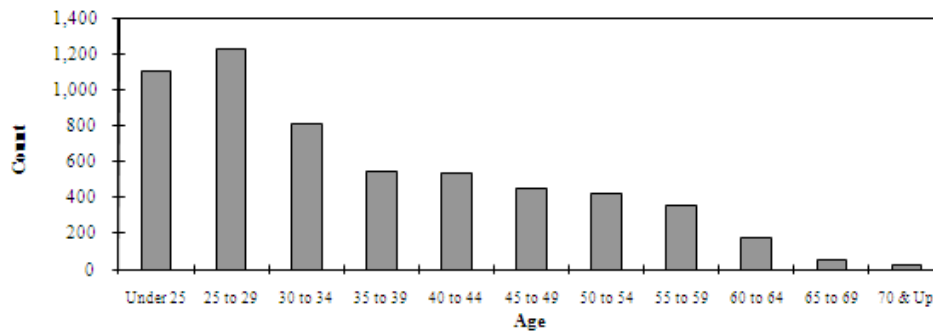
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS  
as of December 31, 2010**

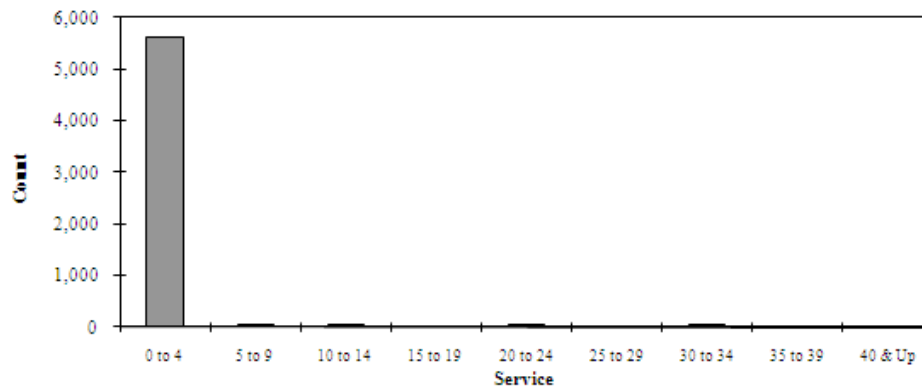
**LOCAL - Tier 2**

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	1,105	0	0	0	0	0	0	0	0	1,105
25 to 29	1,218	5	0	0	0	0	0	0	0	1,223
30 to 34	799	11	1	0	0	0	0	0	0	811
35 to 39	535	10	0	0	0	0	0	0	0	545
40 to 44	525	9	0	0	0	0	0	0	0	534
45 to 49	444	6	2	0	0	0	0	0	0	452
50 to 54	417	3	2	0	1	0	1	0	0	424
55 to 59	349	2	1	0	1	0	0	0	0	353
60 to 64	162	15	0	0	0	0	0	0	0	177
65 to 69	52	2	0	0	0	0	0	0	0	54
70 & Up	23	0	0	0	0	0	0	0	0	23
<b>Total</b>	<b>5,629</b>	<b>63</b>	<b>6</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5,701</b>

**Age Distribution**



**Service Distribution**





**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

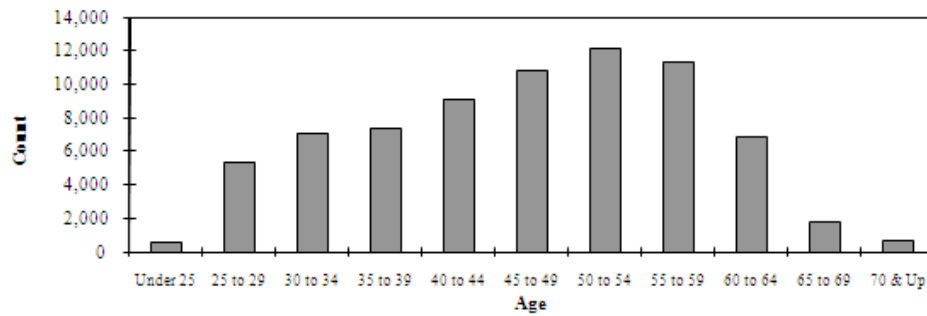
**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of December 31, 2010

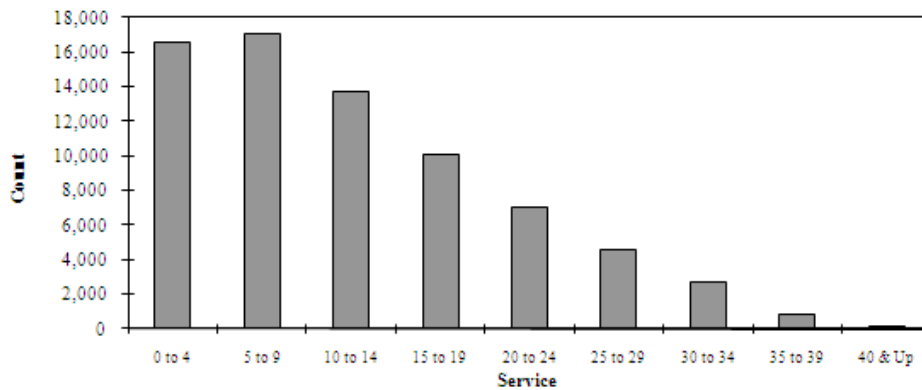
**SCHOOL - Tier 1**

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	485	25	0	0	0	0	0	0	0	510
25 to 29	3,947	1,325	11	1	0	0	0	0	0	5,284
30 to 34	2,216	3,958	846	4	0	0	0	0	0	7,024
35 to 39	1,967	1,951	3,003	469	0	0	0	0	0	7,390
40 to 44	2,077	2,210	1,974	2,386	456	6	0	0	0	9,109
45 to 49	1,931	2,432	2,114	1,627	2,009	635	16	0	0	10,764
50 to 54	1,585	2,077	2,363	1,952	1,481	1,912	733	5	0	12,108
55 to 59	1,167	1,572	1,860	2,053	1,695	1,201	1,413	360	1	11,322
60 to 64	772	986	1,087	1,212	1,133	693	400	446	86	6,815
65 to 69	288	366	297	255	218	142	85	52	64	1,767
70 & Up	138	194	132	93	48	30	11	8	19	673
<b>Total</b>	<b>16,573</b>	<b>17,096</b>	<b>13,687</b>	<b>10,052</b>	<b>7,040</b>	<b>4,619</b>	<b>2,658</b>	<b>871</b>	<b>170</b>	<b>72,766</b>

**Age Distribution**



**Service Distribution**





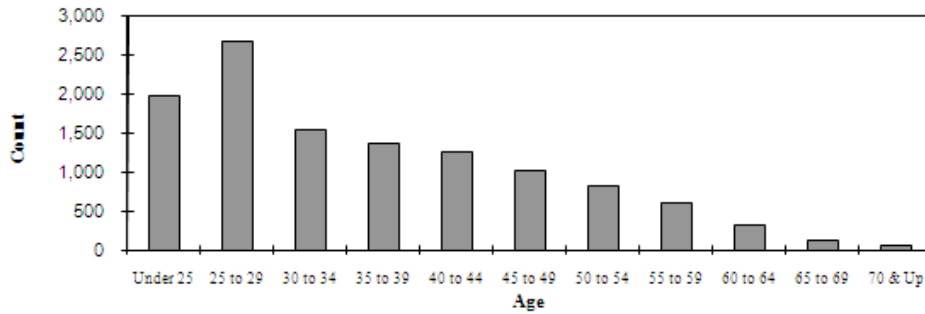
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS  
as of December 31, 2010**

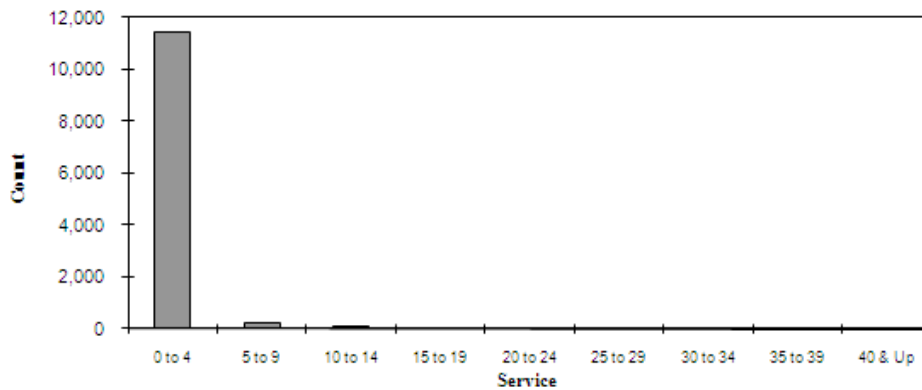
**SCHOOL - Tier 2**

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	1,973	1	0	0	0	0	0	0	0	1,974
25 to 29	2,650	14	0	0	0	0	0	0	0	2,664
30 to 34	1,470	58	0	0	0	0	0	0	0	1,528
35 to 39	1,293	51	4	0	0	0	0	0	0	1,348
40 to 44	1,219	37	3	0	0	0	0	0	0	1,259
45 to 49	966	35	1	0	0	0	0	0	0	1,002
50 to 54	784	28	0	0	0	0	0	0	0	812
55 to 59	577	17	0	0	0	0	0	0	0	594
60 to 64	306	6	0	0	0	0	0	0	0	312
65 to 69	120	2	0	0	0	0	0	0	0	122
70 & Up	57	0	0	0	0	0	0	0	0	57
<b>Total</b>	<b>11,415</b>	<b>249</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,672</b>

**Age Distribution**



**Service Distribution**





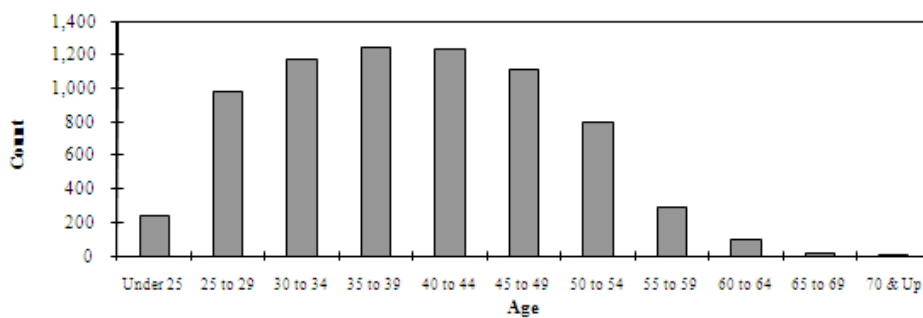
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS  
as of December 31, 2010**

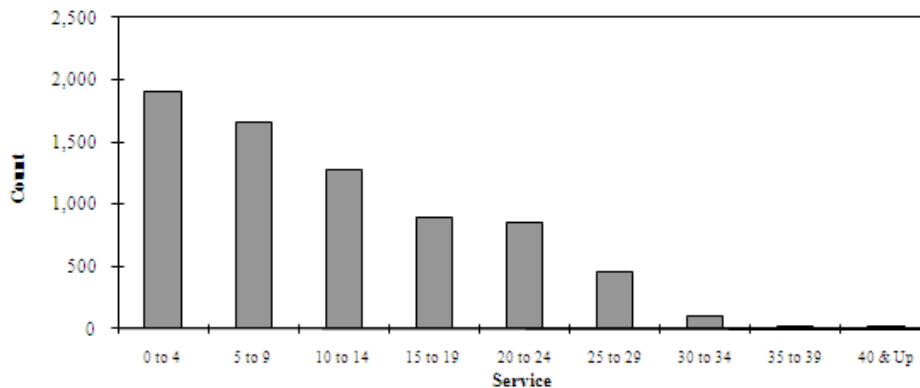
**KP&F**

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	234	0	0	0	0	0	0	0	0	234
25 to 29	760	219	1	0	0	0	0	0	0	980
30 to 34	408	610	155	0	0	0	0	0	0	1,173
35 to 39	243	379	514	108	0	0	0	0	0	1,244
40 to 44	118	212	366	388	144	0	0	0	0	1,228
45 to 49	79	120	135	227	405	145	3	0	0	1,114
50 to 54	35	65	72	115	220	232	55	1	0	795
55 to 59	22	34	25	37	70	60	39	4	0	291
60 to 64	10	17	10	16	19	15	8	2	2	99
65 to 69	1	3	3	0	2	1	1	0	1	12
70 & Up	0	3	0	0	0	0	0	0	0	3
<b>Total</b>	<b>1,910</b>	<b>1,662</b>	<b>1,281</b>	<b>891</b>	<b>860</b>	<b>453</b>	<b>106</b>	<b>7</b>	<b>3</b>	<b>7,173</b>

**Age Distribution**



**Service Distribution**





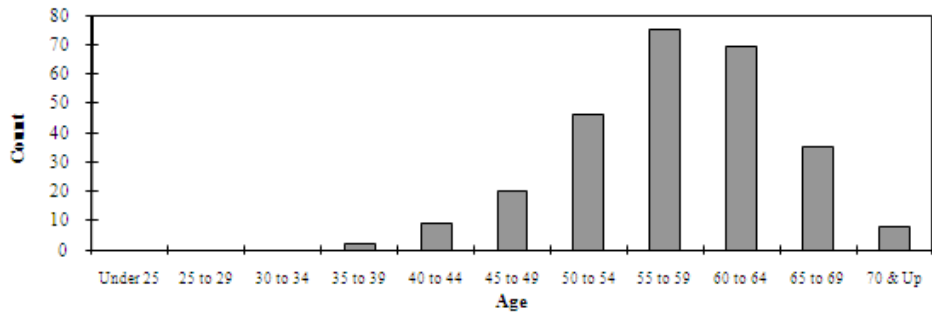
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS  
as of December 31, 2010**

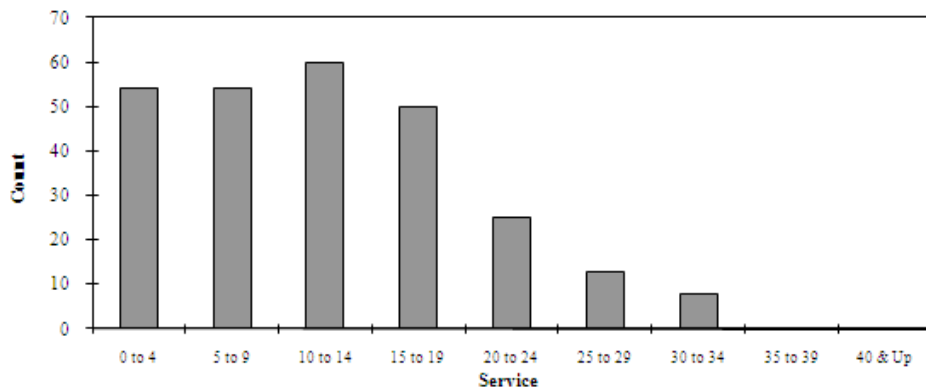
**JUDGES**

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	1	0	1	0	0	0	0	0	0	2
40 to 44	6	3	0	0	0	0	0	0	0	9
45 to 49	10	8	2	0	0	0	0	0	0	20
50 to 54	14	15	11	5	1	0	0	0	0	46
55 to 59	15	14	17	19	8	2	0	0	0	75
60 to 64	5	7	21	16	9	6	5	0	0	69
65 to 69	2	6	6	9	5	5	2	0	0	35
70 & Up	1	1	2	1	2	0	1	0	0	8
<b>Total</b>	<b>54</b>	<b>54</b>	<b>60</b>	<b>50</b>	<b>25</b>	<b>13</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>264</b>

**Age Distribution**



**Service Distribution**





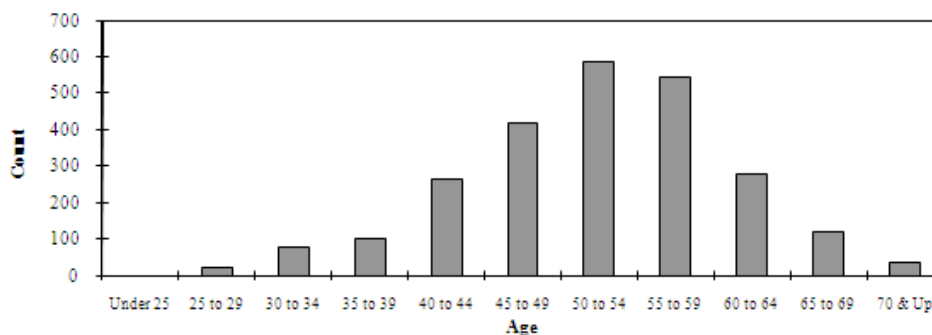
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS  
as of December 31, 2010**

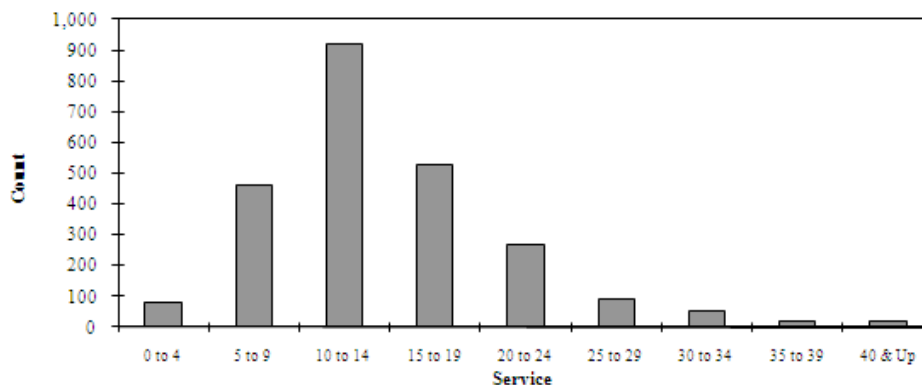
**STATE**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	8	12	0	0	0	0	0	0	0	20
30 to 34	11	56	10	0	0	0	0	0	0	77
35 to 39	6	51	40	1	1	0	0	0	0	99
40 to 44	8	68	140	44	4	0	0	0	0	264
45 to 49	2	67	192	111	41	6	1	0	0	420
50 to 54	1	85	223	157	75	27	17	0	0	585
55 to 59	5	64	207	126	85	36	18	4	0	545
60 to 64	2	35	89	64	48	14	14	8	5	279
65 to 69	22	21	16	23	9	8	4	7	11	121
70 & Up	13	2	4	4	4	2	0	0	4	33
<b>Total</b>	<b>78</b>	<b>461</b>	<b>921</b>	<b>530</b>	<b>267</b>	<b>93</b>	<b>54</b>	<b>19</b>	<b>20</b>	<b>2,443</b>

**Age Distribution**



**Service Distribution**





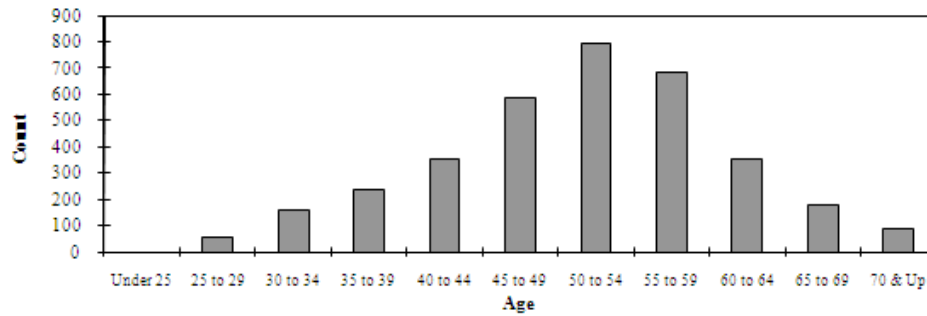
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS  
as of December 31, 2010**

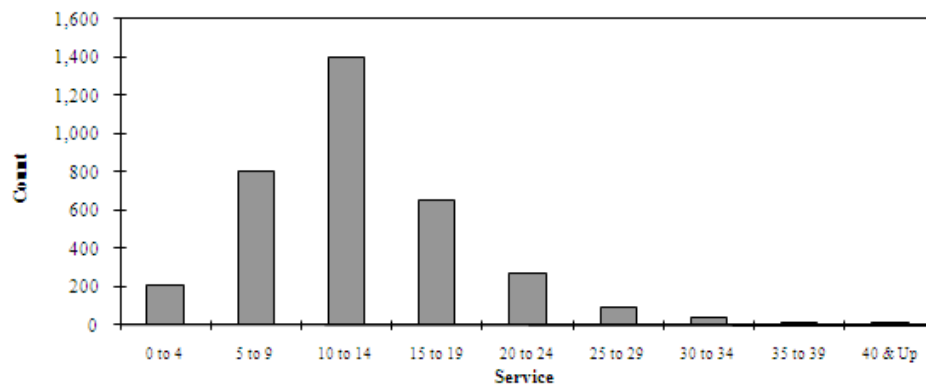
**LOCAL**

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	13	41	0	0	0	0	0	0	0	54
30 to 34	20	117	19	0	0	0	0	0	0	156
35 to 39	15	98	114	9	0	0	0	0	0	236
40 to 44	9	95	187	63	1	0	0	0	1	356
45 to 49	14	111	259	156	39	6	1	0	0	586
50 to 54	6	119	364	180	86	28	11	1	0	795
55 to 59	4	95	295	163	80	34	10	1	0	682
60 to 64	9	74	123	61	46	19	16	6	1	355
65 to 69	65	35	36	14	16	6	3	1	0	176
70 & Up	54	15	6	8	3	1	1	0	1	89
<b>Total</b>	<b>209</b>	<b>800</b>	<b>1,403</b>	<b>654</b>	<b>271</b>	<b>94</b>	<b>42</b>	<b>9</b>	<b>3</b>	<b>3,485</b>

**Age Distribution**



**Service Distribution**





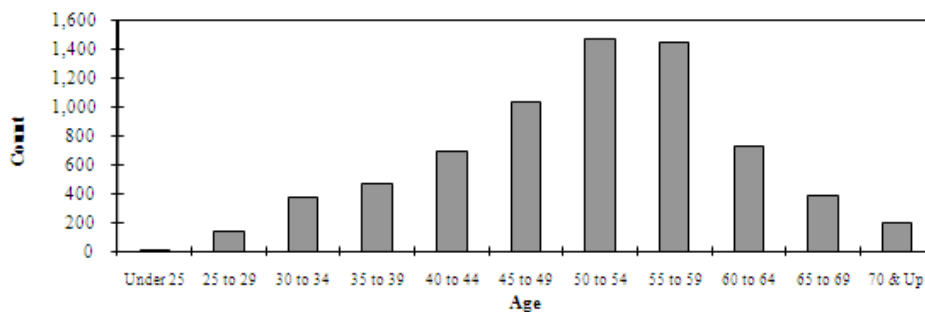
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS  
as of December 31, 2010**

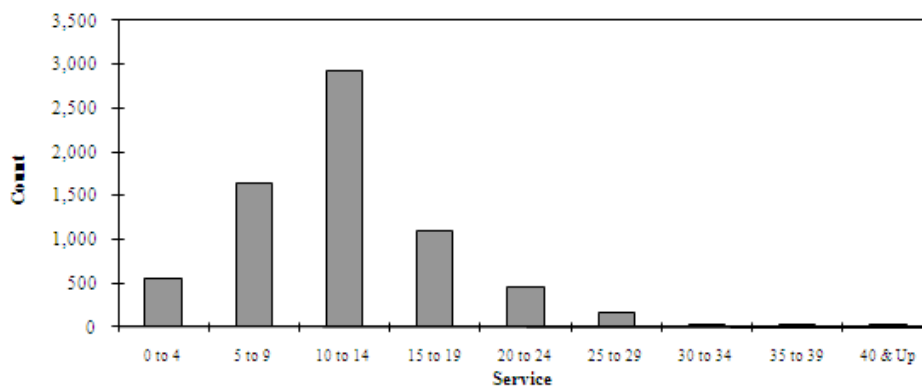
**SCHOOL**

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	5	0	0	0	0	0	0	0	7
25 to 29	42	91	1	0	0	0	0	0	0	134
30 to 34	29	315	29	0	0	0	0	0	0	373
35 to 39	24	198	236	12	0	0	0	0	0	470
40 to 44	27	196	365	92	3	0	0	0	0	683
45 to 49	25	207	521	198	70	9	0	0	0	1,030
50 to 54	21	221	698	281	156	79	7	0	0	1,463
55 to 59	8	177	684	349	152	55	11	1	0	1,437
60 to 64	12	150	319	144	62	22	9	5	1	724
65 to 69	221	65	51	22	11	8	7	1	1	387
70 & Up	143	20	19	6	1	0	1	0	0	190
<b>Total</b>	<b>554</b>	<b>1,645</b>	<b>2,923</b>	<b>1,104</b>	<b>455</b>	<b>173</b>	<b>35</b>	<b>7</b>	<b>2</b>	<b>6,898</b>

**Age Distribution**



**Service Distribution**







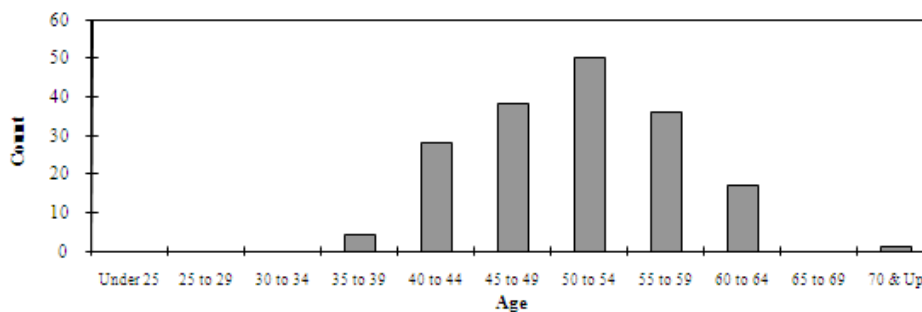
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS  
as of December 31, 2010**

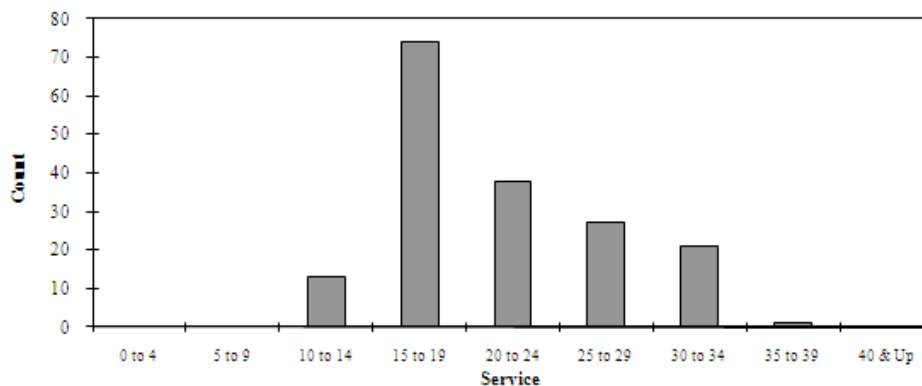
**KP&F**

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	3	0	0	0	0	0	4
40 to 44	0	0	4	20	4	0	0	0	0	28
45 to 49	0	0	1	18	11	8	0	0	0	38
50 to 54	0	0	3	15	15	9	8	0	0	50
55 to 59	0	0	3	10	4	7	11	1	0	36
60 to 64	0	0	1	8	3	3	2	0	0	17
65 to 69	0	0	0	0	0	0	0	0	0	0
70 & Up	0	0	0	0	1	0	0	0	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>74</b>	<b>38</b>	<b>27</b>	<b>21</b>	<b>1</b>	<b>0</b>	<b>174</b>

**Age Distribution**



**Service Distribution**





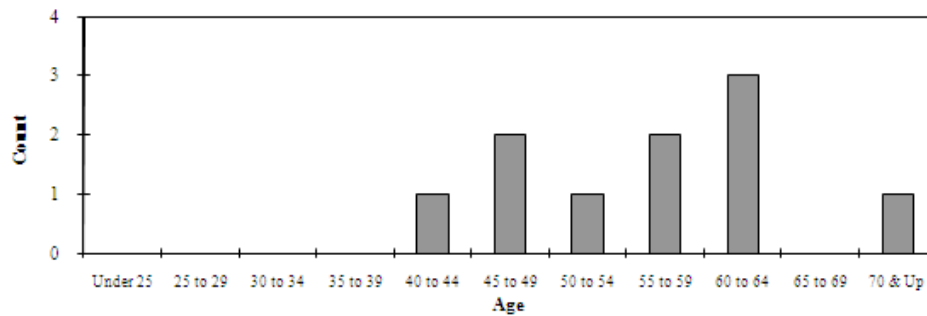
**APPENDIX A - SUMMARY OF MEMBERSHIP DATA**

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM  
DISTRIBUTION OF INACTIVE VESTED MEMBERS  
as of December 31, 2010**

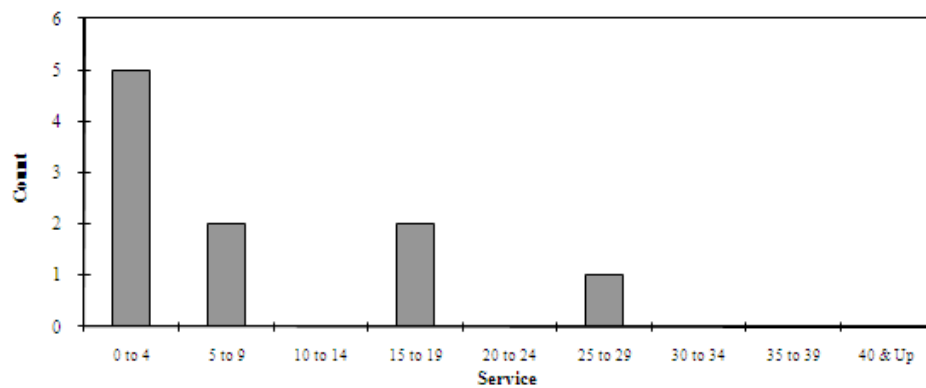
**JUDGES**

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	2	0	0	0	0	0	0	0	0	2
50 to 54	1	0	0	0	0	0	0	0	0	1
55 to 59	0	1	0	1	0	0	0	0	0	2
60 to 64	1	1	0	1	0	0	0	0	0	3
65 to 69	0	0	0	0	0	0	0	0	0	0
70 & Up	0	0	0	0	0	1	0	0	0	1
<b>Total</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</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 \*

\* Effective July 1, 2009, a new set of benefit provisions is applicable to KPERS members. 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, 2010. The changes to benefits and contributions passed by the 2011 Legislature in Senate Substitute for HB 2194 are not reflected in this valuation as they do not become effective without further action.

### 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 (Tier 2),



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

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

### **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 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.



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

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

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

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

### **Member Contributions**

Member contributions are 4% of compensation for Tier 1 and 6% for Tier 2. Interest is credited to members’ contribution accounts on June 30 each year, based on account balance as of the preceding December 31. Those who became members prior to July 1, 1993, have interest credited to their accounts at the rate of 8% per year. Those who become members on and after July 1, 1993, have interest credited to their accounts at the rate of 4% per year.

### **Employer Contributions**

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

### **Board of Regents Plan Members (TIAA and equivalents)**

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

### **Correctional Members**

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



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

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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 Only:** 2% cost-of-living adjustment (COLA) each year beginning at age 65 or the second July 1 after your retirement date, whichever is later.

## **KANSAS POLICE & FIREMEN'S RETIREMENT SYSTEM**

### **Normal Retirement**

**Tier I** – age 55 and 20 years of service or 32 years of service (regardless of age).

**Tier II** – age 50 and 25 years of service, or age 55 and 20 years of service, or age 60 and 15 years of service.

**Benefits** – Benefits are based on the member's Final Average Salary. For those who were hired prior to July 1, 1993, Final Average Salary equals the average of the highest three of the last five years of credited participating service, including add-ons, such as sick and annual leave. For those who are hired on or after July 1, 1993, Final Average Salary equals the average of the highest three of the last five years of participating service, excluding add-ons, such as sick and annual leave. Benefits are based on a member's years of credited service and a multiplier of 2.5% of Final Average Salary for each year of credited service, to a maximum of 80% of Final Average Salary.

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

### **Early Retirement**

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

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

### **Vesting Requirements**

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

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



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### Other Benefits

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

### **Disability Benefits**

**Tier I: Service-connected disability** – There are no age or service requirements to be eligible for this benefit. There is an annual benefit of 50% of Final Average Salary, plus 10% of Final Average Salary for each dependent child under age 18 (or up to age 23 for full-time students), to a maximum of 75% of Final Average Salary. If dependent benefits aren’t payable, the benefit is 50% of Final Average Salary or 2.5% for each year of credited service up to a maximum of 80% of Final Average Salary. Upon the death of a member after two years from the proximate cause of death which is the original service-connected disability, the same benefits are payable. Upon the death of a member after 2 years from a cause different than the disability for which the member is receiving service-connected disability benefits, the surviving spouse receives a lump sum payment of 50% of Final Average Salary. Additionally, a pension benefit of one-half the member’s benefit is payable to either the spouse or to the dependent children.

**Tier I: Non-Service-connected disability** – An annual benefit of 2.5% times years of credited service times Final Average Salary with a minimum of 25% of FAS and a maximum of 80% of FAS.

**Tier II:** There is no distinction between service-connected and non-service-connected disability benefits. Annual benefit of 50% of Final Average Salary. Service Credit is granted during the period of disability. Disability benefits convert to age and service retirement at the earliest date the member is eligible for full retirement benefits. If the member is disabled for at least five years immediately preceding retirement, the member’s Final Average Salary is adjusted during the period of Disability.

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

**Active Member Service Connected Death** – There is no age or service requirement. An annual benefit of 50% of Final Average Salary is payable to the spouse, plus 10% of Final Average Salary for each dependent child under age 18 [or up to age 23 if full time student(s)], to a maximum of 75% of Final Average Salary Active Member.

**Active Member Non-Service Connected Death** – A lump sum of 100% of Final Average Salary is payable to the spouse and a pension of 2.5% of Final Average Salary per year of credited service (to a maximum of 50%) is payable to the spouse. If there is no spouse, the monthly benefit is paid to the dependent children (age 18 or 23 if a full time student). If there is no surviving spouse or eligible children, the beneficiary will receive a lump sum payment of 100% of the member’s current annual pay inclusive of the member’s accumulated contributions.

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



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

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**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.



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## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

### KPERS

<b>Rate of Investment Return</b>	8.0%
<b>Implicit Inflation Rate</b>	3.25%
<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

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: 70% of RP-2000 F Employees -2 State Males: 70% of RP-2000 M Employees +2 State Females: 70% of RP-2000 F Employees +0 Local Males: 90% of RP-2000 M Employees +2 Local Females: 90% of RP-2000 F Employees -1
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**Disabled Life Mortality** RP-2000 Disabled Life Table with same age adjustments as used for Retiree Mortality.



## 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 3.25% inflation and 0.75% productivity)

### Rates of Termination

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



**APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

**Retirement Rates**

**School**

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

Early Retirement

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

Normal Retirement

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

**State**

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

Early Retirement

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

Normal Retirement

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



**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%	10%
55	13%	10%
57	13%	10%
59	15%	12%
61	25%	25%

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

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

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

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

**Rates of Disability**

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

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



**APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

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

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

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

**KP&F**

<b>Rate of Investment Return</b>	8.0%														
<b>Implicit Inflation Assumption</b>	3.25%														
<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 3.25% inflation and 0.75% 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	30%
	52	5%	57	25%
	53	10%	58	40%
	54	30%	59	35%
			60	55%
			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	15%	58	20%
	54	25%	60	20%
			61	40%
			62	35%
			63	100%

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



## 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>Implicit Inflation Assumption</b>	3.25%	
<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>
	62	30%
	63	25%
	64	10%
	65-69	50%
	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. The resulting value must fall within a corridor of 80% to 120% of market value. If the preliminary value is outside the corridor, the actuarial value is set equal to the corridor limit.



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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).