



# **PERFORMANCE AUDIT REPORT**

**Reviewing the Projections Presented by the  
Kansas Public Employees Retirement System  
Regarding the Need for a Long-Term Funding Plan**

**A Report to the Legislative Post Audit Committee  
By Berberich Trahan & Co. Under Contract with the  
Legislative Division of Post Audit  
State of Kansas  
February 2003**

# ***Legislative Post Audit Committee***

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## ***Legislative Division of Post Audit***

**THE LEGISLATIVE POST** Audit Committee and its audit agency, the Legislative Division of Post Audit, are the audit arm of Kansas government. The programs and activities of State government now cost about \$9 billion a year. As legislators and administrators try increasingly to allocate tax dollars effectively and make government work more efficiently, they need information to evaluate the work of governmental agencies. The audit work performed by Legislative Post Audit helps provide that information.

We conduct our audit work in accordance with applicable government auditing standards set forth by the U.S. General Accounting Office. These standards pertain to the auditor's professional qualifications, the quality of the audit work, and the characteristics of professional and meaningful reports. The standards also have been endorsed by the American Institute of Certified Public Accountants and adopted by the Legislative Post Audit Committee.

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Audits are performed at the direction of the Legislative Post Audit Committee. Legisla-

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February 6, 2003

To: Members, Legislative Post Audit Committee

Representative John Edmonds, Chair  
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Representative Bill McCreary  
Representative Frank Miller  
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Senator Derek Schmidt, Vice-Chair  
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This report contains the findings, conclusions, and recommendations from the completed performance audit, *Reviewing the Projections Presented by the Kansas Public Employees Retirement System Regarding the Need for a Long-Term Funding Plan*. The audit was done by Berberich Trahan & Co., an audit firm under contract with the Legislative Division of Post Audit.

We would be happy to discuss these recommendations or any other items in the report with any legislative committees, individual legislators, or other State officials.

  
Barbara J. Hinton  
Legislative Post Auditor



# EXECUTIVE SUMMARY

LEGISLATIVE DIVISION OF POST AUDIT

## Long-Term Funding Outlook: Part 1

The Kansas Public Employees Retirement System issued a report in August 2002 that was intended to inform the System's Board of Trustees, legislators, executive officials, and other interested parties of certain long-term funding issues faced by the System, and to foster an understanding of the related history, underlying causes, financial impact, and possible solutions. .... page 1

## Scope of Performance Audit

The performance audit reviewed the report's funding projections, together with the underlying assumptions and methodology, with the objective of reporting on whether the underlying assumptions are reasonable and whether the funding projections reasonably present applicable future anticipated employer contribution rates, unfunded actuarial liabilities, and funded ratios. .... page 2

## Funding Projections

**Basis of Projections** As of December 31, 2002, the Retirement System's unfunded actuarial liability for the State/school and local groups reached \$1.8 billion. The projections in the Retirement System's report show that, under current funding policy, the currently statutorily-limited employer contribution rates won't converge with actuarially recommended employer contribution rates before the year 2033. .... page 3

Alternative projections are provided in the report assuming:

- (a) an immediate increase in employer contribution rates to the recommended actuarial rates
- (b) an increase in employer contribution rates designed to achieve convergence with recommended actuarial rates in the year 2022
- (c) an increase in employer contribution rates designed to achieve convergence with recommended actuarial rates in the years 2015 and 2016
- (d) an increase in employer contribution rates designed to achieve convergence with recommended actuarial rates in the year 2010

**Projection Limitations** The Retirement System's projections are based on management's assumptions about future events, some more than 30 years in the future. As time passes, actual events will differ to one degree or another from the original assumptions, and actual results will differ from the projected results. The original underlying assumptions are described in Appendix A. .... page 4

**Projection Tables** *Comparative tables show amounts of employer contributions, unfunded actuarial liabilities, and funded ratios under existing funding and each of the four alternatives considered.* ..... page 4

**Assumptions** *The projections were based primarily on the assumptions used for the 2001 actuarial valuation report. Assumptions highlighted by the audit are as follows:* ..... page 7

- = *The investment rate of return is assumed to be, on average, 8 percent. (The audit points out that actual investment performance since the date of the 2001 actuarial valuation report has been below the level assumed.)*
- = *No benefit enhancements are projected.*
- = *No workforce changes are projected.*
- = *The amortization period has 31 years remaining.*

*The projection based on the existing funding policy indicates that a significant unfunded actuarial liability will result in the year 2033. Each of the four alternatives project that the unfunded actuarial liability will be reduced to zero by the year 2033.*

**Overall Conclusion** ..... page 8

**The projections meet the intended use stated in the Long-Term**

**Funding Outlook: Part 1.** We have previously described the projection limitations, especially the long-term nature of such. After considering such, we believe the projections and underlying assumptions are reasonable to assist in reviewing the Retirement System's outlook in order to develop a long-term funding plan. The underlying assumptions are reasonable and the funding projections reasonably present applicable future anticipated employer contribution rates, unfunded actuarial liabilities and funded ratios based on those related assumptions.

**APPENDIX A: Summary of Significant Assumptions** ..... page 9

**APPENDIX B: Agency Response** ..... page 13

# **PERFORMANCE AUDIT REPORT**

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**REVIEWING THE PROJECTIONS PRESENTED BY THE KANSAS  
PUBLIC EMPLOYEES RETIREMENT SYSTEM REGARDING  
THE NEED FOR A LONG-TERM FUNDING PLAN**

**DECEMBER 2002**





# **Reviewing the Projections Presented by the Kansas Public Employees Retirement System Regarding the Need for a Long-Term Funding Plan.**

The Kansas Public Employees Retirement System (Retirement System) was established in 1962 to provide retirement and related benefits to public servants in Kansas. Today, the Retirement System serves more than 240,000 members and 1,400 participating employers. With approximately \$ 9 billion in assets, the System is the 102<sup>nd</sup> largest pension plan in the United States and the 159<sup>th</sup> largest plan in the world. Forty years after being established, the Retirement System faces a long-term funding shortfall.

## **Long-Term Funding Outlook: Part 1**

The Retirement System prepared a report titled *Long-Term Funding Outlook: Part I* dated August 2002 (Report). The objective of the Report is to inform the Retirement System's Board of Trustees, legislators, executive officials and other interested parties of certain long-term funding issues and to develop an understanding of the history, underlying causes, financial impact, and possible solutions for these issues.

Included in the Report is the following information:

The Retirement System's most recent actuarial valuation indicates that the unfunded actuarial liability had grown to \$ 1.8 billion as of December 31, 2001. According to the Retirement System's consulting actuary, the statutory employer contribution rates for State, school and local members will not converge with the actuarial rates by the end of the amortization period in 2033.

The December 31, 2001 actuarial valuation report indicates that, beginning in fiscal year 2005, the State should contribute 7.69 percent of payroll to pay for promised benefits to existing and former State/school members. The statutory employer rate for these members is scheduled to be 4.78 percent, or 62 percent of the amount necessary to fund current obligations. This payment approach creates a long-term funding situation similar to making partial payments on a home mortgage, thereby adding the unpaid amount to the mortgage.

Similarly, for local members, the actuarial valuation report indicates that employers should contribute 4.64 percent of payroll during fiscal years beginning in fiscal year 2004. The statutory local rate is scheduled to be 3.22 percent. Local employers will be contributing about 69 percent of the amount necessary to fund current obligations.

In the December 31, 2001 actuarial valuation report, the Retirement System's consulting actuary recommended that employer contributions be increased to alleviate the funding shortfall and improve the Retirement System's long-term financial health:

“As the System's actuary we strongly recommend action be taken to increase future contributions to a level which will restore the System to actuarial balance. Due to recent negative investment experience and the delayed reflection of market experience in the

actuarial value of assets, it is expected that additional actuarial losses will be reflected in the unfunded actuarial liability over the next few years, which will in turn exacerbate the long term funding concerns. It is in the System's best financial interest for additional contributions to begin as soon as possible...."

The Report also indicated that absent changes in future contribution levels, the System's unfunded actuarial liability will grow to approximately \$ 4 billion and the funded ratio will decline to 72 percent by 2011. The actuarial employer rates will continue to increase, reaching double digits in about 2009. In addition to the overall financial deterioration, the System's cash flow needs and investment strategy would need to change to provide the liquidity needed to pay benefits. It is important to note that this is a long-term funding situation rather than an immediate crisis. The Retirement System will continue to make all benefit payments to members and benefit payments are not in jeopardy at this time.

Many alternatives exist for increasing contributions to the Retirement System and improving the long-term funding outlook. The Report was designed to serve as a catalyst to develop a funding plan. The Report presents a range of alternatives designed to illustrate the cost and impact of several funding options.

### **SCOPE OF PERFORMANCE AUDIT**

The Legislative Division of Post Audit Committee has engaged Berberich Trahan & Co., P.A. (we) to perform the following:

**Review the funding projections included in the Report for existing and alternative potential adjustments to the current plan for employer contributions, together with the underlying assumptions and methodology, and report on the reasonableness of the underlying assumptions and whether the funding projections reasonably present applicable future anticipated employer contribution rates, unfunded actuarial liabilities, and funded ratios based on those related assumptions.**

To accomplish such, we read the Report and the related report titled, *Long-Term Funding Outlook: Part II* dated November 2002 as well as the latest annual report and actuarial report. We also inquired of Retirement System's personnel and the consulting actuary of the source of the projection model program used and the basis, methodology and rationale used for each underlying assumption. We then obtained and reviewed the source documents of the underlying assumptions for reasonableness and determined if the stated assumptions in the projections were properly included in the model program and reflected in the projections. We determined that the basis for the projection data was primarily from the December 31, 2001 actuarial valuation report. We also performed analytical procedures to compare the relationship of the projected financial data for reasonableness.

In conducting this performance audit, we followed all applicable government auditing standards set forth by the U.S. General Accounting Office.

## **FUNDING PROJECTIONS**

### **Basis of Projections**

According to the latest actuarial valuation report, the Retirement System's unfunded actuarial liability for the State/school and local groups reached \$ 1.8 billion as of December 31, 2001. The Report focuses exclusively on State/school and local groups because the Retirement System's total unfunded actuarial liability can be attributed mainly to those groups. As of that date, the funded ratio was 82 percent for the State/school group and 89 percent for the local group. The funded ratio represents the ratio of the actuarial value of assets to the actuarial accrued liability. Projections as of that date also indicate that, under the current funding policy, the statutory employer contribution rates will not converge with the actuarial rates before the end of the amortization period in 2033. The reason the rates will not converge is because legislation was enacted in 1995 that limits the increase in the employer contribution rate per year to 0.2 percent for State/school group and 0.15 percent for the local group. The resulting contribution rates are below the Retirement System's consulting actuary's recommended rates.

The Retirement System, with assistance from the consulting actuary, has projected the fiscal impact of the existing funding policy and four long-term funding alternatives in an effort to develop a long-term funding plan. The long-term funding plan alternatives would, over time, place the Retirement System back into actuarial balance. The date at which the statutory employer rate equals the actuarial employer rate is called the equilibrium date. A description of the existing funding policy and the four alternatives follows:

#### **Existing Funding**

This funding policy uses current actuarial assumptions and the current annual statutory employer contribution rate increases of 0.2 percent for the State/school group and 0.15 percent for the local group to project the employer contributions, unfunded actuarial liability and funded ratio through 2033.

#### **Alternative A – Immediate Contribution Increase**

This alternative assumes that the State/school and local groups would begin contributing at the actuarial rate in 2005.

#### **Alternative B – Employer Contributions with Long-Range Equilibrium Date**

This alternative assumes that employer contributions for the State/school and local groups increase beginning in fiscal year 2005 at rates of 0.4 percent and 0.2 percent, respectively, and the contribution rates reach equilibrium in 2022.

#### **Alternative C – Employer Contributions with Mid-Range Equilibrium Date**

This alternative assumes that employer contributions for the State/school and local groups increase beginning in fiscal year 2005 at rates of 0.6 percent and 0.3 percent, respectively, and the contribution rates reach equilibrium in 2015 for the State/school group and in 2016 for the local group.

### **Alternative D – Employer Contributions with Short-Range Equilibrium Date**

This alternative assumes that employer contributions for the State/school and local groups increase beginning in fiscal year 2005 at rates of 1.0 percent and 0.5 percent, respectively, and the contribution rates reach equilibrium in 2010.

### **Projection Limitations**

The projections reflect management's judgment as of August 2002, the date of the Retirement System's *Long-term Funding Outlook: Part I*, of the expected conditions and its expected course of action if one of a group of long-term funding alternatives is chosen. The presentation is designed to provide information to the Board of Trustees, legislators, executive officials and other interested parties and cannot be considered to be a presentation of expected future results. Accordingly, this projection may not be useful for other purposes. The assumptions disclosed herein are those that management believes are significant to the projections; however no long-term funding alternative has been chosen. Even if a long-term funding alternative is chosen, there will be differences between projected and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material. This would be particularly true considering the long-term nature of the projections and related assumptions over a period of 31 years.

The existing funding policy and alternative funding plans and calculations presented in this projection are based on a series of assumptions using an actuarial model provided by the Retirement System's consulting actuary. The underlying assumptions for the projections are described in Appendix A.

### **Projection Tables**

The following tables present the fiscal impact of the existing funding policy and the four alternative funding plans (A, B, C and D) that have been projected by the Retirement System, for the long-term needs of both the State/school group and the local group. The tables contain projected amounts for each year 2002 through 2010 and then projected amounts every fifth year through 2025.

The annual impact of increases in funding, the corresponding resulting changes in status of the Unfunded Actuarial Liability (UAL) and the resulting funded ratios for State/school group and local group for the existing funding policy and each alternative are provided in the following tables. Since the alternatives all utilize the same assumptions, except for the contribution rates, we are presenting the alternatives side by side in the tables to provide an easy means of comparison. For the tables on employer contributions, it should be noted that the first column represents the existing funding requirement for each period and the four alternatives show the increase or decrease from the existing funding requirement.

For presentation purposes, the projection tables cover the years through 2025. It should be noted that all four alternative funding projections result in a zero UAL by the end of the amortization period in 2033. The existing funding projection results in an \$ 8 billion UAL by the end of the amortization period in 2033.

**State/School Group**

**Employer contributions (in millions):**

Fiscal Year Ending	Existing Funding	Increase (Decrease) from Existing Funding			
		A	B	C	D
2003	\$ 144.0				
2004	154.9				
2005	166.2	\$ 101.1	\$ 7.0	\$ 13.9	\$ 27.8
2006	177.9	122.5	14.3	28.6	57.1
2007	190.0	137.5	22.0	44.0	88.0
2008	202.5	148.7	30.1	60.2	120.4
2009	215.4	153.7	38.6	77.2	154.4
2010	228.8	155.6	47.5	95.0	190.0
2015	305.3	125.6	99.1	198.1	149.0
2020	406.4	24.6	167.1	113.3	54.8
2025	529.3	(124.2)	130.2	(10.9)	(85.6)

**Unfunded Actuarial Liability (in millions):**

January 1	Existing Funding	Status of the Unfunded Actuarial Liability			
		A	B	C	D
2002	\$ 1,506.0				
2003	1,854.3				
2004	2,125.7	\$ 2,125.7	\$ 2,125.7	\$ 2,125.7	\$ 2,125.7
2005	2,379.2	2,326.6	2,375.6	2,372.0	2,364.7
2006	2,609.4	2,434.6	2,594.3	2,579.2	2,549.1
2007	2,824.6	2,498.3	2,789.2	2,753.8	2,683.1
2008	3,029.7	2,525.2	2,963.9	2,898.2	2,766.6
2009	3,227.8	2,521.6	3,120.3	3,012.9	2,798.0
2010	3,419.2	2,490.3	3,257.4	3,095.6	2,783.7
2015	4,336.7	2,021.2	3,653.1	2,976.3	2,349.4
2020	5,194.9	1,200.0	3,354.9	2,182.0	1,534.1
2025	6,165.4	453.7	2,382.2	1,303.6	743.2

**Funded Ratio:**

January 1	Existing Funding	Status of the Funded Ratio			
		A	B	C	D
2002	82%				
2003	79%				
2004	77%	77%	77%	77%	77%
2005	76%	76%	76%	76%	76%
2006	75%	76%	75%	75%	75%
2007	74%	77%	74%	74%	75%
2008	73%	78%	74%	74%	75%
2009	72%	79%	73%	74%	76%
2010	72%	80%	73%	75%	77%
2015	70%	86%	75%	79%	84%
2020	69%	93%	80%	87%	91%
2025	67%	98%	87%	93%	96%

**Local Group**

**Employer Contributions (in millions):**

Fiscal Year Ending	Existing Funding	Increase (Decrease) from Existing Funding			
		A	B	C	D
2002	\$ 31.2				
2003	34.3				
2004	37.5				
2005	40.9	\$ 21.1	\$ 0.6	\$ 1.8	\$ 4.2
2006	44.5	24.2	1.3	3.8	8.8
2007	48.2	27.1	2.0	5.9	13.8
2008	52.2	28.2	2.7	8.2	19.1
2009	56.4	28.6	3.6	10.7	24.9
2010	60.8	28.4	4.4	13.3	31.0
2015	86.7	15.3	9.8	29.4	21.7
2020	120.7	(14.8)	17.2	7.5	(6.7)
2025	160.4	(63.2)	(1.8)	(34.5)	(52.6)

**Unfunded Actuarial Liability (in millions):**

January 1	Existing Funding	Status of the Unfunded Actuarial Liability			
		A	B	C	D
2002	\$ 185.3				
2003	252.6				
2004	303.1				
2005	349.7	\$ 349.7	\$ 349.7	\$ 349.7	\$ 349.7
2006	390.8	368.9	390.2	388.9	386.4
2007	428.6	379.6	426.6	422.6	414.6
2008	463.4	382.1	459.1	450.7	433.9
2009	496.0	378.6	488.6	473.8	444.1
2010	526.9	369.9	515.2	491.7	444.8
2015	648.3	253.2	592.0	479.5	337.3
2020	680.3	47.8	519.4	279.3	132.0
2025	631.7	(116.2)	308.1	81.7	(44.3)

**Funded Ratio:**

January 1	Existing Funding	Status of the Funded Ratio			
		A	B	C	D
2002	89%				
2003	86%				
2004	84%				
2005	83%	83%	83%	83%	83%
2006	82%	83%	82%	82%	82%
2007	82%	84%	82%	82%	82%
2008	81%	85%	81%	82%	82%
2009	81%	86%	81%	82%	83%
2010	81%	87%	82%	82%	84%
2015	82%	93%	84%	87%	91%
2020	85%	99%	89%	94%	97%
2025	89%	102%	95%	99%	101%

## **Assumptions**

**The projections were based primarily on the assumptions used for the 2001 actuarial valuation report.** The assumptions used for the projections include the actuarial assumptions that have been used in the actuarial valuation as of December 31, 2001. A description of the significant assumptions can be found in Appendix A. The following assumptions are highlighted below:

**The investment rate of return is assumed to be, on average, 8 percent.** The funding alternatives assume that the Retirement System will, on average, earn 8 percent on its investments. This is the percentage currently adopted by the Retirement System's Board of Trustees and used by the Retirement System's actuary for the actuarial valuation and other projections. We understand that this rate is utilized by many retirement systems. The Report indicates that the actual average annual realized rate of the Retirement System over its history has approximated 8 percent.

In reviewing the projections, we noted that the Retirement System used an 8.68 percent rate over the first twenty years. The reason for this was attributed to an actuarial method used to value investments called the asset smoothing method. This method is used to smooth the effect of market fluctuations. At the beginning date of the projection, January 1, 2002, there was a deferred actuarial investment loss that was not recognized in the actuarial valuation and which needed to be recovered. The 8.68 percent accomplishes this so that the average rate of return will be 8%.

In addition, we also noted negative investment performance through November 30, 2002. This would indicate that the UAL would be higher than that projected for December 31, 2002. Typically a projection is performed and is not updated until the next period which could be at the time of the next actuarial report. The next actuarial report is scheduled to be completed in 2003. If we enter the investment results through November 30, 2002 into the computer model, the results indicate that a rate of over 9 percent would be necessary for the remaining amortization years to cover the smoothing described above plus the 2002 negative investment results. This does not change the 8% assumption since this is an average to be achieved over many years.

**No benefit enhancements projected.** The projections assume that there will be no benefit enhancements such as cost-of-living adjustments or lower vesting requirements.

**No workforce changes.** Even though the Retirement System has experienced modest growth in the past, the number of active members is assumed to remain level for projection purposes. This was attributed to the approaching departure of the Baby Boom generation from the workforce, current demographic projections of the available workforce in Kansas and budgetary concerns (for the State in particular). Appendix A further describes the reason for this assumption.

**The amortization period has 31 years remaining.** The 40-year amortization period began in 1993 when the Legislature improved benefits for current and former members in accordance with State statutes and also changed the actuarial cost method used. The amortization period is a closed amortization period, which means the ending date doesn't change.

**The Projection Utilizing the Existing Funding Policy Indicates that a Significant Unfunded Actuarial Liability Will Result.** The projection of the existing funding policy shows an \$ 8 billion unfunded actuarial liability in 2033. Each of the four alternatives project that the unfunded actuarial liability will be reduced to zero by the year 2033.

**The Projections Meet the Intended Use Stated in the *Long-Term Funding Outlook: Part 1*.**

We have previously described the projection limitations, especially the long-term nature of such. After considering such, we believe the projections and underlying assumptions are reasonable to assist in reviewing the Retirement System's outlook in order to develop a long-term funding plan. The underlying assumptions are reasonable and the funding projections reasonably present applicable future anticipated employer contribution rates, unfunded actuarial liabilities and funded ratios based on those related assumptions.



## **APPENDIX A**

### **Summary of Significant Assumptions**

This appendix contains the summary of significant assumptions used in the projections.

## **Summary of Significant Assumptions**

These projections present, to the best of management's knowledge and belief, the long-term funding needs of the State/school group and the local group based upon the existing funding policy and the four alternative funding plans.

### **Existing Funding**

This funding policy uses current actuarial assumptions along with the current annual statutory employer contribution rate increases of 0.2 percent for the State/school group and 0.15 percent for the local group to project the employer contributions, unfunded actuarial liability and funded ratio through 2033.

### **Alternative A – Immediate Contribution Increase**

This alternative assumes that the State/school and local groups would begin contributing at the actuarial rate in 2005.

### **Alternative B – Employer Contributions with Long-Range Equilibrium Date**

This alternative assumes that employer contributions for the State/school and local groups increase beginning in fiscal year 2005, and the contribution rates reach equilibrium in 2022.

### **Alternative C – Employer Contributions with Mid-Range Equilibrium Date**

This alternative assumes that employer contributions for the State/school and local groups increase beginning in fiscal year 2005, and the contribution rates reach equilibrium in 2015 for the State/school group and in 2016 for the local group.

### **Alternative D – Employer Contributions with Short-Range Equilibrium Date**

This alternative assumes that employer contributions for the State/school and local groups increase beginning in fiscal year 2005, and the contribution rates reach equilibrium in 2010.

The funding alternatives and calculations presented in these projections are based on a series of assumptions using an actuarial model provided by the Retirement System's consulting actuary. The assumptions made for the alternatives are detailed below.

### **Amortization Period – 31 Years**

In 1993, the Legislature improved benefits for current and former members and established a 40-year payment plan for the enhancements. In 2002, there were 31 years remaining in the amortization period. The funding alternatives in these projections retain the existing amortization period.

### **Actuarial Cost/Amortization Method – Projected Unit Credit Method**

The current actuarial cost method, called the projected unit credit method, develops payments as a level of payroll. The funding alternatives in the projections retain the current actuarial cost method.

**Workforce Increases – 0 percent**

The funding alternatives assume the total number of active members in the Retirement System will remain level over the amortization period. Although the number of active members in both the State/school and local groups have exhibited modest growth in the past, given the approaching departure of the Baby Boom generation from the workforce, current demographic projections of the available workforce in Kansas and budgetary concerns (for the State in particular), it does not appear that the Retirement System's active membership will increase significantly during the next 30 years. For these reasons, the assumption for active membership growth was set to 0 percent for these projections.

**Asset Valuation Method – Actuarial Value**

The assets are valued at expected value (based on the actuarial assumed rate of return) at the valuation date (based on the actuarial assumption) plus one-third of the difference between the market value and expected value. This method is referred to as smoothing. Smoothing refers to the practice of recognizing only a portion of changes in asset value over time as opposed to recognizing 100 percent of market value variations at each measurement period. Smoothing has the desired impact of reducing the short-term volatility of periodic market fluctuations and providing a more informational trend of plan results. More importantly smoothing reduces the need for sporadic adjustments to contributions.

**Annual Investment Rate of Return – 8 Percent**

The funding alternatives assume that the Retirement System will, on average, earn 8 percent on its investments. This is the percentage currently adopted by the Retirement System's Board of Trustees and used by the Retirement System's actuary for the actuarial valuation and other projections.

**Statutory Contribution Caps – Varies with Each Funding Alternative**

The Legislature by statute has limited the amounts that employers are required to contribute for State/school employees and local employees by limiting annual increases to 0.2 percent for the State/school group and 0.15 percent for the local group. The statutory contribution cap per year varies for each funding alternative and is listed below:

	<u>State/school</u>	<u>Local</u>
Alternative A:	None	None
Alternative B:	0.4%	0.2%
Alternative C:	0.6%	0.3%
Alternative D:	1.0%	0.5%

**Benefit Enhancements – None**

The funding alternatives include the assumption that no benefit enhancements are included in the projections, such as cost-of-living adjustments or lower vesting requirements.

**Other Actuarial Assumptions**

Other underlying assumptions used in the projections were the implicit inflation rate, rates of mortality, disabled life mortality, rates of salary increases, rates of termination, retirement rates and rates of disability. These assumptions are the same as those used in the actuarial valuation report as of December 31, 2001 and are discussed in more detail in that report.

## **APPENDIX B**

### **Agency Response**

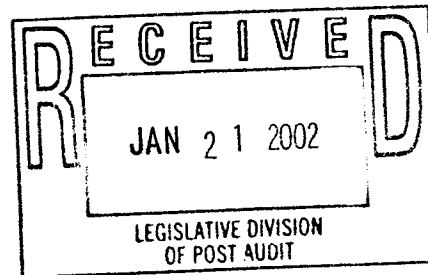
On January 16, 2003, we provided copies of the draft audit report to the Kansas Public Employees Retirement System. The response we received is included in this appendix.



**Kansas Public Employees Retirement System**

January 21, 2003

Brad Koehn  
Berberich Trahan & Co., P.A.  
3630 SW Burlingame Road  
Topeka, KS 66611-2050



Dear Mr. Koehn:

Thank you for the opportunity to respond to the draft performance audit report, "Reviewing the Projections Presented by the Kansas Public Employees Retirement System Regarding the Need for a Long-Term funding Plan". The Retirement System appreciates the professional approach taken by your firm during this audit engagement.

We are pleased that your report concludes that the assumptions that underlie our review and the corresponding projections regarding the Retirement System's long-term funding issues are reasonable. As with most forward-looking analysis that we develop for the System, these projections are based on a number of very dynamic economic and demographic estimates. Although difficult to predict, these assumptions are critical in developing the information necessary to enable policymakers to understand the size and trend of the funding shortfall and to evaluate the various funding alternatives. The information presented reflected our best estimates at the time of the August 2002 report. As we move forward these projections and estimates will be updated as available and appropriate. Actual results will continue to depend on many variables.

This funding shortfall is critical to the long-term financial health of the System and is the most important issue facing the System. Our objective is to develop a consensus among the Board of Trustees, the Legislature, the Governor, and other state and local officials on a long-term funding plan for the System. The funding plan will need to provide for increasing employer contributions to a level that will restore the System to actuarial balance and ensure its long-term financial health.

The KPERS staff and actuary have presented a number of reports on this issue to the Joint Committee on Pensions, Investments and Benefits over the past year and we continue to work with the Committee to develop funding alternatives for future consideration by the Legislature.

We look forward to discussing the final audit report with the Legislative Post Audit Committee.

Sincerely,

  
Glenn Deck  
Executive Director

cc: Randy Tongier, Audit Manager  
Legislative Division of Post Audit