

**Employees' Retirement System of the City of Kansas City,  
Missouri**

*Actuarial Valuation and Review  
as of May 1, 2004*

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The Segal Company  
6300 S. Syracuse Way, Suite 750 Englewood, CO 80111  
T 303.714.9900 F 303.714.9990 www.segalco.com

*September 20, 2004*

*Board of Trustees  
Employees' Retirement System of the City of Kansas City, Missouri  
Kansas City, Missouri*

*Dear Board Members:*

*We are pleased to submit this Actuarial Valuation and Review as of May 1, 2004. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2004 and analyzes the preceding year's experience.*

*The census information on which our calculations were based was prepared by the Retirement System. That assistance is gratefully acknowledged. The actuarial calculations were completed under our supervision.*

*This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the System.*

*We look forward to reviewing this report at your next meeting and to answering any questions.*

*Sincerely,*

*THE SEGAL COMPANY*

*By:*

\_\_\_\_\_  
*Leslie L. Thompson, FSA, MAAA, EA  
Senior Vice President and Actuary*

\_\_\_\_\_  
*Wally Malles, ASA, MAAA, EA  
Assistant Actuary*

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## **SECTION 1: Valuation Summary for the Employees' Retirement System of the City of Kansas City, Missouri**

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### **Purpose**

This report has been prepared by The Segal Company to present a valuation of the Employees' Retirement System of the City of Kansas City, Missouri as of May 1, 2004. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Retirement System, as administered by the Board;
- The characteristics of covered active members, inactive vested members, pensioners and survivors as of May 1, 2004, provided by the Board;
- The assets of the System as of April 30, 2004, provided by the Retirement System;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

## SECTION 1: Valuation Summary for the Employees' Retirement System of the City of Kansas City, Missouri

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### Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The expected contribution shortfall (the annual recommended contribution less the expected contribution) is approximately \$8.8 million. Last year the expected contribution shortfall was also approximately \$8.8 million.
- The City total cost for the General Employees is 16.91% of General Employees' payroll. The total scheduled City contribution is 10.53% of General Employees' payroll, of which 2.53% is for the retirement window offered in 2003. The retirement window contribution is projected to be paid annually through April 30, 2013.
- The City total cost for the Judges and Elected Officials is 30.82% of payroll for Judges and Elected Officials. The scheduled City contribution is 19.50% of payroll for Judges and Elected Officials.
- Under the current funding policy, benefit costs are not being met. We understand the Board is working on strategies to overcome this, such as increasing the scheduled City contribution rates for the General Employees. As of May 1, 2005, the scheduled City contribution for the General Employees is expected to be increased by an additional 1.50% of payroll.
- For the year ended April 30, 2004, the plan's cash flow became negative for the first time. Benefit payments now exceed the sum of total contributions and net interest and dividends.
- As of May 1, 2003 the actuarial accrued liability exceeded the actuarial value of assets by \$82.6 million. As of May 1, 2004, the actuarial accrued liability exceeded the actuarial value of assets by \$113.1 million. This increased deficit is primarily due to less than anticipated investment return on an actuarial value of assets basis and the recognition of past investment losses.
- The market value of assets now exceeds the actuarial value of assets as of April 30, 2004, due to the 18.86% return and the effect of the asset smoothing method. This constitutes a positive asset reserve dollar difference of approximately \$47.0 million. The actuarial value of assets as a percentage of market value of assets is 93.0% as of April 30, 2004, compared to 106.7% as of the prior year. The large market value investment gain during the prior year will be recognized over future years and will potentially offset future losses, should they occur.
- There were no changes in plan provisions, actuarial assumptions or actuarial cost methods since the prior actuarial valuation.

**SECTION 1: Valuation Summary for the Employees' Retirement System of the City of Kansas City, Missouri**

**Summary of Key Valuation Results**

	<b>2004</b>	<b>2003</b>
<b>Contributions for plan year beginning May 1:</b>		
Recommended	\$23,406,798	\$20,018,740
Scheduled*	11,150,642	8,019,644
Scheduled city contribution for retirement window offered in 2003**	3,433,067	3,248,862
Actual	--	12,100,061
<b>Funding elements for plan year beginning May 1:</b>		
Normal cost, including employee contributions***	\$18,651,105	\$17,575,399
Market value of assets	674,111,615	585,919,321
Actuarial value of assets	627,078,139	624,897,653
Actuarial accrued liability	740,186,346	707,513,176
Unfunded/(overfunded) actuarial accrued liability	113,108,207	82,615,523
<b>GASB 25/27 for plan year beginning May 1:</b>		
Annual required contributions	\$23,406,798	\$20,018,740
Actual contributions	--	12,100,061
Percentage contributed	--	60.44%
Funded ratio	84.72%	88.32%
Covered payroll	\$137,207,640	\$130,028,040
<b>Demographic data for plan year beginning May 1:</b>		
Number of pensioners and survivors	1,982	2,035
Number of vested former members	51	49
Number of refunds due	70	113
Number of active members	3,427	3,357
Total anticipated 2004 payroll	\$137,207,640	\$130,028,040
Average anticipated 2004 payroll	40,037	38,733

\* Scheduled City contribution for General Employees is 8.0% for 2004 and 6.0% for 2003 of anticipated payroll, and 19.5% of anticipated payroll for Judges and Elected Officials.

\*\* Scheduled City contribution for retirement window offered in 2003 is 2.53% of anticipated payroll for General Employees and projected to be paid annually through April 30, 2013.

\*\*\* Excludes adjustment for timing

**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

**A. MEMBER DATA**

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, pensioners and survivors.

This section presents a summary of significant statistical data on these member groups. The 10.4% decrease in active members and the 22.9% increase in pensioners and survivors for the year ended April 30, 2003 is primarily due to the retirement window offered in 2003.

More detailed information including General Employees, Judges and Elected Officials summarized separately for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

*A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.*

**CHART 1**  
**Member Population: 1995 – 2004**

<b>Year Ended April 30</b>	<b>Active Members</b>	<b>Vested Terminated Members*</b>	<b>Pensioners and Survivors</b>	<b>Ratio of Non-Actives to Actives</b>
1995	3,426	39	1,731	0.52
1996	3,708	31	1,687	0.46
1997	3,787	26	1,647	0.44
1998	3,808	30	1,655	0.44
1999	3,830	31	1,650	0.44
2000	3,776	38	1,662	0.45
2001	3,827	47	1,657	0.45
2002	3,745	51	1,656	0.46
2003	3,357	49	2,035	0.62
2004	3,427	51	1,982	0.59

\*Excludes terminated members due a refund of employee contributions

**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

**Active Members**

Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 3,427 active members with an average age of 43.2, average years of service of 9.0 years and average payroll of \$40,037. The 3,357 active members in the prior valuation had an average age of 42.6, average service of 8.5 years and average payroll of \$38,733.

**Inactive Members**

In this year's valuation, there were 51 members with a vested right to a deferred or immediate vested benefit.

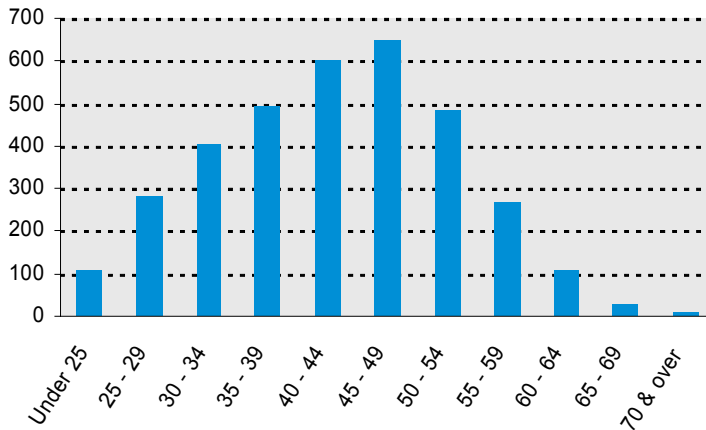
In addition, there were 70 members entitled to a return of their employee contributions, totaling \$713,799. Last year, there were 113 members entitled to receive a return of their employee contributions totaling \$730,122.

The graphs below show distributions for the total Retirement System. The information split between General Employees, Judges, and Elected Officials are shown in Exhibit B.

*These graphs show a distribution of active members by age and by years of service.*

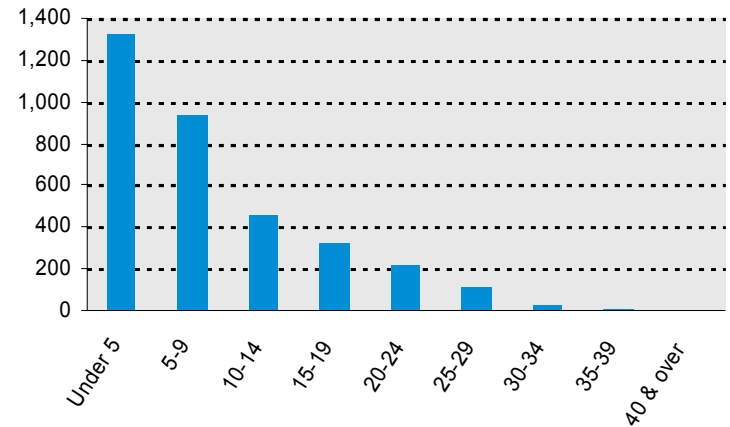
**CHART 2**

**Distribution of Active Members by Age as of April 30, 2004**



**CHART 3**

**Distribution of Active Members by Years of Service as of April 30, 2004**





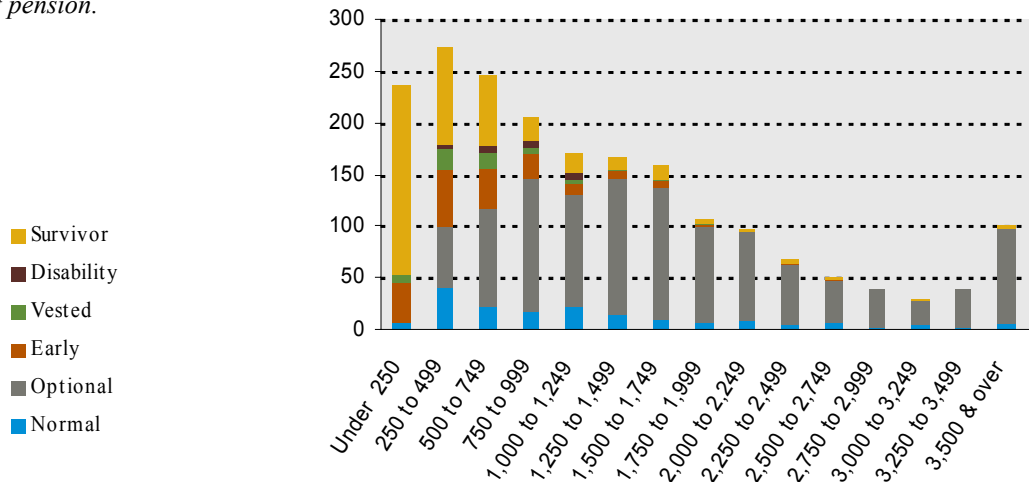
**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

**Pensioners and Survivors**

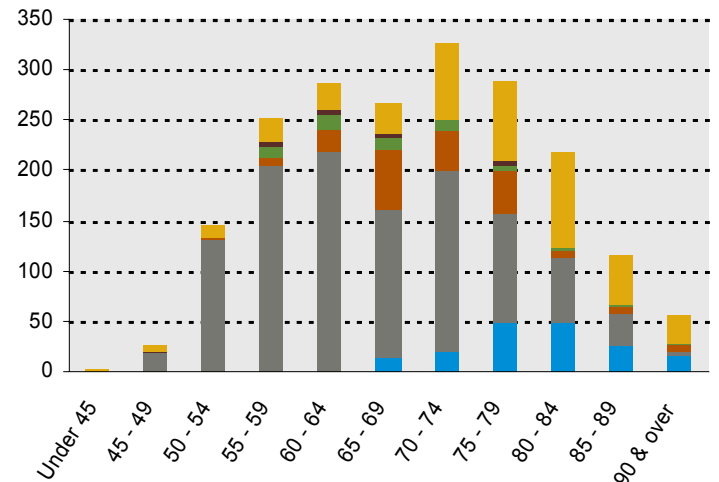
As of April 30, 2004, 1,554 pensioners and 428 survivors were receiving total monthly benefits of \$2,637,414. For comparison, in the previous valuation, there were 1,610 pensioners and 425 survivors receiving monthly benefits of \$2,615,581.

*These graphs show a distribution of the current pensioners and survivors based on their monthly amount and age, by type of pension.*

**CHART 4**  
**Distribution of Pensioners and Survivors by Type and by Monthly Amount as of April 30, 2004**



**CHART 5**  
**Distribution of Pensioners and Survivors by Type and by Age as of April 30, 2004**



**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

**B. FINANCIAL INFORMATION**

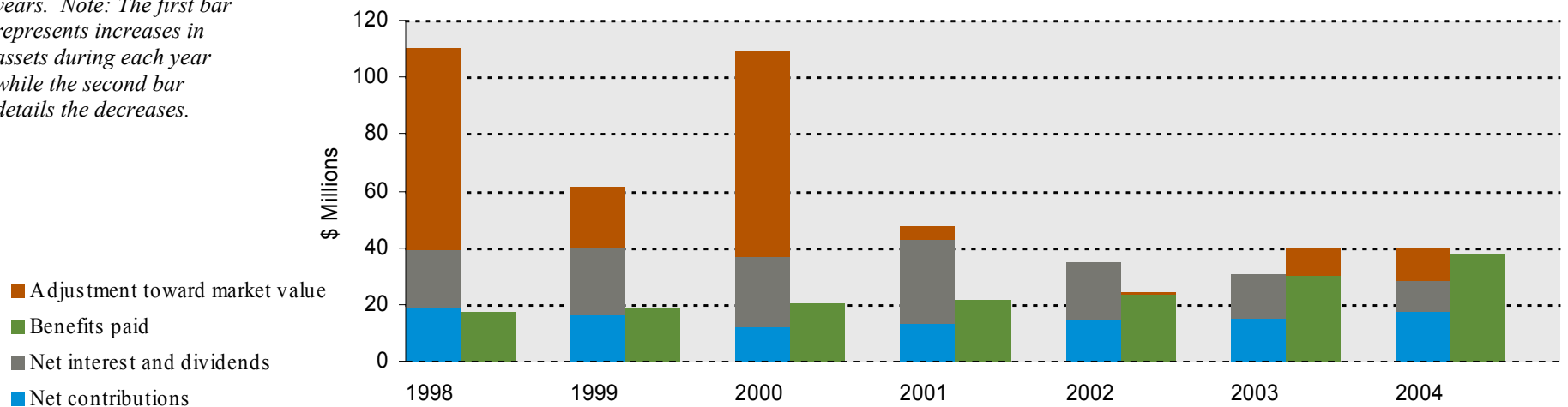
Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

For the year ended April 30, 2004, the plan's cash flow became negative for the first time. Benefit payments (the green bar) now exceed the sum of total contributions (the blue bar) and net interest and dividends (the gray bar).

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

*The chart depicts the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.*

**CHART 6**  
**Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended April 30, 1998 – 2004**



**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

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It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

*The chart shows the determination of the actuarial value of assets as of the valuation date.*

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**CHART 7**

**Determination of Actuarial Value of Assets for Year Ended April 30, 2004**

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1. Actuarial value of assets at beginning of year	\$624,897,653
2. Contributions, interest and dividends, less benefit payments and expenses	-9,577,883
3. Preliminary actuarial value of assets: (1) + (2)	615,319,770
4. Market value of assets	674,111,615
5. Adjustment toward market value: 20% of [(4) - (3)]	11,758,369
6. Adjustment to be within 10% corridor	0
7. Final actuarial value of assets at end of year: (3) + (5) + (6)	<u>\$627,078,139</u>
8. Actuarial value at end of year as a percentage of market value: (7) ÷ (4)	93.0%

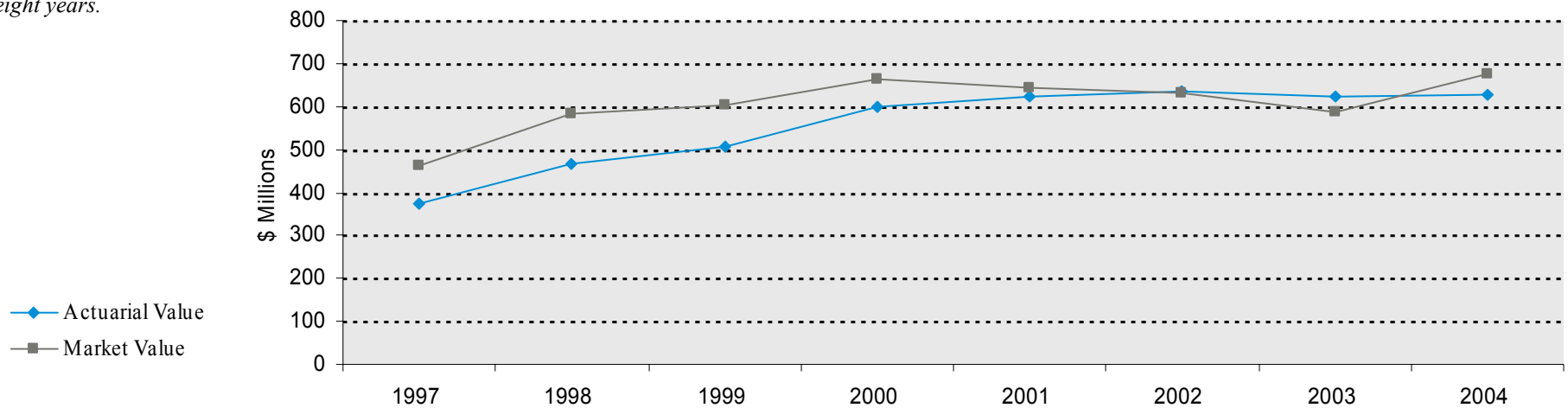
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**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

Both the actuarial value and market value of assets are representations of the Retirement System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Retirement System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

*This chart shows the change in the actuarial value of assets versus the market value over the past eight years.*

**CHART 8**  
**Actuarial Value of Assets vs. Market Value of Assets as of April 30, 1997 – 2004**



**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

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**C. ACTUARIAL EXPERIENCE**

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The experience gain/(loss) is (\$23,325,261), (\$25,078,314) from investments and \$1,753,053 from all other sources. The net experience variation from individual sources other than investments was 0.2% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

*This chart provides a summary of the actuarial experience during the past year.*

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**CHART 9  
Actuarial Experience for Year Ended April 30, 2004**

1. Net gain/(loss) from investments*	-\$25,078,314
2. Net gain/(loss) from other experience**	<u>1,753,053</u>
3. Net experience gain/(loss): (1) + (2)	-\$23,325,261

\* Details in Chart 10

\*\* Details in Chart 13

**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Retirement System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 7.75%. The actual rate of return on an actuarial basis for the 2004 plan year was 3.67%.

Since the actual return for the year was less than the assumed return, the Retirement System experienced an actuarial loss during the year ended April 30, 2004 with regard to its investments.

*This chart shows the gain/(loss) due to investment experience.*

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**CHART 10**  
**Actuarial Value Investment Experience for Year Ended April 30, 2004**

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1. Actual return	\$22,561,490
2. Average value of assets	614,707,151
3. Actual rate of return: (1) ÷ (2)	3.67%
4. Assumed rate of return	7.75%
5. Expected return: (2) x (4)	\$47,639,804
6. Actuarial gain/(loss): (1) – (5)	<u>-\$25,078,314</u>

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**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last seven years, including the five-year average.

Based upon this experience and future expectations, we have maintained the assumed rate of return of 7.75% per annum, net of investment fees and administrative expenses.

**CHART 11**

**Investment Return – Actuarial Value vs. Market Value: 1998 - 2004**

Year Ended April 30	Net Interest and Dividend Income		Adjustment Toward Market		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	\$20,827,742	5.58	\$71,226,814	19.10	\$92,054,556	24.68	\$117,265,236	25.28
1999	23,037,972	4.96	21,546,601	4.64	44,584,573	9.60	24,377,279	4.21
2000	24,731,101	4.91	72,218,105	14.32	96,949,206	19.23	67,094,491	11.18
2001	29,239,958	4.93	5,077,282	0.86	34,317,240	5.79	-11,716,478	-1.76
2002	20,389,227	3.30	-499,818	-0.08	19,889,409	3.22	-2,418,993	-0.36
2003	15,618,140	2.49	-9,744,583	-1.56	5,873,557	0.93	-31,105,502	-4.98
2004	<u>10,803,121</u>	1.76	<u>11,758,369</u>	1.91	<u>22,561,490</u>	3.67	<u>108,573,298</u>	18.86
Total	\$144,647,261		\$171,582,770		\$316,230,031		\$272,069,331	
					Five-year average return	6.09%		4.22%

*Note: Each year's yield is weighted by the average asset value in that year.*

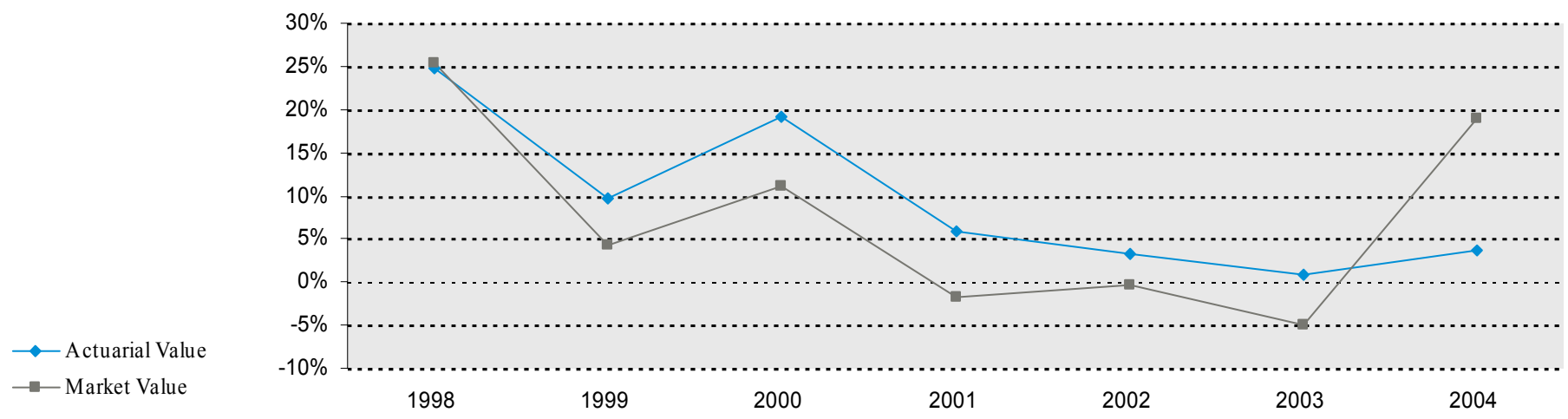
**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

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Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

*This chart illustrates how this leveling effect has actually worked over the years 1998 - 2004 .*

**CHART 12**  
**Market and Actuarial Rates of Return for Years Ended April 30, 1998 - 2004**





**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Other Experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),

- the number of new entrants and returning employees, and
- salary increases different than assumed.

The net gain from this other experience for the year ended April 30, 2004 amounted to \$1,753,053 which is 0.2% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the Retirement System for the year ended April 30, 2004 is shown in the chart below.

*The chart shows elements of the experience gain/(loss) for the most recent year.*

**CHART 13**  
**Experience Due to Changes in Demographics for Year Ended April 30, 2004**

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1. Pre-retirement mortality	\$1,185,195
2. Turnover	-1,341,183
3. Retirement	340,138
4. Post-retirement mortality	144,628
5. New and returning employees	-1,861,153
6. Salary increases less than expected for continuing actives	2,932,135
7. Miscellaneous	<u>353,293</u>
8. Total	\$1,753,053

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**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

**D. RECOMMENDED CONTRIBUTION**

The amount of annual contribution recommended to fund the System is comprised of a City normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability.

The recommended City contribution is based on a 30-year open amortization of the unfunded/(overfunded) actuarial accrued liability as specified in the law governing the System. The scheduled City contribution is 8.0% of anticipated payroll for General Employees and 19.5% of anticipated payroll for Judges and Elected Officials. The

scheduled City contribution for the retirement window offered in 2003 is 2.53% of anticipated payroll for General Employees, and is projected to be paid annually through April 30, 2013.

The contribution rates as of May 1, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the System's plan provisions adopted at the time of preparation of the actuarial valuation.

**CHART 14  
Recommended Contribution**

	Year Beginning May 1, 2004			Total % of Payroll
	General Employees	Judges and Elected Officials	Total	
1. Total normal cost, adjusted for timing	\$18,982,527	\$433,646	\$19,416,173	14.15%
2. Expected employee contributions	<u>-5,427,773</u>	<u>-60,525</u>	<u>-5,488,298</u>	4.00%
3. City normal cost: (1) + (2)	\$13,554,754	\$373,121	\$13,927,875	10.15%
4. Actuarial accrued liability	732,902,117	7,284,229	740,186,346	
5. Actuarial value of assets	620,907,016	6,171,123	627,078,139	
6. Unfunded/(overfunded) actuarial accrued liability: (4) - (5)	\$111,995,101	\$1,113,106	\$113,108,207	
7. Payment on unfunded/(overfunded) actuarial accrued liability over 30 years	9,385,640	93,283	9,478,923	6.91%
8. Scheduled City contributions	10,855,547	295,095	11,150,642	8.13%
9. Scheduled City contributions for retirement window offered in 2003*	3,433,067	0	3,433,067	2.50%
10. Amount available for amortization: (8) + (9) - (3)	733,860	-78,026	655,834	
11. Amount in excess of / (short of) expected City contributions: (10) - (7)	-8,651,780	-171,309	-8,823,089	-6.43%
12. Total recommended City contribution, adjusted for timing**: (8) + (9) - (11)	<u>22,940,394</u>	<u>466,404</u>	<u>23,406,798</u>	<u>17.06%</u>
13. Anticipated 2004 payroll	\$135,694,332	\$1,513,308	\$137,207,640	

\* Projected to be paid annually through April 30, 2013.

\*\* Recommended contributions are assumed to be paid at the end of every month.

**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Reconciliation of Recommended Contribution**

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

*The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.*

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**CHART 15**

**Reconciliation of Recommended Contribution from May 1, 2003 to May 1, 2004**

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<b>Recommended Contribution as of May 1, 2003</b>	\$20,018,740
Effect of contributions (more)/less than recommended contribution	670,836
Effect of investment (gain)/loss	2,121,265
Effect of net other changes	<u>595,957</u>
<b>Total change</b>	<u>\$3,388,058</u>
<b>Recommended Contribution as of May 1, 2004</b>	\$23,406,798

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**SECTION 2: Valuation Results for the Employees' Retirement System of the City of Kansas City, Missouri**

**E. INFORMATION REQUIRED BY THE GASB**

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 16 below presents a graphical representation of this information for the System.

The other critical piece of information regarding the System's financial status is the funded ratio. This ratio

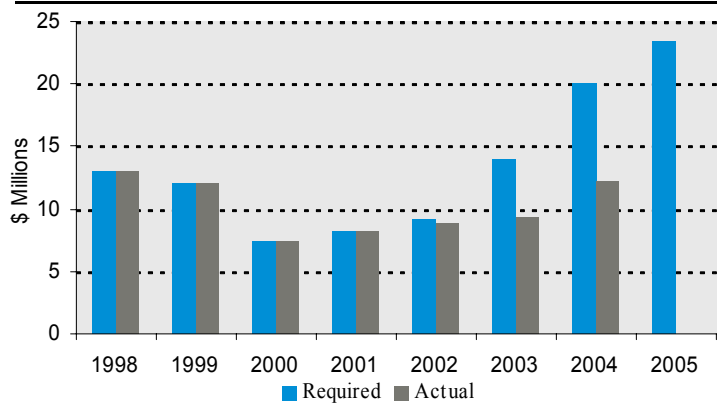
compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

Although GASB requires that the actuarial value of assets be used to determine the funded ratio, Chart 17 shows the funded ratio calculated using both the actuarial value of assets and the market value of assets.

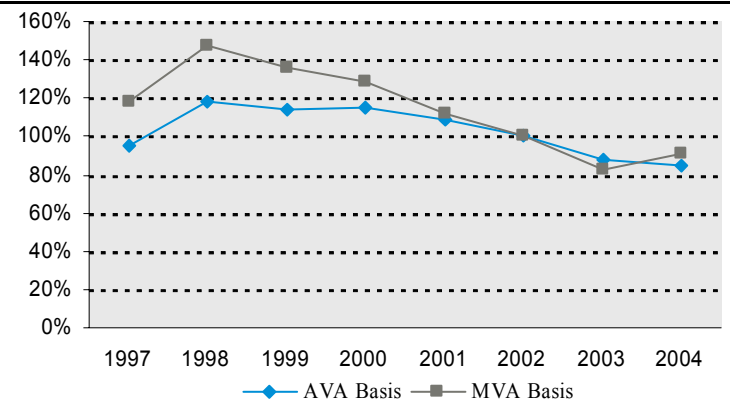
The details regarding the calculations of these values and other GASB numbers may be found in Section 4.

*These graphs show key GASB factors.*

**CHART 16**  
**Required Versus Actual Contributions**



**CHART 17**  
**Funded Ratio**



**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT A**

**Table of System Coverage**

<b>Category</b>	<b>Year Ended April 30</b>		<b>Change From Prior Year</b>
	<b>2004</b>	<b>2003</b>	
<b>Total active members in valuation:</b>			
Number	3,427	3,357	2.1%
Average age	43.2	42.6	N/A
Average service	9.0	8.5	N/A
Total anticipated 2004 payroll	\$137,207,640	\$130,028,040	5.5%
Average anticipated 2004 payroll	40,037	38,733	3.4%
Account balances	56,023,734	49,808,504	12.5%
Eligible to retire on:			
Normal pension	31	21	47.6%
Optional pension	121	89	36.0%
Early pension	122	106	15.1%
Deferred pension	1,831	1,748	4.7%
Total active vested members	2,105	1,964	7.2%
<b>Vested terminated members</b>	51	49	4.1%
<b>Pensioners:</b>			
Number in pay status	1,554	1,610	-3.5%
Average age	68.3	67.6	N/A
Average monthly benefit	\$1,548	\$1,491	3.8%
<b>Survivors in pay status</b>	428	425	0.7%
<b>Members due refunds</b>	70	113	-38.1%

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT A (continued)**  
**Table of System Coverage**

<b>Category (Active participants in valuation)</b>	<b>Year Ended April 30</b>		<b>Change From Prior Year</b>
	<b>2004</b>	<b>2003</b>	
<b>General Employees</b>			
Number	3,408	3,336	2.2%
Average age	43.2	42.5	N/A
Average service	9.0	8.5	N/A
Total anticipated 2004 payroll	\$135,694,332	\$128,413,512	5.7%
Average salary	39,816	38,493	3.4%
<b>Judges</b>			
Number	8	9	-11.1%
Average age	56.8	57.1	N/A
Average service	12.5	13.8	N/A
Total anticipated 2004 payroll	\$951,840	\$1,029,672	-7.6%
Average salary	118,980	114,408	4.0%
<b>Elected Officials</b>			
Number	11	12	-8.3%
Average age	50.6	49.8	N/A
Average service	3.5	2.3	N/A
Total anticipated 2004 payroll	\$561,468	\$584,856	-4.0%
Average salary	51,043	48,738	4.7%

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT B1 (General Employees)**

**Members in Active Service as of April 30, 2004  
By Age, Years of Service, and Average Salary**

Age	Years of Service									
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	106	105	1	--	--	--	--	--	--	--
	\$24,707	\$24,700	\$25,392	--	--	--	--	--	--	--
25 - 29	280	227	52	1	--	--	--	--	--	--
	29,680	29,457	30,627	\$31,140	--	--	--	--	--	--
30 - 34	402	232	137	32	1	--	--	--	--	--
	34,302	30,698	38,183	43,266	\$51,840	--	--	--	--	--
35 - 39	491	217	173	79	22	--	--	--	--	--
	36,925	31,439	39,313	44,300	45,767	--	--	--	--	--
40 - 44	599	183	186	101	82	44	3	--	--	--
	40,991	32,259	40,765	46,118	50,368	\$48,813	\$43,984	--	--	--
45 - 49	644	142	175	84	87	92	60	4	--	--
	43,128	35,303	39,849	44,460	50,335	49,100	49,336	\$49,266	--	--
50 - 54	478	109	111	79	77	62	30	9	1	--
	44,675	33,746	43,334	47,216	48,776	50,318	54,611	64,273	\$43,872	--
55 - 59	268	73	61	51	38	14	20	10	1	--
	47,158	37,694	46,507	46,428	53,622	65,454	62,310	43,949	42,180	--
60 - 64	107	26	27	22	19	3	2	4	3	1
	46,533	34,389	39,819	45,379	61,038	53,372	56,616	64,551	84,188	\$67,644
65 - 69	24	6	7	7	1	--	2	1	--	--
	46,662	43,600	41,597	46,162	70,344	--	64,872	43,872	--	--
70 & over	9	2	4	1	1	--	--	1	--	--
	47,279	26,004	48,252	48,540	91,788	--	--	40,164	--	--
Total	3,408	1,322	934	457	328	215	117	29	5	1
	\$39,816	\$31,603	\$40,056	\$45,461	\$50,864	\$50,517	\$53,159	\$53,698	\$67,723	\$67,644

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT B2 (Judges)**

**Members in Active Service as of April 30, 2004  
By Age, Years of Service, and Average Salary**

Age	Years of Service									
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	--	--	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--	--	--
35 - 39	--	--	--	--	--	--	--	--	--	--
40 - 44	--	--	--	--	--	--	--	--	--	--
45 - 49	1 \$118,980	1 \$118,980	--	--	--	--	--	--	--	--
50 - 54	3 118,980	--	2 \$118,980	1 \$118,980	--	--	--	--	--	--
55 - 59	1 118,980	--	1 118,980	--	--	--	--	--	--	--
60 - 64	2 118,980	--	--	--	1 \$118,980	1 \$118,980	--	--	--	--
65 - 69	1 118,980	--	--	--	1 118,980	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
Total	8 \$118,980	1 \$118,980	3 \$118,980	1 \$118,980	2 \$118,980	1 \$118,980	--	--	--	--



**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT B3 (Elected Officials)**

**Members in Active Service as of April 30, 2004  
By Age, Years of Service, and Average Salary**

Age	Years of Service									
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	--	--	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--	--	--
35 - 39	2	1	1	--	--	--	--	--	--	--
40 - 44	\$46,788	\$46,788	\$46,788	--	--	--	--	--	--	--
45 - 49	2	1	1	--	--	--	--	--	--	--
50 - 54	46,788	46,788	46,788	--	--	--	--	--	--	--
55 - 59	1	--	1	--	--	--	--	--	--	--
60 - 64	46,788	--	46,788	--	--	--	--	--	--	--
65 - 69	1	1	--	--	--	--	--	--	--	--
70 & over	46,788	46,788	--	--	--	--	--	--	--	--
	1	--	1	--	--	--	--	--	--	--
	93,588	--	93,588	--	--	--	--	--	--	--
Total	11	5	6	--	--	--	--	--	--	--
	\$51,043	\$46,788	\$54,588	--	--	--	--	--	--	--

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT B4 (Total)**

**Members In Active Service as of April 30, 2004  
By Age, Years of Service, and Average Salary**

Age	Years of Service									
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	106	105	1	--	--	--	--	--	--	--
	\$24,707	\$24,700	\$25,392	--	--	--	--	--	--	--
25 - 29	280	227	52	1	--	--	--	--	--	--
	29,680	29,457	30,627	\$31,140	--	--	--	--	--	--
30 - 34	402	232	137	32	1	--	--	--	--	--
	34,302	30,698	38,183	43,266	\$51,840	--	--	--	--	--
35 - 39	493	218	174	79	22	--	--	--	--	--
	36,965	31,509	39,356	44,300	45,767	--	--	--	--	--
40 - 44	601	184	187	101	82	44	3	--	--	--
	41,010	32,338	40,797	46,118	50,368	\$48,813	\$43,984	--	--	--
45 - 49	646	143	176	84	87	92	60	4	--	--
	43,252	35,888	39,888	44,460	50,335	49,100	49,336	\$49,266	--	--
50 - 54	483	111	113	80	77	62	30	9	1	--
	45,145	33,981	44,673	48,113	48,776	50,318	54,611	64,273	\$43,872	--
55 - 59	270	73	63	51	38	14	20	10	1	--
	47,422	37,694	47,662	46,428	53,622	65,454	62,310	43,949	42,180	--
60 - 64	110	27	27	22	20	4	2	4	3	1
	47,853	34,848	39,819	45,379	63,935	69,774	56,616	64,551	84,188	\$67,644
65 - 69	26	6	8	7	2	--	2	1	--	--
	51,248	43,600	48,096	46,162	94,662	--	64,872	43,872	--	--
70 & over	10	2	5	1	1	--	--	1	--	--
	47,230	26,004	47,959	48,540	91,788	--	--	40,164	--	--
Total	3,427	1,328	943	458	330	216	117	29	5	1
	\$40,037	\$31,726	\$40,400	\$45,622	\$51,276	\$50,834	\$53,159	\$53,698	\$67,723	\$67,644

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT C**

**Reconciliation of Member Data**

	<b>Active Members</b>	<b>Vested Former Members</b>	<b>Pensioners</b>	<b>Survivors</b>	<b>Total</b>
Number as of May 1, 2003	3,357	49	1,610	425	5,441
New members	325	N/A	N/A	N/A	325
Terminations – with vested rights	-4	4	0	0	0
Terminations – without vested rights	-240	N/A	N/A	N/A	-240
Retirements	-4	0	4	N/A	0
Return to work	3	0	-3	N/A	0
Died with beneficiary	0	0	-24	24	0
Died without beneficiary	-10	-2	-38	-26	-76
Certain period expired	N/A	N/A	0	-1	-1
Data adjustments	<u>0</u>	<u>0</u>	<u>5</u>	<u>6</u>	<u>11</u>
Number as of May 1, 2004	3,427	51	1,554	428	5,460

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT D**

**Summary Statement of Income and Expenses on an Actuarial Value Basis**

	<b>Year Ended April 30, 2004</b>	<b>Year Ended April 30, 2003</b>
<b>Contribution income:</b>		
Employer contributions	\$12,100,061	\$9,284,587
Employee contributions	<u>5,348,584</u>	<u>5,809,817</u>
Total contribution income	\$17,448,645	\$15,094,404
<b>Investment income:</b>		
Interest, dividends and other income	\$14,277,781	\$18,923,064
Adjustment toward market value	11,758,369	-9,744,583
Less investment fees and administrative expenses	<u>-3,474,660</u>	<u>-3,304,924</u>
Net investment income	<u>22,561,490</u>	<u>5,873,557</u>
<b>Total income available for benefits</b>	<b>\$40,010,135</b>	<b>\$20,967,961</b>
<b>Less benefit payments:</b>		
Benefit payments	-\$35,403,522	-\$22,745,408
Refund of contributions (terminations)	-1,176,930	-1,273,083
Refund of contributions (retirements)	<u>-1,249,197</u>	<u>-6,077,659</u>
Total benefit payments	-\$37,829,649	-\$30,096,150
<b>Change in reserve for future benefits</b>	<b>\$2,180,486</b>	<b>-\$9,128,189</b>

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT E**

**Table of Financial Information**

	<b>Year Ended April 30, 2004</b>	<b>Year Ended April 30, 2003</b>
<b>Cash equivalents</b>	\$38,038,960	\$38,161,367
<b>Accounts receivable:</b>		
Contributions	\$709,863	\$412,375
Investment income	1,046,092	1,035,761
Sale of investments	<u>9,114,926</u>	<u>2,946,107</u>
Total accounts receivable	10,870,881	4,394,243
<b>Investments:</b>		
Common stocks	\$565,880,816	\$378,511,860
Corporate bonds	48,441,031	153,899,475
Government securities	49,013,151	33,026,773
Government bonds	20,501	244,231
Foreign securities	369,161	303,408
Indexed notes and bonds	<u>9,702,982</u>	<u>6,681,593</u>
Total investments at market value	<u>673,427,642</u>	<u>572,667,340</u>
<b>Total assets</b>	<b>\$722,337,483</b>	<b>\$615,222,950</b>
<b>Less accounts payable:</b>		
Purchase of investments	-\$47,468,438	-\$28,514,134
Administrative expenses and investment fees payable	<u>-757,430</u>	<u>-789,495</u>
Total accounts payable	-\$48,225,868	-\$29,303,629
<b>Net assets at market value</b>	<b><u>\$674,111,615</u></b>	<b><u>\$585,919,321</u></b>
<b>Net assets at actuarial value</b>	<b><u>\$627,078,139</u></b>	<b><u>\$624,897,653</u></b>

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT F**

**Development of the Fund Through April 30, 2004**

<b>Year Ended April 30</b>	<b>Employer Contributions</b>	<b>Employee Contributions</b>	<b>Net Investment Return*</b>	<b>Benefit Payments</b>	<b>Actuarial Value of Assets at End of Year</b>
1998	\$12,971,863	\$5,494,028	\$92,054,556	\$17,303,120	\$465,619,424
1999	11,940,848	4,689,949	44,584,573	18,553,121	508,281,673
2000	7,324,278	4,754,722	96,949,206	20,224,255	597,085,624
2001	8,106,825	5,262,253	34,317,240	21,522,390	623,249,552
2002	8,747,053	5,700,124	19,889,409	23,560,296	634,025,842
2003	9,284,587	5,809,817	5,873,557	30,096,150	624,897,653
2004	12,100,061	5,348,584	22,561,490	37,829,649	627,078,139

*\* Net of investment fees and administrative expenses*

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT G**

**Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended April 30, 2004**

1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year		\$82,615,523
2. Plus: Expected change due to amortization method		
Normal cost	\$17,575,400	
Interest on unfunded accrued liability and normal cost	<u>7,764,797</u>	
Subtotal	25,340,197	
Expected City and employee contributions	-20,072,007	
Interest on expected contributions	<u>-831,739</u>	
Scheduled change		\$4,436,451
3. Plus: Deficient (surplus) contributions		
Expected City and employee contributions	\$20,072,007	
Actual City and employee contributions	<u>-17,448,645</u>	
Contribution shortfall (surplus)	2,623,362	
Interest	<u>107,610</u>	
Deficient (surplus) contributions		\$2,730,972
4. Plus: Actuarial (gains) losses		
Investment earnings	\$25,078,314	
Salary increases less than expected for continuing actives	-2,932,135	
Turnover	1,341,183	
Retirement	-340,138	
New and returning employees	1,861,153	
Pre-retirement mortality	-1,185,195	
Post-retirement mortality	-144,628	
Miscellaneous	<u>-353,293</u>	
Total		<u>\$23,325,261</u>
5. Unfunded/(Overfunded) actuarial accrued liability at end of year		<u>\$113,108,207</u>

**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**EXHIBIT H**

**Definitions of Pension Terms**

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The following list defines certain technical terms for the convenience of the reader:

<b>Actuarial Assumptions:</b>	The estimates on which the cost of the System is calculated including: <ul style="list-style-type: none"><li>(a) <u>Investment return</u> — the rate of investment yield that the System will earn over the long-term future;</li><li>(b) <u>Mortality rates</u> — the death rates of employees and pensioners; life expectancy is based on these rates;</li><li>(c) <u>Retirement rates</u> — the rate or probability of retirement at a given age;</li><li>(d) <u>Turnover rates</u> — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.</li></ul>
<b>Normal Cost:</b>	The amount of contributions required to fund the benefit allocated to the current year of service.
<b>Actuarial Accrued Liability For Actives:</b>	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
<b>Actuarial Accrued Liability For Pensioners:</b>	The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.
<b>Unfunded Actuarial Accrued Liability:</b>	The extent to which the actuarial accrued liability of the System exceeds the assets of the System. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.



**SECTION 3: Supplemental Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Amortization of the Unfunded**

**Actuarial Accrued Liability:** Payments made over a period of years equal in value to the System's unfunded actuarial accrued liability.

**Investment Return:**

The rate of earnings of the System from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**EXHIBIT I**

**Summary of Actuarial Valuation Results**

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The valuation was made with respect to the following data supplied to us:

1. Pensioners as of the valuation date (including 428 beneficiaries in pay status)		1,982
2. Members inactive during year ended April 30, 2004 with vested rights		51
3. Members active during the year ended April 30, 2004		3,427
Fully vested	2,105	
Not vested	1,322	
4. Members due refunds as of April 30, 2004		70

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**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT I (continued)  
Summary of Actuarial Valuation Results**

The actuarial factors as of the valuation date are as follows:

1. Actuarial accrued liability:		\$740,186,346
Pensioners and survivors	\$405,369,936	
Inactive members with vested rights*	5,790,771	
Active members	329,025,639	
2. Actuarial value of assets (\$674,111,615 at market value)		627,078,139
3. Unfunded/(overfunded) actuarial accrued liability: (1) – (2)		113,108,207
4. Amortization of unfunded/(overfunded) actuarial accrued liability		9,478,923
5. Normal cost, payable monthly:		
Amount		\$19,416,173
As a percent of payroll		14.15%
6. Total recommended contribution: (4) + (5)		
Amount		\$28,895,096
As a percent of payroll		21.06%
7. Expected employee contribution (4.0% of payroll)		\$5,488,298
8. Recommended City contribution: (6) – (7)		
Amount		\$23,406,798
As a percent of payroll		17.06%
9. Expected City contribution:		
General Employees (8.0% of payroll)		\$10,855,547
Judges and Elected Officials (19.5% of payroll)		295,095
General Employees (2.53% of payroll) for retirement window offered in 2003**		<u>3,433,067</u>
Total		<u>\$14,583,709</u>
10. Excess/(shortfall) total City contributions:		
Amount		-\$8,823,089
As a percent of payroll		-6.43%
11. Total anticipated 2004 payroll		\$137,207,640

\* Includes members due refunds

\*\* Projected to be paid annually through April 30, 2013.

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**EXHIBIT II**

**Supplementary Information Required by the GASB – Schedule of City Contributions**

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<b>Plan Year Ended April 30</b>	<b>Annual Required Contributions</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
1998	\$12,971,863	\$12,971,863	100.0%
1999	11,940,848	11,940,848	100.0%
2000	7,324,278	7,324,278	100.0%
2001	8,106,825	8,106,825	100.0%
2002	9,094,835	8,747,053	96.2%
2003	13,996,455	9,284,587	66.3%
2004	20,018,740	12,100,061	60.4%
2005	23,406,798	--	--

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**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT III**

**Supplementary Information Required by the GASB – Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll* [(b) - (a) / (c)]</b>
05/01/1997	\$372,402,097	\$391,069,000	\$18,666,903	95.23%	\$109,405,000	17.06%
05/01/1998	465,619,424	394,943,900	-70,675,524	117.90%	111,639,400	0.0%
05/01/1999	508,281,673	445,761,900	-62,519,773	114.03%	117,018,100	0.0%
05/01/2000	597,085,624	517,046,400	-80,039,224	115.48%	122,645,800	0.0%
05/01/2001	623,249,552	573,339,758	-49,909,794	108.71%	136,263,216	0.0%
05/01/2002	634,025,842	630,683,891	-3,341,951	100.53%	146,816,820	0.0%
05/01/2003	624,897,653	707,513,176	82,615,523	88.32%	130,028,040	63.54%
05/01/2004	627,078,139	740,186,346	113,108,207	84.72%	137,207,640	82.44%

\* *Not less than zero*

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT IV**

**Progress of Pension Rolls Through April 30, 2004**

<b>Year Ended April 30</b>	<b>Awards</b>	<b>Deaths</b>	<b>Suspensions</b>	<b>Reinstatements</b>	<b>Number</b>	<b>Monthly Amount</b>
1997	63	98	5	--	1,647	\$1,129,100
1998	82	76	2	4	1,655	1,183,731
1999	82	87	--	--	1,650	1,285,927
2000	96	84	--	--	1,662	1,358,548
2001	78	83	--	--	1,657	1,484,234
2002	86	87	--	--	1,656	1,581,296
2003	462*	83	--	--	2,035	2,615,581
2004	39	89	3	--	1,982	2,637,414

*\* The higher number of awards for the year ended April 30, 2003 is due to the retirement window offered in 2003.*

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT V  
Pensions in Payment Status on May 1, 2004 by Type and Monthly Amount**

Monthly Amount	Total	Type of Pension					
		Normal	Optional	Early	Deferred	Disability	Survivor
<b>Total</b>	1,982	168	1,114	187	63	22	428
Under \$200	93	3	1	31	6	--	52
\$200 – 399	266	14	9	35	8	--	200
400 – 599	251	36	79	43	24	5	64
600 – 799	186	18	91	29	8	8	32
800 – 999	165	15	101	18	6	4	21
1,000 – 1,199	137	18	84	10	4	5	16
1,200 – 1,399	127	10	94	9	2	--	12
1,400 – 1,599	144	10	115	5	3	--	11
1,600 – 1,799	104	8	89	2	--	--	5
1,800 – 1,999	89	6	77	1	2	--	3
2,000 – 2,199	85	7	77	--	--	--	1
2,200 – 2,399	58	3	52	2	--	--	1
2,400 – 2,599	44	3	38	--	--	--	3
2,600 – 2,799	34	3	27	2	--	--	2
2,800 – 2,999	32	2	30	--	--	--	--
3,000 – 3,199	25	4	20	--	--	--	1
3,200 – 3,399	25	1	24	--	--	--	--
3,400 – 3,599	27	2	24	--	--	--	1
3,600 – 2,799	15	--	15	--	--	--	--
3,800 – 3,999	12	1	11	--	--	--	--
4,000 – 4,199	12	--	11	--	--	--	1
4,200 – 4,399	11	--	11	--	--	--	--
4,400 – 4,599	9	1	7	--	--	--	1
4,600 – 4,799	5	--	5	--	--	--	--
4,800 – 4,999	1	--	1	--	--	--	--
5,000 and Over	25	3	21	--	--	--	1

*During the year ended April 30, 2004, there were 39 new pensions awarded (1 Normal, 8 Optional, and 30 Survivors).*

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**EXHIBIT VI**

**Supplementary Information Required by the GASB**

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<b>Valuation Date</b>	May 1, 2004
<b>Actuarial Cost Method</b>	Entry Age Normal Cost
<b>Amortization Method</b>	Open 30-year amortization period; level dollar amount for remaining unfunded/(overfunded) actuarial accrued liability
<b>Remaining Amortization Period</b>	30 years
<b>Asset Valuation Method</b>	Asset values are gradually adjusted toward market value by adding to the "preliminary asset value" 20% of the difference between the market value and the preliminary asset value. The preliminary asset value is the actuarial asset value at the beginning of the year plus net new money. Net new money is the sum of contributions, dividends and interest, less the sum of refunds, expenses and benefit payments. If the actuarial value of assets is less than 90% or more than 110% of the market value, an adjustment is made to the actuarial value to bring the value within this 10% corridor.

---

**Actuarial Assumptions:**

Investment rate of return	7.75% per annum, net of investment fees and administrative expenses
Projected salary increases	6.00% per annum
Annual cost of living adjustments	3.00% of original benefit

---

**Membership of the Plan:**

Pensioners and survivors receiving benefits	1,982
Vested former members entitled to, but not yet receiving benefits	51
Members due refunds	70
Active members	<u>3,427</u>
Total	5,530

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**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

**EXHIBIT VII**

**Actuarial Assumptions and Actuarial Cost Method**

**Mortality Rates:**

*Healthy:* 1983 Group Annuity Mortality Table (sample rates shown below)  
*Disabled:* 1983 Railroad Retirement Board Disabled Life Mortality Table

**Rates before Retirement:**

Sample rates shown below:

Age	Rate (%)			
	Mortality		Withdrawal*	
	Male	Female	General Employees	Judges and Elected Officials
20	0.04	0.02	11.94	5.71
25	0.05	0.03	11.62	5.14
30	0.06	0.03	11.21	3.89
35	0.09	0.05	10.55	2.47
40	0.12	0.07	9.40	1.18
45	0.22	0.10	7.54	0.28
50	0.39	0.16	4.83	--
55	0.61	0.25	1.73	--
60	0.92	0.42	0.16	--

\* *Withdrawal rates end upon first assumed retirement age.*

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Retirement Rates:**

<b>General Employees</b>		
<u>Age</u>	<u>Age Plus Service Greater than or Equal to 80*</u>	<u>Other General Employees</u>
Under 55	15%	0%
55	30	0
56	15	0
57	15	0
58	15	0
59	15	0
60	15	0
61	15	0
62	60	100
63	60	100
64	60	100
65	100	100

*\* 50% of General Employees are assumed to retire at first age when age plus service equals 80.*

<b>Elected Officials</b>	
<u>Age</u>	<u>Percent</u>
60	100%

<b>Judges</b>	
<u>Age</u>	<u>Percent</u>
65	100%

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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<b>Retirement Age for Inactive Vested Members:</b>	60
<b>Unknown Data for Members:</b>	Same as those exhibited by Members with similar known characteristics.
<b>Percent Married:</b>	80% for males and 70% for females in active status.
<b>Age of Spouse:</b>	Females four years younger than males.
<b>Net Investment Return:</b>	7.75% per annum, net of investment fees and administrative expenses.
<b>Salary Increases:</b>	6.00% per year.
<b>Actuarial Value of Assets:</b>	Asset values are gradually adjusted toward market value by adding to the “preliminary asset value” 20% of the difference between the market value and the preliminary asset value. The preliminary asset value is the actuarial asset value at the beginning of the year plus net new money. Net new money is the sum of contributions, dividends and interest, less the sum of refunds, expenses and benefit payments. If the actuarial value of assets is less than 90% or more than 110% of the market value, an adjustment is made to the actuarial value to bring the value within this 10% corridor.
<b>Actuarial Cost Method:</b>	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
<b>Amortization of Unfunded Actuarial Accrued Liability/Surplus:</b>	Open 30-year amortization period; level dollar amount.
<b>Changes in Assumptions:</b>	There have been no changes in actuarial assumptions or actuarial cost methods since the last valuation.

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**EXHIBIT VIII**  
**Summary of Plan Provisions**

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This exhibit summarizes the major provisions of the Retirement System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

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<b>Plan Year:</b>	May 1 through April 30
<b>Membership:</b>	All full-time permanent employees in the classified and unclassified services shall become members as a condition of employment. Employees of any administrative board or board of control as organized and existing under general laws of Missouri and as defined in Revised Statutes of Missouri, Section 95.540, whose governing body has elected membership, shall become members. Membership shall begin on the first day of employment.
<b>Creditable Service:</b>	Total creditable service is defined as the sum of the number of years of membership service and prior service.
<i>Membership Service</i>	Years and full calendar months of employment while a contributing member of this System.
<i>Prior Service</i>	Years and full calendar months of employment preceding December 21, 1962, if continuous with membership service.

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**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Normal Retirement:**

*Age Requirement*

General Employees: 65.

Judges and Elected Officials: Later of age 60 or expiration of term of office.

*Service Requirement*

General Employees: 5 years of creditable service.

Judges and Elected Officials: One elective term.

*Amount*

General Employees:

*If unmarried at time of retirement, 2.22% of final average compensation multiplied by years and months of creditable service.*

*If married at date of retirement, 2.00% of final average compensation multiplied by years and months of creditable service.*

*Minimum benefit:* \$400 per month if retirement with at least 10 years of creditable service.

*Maximum benefit:* 70% of final average compensation.

Judges and Elected Officials:

2.22% of average monthly compensation received by then serving Judges and Elected Officials of the same office during the 24 months preceding the beginning of the annuity multiplied by years and months of creditable service.

*Maximum benefit:* 70% of the existing salary for then serving Judges and Elected Officials of the same office.

A member retiring with a normal, optional, service or early retirement benefit may elect to withdraw all, or a portion of, member accumulated contributions and interest, and receive a reduced annuity.

Final average compensation is defined as the monthly average of the two highest years of compensation in the last ten years (for Judges and Elected Officials, last ten years for then serving elected official of same office). Compensation does not include bonus, overtime, expense allowance or other extraordinary compensation.

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Optional Retirement:**

<i>Age Requirement</i>	60
<i>Service Requirement</i>	10 years of creditable service, or
<i>Age/Service requirement</i>	The sum of age and service equals 80, if earlier.
<i>Amount</i>	Same as normal retirement.

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**Early Retirement:**

<i>Age/Service Requirement</i>	General Employees: 60 and 5 years of creditable service, or 55 and 10 years of creditable service.
	Judges and Elected Officials: 55 and 10 years of creditable service.
<i>Amount</i>	Accrued benefit reduced by ½ of 1% per month of age less than 60 or, if service is less than ten, ½ of 1% per month of age less than 65.

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**Disability:**

<i>Age Requirement</i>	Disability benefits are provided through a separate long-term disability program, effective June 1, 1996.
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**Vesting:**

<i>Age Requirement</i>	None
<i>Service Requirement</i>	Five years of service.
<i>Amount</i>	Accrued benefit payable at age 60, or payable at age 65 if service less than 10.

---

**Withdrawal (Refund) Benefit:**

<i>Age Requirement</i>	None
<i>Service Requirement</i>	Less than five years of service.
<i>Amount</i>	An employee terminating before becoming eligible for a deferred pension or choosing not to elect a deferred benefit, will receive a return of contributions with interest.

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Pre-Retirement Death Benefit:**

Service less than five years:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	Less than five years.
<i>Amount</i>	Lump sum equal to the member's accumulated contributions and interest shall be paid to the surviving spouse or, if no surviving spouse, to the designated beneficiary, or, if none, to the member's estate.

Service of five or more years  
but less than 20 years:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	Five or more years of service but less than 20 years.
<i>Amount</i>	The surviving spouse may elect, in lieu of the lump sum settlement above, an annuity equal to 50% of the member's accrued annuity at the time of death. The effective date of this annuity shall be the later of the first day of the month following the member's death or attainment of what would have been the member's early retirement date. The annuity is reduced for early retirement if paid at the member's early retirement date.

Service of 20 or more years of service:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	20 or more years of service.
<i>Amount</i>	The surviving spouse may elect, in lieu of the settlements above, an annuity equal to 100% of the member's accrued annuity at the time of death, actuarially reduced for 100% joint and survivor coverage. The effective date of this annuity shall be the first day of the month following the member's death.

**SECTION 4: Reporting Information for the Employees' Retirement System of the City of Kansas City, Missouri**

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**Post-Retirement Death Benefit:**

*Age Requirement* None

*Service Requirement* None

*Amount* The surviving spouse shall receive an annuity equal to 50% of the member's accrued annuity, or, if the member elected the actuarially equivalent 100% joint and survivor annuity, this annuity shall continue to be paid to the surviving spouse. Either annuity is payable until death or remarriage of the spouse.

**Minimum Surviving Spouses' Pension:**

A minimum benefit of \$200 per month is paid to surviving spouses of members with 10 or more years of creditable service.

**Health Insurance Subsidy:**

A monthly health insurance subsidy of \$200 is paid to all current and future pensioners. Benefits are payable for the lifetime of the member and are not subject to an annual cost-of-living adjustment.

**Cost-Of-Living Adjustment (COLA):**

An increase of 3.00% of the original pension will be made annually. Members must retire on or before January 1<sup>st</sup> in order to receive a COLA in the following year.

**Contributions:**

- (a) Employee
  - 4.00% of salary
  - The City "picks up" these employee contributions.
- (b) City
  - 8.00% of payroll for General Employees
  - 2.53% of payroll for General Employees for the retirement window offered in 2003, projected to be paid annually through April 30, 2013.
  - 19.50% of payroll for Judges and Elected Officials.

**Interest on Employee Contributions:** 5.25% per year, compounded.

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**Changes in Plan Provisions:**

There have been no changes in the plan provisions since the preceding actuarial valuation.



## Data Section (do not touch)

StringBookmarks	
PlanNameLong	Employees' Retirement System of the City of Kansas City, Missouri
PlanNameShort	Retirement System
OfficeAddr1	delete this (Street address)
OfficeAddr2	Kansas City, Missouri
ClientContact	Board of Trustees
FinanSource	Retirement System
ActuaryName	Wally Malles
ActuaryTitle	Assistant Actuary
ActuaryCredential	ASA, MAAA, EA
ActuaryNumber	99-1234
Assumptions	Board
ConsultantName	Leslie L. Thompson, FSA, MAAA, EA
ConsultantTitle	Senior Vice President and Actuary
SegalAddr1	6300 S. Syracuse Way, Suite 750
SegalAddr2	Englewood, CO 80111
SegalPhone	303.714.9900
SegalFax	303.714.9990
ParticipantName	Member
ParticipantPlural	Members
RetireeName	Pensioner
RetireePlural	Pensioners
AuditorCompany	delete this (Auditor Company)
FMWording	Entry Age Normal
ValDate	"5/1/2004"
ValDateEOY	"4/30/2005"
FiscalDate	"5/1/2004"
CensusDate	"5/1/2004"
CensusDateEOY	"4/30/2004"
ValDate1	"5/1/2003"
ValDateEOY1	"4/30/2004"
ValDateMinusOne	"4/30/2004"
ValDate1MinusOne	"4/30/2003"
FiscalDate1	"5/1/2003"
CreditRef	Years of Service
CreditRefSingle	Year of Service
PayRef	Payroll
PayRefSingle	Payroll
GLText	loss
GLAdminText	loss
OtherGLText	gain
GLInvText	loss
HistYearsText	eight
EmpName	Employer

**Data Section (do not touch)**

OptCategory1	Due Refunds
OptCategory2	Disableds
OptRow	
InactNonText	Due Refunds

**Data Section (do not touch)**

Florida	0	“#”
FundingMethod	2	“#”
AssetMethod	1	“#”
IntVal	0.0775	“#.00%”
IntActual	0.0367	“#.00%”
IntActual1	0.0095	“#.00%”
MVIntActual	0.1886	“#.00%”
MVIntActual1	-0.0497	“#.00%”
DollarLimit	165,000	“#,###”
DollarLimit1	160,000	“#,###”
Valcycle	1	“#”
Fiscal	0	“#”
ActNumTot	3,427	“#,###”
ActNumTot1	3,357	“#,###”
ActNumUnknown	0	“#,###”
AveSalary	40,037	“#,###”
AveSalary1	38,733	“#,###”
ActAge	43.2	“#,###”
ActAge1	42.6	“#,###”
ActSvc	09.0	“#,###”
ActSvc1	08.5	“##.##”
Payroll	137,207,640	“#,###”
Payroll1	130,028,040	“#,###”
BenNum	444	“#,###”
BenNum1	425	“#,###”
BenBft	247,396	“#,###”
BenBft1	215,131	“#,###”
RDNum	1,521	“#,###”
RDNum1	1,610	“#,###”
SuspendedPens	0	“#,###”
SuspendedPens1	0	“#,###”
RDBft	2,312,730	“#,###”
RDBft1	2,400,450	“#,###”
InactNum	50	“#,###”
TotalCount	5,442	“#,###”
TotalCount1	5,441	“##.##”
AstMkt	674,111,615	“#,###”
AstAct	627,078,139	“#,###.##”
AstAct1	624,897,653	“#,###”
InvGL	-25,078,314	“#,###”
AstActAve	614,707,151	“#,###”

UpCorridor	1.1000	“#.00%”
LowCorridor	0.9000	“#.00%”
CalcUal	98,393,466	“#,###”
OtherGL	16,467,795	“#,###”
ExpGL	0	“#,###”
TotalGl	-8,610,520	“#,###”
AdminExp	0	“#”
ActAL	725,471,605	“#,###”
ActOPExpDol	0	“#,###”
AsmExpDolPer	0	“#,###”
AsmExpDolPer1	0	“#,###”
SchAmtYrs	30	“#,###”
FCRate	0.1616	“#.00%”
FCRate1	0.1540	“#.00%”
RecCont	22,173,643	“#,###”
RecContDec	27,428,810	“#,###”
RecContInc	16,918,476	“#,###”
RecContPct	0.1616	“#.00%”
RecContPctDec	0.1999	“#.00%”
RecContPctInc	0.1233	“#.00%”

	First
Chart1First	1995
Chart6First	1998
Chart8First	1997
Chart11First	1998
Chart12First	1998

	Last
Chart1Last	2004
Chart6Last	2004
Chart8Last	2004
Chart11Last	2004
Chart12Last	2004

	Num
Chart1Num	10
Chart6Num	7
Chart8Num	8
Chart11Num	7
Chart12Num	7

Results of last import: Last Import was Successful!  
 Type of import: Import Itemized!  
 Spreadsheet imported from:  
 M:\KCEES.CLI\Val2004\MesVal\Val2004.xls  
 Date and time of import: 09/02/2004 11:01:21 AM