The Report of the Annual Actuarial Valuation of the Police Retirement System of Kansas City, Missouri

April 30, 2003
for the Plan Year Ending April 30, 2004

Submitted to
The Retirement Board

Police Retirement System of
Kansas City, Missouri

Gabriel, Roeder, Smith & Company

OUTLINE OF CONTENTS

September 30, 2003

The Retirement Board
Police Retirement System of
Kansas City, Missouri

Dear Board Members:

Submitted in this report are the results of the Annual Actuarial Valuation of the assets, actuarial values, and contribution requirements associated with benefits provided by the Police Retirement System of Kansas City, Missouri.

The date of the valuation was April 30, 2003.

Valuation results, comments and conclusions are contained in Section A.

The valuation was based upon information concerning Retirement System benefits, financial transactions, and individual members, terminated members, retirants and beneficiaries. Data was checked for year-to-year consistency but was not otherwise audited by us. This information is summarized in Section B.

Descriptions of the actuarial cost methods and actuarial assumptions are contained in Section C, along with a glossary of technical terms.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge this report is complete and accurate and was made in accordance with standards of practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The actuarial assumptions used for the valuation produce results which we believe are reasonable.

Respectfully submitted,

Brian B. Murphy, F.S.A. Mita D. Drazilov, A.S.A.

MDD:kmg

SECTION A

Valuation Results, Comments, and Recommendations

FINANCIAL OBJECTIVE

The financial objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year-to-year and will not have to be increased for future generations of citizens.

CONTRIBUTION RATES

The Retirement System is supported by member contributions, City contributions and investment income from Retirement System assets.

Contributions which satisfy the financial objective are determined by an annual actuarial valuation and are sufficient to:

(1) cover the actuarial present value of benefits assigned to the current year by the actuarial cost methods described in Section C (the normal cost); and

(2) amortize over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Contribution requirements for the fiscal year beginning May 1, 2003 are shown on page A-2.

CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM

Contributions for Fiscal Year Beginning May 1	Contributions Expressed as Percents of Payroll 2003	2002
Normal Cost		
Age & service benefits	19.95 %	19.00 %
Death and disability benefits	3.24	4.93
Termination benefits		
Deferred age & service benefits	0.78	0.38
Refunds of member contributions	1.27	1.06
Supplemental retirement benefit	0.88	1.01
Assumed rate for administrative expenses	0.40	0.40
Total Normal Cost	26.52	26.78
Amortization Payment		
Scheduled amortization of UAAL*	7.17	3.32
Additional amortization of UAAL or (shortfall)	(3.44)	0.15
Total Amortization Payment	3.73	3.47
Total Reported Contribution	30.25 %	30.25 %
Member portion	10.55 %	10.55 %
City portion#	19.70 %	19.70 %

* *Unfunded Actuarial Accrued Liabilities.*
\# *It was reported that the City is contributing 19.70% for the fiscal year beginning May 1, 2003.*

The annual required City contribution is 23.14% of pay -- greater than the scheduled amount shown above.

Unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll. A description of the method may be found on page C-1.

Procedures for determining dollar contribution amounts are described on page A-3.

Comparative contribution amounts for prior fiscal years are shown on page A-5.

DETERMINING DOLLAR CONTRIBUTIONS

For any period of time, the percent-of-payroll contribution rate needs to be converted to dollar amounts. We recommend one of the following procedures.

(1) Contribute dollar amounts at the end of each payroll period which are equal to the City's reported percent-of-payroll contribution rate of 19.70% shown on page A-2, multiplied by the covered active member payroll for the period. Adjustments should be made as necessary to exclude items of pay that are not covered compensation for Retirement System benefits and to include special payments that are covered compensation. **The City's computed employer contribution rate is 23.14%.**

(2) Contribute $12,851,219 on October 30, 2003, based upon the reported City contribution rate of 19.70%. This dollar amount was derived by multiplying the percent-of-payroll contribution requirement by the April 30, 2003 valuation payroll, projected to the fiscal year beginning May 1, 2003, using a 1.045 projection factor. If contributions are made on a later schedule, interest should be added at the rate of 0.65% per month. **The annual required contribution based upon the valuation results is $15,095,290.**

These two methods are essentially equivalent, and will produce the same result in the long term.

AMORTIZATION SCHEDULE FOR THE UNFUNDED ACCRUED LIABILITY

	Balances			24-Year Amortization	
	Date Created	Initial	Outstanding	Initial	2003/2004 Amortization
05/01/1998 Base	05/01/1998	$ 60,092,542	$ 63,470,769	$ 3,482,213	$ 4,503,432
05/01/1999 Base	05/01/1999	(23,794,584)	(24,968,877)	(1,378,837)	(1,706,416)
05/01/2000 Base	05/01/2000	(15,860,433)	(16,494,911)	(919,072)	(1,088,443)
05/01/2001 Base	05/01/2001	(6,685,610)	(6,876,022)	(387,414)	(439,051)
05/01/2002 Base	05/01/2002	12,470,529	12,658,356	749,940	783,688
05/01/2003 Base	05/01/2003	43,654,725	43,654,725	2,625,264	2,625,264
Total			**$ 71,444,040**		**$ 4,678,474**

COMPUTED AND ACTUAL CITY CONTRIBUTIONS
COMPARATIVE STATEMENT

			Fiscal Year Contributions				
			as a % of Projected Pay		$ Contributions		
Fiscal Year Beg. May 1	Valuation Date April 30	Projected Annual Payroll	Annual Required Contrib.	Reported FY City Contrib.	Annual Required Contrib.	Projected FY City Contrib.	Actual Dollar Contrib.
1997	1997	$48,173,740	18.09 %	20.60 %	$ 8,716,539	$ 9,923,790	$ 9,978,462
1998	1998	49,872,090	18.76	20.60	9,355,956	10,273,651	10,318,583
1999	1999	51,963,858	19.01	20.60	9,880,286	10,704,555	10,789,963
2000	2000	57,791,028	18.66	20.60	10,785,784	11,904,952	11,392,871
2001	2001	57,505,238	18.85	19.70	10,837,294	11,328,532	11,312,754
2002	2002	59,228,848	19.55	19.70	11,579,240	11,668,083	12,017,801
2003	2003	65,234,614	23.12	19.70	15,082,243	12,851,219	
2003@	2003	65,234,614	23.14	19.70	15,095,290	12,851,219	

@ *After changes in actuarial assumptions or methods.*

ACTUARIAL ACCRUED LIABILITIES & VALUATION ASSETS COMPARATIVE STATEMENT

Valuation Date April 30	Actuarial Accrued Liability (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liability (UAAL)	Ratio of Present Assets to AAL	Ratio of UAAL to Annual Payroll
1997	$ 456,218,854	$ 388,984,781	$ 67,234,073	85.3 %	140.0 %
1998	493,183,065	433,090,523	60,092,542	87.8	120.0
1999	521,600,003	484,396,958	37,203,045	92.9	72.0
2000	589,566,248	584,514,972	5,051,276	99.1	9.0
2001	615,291,156	600,051,893	15,239,263	97.5	27.0
2002	648,632,789	620,948,986	27,683,803	95.7	48.8
2003	680,178,783	611,246,928	68,931,855	89.9	110.4
2003@	682,690,968	611,246,928	71,444,040	89.5	114.4

@ *After changes in actuarial assumptions or methods.*

The Ratio of Valuation Assets to AAL is a traditional measure of a system's funding progress. Except in years when the system is amended or actuarial assumptions are revised, this ratio can be expected to move gradually toward 100%.

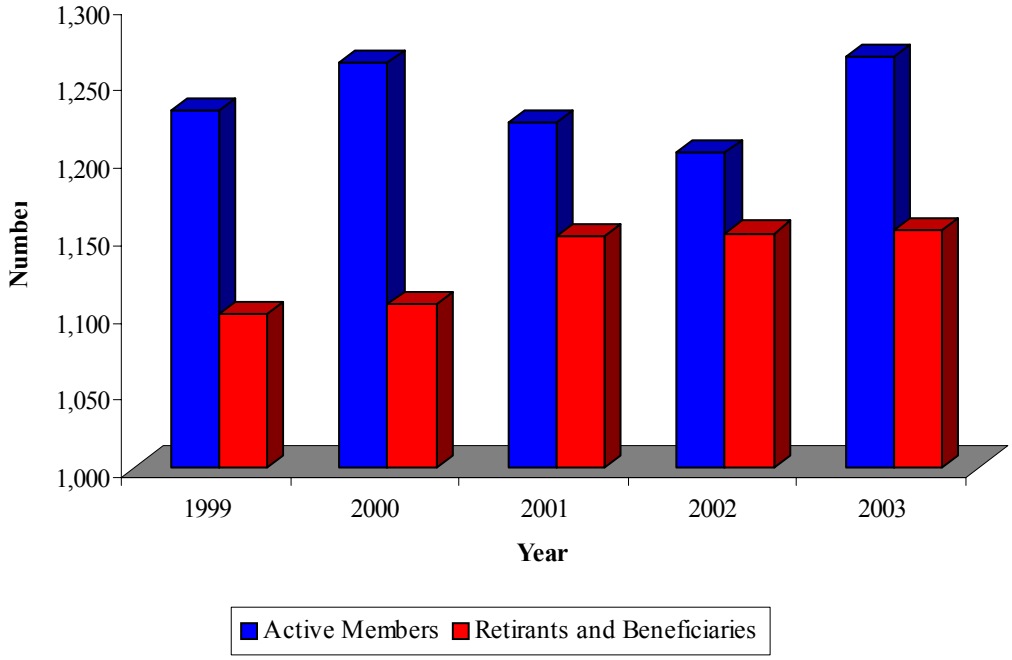
The Ratio of UAAL to Valuation Payroll is another relative index of condition. Actuarial unfunded liabilities represent debt, while active member payroll represents the system's capacity to collect contributions to pay toward debt. The lower the ratio, the greater the financial strength - and vice-versa.

SHORT CONDITION TEST COMPARATIVE STATEMENT

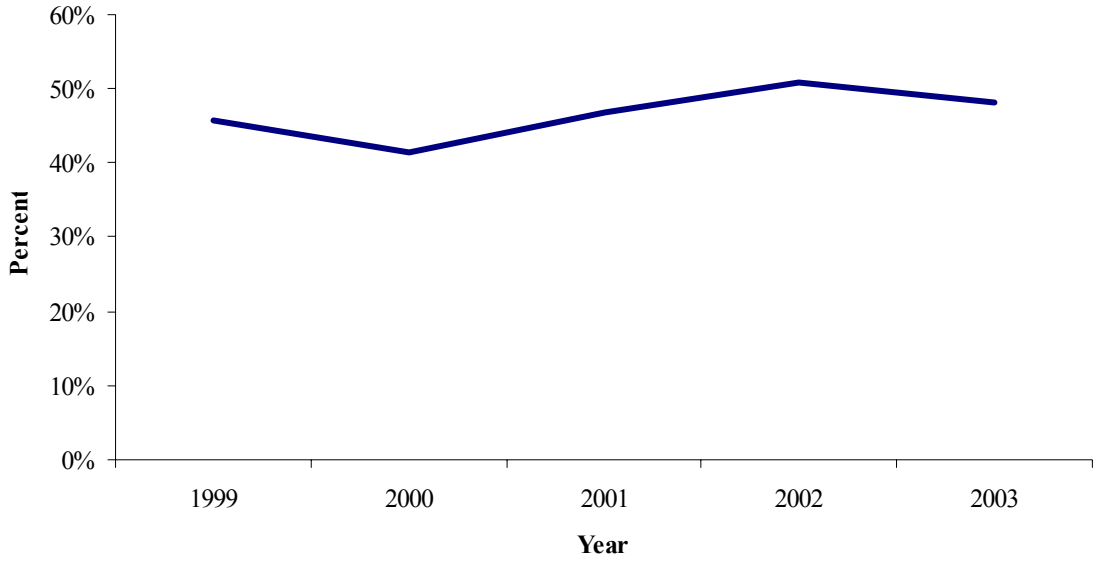
	Entry Age Accrued Liabilities				Portion of Accrued Liabilities Covered by Assets		
Valuation Date April 30	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	(1)	(2)	(3)
2002	$41,661,164	$424,565,985	$182,405,640	$620,948,986	100 %	100 %	85 %
2003	46,015,271	433,996,776	200,166,736	611,246,928	100	100	66
2003@	46,015,271	436,805,624	199,870,073	611,246,928	100	100	64

@ *After changes in actuarial assumptions or methods.*

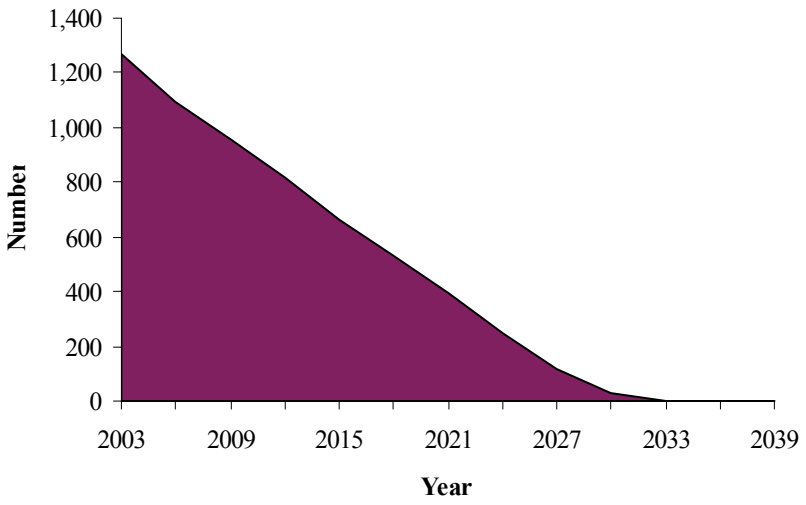
Active and Retired Members



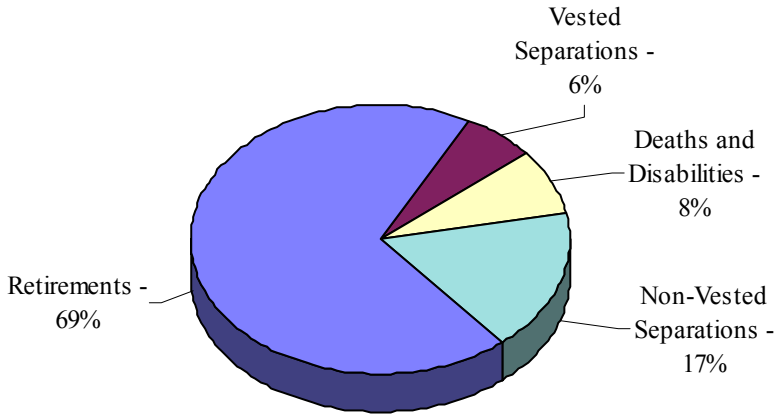
Benefits as a Percent-of-Payroll



Closed Group Population Projection



Expected Terminations from Active Employment for Current Active Members



VALUATION RESULTS, COMMENTS, AND RECOMMENDATIONS

Comment A: For the fiscal year ending April 30, 2004, it was reported to the actuary that the City is contributing 19.70% of payroll. Based on the results of this valuation and the current procedure of amortizing the unfunded actuarial accrued liability, the computed employer contribution rate is 23.14% of pay. For the long term well being of the retirement system, it is important that computed contributions be received. In the near term, when confronted with a contribution rate increase of this relative magnitude, some systems have permitted the increase to be phased in over a period of years. For example, the total computed increase in this valuation is 3.44%. If the increase were phased in over two future years, this would result in a scheduled increase of approximately 2% of payroll each year for those two years. Future gains and losses could, of course, affect the schedule.

Comment B: As of April 30, 2003, actuarial accrued liabilities were $682,690,968 while valuation assets were $611,246,928, resulting in a funded ratio of 89.5%. The funded ratio is likely to drop over the next several years as prior investment losses become more fully recognized. While this is a common situation in the United States today, a declining funded ratio indicates a weakening of the System's financial position.

Comment C: On a market value basis, the System earned (7.5)% return, in other words, it lost money on investments this year. Such losses have been a common experience for retirement systems across the country in recent years. The asset smoothing method smoothes gains and losses over 4 year periods. Consequently, not all of the losses that have occurred to date have been fully recognized in the valuation. There will be upward pressure on contribution rates as these prior losses gradually are recognized. Market rates of return well in excess of the actuarial assumed rate are required to offset that pressure. A recovery in the investment markets is important for this retirement system and for every other funded system in the country.

Comment D: The April 30, 2003 actuarial valuation includes the new non-economic assumptions and methods as a result of the experience study covering the 5-year period from May 1, 1997 to April 30, 2002. The new assumptions did not have a material effect on the contribution rate results.

Recommendation 1: This valuation nominally produces a contribution rate for the fiscal year beginning May 1, 2003, but the valuation cannot be produced in time to permit those needed contributions to be budgeted. Many governmental retirement plans have instituted a time lag, such as one year, between the valuation date, and the period when contributions become due. If that were done in this case, it would mean that the results of this valuation would affect contributions that are due during the period May 1, 2004 through April 30, 2005. We recommend that the Board and Staff review this matter to see whether or not such an arrangement would produce a more satisfactory budgeting process, both for the Board, and for the City.

Recommendation 2: The ratio of funding value of assets to market value of assets is currently 121.5%. This means that in the financing of System benefits we are currently using $108 million in assets that the System does not actually have. We recommend that in future years, the funding value of assets be constrained to fall in between 80% and 120% of market value. This is a commonly accepted "corridor" for asset valuation methods, and would represent an improvement in the process.

Conclusion: This system, like virtually every other retirement system in the country has been battered by the weak investment market that has persisted since March of 2000. The echoes of that period will continue to affect the system for several more years as the full effects of the unrealized losses flow through to the value of assets that is recognized in the valuation. Two things are important for the continued well being of this system. First, there must be a return to more normal investment markets. Second a plan should be instituted for receiving contributions at the levels recommended in the actuarial valuation.

DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
APRIL 30, 2003

Actuarial Present Value	(1) Total Actuarial Present Value	Allocation by Entry Age	
		(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
Allowances currently being paid to current retirees and beneficiaries:			
Pension	$ 378,766,135	$ -	$ 378,766,135
Supplemental Retirement Benefit	58,039,489	-	58,039,489
Allowances likely to be paid to members with deferred benefits:			
Pension	1,524,912	-	1,524,912
Supplemental Retirement Benefit	356,033	-	356,033
Age and service allowances due to retirement or vested withdrawals based on service rendered before and likely to be rendered after the valuation date	359,931,361	145,670,269	214,261,092
Disability allowances likely to be paid present active members who become permanently disabled	31,624,173	18,680,331	12,943,842
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	6,131,731	4,131,293	2,000,438
Return of member contributions	6,128,599	8,773,897	(2,645,298)
Supplemental retirement benefit likely to be paid to present active members	23,733,777	6,289,452	17,444,325
Total	$866,236,210	$183,545,242	$682,690,968
Actuarial Value of Assets			611,246,928
Unfunded Actuarial Accrued Liability			$ 71,444,040

ACTUARIAL BALANCE SHEET

Present Resources and Expected Future Resources	Measured on April 30 2003	2002
A. Valuation assets:		
1. Net assets from system financial statements (market value)	$ 502,971,920	$ 561,755,162
2. Valuation adjustment	108,275,008	59,193,824
3. Valuation assets	611,246,928	620,948,986
B. Actuarial present value of expected future employer contributions:		
1. For normal costs	112,209,698	95,428,556
2. For unfunded actuarial accrued liabilities	71,444,040	27,683,803
3. Total	183,653,738	123,112,359
C. Actuarial present value of expected future member contributions	74,146,797	66,224,636
D. Total Actuarial Present Value of Present and Expected Future Resources	$ 869,047,463	$ 810,285,981
Actuarial Present Value of Expected Future Benefit Payments and Reserves		
A. To retirants and beneficiaries	$ 436,805,624	$ 424,565,985
B. To vested terminated members	1,880,945	1,739,694
C. To present active members:		
1. Allocated to service rendered prior to valuation date	244,004,399	222,327,110
2. Allocated to service likely to be rendered after valuation date	183,545,242	159,142,305
3. Total	427,549,641	381,469,415
D. Total Actuarial Present Value of Expected Future Benefit Payments	866,236,210	807,775,094
E. Present Value of Assumed Future Administrative Expenses	2,811,253	2,510,887
F. Total Actuarial Present Value of Expected Future Benefit Payments and Reserves	$ 869,047,463	$ 810,285,981

DERIVATION OF ACTUARIAL GAIN (LOSS)

The actuarial gains or losses realized in the operation of the Retirement System provide an experience test. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is expected that gains and losses will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below, along with a year-by-year comparative schedule.

Measurements for Fiscal Year Ended April 30	**2003**	**2002**
(1) UAAL* at start of year	$27,683,803	$15,239,263
(2) Employer normal cost from last valuation	8,972,179	15,932,154
(3) Actual employer contributions	12,017,801	17,470,774
(4) Interest accrual: (1) x 0.0775 + [(2) - (3)] / 2 x 0.0775	2,027,477	1,181,043
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	26,665,658	14,881,686
(6) Change from benefit changes	none	none
(7) Change from revised actuarial assumptions and miscellaneous	2,512,185	331,588
(8) Expected UAAL after changes: (5) + (6) + (7)	29,177,843	15,213,274
(9) Actual UAAL at end of year	71,444,040	27,683,803
(10) Gain (loss) (8) - (9)	(42,266,197)	(12,470,529)
(11) Gain (loss) as percent of actuarial accrued liabilities at start of year ($648,632,789)	(6.5%)	(2.0%)

* *Unfunded actuarial accrued liability (UAAL).*

Year Ended April 30	**Actuarial Gain (Loss) As % of Beginning Accrued Liabilities**
2002	(2.0) %
2003	(6.5)

SECTION B

Summary of Benefit Provisions and Valuation Data Submitted by the Retirement System

BRIEF SUMMARY OF BENEFIT CONDITIONS EVALUATED (APRIL 30, 2003)

Eligibility	Amount
SERVICE RETIREMENT	
Age 60 with 10 or more years of service or 25 years of service regardless of age. Members must retire at the completion of 30 years of creditable service, or after attaining age 60, whichever occurs first. The Board of Police Commissioners may, however, with the recommendation of the Chief of Police, permit a member to continue in service until age 65, at which time the member must retire.	For a member retiring prior to August 28, 2000, straight life pension equals 2.0% of Final Compensation times years of service, subject to a maximum benefit of 60% of Final Compensation. For a member retiring on or after August 28, 2000, straight life pension equals 2.5% of Final Compensation times years of service, subject to a maximum benefit of 75% of Final Compensation. Final Compensation is the average annual compensation during the two years of service with the highest salary, whether consecutive or otherwise, or during the entire period of service if less than two years. Pensions are payable monthly at one-twelfth of the annual rate.
DEFERRED RETIREMENT	
A member with at least 10 years of creditable service who is not terminated by death or retirement, but by order of the Board of Police Commissioners for any reason other than dishonesty, intemperate habits or conviction of a felony.	50% of Final Compensation multiplied by the ratio of the number of creditable years of service to 30. Benefit begins at age 60.
15 or more years of creditable service.	Computed as service retirement but based upon service, Final Compensation and benefit in effect at termination. Benefit begins at age 55.
DEATH AFTER RETIREMENT SURVIVOR'S PENSION	
Payable to a surviving spouse, if any, upon the death of a retired member who was receiving a straight life pension. Benefit is payable until death.	Spouse's pension equals 80% of the straight life pension the deceased retirant was receiving. The 80% benefit amount calculated under this provision is in addition to the Supplemental Retirement Benefit.

BRIEF SUMMARY OF BENEFIT CONDITIONS EVALUATED (CONTINUED) (APRIL 30, 2003)

Eligibility	Amount
NON-DUTY DEATH IN SERVICE SURVIVOR'S PENSION	
Payable to a surviving spouse, if any, upon death of a member. Benefit is payable until death. If there is no qualified surviving spouse, payable to qualified child or children in equal shares until age 18.	40% of Final Compensation.
Payable to each child under age 18, if any, until the child attains age 18, or, if mentally or physically incapacitated from wage earnings, until the incapacity no longer exists, or age 21 if a full time student.	$600 annually.
Payable at death.	A funeral benefit of $1,000.
DUTY DEATH IN SERVICE SURVIVOR'S PENSION	
Payable to the surviving spouse, or if there is no surviving spouse, to children under age 21 or to children over age 21 if mentally or physically incapacitated, of a member who died in the line of duty.	In addition to the benefits payable under non-duty death, a lump sum of $50,000.
NON-DUTY DISABILITY	
Payable to a member with 10 or more years of service who has become permanently unable to perform the full and unrestricted duties of a police officer as established by the Board of Police Commissioners.	2.5% of Final Compensation multiplied by years of creditable service payable for the remainder of the officer's life, or as long as the permanent disability continues.
DUTY DISABILITY	
Payable to a member as a result of an accident or disease occurring in the line of duty who has become permanently unable to perform the full and unrestricted duties of a police officer as established by the Board of Police Commissioners.	75% of Final Compensation payable for the remainder of the officer's life, or as long as the permanent disability continues. The pension may be subject to offset or reduction by amounts paid or payable under any Workers' Compensation law.

BRIEF SUMMARY OF BENEFIT CONDITIONS EVALUATED (CONTINUED) (APRIL 30, 2003)

Eligibility	Amount

MINIMUM PENSION BENEFIT

Any member who retired entitled to a pension benefit and who either has at least 25 years of creditable service or is retired as a result of an injury or illness occurring in the line of duty or course of employment. A surviving spouse qualifies for the minimum monthly benefit if the officer had at least 25 years of creditable service or was retired or died as a result of an injury or illness occurring in the line of duty or course of employment.	Minimum monthly benefit of not less than $600 in combined pension benefit and cost-of-living adjustments. The minimum monthly pension benefit is in addition to the Supplemental Retirement Benefit.

POST-RETIREMENT BENEFIT INCREASES

Any member may receive during each year, in addition to the officer's base pension, a cost of living adjustment in an amount not to exceed 3% of the officer's base pension. Base pension is the pension computed under the provisions of the law at the date of retirement, without regard to the cost of living adjustment. The cost of living adjustment also applies to benefits being paid to a surviving spouse. The adjustment is normally effective with the May 30th benefit payment.

MEMBER CONTRIBUTIONS

10.55% of compensation. No contributions are required for members after they retire or complete 30 years of service.

SUPPLEMENTAL RETIREMENT BENEFIT

Current and future retired and disabled members and their surviving spouses are eligible to receive $420 per month in addition to pension benefits.

DERIVATION OF FUNDING VALUE OF ASSETS

Valuation Date April 30,	2002	2003	2004	2005	2006
A. Funding Value Beginning of Year	$600,051,893	$620,948,986			
B. Market Value End of Year	561,755,162	502,971,920			
C. Market Value Beginning of Year	594,853,903	561,755,162			
D. Non-Investment Net Cash Flow	(17,500,379)	(17,406,832)			
E. Investment Return:					
E1. Market Total: B-C-D	(15,598,362)	(41,376,410)			
E2. Assumed Rate	7.75%	7.75%			
E3. Amount for Immediate Recognition	45,834,318	47,457,422			
E4. Amount for Phased In Recognition	(61,432,680)	(88,833,832)			
F. Phased-In Recognition of Investment Return:					
F1. Current Year: 0.25 x E4	(15,358,170)	(22,208,458)			
F2. First Prior Year	(10,933,294)	(15,358,170)	$(22,208,458)		
F3. Second Prior Year	8,747,274	(10,933,294)	($15,358,170)	$(22,208,458)	
F4. Third Prior Year	10,107,344	8,747,274	(10,933,294)	(15,358,170)	$(22,208,458)
F5. Total Recognized Investment Gain	(7,436,846)	(39,752,648)	(48,499,922)	(37,566,628)	(22,208,458)
G. Funding Value End of Year: A+D+E3+F5	620,948,986	611,246,928			
H. Difference Between Funding & Market Values	59,193,824	108,275,008			
I. Recognized Rate of Return	6.5%	1.3%			
J. Market Rate of Return	(2.7)%	(7.5)%			
K. Ratio of Funding Value to Market Value	110.5%	121.5%			

The Funding Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment return (line E4) are phased in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 3 consecutive years, funding value will become equal to market value.

SUMMARY OF CURRENT ASSET INFORMATION REPORTED FOR VALUATION

	Market Value	
	April 30, 2003	April 30, 2002
Cash & Equivalents	$ 14,269,379	$ 15,493,398
Receivables	4,092,905	5,324,070
Stocks: Common Corporate	238,619,647	281,722,632
Foreign	53,257,555	65,318,548
Bonds: U.S Government	78,946,045	83,005,914
Corporate	99,917,260	98,560,691
Mortgages	14,390,307	12,751,012
Other	12,823	22,629
Building and Other Property Used in Plan Operations	0	0
Total Assets	$503,505,921	$562,198,894
Accounts Payable	(534,001)	(443,732)
Net Assets Available for Benefits	$502,971,920	$561,755,162

Additions and Deductions

	2003	2002
Market Value - Balance - Beginning of Year	$561,755,162	$594,853,903
Additions:		
Employees' Contributions	6,551,628	6,158,020
Employer Contributions	12,017,801	11,312,754
Investment Return	(39,270,821)	(13,129,283)
Miscellaneous	0	0
Deductions:		
Retirement Benefit Payments	34,867,077	33,374,972
Death Benefit Payments	13,000	71,000
Refunds of Member Contributions	618,418	1,075,649
Investment Expenses	2,105,589	2,469,079
Administrative Expenses	477,766	449,532
Market Value - Balance - End of Year	$502,971,920	$561,755,162

ASSET INFORMATION REPORTED FOR VALUATION
COMPARATIVE STATEMENT

Year Ended April 30	Assets BOY	Additions				Deductions					Assets Year-End
		Employee Contrib.	Employer Contrib.	Investment Return	Misc. Income	Ret. Benefits	Death Benefits	Contrib. Refunds	Inv. Exp.	Admin. Exp.	
2001	$638,358,684	$5,958,321	$11,392,871	$(26,895,447)	$0	$30,446,870	$72,066	$514,571	$2,385,480	$541,539	$594,853,903
2002	594,853,903	6,158,020	11,312,754	(13,129,283)	0	33,374,972	71,000	1,075,649	2,469,079	449,532	561,755,162
2003	561,755,162	6,551,628	12,017,801	(39,270,821)	0	34,867,077	13,000	618,418	2,105,589	477,766	502,971,920

RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS
COMPARATIVE STATEMENT

Year Ended April 30	Added to Rolls			Removed from Rolls		Rolls End of Year		% Incr. Annual Benefits	Average Annual Benefit	Annual Benefits as a % of Active Payroll	Number of Active Members per Retired Members
	No.	Annual Benefits	Post-Ret. Increases	No.	Annual Benefits	No.*	Annual Benefits #				
2001						1,132	$26,964,694		$23,820	50.4 %	1.1
2002	51	$1,571,767	$711,249	31	$ 355,257	1,152	28,892,453	7 %	25,080	51.0	1.0
2003	29	922,116	683,715	27	445,922	1,154	30,052,362	4 %	26,042	48.1	1.1

* *The total number does not reflect QDROs receiving benefits. For reporting purposes, the member and respective QDRO have been grouped together as one pension.*

\# *Does not include supplemental retirement benefits.*

RETIRANTS AND BENEFICIARIES - APRIL 30, 2003
TABULATED BY ATTAINED AGES *

Attained Ages	Age & Service Retirants		Disability Retirants		Survivor Beneficiaries	
	No. #	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
5-9					6	$32,158
10-14					6	15,265
15-19					10	42,732
20-24					1	216
25-29			1	$20,289		
30-34			1	29,392		
35-39			5	100,731	2	28,462
40-44			7	198,494	2	22,810
45-49	7	$283,014	6	166,939	5	96,148
50-54	95	3,448,241	31	821,786	14	273,345
55-59	219	7,278,466	41	1,134,982	12	210,381
60-64	166	5,328,789	26	550,199	22	409,392
65-69	141	3,986,061	16	349,134	33	538,076
70-74	79	1,864,482	11	216,857	28	381,838
75-79	53	1,058,567	5	84,571	31	396,076
80-84	18	283,920			23	201,032
85-89	2	16,453			18	107,440
90 & Over	2	17,090			9	58,534
Totals	**782**	**$23,565,083**	**150**	**$3,673,374**	**222**	**$2,813,905**

* *Benefit amounts do not include supplemental retirement benefits.*

\# *Number counts do not reflect 22 QDROs receiving benefits. For reporting purposes, the member and respective QDRO have been grouped together as one pension.*

VESTED TERMINATED MEMBERS - APRIL 30, 2003
TABULATED BY ATTAINED AGES

Attained Ages	No.	Annual Benefits*
40-44	1	$20,003
45-49	2	40,536
50-54	6	100,632
55-59	1	13,045
Totals	**10**	**$174,216**

** Benefit amounts do not include supplemental retirement benefits.*

ACTIVE MEMBERS INCLUDED IN APRIL 30, 2003 VALUATION
COMPARATIVE SCHEDULE

Valuation Date April 30	Active Members	Annual Payroll	Average Age	Average Service	Average Pay	% Inc. Avg. Pay
1999	1,231	$51,963,858	35.6 yrs.	9.6 yrs.	$42,213	
2000	1,262	57,791,028	35.9	9.8	45,793	8.5 %
2001	1,224	57,505,238	36.0	9.8	46,981	2.6
2001 *	1,224	53,489,585	36.0	9.8	43,701	
2002	1,204	56,678,323	36.1	9.9	47,075	7.7
2003	1,266	62,425,468	36.2	9.9	49,309	4.7

* *Payroll reported in data. For valuation years 2001 and prior, valuation payroll includes projected salary increases for year following valuation. For valuation years 2002 and greater, valuation payroll is payroll reported in data after annualization of pays for new hires.*

ADDITIONS TO AND REMOVALS FROM ACTIVE MEMBERSHIP
ACTUAL AND EXPECTED NUMBERS

Year Ended April 30	Number Added During Year		Terminations During Year								Active Members End of Year
			Normal Retirement		Disability Retirement		Died-In Service		Other Terminations		
	A	E	A	E	A	E	A	E	A	E	
2001											1,224
2002	72	92	36	29.9	3	5.0	2	1.2	51	31.9	1,204
2003	114	52	12	17.1	5	5.0	1	1.2	34	31.3	1,266
5-Year Totals	186	144	48	47.0	8	10.0	3	2.4	85	63.2	

A represents actual number.
E represents number based on assumptions outlined in Section C.

ACTIVE MEMBERS – APRIL 30, 2003
ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Annual Payroll
Under 20									
20-24	47							47	$ 1,788,528
25-29	171	33						204	7,709,825
30-34	126	200	31					357	15,674,932
35-39	31	84	116	46				277	14,335,775
40-44	5	14	40	92	15			166	9,676,163
45-49	2	4	15	48	56	8		133	8,120,545
50-54		3	2	18	27	18		68	4,262,257
55-59		1	1		5	6		13	803,059
60-64				1				1	54,384
Totals	**382**	**339**	**205**	**205**	**103**	**32**		**1,266**	**$ 62,425,468**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 36.2 years

Service: 9.9 years

Annual Pay: $49,309

SECTION C

Financial Principles, Actuarial Valuation Process, Actuarial Cost Methods, Actuarial Assumptions and Definitions of Technical Terms

BASIC FINANCIAL PRINCIPLES AND OPERATION OF THE RETIREMENT SYSTEM

Benefit Promises Made Which Must Be Paid For. A retirement program is an orderly means of handing out, keeping track of, and financing pension promises to a group of employees. As each member of the retirement program acquires a unit of service credit the member is, in effect, handed an "IOU" which reads: "The Police Retirement System of Kansas City, Missouri promises to pay you one unit of retirement benefits, payments in cash commencing when you retire."

The principal related financial question is: When shall the money required to cover the "IOU" be contributed? This year, when the benefit of the member's service is received? Or, some future year when the "IOU" becomes a cash demand?

A Retirement System meets this requirement by having as its ***financial objective the establishment and receipt of contributions, expressed as percents of active member payroll, which will remain approximately level*** from year-to-year and will not have to be increased for future generations of taxpayers.

Translated into actuarial terminology, a level percent-of-payroll contribution objective means that the contribution rate must be at least:

> ***Normal Cost*** (the present value of future benefits assigned to members' service being rendered in the current year)
>
> ... plus ...
>
> ***Interest on the Unfunded Actuarial Accrued Liability*** (the difference between the actuarial accrued liability and current system assets).

The accumulation of invested assets ***is a by-product of level percent-of-payroll contributions, not the objective***. Investment income becomes the 3rd major contributor to the retirement program, and the amount is directly related to the amount of contributions and investment performance.

If contributions to the retirement program are less than the preceding amount, the difference, ***plus investment earnings not realized thereon***, will have to be contributed at some later time (or benefits will have to be reduced) to satisfy the fundamental fiscal equation under which all retirement programs must operate:

$$B = C + I - E$$

The aggregate amount of **B**enefit payments to any group of members and their beneficiaries cannot exceed the sum of:

The aggregate amount of **C**ontributions received on behalf of the group

. . . plus . . .

Investment earnings on contributions received and not required for immediate cash payments of benefits

. . . minus . . .

The **E**xpenses of operating the program.

There are retirement programs designed to defer the bulk of contributions far into the future. The present contribution rate for such systems is ***artificially low***. The fact that the contribution rate is destined to increase relentlessly to a much higher level, is often ignored.

Computed Contribution Rate Needed to Finance Benefits. From a given schedule of benefits and from the data furnished, the actuary calculates the contribution rate ***by means of an actuarial valuation*** - the technique of assigning monetary values to the risks assumed in operating a retirement program.

THE ACTUARIAL VALUATION PROCESS

The financing diagram on the previous page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is an ***increasing contribution method***; and the ***level contribution method*** which equalizes contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

A. ***Covered Person Data***, furnished by plan administrator.

Retired lives now receiving benefits

Former employees with vested benefits not yet payable

Active employees

B. + ***Asset data*** (cash & investments), furnished by plan administrator

C. + ***Assumptions concerning future financial experience in various risk areas***, which assumptions are established by the Retirement Board after consulting with the actuary

D. + ***The funding method*** for employer contributions (the long-term, planned pattern for employer contributions)

E. + ***Mathematically combining the assumptions, the funding method, and the data***

F. = Determination of:

Plan financial position

and/or New Employer Contribution Rate

ACTUARIAL COST METHODS USED FOR THE VALUATION

Age and Service Benefits, Death and Disability Benefits. Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

(i) the annual normal costs for each individual active member, payable from the member's date of employment to the member's projected date of retirement, are sufficient to accumulate the actuarial present value of the member's future service benefit at time of retirement;

(ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Amortization of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities were amortized by level percent-of-payroll contributions (principal and interest combined) over a closed initial period of 24 years. Beginning in 1998, a new basis is created as of each valuation date.

Active member payroll was assumed to increase 4.5% a year for the purpose of determining the level percent contributions.

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The actuary calculates contribution requirements and actuarial present values for a retirement system by applying actuarial assumptions to the benefit provisions and people information of the system, using the actuarial cost methods described on page C-5.

The principal areas of risk which require assumptions about future experience are:

(i) long-term rates of investment return to be generated by the assets of the system
(ii) patterns of pay increases to members
(iii) rates of mortality among members, retirants and beneficiaries
(iv) rates of withdrawal of active members
(v) rates of disability among active members
(vi) the age patterns of actual retirements

In making a valuation, the actuary calculates the monetary effect of each assumption for as long as a present covered person survives - - - a period of time which can be as long as a century.

The employer contribution rate has been computed to remain level from year-to-year so long as benefits and the basic experience and make-up of members do not change. Examples of favorable experience, which would tend to reduce the employer contribution rate are:

(1) Investment returns in excess of 7.75 percent per year.
(2) Member non-vested terminations at a higher rate than outlined on page C-11.
(3) Mortality among retirants and beneficiaries at a higher rate than indicated by the 1983 Group Annuity Mortality Table.

Examples of unfavorable experience, which would tend to increase the employer contribution rate are:

(1) Pay increases in excess of the rates outlined on page C-9.
(2) An acceleration in the rate of retirement from the rates outlined on page C-12.
(3) A pattern of hiring employees at older ages than in the past.

Actual experience of the system will not coincide exactly with assumed experience, regardless of the choice of the assumptions, or the skill of the actuary or the precision of the calculations. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time one or more of the assumptions is modified to reflect experience trends (but not random or temporary year-to-year fluctuations).

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

Economic Assumptions

The investment return rate used in making the valuations was 7.75% per year, compounded annually. The real rate of return is the portion of total investment return, which is more than the wage inflation rate. Considering other financial assumptions, the 7.75% investment return rate translates to an assumed real rate of return of 3.25%. In order to assume a 3.25% real return over wage growth, it would be necessary to realize about a 4.25% real return over price inflation, after accounting for difference between wage increases and price increases.

Pay increase assumptions for individual active members are shown below. Part of the assumed increase at each age is for merit and/or seniority, and the other 4.5% recognizes changes in wage levels due to broad economic effects, including inflation and real wage growth.

	Annual Rate of Pay Increase for Sample Ages		
Sample Ages	Base (Economic)	Merit and Longevity	Total
20	4.5%	4.4%	8.9%
25	4.5%	3.8%	8.3%
30	4.5%	3.3%	7.8%
35	4.5%	2.8%	7.3%
40	4.5%	1.6%	6.1%
45	4.5%	0.7%	5.2%
50	4.5%	0.5%	5.0%
55	4.5%	0.5%	5.0%
60	4.5%	0.5%	5.0%

Price inflation of 3.5% per year would be consistent with the above assumptions. (This assumption is not utilized in the valuation process.)

The active member payroll is assumed to increase 4.5% annually, which is the portion of the individual pay increase assumptions attributable to broad economic effects.

The number of active members is assumed to continue at the present number.

Non-Economic Assumptions

Mortality Tables. For healthy lives, the 1983 Group Annuity Mortality Table, set back 0 years for men and 0 years for women. Male and female officers still in employment use 75% of the standard mortality tables. Sample values follow:

Sample Ages	Actuarial Present Value of $1 Monthly for Life		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	$135.06	$143.84	29.18	34.92
55	127.14	137.81	24.82	30.24
60	117.18	129.90	20.64	25.67
65	104.97	119.83	16.69	21.29
70	91.48	107.29	13.18	17.13
75	77.33	92.89	10.15	13.37
80	63.28	78.10	7.64	10.20

For disabled lives, the 1983 Group Annuity Mortality Table, set forward 10 years for men and 10 years for women was used. Sample values follow:

Sample Ages	Actuarial Present Value of $1 Monthly for Life		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	$117.18	$129.90	20.64	25.67
55	104.97	119.83	16.69	21.29
60	91.48	107.29	13.18	17.13
65	77.33	92.89	10.15	13.37
70	63.28	78.10	7.64	10.20
75	51.01	63.62	5.73	7.58
80	40.59	49.36	4.28	5.40

These assumptions are used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement.

It was assumed that 20% of deaths-in-service would be duty related.

Rates of separation from active membership. The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment.

Sample Ages	% of Active Members Separating within Next Year	
	Male	Female
25	6.4%	6.7%
30	4.5%	5.6%
35	2.8%	4.2%
40	2.0%	2.0%
45	1.1%	0.5%
50	0.7%	0.0%

Rates of Disability. These assumptions represent the probabilities of active members becoming disabled. It was assumed that 55% of disabilities would be duty related.

Sample Ages	Percent Becoming Disabled within Next Year	
	Male	Female
30	0.000%	0.000%
35	0.240%	0.480%
40	0.320%	0.640%
45	0.336%	0.672%
50	0.584%	1.168%
55	1.120%	2.240%
60	1.984%	3.968%

Rates of Retirement. These rates are used to measure the probabilities of an eligible member retiring during the next year.

Active Members Retiring Within Next Year	
Years of Service	**Percent Retiring**
25	30%
26	30%
27	30%
28	25%
29	40%
30	100%

Present assets (cash & investments) were used with a market value adjustment that spreads differences between actual and assumed return over a closed four-year period. Details of the method may be found in the body of the report on page B-4. Assets may be used in the valuation prior to the final audit.

The data about persons now covered and about present assets were furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.) who has experience performing public plan valuations.

SUMMARY OF ASSUMPTIONS USED
APRIL 30, 2003

Pensions in an Inflationary Environment

Value of $1,000/month Retirement Benefit To an Individual Who Retires at Age 50 In an Environment of 3.5% Inflation

Age	Value
50	$1,000
51	966
52	934
53	902
54	871
55	842
60	709
65	597
70	503
75	423
80	356
85	300

The life expectancy of a 50 year old male retiree is age 79. The life expectancy for a 50 year old female retiree is age 85. Approximately half of the people will outlive their life expectancy. The effects of even moderate amounts of inflation can be significant for those who live to an advanced age.

SUMMARY OF ASSUMPTIONS USED
APRIL 30, 2003
MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption.	85% of males and 55% of females are assumed to be married for purposes of death-in-service benefits and death-after-retirement benefits. Males are assumed to be 3 years older than their spouses. Actual reported data is utilized for retirees and beneficiaries.
Pay Increase Timing.	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing.	Decrements of all types are assumed to occur mid-year.
Eligibility Testing.	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date of decrement.
Benefit Service.	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity.	Decrement rates are used without adjustment for multiple decrement table effects.
Decrement Operation.	Withdrawal does not operate during retirement eligibility.
Normal Form of Benefit.	The assumed normal form of benefit is 80% joint and survivor.
Cost of Living.	It was assumed that the Retirement Board will grant the full 3.0% cost of living adjustment each year as allowed by the plan.
Loads.	0.4% of payroll each year for administrative expenses.
Incidence of Contributions.	Contributions are assumed to be received continuously throughout the year based upon the computed percent-of-payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.
Pay Annualization.	Reported pays for members with less than 1 year of service were annualized for valuation purposes.

DEFINITIONS OF TECHNICAL TERMS

Accrued Service. Service credited under the system, which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability. The difference between the actuarial present value of system benefits and the actuarial present value of future normal costs. Also referred to as "past service liability."

Actuarial Assumptions. Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future benefits" between future normal costs and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent. One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.

Actuarial Gain (Loss). The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities -- during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.

Actuarial Present Value. The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments.

Amortization. Paying off an interest-discounted amount with periodic payments of interest and (generally) principal -- as opposed to paying off with a lump sum payment.

Normal Cost. The portion of the actuarial present value of future benefits that is assigned to the current year by actuarial cost method. Sometimes referred to as "current service cost."

Unfunded Actuarial Accrued Liabilities. The difference between actuarial accrued liabilities and valuation assets. Sometimes referred to as "unfunded past service liability" or "unfunded supplemental present value."

Most retirement systems have unfunded actuarial accrued liabilities. They arise each time new benefits are added and each time an actuarial loss occurs.

The existence of unfunded actuarial accrued liabilities is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liabilities do not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liabilities and the trend in their amount (after due allowance for devaluation of the dollar).

Valuation Assets. Also referred to as actuarial value of assets, funding value of assets, or smoothed market value of assets.

Valuation assets recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, valuation assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, valuation assets will tend to be greater than market value. If assumed rates are exactly realized for 3 consecutive years, valuation assets will become equal to market value.

SECTION D

Actuarial Schedules Required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board

GASB STATEMENTS NO. 25 AND NO. 27 REQUIRED ACTUARIAL INFORMATION SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Entry Age Actuarial Accrued Liability	(b-a) Unfunded Accrued Liability (UAL)	(a/b) Funded Ratio	(c) Annual Payroll#	[(b-a)/c] UAL as a Percentage of Annual Payroll
4/30/1997	$388,984,781	$456,218,854	$67,234,073	85	$48,173,740	140 %
4/30/1998	433,090,523	493,183,065	60,092,542	88	49,872,090	120
4/30/1999	484,396,958	521,600,003	37,203,045	93	51,963,858	72
4/30/2000	584,514,972	589,566,248	5,051,276	99	57,791,028	9
4/30/2001	600,051,893	615,291,156	15,239,263	98	57,505,238	27
4/30/2002	620,948,986	648,632,789	27,683,803	96	56,678,323	49
4/30/2003	611,246,928	680,178,783	68,931,855	90	62,425,468	110
4/30/2003@	611,246,928	682,690,968	71,444,040	90	62,425,468	114

@ *After changes in actuarial assumptions or methods.*

\# *For valuation years 2001 and prior, valuation payroll includes projected salary increases for year following valuation. For valuation years 2002 and greater, valuation payroll is payroll reported in data after annualization of pays for new hires.*

GASB STATEMENTS NO. 25 AND NO. 27 REQUIRED ACTUARIAL INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending April 30	Annual Required Contribution	Percent Contributed
1996	$ 8,346,925	111 %
1997	8,587,324	110
1998	8,716,539	112
1999	9,355,956	107
2000	9,880,286	104
2001	10,785,784	100
2002	10,837,294	104
2003	11,579,240	104
2004@	15,095,290	

@ *After changes in actuarial assumptions or methods.*

DEVELOPMENT OF ANNUAL PENSION COST AND NET PENSION OBLIGATION

Fiscal Year	(a) Annual Required Contribution (ARC)	(b) Interest on Net Pension Obligation (Asset) (NPO (NPA))	(c) ARC Adjustment	(d) = (a) + (b) – (c) Annual Pension Cost	(e) Actual Contribution	(f) = (d) – (e) Change in NPO (NPA)	(g) = sum of (f) Net Pension Obligation (Asset) at End of Year
1998	$8,716,539	$ (759,648)	$ (1,131,332)	$ 9,088,223	$ 9,978,462	$ (890,239)	$ (10,692,143)
1999	9,355,956	(828,641)	(1,143,913)	9,671,228	10,318,583	(647,355)	(11,339,498)
2000	9,880,286	(878,811)	(735,927)	9,737,402	10,789,963	(1,052,561)	(12,392,059)
2001	10,785,784	(960,385)	(718,089)	10,543,488	11,392,871	(849,383)	(13,241,442)
2002	10,837,294	(1,026,212)	(767,308)	10,578,390	11,312,754	(734,364)	(13,975,806)
2003	11,579,240	(1,083,125)	(840,463)	11,336,578	12,017,801	(681,223)	(14,657,029)
2004	15,095,290	(1,135,920)	(881,430)	14,840,800			

GASB STATEMENTS 25 AND 27
REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest valuation date follows:

Valuation date	April 30, 2003
Actuarial cost method	Individual entry age
Amortization method for unfunded actuarial accrued liabilities	Level percent closed
Remaining amortization periods	19 - 24 years
Asset valuation method	4-year smoothed market
Actuarial assumptions:	
Investment rate of return	7.75%
Projected salary increases including wage inflation at 4.5%	4.5% - 8.9%
Cost-of-living adjustments	3.0% simple

Membership of the plan consisted of the following at April 30, 2003, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	1,154
Terminated plan members entitled to but not yet receiving benefits	10
Active plan members	1,266
Total	2,430

September 30, 2003

Mr. James J. Pyle
Pension Systems Manager
Kansas City Police Employees'
Retirement Systems
1328 Agnes
Kansas City, Missouri 64127

Dear Jim:

Enclosed are twenty report copies of the Annual Actuarial Valuation of the Police Retirement System of Kansas City, Missouri. A copy will be forwarded to your auditor.

Please call if you have any questions or comments.

Sincerely,

Mita D. Drazilov

MDD:kmg

CC: McGladrey & Pullen