City of Kansas City, Missouri Employees' Retirement System

Actuarial Valuation as of May 1, 2008

Produced by Cheiron

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LETTER OF TRANSMITTAL

August 11, 2008

Board of Pension Trustees City of Kansas City, Missouri Employees' Retirement System 12th Floor, City Hall 414 East 12th Street Kansas City, MO 64106

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the City of Kansas City, Missouri Employees' Retirement System (KCERS) as of May 1, 2008. The valuation is organized as follows:

- In Section I, the **Board Summary** we describe the purpose of an actuarial valuation and summarize the key results found in this valuation;
- The **Main Body** of the report presents details on the System's:
 - Section II Assets
 - Section III Liabilities
 - Section IV- Contributions
 - Section V- Required Accounting Disclosures (GASB)
- In the **Appendices** we conclude our report with detailed information describing System membership (Appendix A), actuarial assumptions and methods employed (Appendix B), and a summary of pertinent plan provisions (Appendix C).

The results of this report rely on future plan experience conforming to the underlying assumptions. As of May 1, 2008, we changed the investment return assumption from 7.75% to 7.50%. To the extent that actual plan experience deviates from the underlying assumptions, the results would vary accordingly.

In addition to the investment return assumption change, we also changed the smoothing method for the actuarial value of assets, as well as the amortization method of the unfunded actuarial liability (UAL). Both of these changes are mentioned throughout the valuation and are stated in detail in Appendix B.

In preparing our report, we relied without audit, on information supplied by KCERS' staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. In addition, we certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice as set out by the Actuarial Standards Board.

Finally, as a Member of the American Academy of Actuaries, I, Gene Kalwarski, certify that I meet the Qualification Standards to render the opinions contained in this report.

Sincerely, Cheiron

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Gene Kalwarski, FSA Consulting Actuary

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Matthew Avery, ASA Assistant Actuary

SECTION I BOARD SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe and identify as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan,
- The City's contributions for Fiscal Year 2009, and
- Information required by the Governmental Accounting Standards Board (GASB).

In the balance of this Board Summary we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key financial results, (C) an examination of the historical trends, and (D) the projected financial outlook for the System.

A. Valuation Basis

This valuation represents Cheiron's second valuation performed for KCERS. As stated in the letter of transmittal, the May 1, 2008 valuation reflects the assumption and methodology changes that were approved by the KCERS Board. These changes are as follows:

- <u>The Asset Smoothing Method</u>: The Board moved to change to the expected asset method recognizing annually 100% of the expected return plus 25% of actual returns above or below the expected return. The Board also moved to change the asset corridor from 90% minimum/110% maximum to 85% minimum/110% maximum.
- <u>Amortization of UAL</u>: The Board moved to change the unfunded actuarial liability amortization method from a *30-year rolling level dollar amortization method* to a *20-year layered level percent of pay amortization method*. Under the layered approach the May 1, 2008 unfunded actuarial liability will be written down over a 20-year period and all future changes to the unfunded actuarial liability will establish new 20-year amortization periods.
- <u>Investment Assumption</u>: The Board moved to change the investment assumption from 7.75% to 7.50%.

B. Key Findings of this Valuation

The key results of the May 1, 2008 actuarial valuation are as follows:

The actuarially determined City contribution rate increased from 9.84% as of May 1, 2007 to 11.40% as of May 1, 2008. However, the actual rate that the City is scheduled to contribute for Fiscal Year 2009 will be 12.11%. This is based on a 12.03% contribution rate for General Employees, and a 19.50% contribution rate for Judges and Elected Officials.



SECTION I BOARD SUMMARY

- The ERS's unfunded actuarial liability increased from \$24 million on May 1, 2007 to \$61 million on May 1, 2008.
- The ERS's funding ratio, the ratio of assets over liabilities decreased from 97.1% to 93.5% as of May 1, 2008.
- The primary reason for the decrease in the plan's funded status was an overall loss on the unfunded actuarial liability of \$42.5 million.
 - During the year ended April 30, 2008, the Plan's assets earned -1.73% on a market value basis. The return on the actuarial asset value (i.e. incorporating the prior asset smoothing method) was 3.35% (as compared to 7.75% assumed). This resulted in an actuarial loss on investments of \$35.7 million. However, the change in the actuarial value of asset method resulted in a gain of \$38.8 million. Therefore the net gain on actuarial value of assets is \$3.1 million.
 - On the liability side, the System experienced an actuarial loss of \$18.4 million. This loss is attributable primarily to data corrections made this year, but also to assumptions made on pay increases and rates of mortality, retirement, disability and withdrawal.
 - In addition, the change of the investment return assumption resulted in a loss of \$27.2 million on the actuarial liability.

Following is Table I-1 which summarizes all the key results of the valuation with respect to System membership, assets and liabilities, and contributions. The results are presented and compared for both the current and prior plan year.



SECTION I BOARD SUMMARY

TABLE I-1 City of Kansas City, Missouri Employees' Retirement System Summary of Principal Plan Results				
Valuation as of:	May 1, 2007	May 1, 2008	% Change	
Participant Counts Active Participants Disabled Participants Retirees and Beneficiaries Terminated Vested Participants Inactive Participants Total	3,573 16 1,906 70 <u>126</u> 5,691	3,688 16 1,928 69 <u>137</u> 5,838	3.22% 0.00% 1.15% (1.43%) <u>8.73%</u> 2.58%	
Annual Salaries of Active Members Annual Retirement Allowances for Retired Members and Beneficiaries <u>Assets and Liabilities</u> Actuarial Liability (AL) Actuarial Value of Assets Unfunded Actuarial Liability (UAL) Funded Ratio	\$ 158,779,836 \$ 34,900,540 \$ 847,393,167 <u>823,014,181</u> 24,378,986 97,1%	 \$ 169,867,066 \$ 36,440,017 \$ 934,333,865 <u>873,680,276</u> 60,653,589 93,5% 	6.98% 4.41% 10.26% <u>6.16%</u> 148.79%	
Present Value of Accrued Benefits (PVAB) Market Value of Assets Unfunded PVAB Accrued Benefit Funding Ratio Contributions as a Percentage of Payroll	\$ 728,093,852 914,460,201 (186,366,349) 125.6% Fiscal Year 2008	\$ 799,991,686 <u>883,100,233</u> (83,108,547) 110.4% Fiscal Year 2009	9.87% (<u>3.43%)</u> (55.41%)	
Normal Cost Rate Unfunded Actuarial Liability Rate Total City Contribution Rate Annual Required Contribution (GASB)	8.55% <u>1.29%</u> 9.84% \$ 15,623,936	8.96% <u>2.44%</u> 11.40% \$ 19,364,846	23.9%	

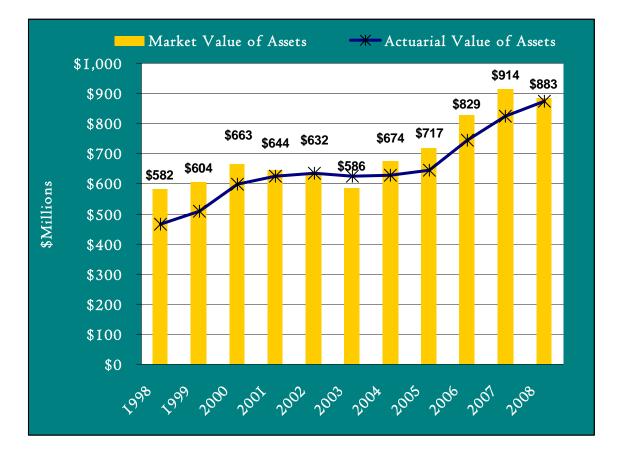


SECTION I BOARD SUMMARY

C. Historical Trends

Despite the fact that for most retirement systems the greatest attention is given to the current valuation results and in particular the size of the current unfunded actuarial liability and the City's contribution, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is more important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

System Assets



The market value of assets (MVA) had a loss on investments in 2008, returning -1.73%. However, due to the asset smoothing method in place, the actuarial value of assets has tracked a much smoother path through the volatility of the market value of assets. In addition, the actuarial value of assets smoothing method was changed as of May 1, 2008. As can be seen in the graph, the actuarial value of assets (AVA) increased from 2007 to 2008 due to smoothing and the change in method, despite a loss on the market value of assets.



SECTION I BOARD SUMMARY

Assets and Liabilities



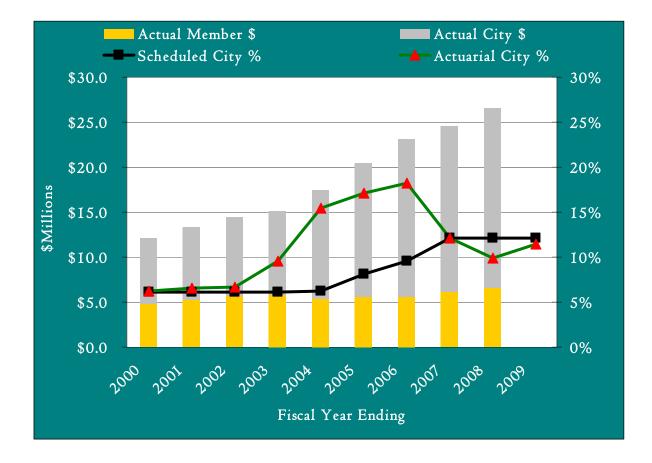
The above chart compares the actuarial value of assets to the actuarial liabilities as well as the funded ratio, sometimes referred to as the benefit security ratio. Despite the decrease in funding ratio from 2007 to 2008, the funding ratio still remains well above 90%.



SECTION I BOARD SUMMARY

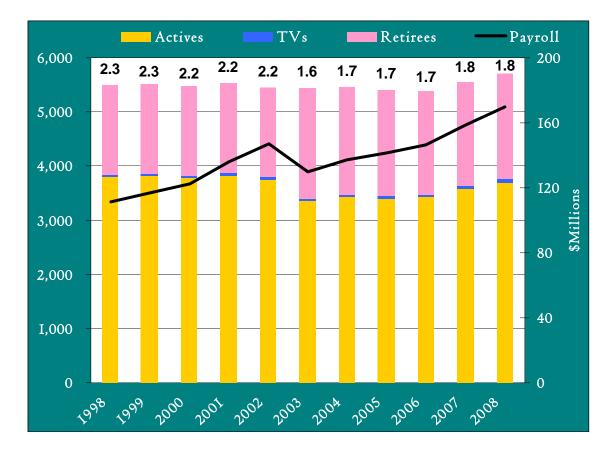
Contribution Rates

The stacked bars in this graph show the dollar amount of contributions made by the City and the members (depicted on the left hand scale) since Fiscal Year Ending 2000. The green line shows the City's actuarial contribution rate as a percent of payroll (depicted on the right hand scale). The black line shows the scheduled City contribution rate as a percent of payroll (depicted on the right hand scale). The member contribution rate is set by City law at 4% of payroll. The City contribution rate is currently scheduled for General Employees to be 9.50% of payroll plus 2.53% of payroll for the retirement window offered in 2003, projected to be paid annually through April 30, 2013. The City contribution rate is currently scheduled for Judges and Elected Officials to be 19.50% of payroll.





SECTION I BOARD SUMMARY



Participant Trends

The above chart provides a measure for the maturity in the plan, by comparing the ratio of active members to inactive members (retirees and terminated-vesteds). The active-to-inactive ratio has declined since 1999 from 2.3 actives supporting each inactive member to 1.8 actives supporting each inactive member today.

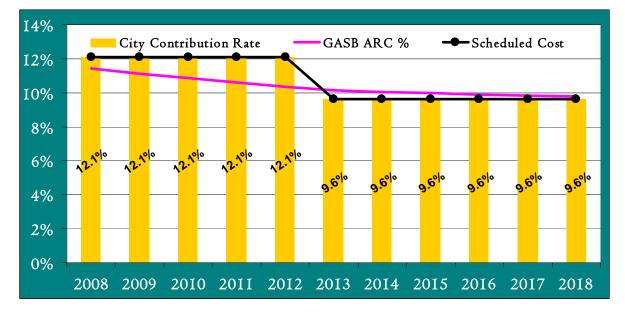


SECTION I BOARD SUMMARY

D. Future Expected Financial Trends

The analysis of projected financial trends is perhaps the most important component of this valuation. In this Section, we present our assessment of the implications of the May 1, 2008 valuation results in terms of benefit security (assets over liabilities). As far as the City's scheduled cost progression, the employer's rate is projected, under each scenario, to be the same regardless of the investment return scenario.

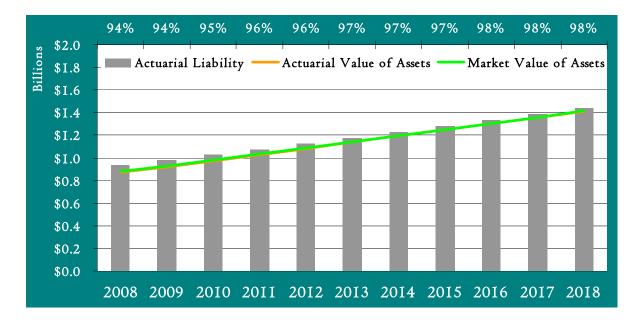
Contribution Rate Projections



Our projections of assets to liabilities which follow are shown on three different bases, expected investment returns of 7.50%, the current assumed rate, returns of 9.00%, and returns of 6.00%.

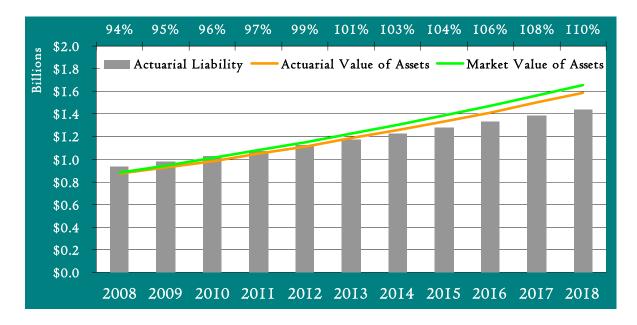


SECTION I BOARD SUMMARY



Asset and Liability Projections: Baseline 7.50% return

The graph above shows the projected funding status increasing to just under 100% over the next 10 years.

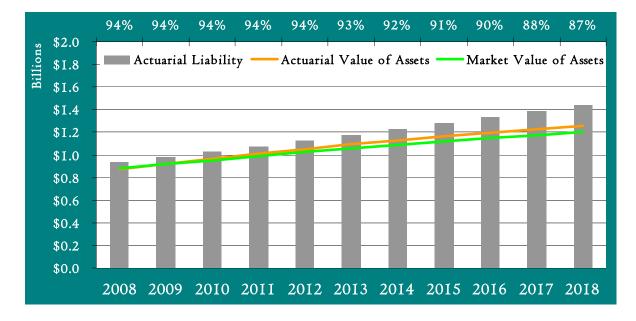


Projections with Asset Returns of 9.00%

With superior returns of 9.00% each year, the Plan would reach 110% funding by 2018.



SECTION I BOARD SUMMARY



Projections with Asset Returns of 6.00%

Despite earnings of only 6.00%, this projection shows a decrease in the Plan's funded status from the current 94% down to 87% by the end of the period. The key driver of these results is that the scheduled contributions being projected remain unchanged regardless of the investment scenario.



SECTION II ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Trustees may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact upon benefit levels, City contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of May 1, 2007 and May 1, 2008;
- Statement of the **changes** in market values during the year;
- Development of the Actuarial Value of Assets;
- An assessment of investment performance; and
- A projection of the Plan's expected **cash flows** for the next ten years.

Disclosure

There are two types of asset values disclosed in this valuation, the market value of assets and the actuarial value of assets. The market value represents a "snap-shot" or "cash-out" value which provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the actuarial value of assets which reflect smoothing of annual investment returns.

TABLE II-1 Statement of Assets at Market Value as of April 30,					
Assets		2007		2008	% Change
Cash	\$	47,650,873	\$	49,835,605	4.58%
Stock and Collective Trusts		922,227,290		885,547,657	(3.98%)
Accounts Receivable		22,292,594		8,057,196	(63.86%)
Interest and Dividends		1,153,704		1,297,288	12.45%
Contributions Received		847,650		1,017,505	20.04%
Expenses		(748,502)		(461,536)	(38.34%)
Purchase of Investments		(78,963,408)		(62,193,482)	(21.24%)
Market Value of Assets	\$	914,460,201	\$	883,100,233	(3.43%)

Table II-1 below discloses and compares each asset value as of April 30, 2007 and 2008.



SECTION II ASSETS

Changes in Market Value

Table II-2 below shows the components of change between the market value of assets as of April 30, 2007 and April 30, 2008.

TABLE II-2 Changes in Market Values					
Value of Assets – April 30, 2007	\$	\$	914,460,201		
Additions					
Member Contributions	6,528,004				
Employer Contributions	20,011,617				
Interest and Dividends	19,767,363				
Investment Return	(30,865,468)				
Total Additions	15,441,516				
Deductions					
Benefit Payments	(42,201,535)				
Administrative Expenses	(4,599,949)				
Total Deductions	(46,801,484)				
Value of Assets – April 30, 2008	\$	\$	883,100,233		



SECTION II ASSETS

Actuarial Value of Assets

The next table, Table II-3 shows how the actuarial value of assets is developed. The actuarial value of assets method was changed as of May 1, 2008 and the new method is described below. We elected to apply the method change as it had been in place for the previous year.

Asset values are gradually adjusted toward market value by adding 25% of the difference between the market value and expected actuarial asset value to the expected actuarial asset value. The expected actuarial asset value is the actuarial asset value at the beginning of the year plus contributions, less benefit payments, all with interest at the assumed net rate of investment return on an actuarial basis. If the actuarial value of assets is less than 85% or more than 110% of the market value, an adjustment is made to the actuarial value to bring the value within this corridor.

	TABLE II-3 Development of Actuarial Value of Assets			
1.	Actuarial Value of Assets at May 1, 2007	\$	823,014,181	
2.	Contributions		26,539,621	
3.	Benefit Payments		(42,201,535)	
4.	Expected Return		63,188,024	
5.	Expected Actuarial Value at End of Year = $(1) + (2) + (3) + (4)$		870,540,291	
6.	Actual Market Value of Assets at April 30, 2008		883,100,233	
7.	Excess of (6) over (5)		12,559,942	
8.	Adjustment toward market value: 25% of (7)		3,139,986	
9.	Adjustment to be within 85%/110% corridor		0	
10.	Actuarial Value of Assets at May 1, 2008 = (5) + (8) + (9)	\$	873,680,276	



SECTION II ASSETS

Investment Performance

The market value of assets (MVA) returned -1.73% during 2008, which is less than the assumed 7.75% return. A return of 3.35% was experienced on the actuarial value of assets (AVA) under the prior method. Under the new method, a return of 8.14% was experienced.

Projection of Plan's Future Cash Flows

TABLE II-4 Projection of Plan's Expected Cash Flows Total						
Year Beginning May 1, Benefit Payments Contributions* Net Cash Flo						
2008	\$ (46,134,463)	\$ 27,362,036	\$ (18,772,427)			
2009	(47,872,216)	28,456,518	(19,415,698)			
2010	(50,892,689)	29,594,778	(21,297,911)			
2011	(53,813,928)	30,778,570	(23,035,358)			
2012	(57,012,830)	32,009,712	(25,003,118)			
2013	(60,575,204)	33,290,101	(27,285,103)			
2014	(64,439,956)	29,392,973	(35,046,983)			
2015	(68,250,369)	30,568,692	(37,681,677)			
2016	(72,573,897)	31,791,439	(40,782,458)			
2017	(76,428,438)	33,063,097	(43,365,341)			

* Expected contributions include City Contributions and Member Contributions. For illustration purposes, we have assumed the City Contribution rate will be based on the scheduled contribution rates and that payroll will increase at the actuarially assumed rate of 4.00% per year.



SECTION III LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- Disclosure of Plan liabilities as of May 1, 2007 and May 1, 2008, and
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them.

- **Present Value of All Future Benefits:** Used for measuring all future System obligations, represents the amount of money needed today to fully pay off all benefits of the System both earned as of the valuation date and those to be earned in the future by current plan participants, under the current Plan provisions.
- Actuarial Liability: Used for funding calculations and GASB disclosures, this liability is calculated taking the present value of benefits and subtracting the present value of future member contributions and future employer normal costs under an acceptable actuarial funding method. This method is referred to as the Entry Age Normal funding method.
- **Present Value of Accrued Benefits:** Used for communicating the current level of liabilities, this liability represents the total amount of money needed today to fully pay off the current accrued obligations of the Plan, assuming no future accruals of benefits. These liabilities are also required for accounting purposes (FAS 35) and used to assess whether the Plan can meet its current benefit commitments.

Table III-1, which follows, discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of Plan assets yields, for each respective type, a **net surplus** or an **unfunded liability**.



SECTION III LIABILITIES

TABLE III-1							
Liabilities/Net (Surplus)/Unfunded							
May 1, 2007 May 1, 2008							
Present Value of Future Benefits							
Active Participant Benefits	\$	532,982,942	\$	614,203,746			
Retiree and Inactive Benefits		446,908,440		468,489,234			
Present Value of Future Benefits (PVB)	\$	979,891,382	\$	1,082,692,980			
Actuarial Liability							
Present Value of Future Benefits (PVB)	\$	979,891,382	\$	1,082,692,980			
Present Value of Future Normal Costs (PVFNC)		132,498,215		148,359,115			
Actuarial Liability (AL = PVB – PVFNC)		847,393,167		934,333,865			
Actuarial Value of Assets (AVA)		823,014,181		873,680,276			
Net (Surplus)/Unfunded (AL – AVA)	\$	24,378,986	\$	60,653,589			
Present Value of Accrued Benefits							
Present Value of Future Benefits (PVB)	\$	979,891,382	\$	1,082,692,980			
Present Value of Future Benefit Accruals (PVFBA)		251,797,530		282,701,294			
Present Value of Accrued Benefits (PVAB=PVB-PVFBA)		728,093,852		799,991,686			
Market Value of Assets (MVA)		914,460,201		883,100,233			
Net Unfunded/(Surplus)	\$	(186,366,349)	\$	(83,108,547)			



SECTION III LIABILITIES

Changes in Liabilities

Each of the Liabilities disclosed in the prior table are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in Plan assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure plan assets

In each valuation, we report on those elements of change which are of particular significance, potentially affecting the long-term financial outlook of the Plan. Below we present key changes in liabilities since the last valuation.

In the table that follows, we show the components of change in the actuarial liability between May 1, 2007 and May 1, 2008.

TABLE III-2		
	Actuarial Liability	
Liabilities May 1, 2007	\$	847,393,167
Liabilities May 1, 2008		934,333,865
Liability Increase (Decrease)		86,940,698
Change Due to:		
Plan Amendments		0
Assumption Changes		27,233,523
Actuarial (Gain)/Loss		18,451,978
Benefits Accumulated and Other Sources		41,255,197



SECTION III LIABILITIES

In addition, we breakdown the change in accrued liability further by showing the total actuarial (gain)/loss by source, as shown in Table III-3 below.

TABLE III-3 (Gain)/Loss by Source as of May 1, 2008	
Turnover	\$ 5,262,602
Retirement	(2,635,616)
Pre-retirement mortality	442,748
Post-retirement mortality	(68,758)
Salary increase more than expected for continuing actives	1,806,336
New entrants	1,893,573
Data adjustments & miscellaneous changes	 11,751,093
Total (Gain)/Loss	\$ 18,451,978



SECTION IV CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this Plan, the funding method employed is the **Entry Age Actuarial Cost Method**. Under this method, there are two primary components to the total contribution: the **normal cost rate** (employee and employer) and the **unfunded actuarial liability rate** (UAL rate). The normal cost rate is determined by taking the value, as of entry age into the plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of each member's expected future salary. The normal cost rate is multiplied by current salary to determine each member's normal cost rate. Finally, the total normal cost rate is reduced by the member contribution to produce the employer normal cost rate. The difference between the EAN actuarial liability and the actuarial value of assets is the unfunded actuarial liability.

The unfunded actuarial liability is amortized under a layered approach over a 20-year period as a level percent of pay. Under the layered approach, the May 1, 2008 unfunded actuarial liability will be written down over a 20-year period and all future changes to the unfunded actuarial liability will establish new 20-year amortization periods. Payroll is expected to increase 4.0% per year.

Table IV-1 below presents and compares the employer contribution rates for the Plan for this valuation and the prior one.

TABLE IV-1 Employer Contribution Rate					
May 1, 2007 May 1, 2008					
Entry Age Normal Cost Rate	8.55%	8.96%			
Amortization Payment	1.29%	2.44%			
Actuarially Determined Contribution	9.84%	11.40%			



SECTION IV CONTRIBUTIONS

Table IV-2 below presents the May 1, 2008 employer contribution rates for the Plan split between the General Employees and the Judges and Elected Officials. The employer contribution rate is based on a 20-year amortization of the May 1, 2008 unfunded actuarial liability and a 20-year amortization of all future changes to the unfunded actuarial liability, as specified in the law governing the System. The employer contribution rates are then compared to what the City is expected to contribute for the current plan year. The scheduled City contribution is 9.5%, plus an additional 2.53% for the retirement window offered in 2003, of anticipated payroll for General Employees and 19.5% of anticipated payroll for Judges and Elected Officials.

TABLE IV-2 Development of Plan Contribution Rate as of May 1, 2008				
	General Employees	Judges and Elected Officials	Total	
 Normal Cost (monthly): a. Total Normal Cost b. Expected Members Contribution c. Employer Paid Normal Cost (a) – (b) 	12.84%	24.98%	12.96%	
	<u>4.00%</u>	<u>4.00%</u>	<u>4.00%</u>	
	8.84%	20.98%	8.96%	
 2. Amortization of Unfunded Liability a. Actuarial Liability b. Actuarial Value of Assets c. Unfunded Liability (a) – (b) d. Amortization of Unfunded Liability 	\$ 923,705,530	\$ 10,628,335	\$ 934,333,865	
	<u>863,741,895</u>	<u>9,938,382</u>	<u>873,680,276</u>	
	\$ 59,963,635	\$ 689,953	\$ 60,653,589	
	2.44%	2.67%	2.44%	
 Actuarially Computed Employer Contribution Rate	11.28%	23.65%	11.40%	
(1) + (2d) Scheduled City Contributions¹	12.03%	19.50%	12.11%	

¹ General Employees are scheduled to contribute 9.50% of payroll, plus an additional 2.53% of payroll through April 30, 2013 for the early retirement window. Judges and Elected Officials contribute 19.50% of payroll.



SECTION V ACCOUNTING STATEMENT INFORMATION

Statement No. 35 of the Financial Accounting Standards Board requires the Plan to disclose certain information regarding its funded status. Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in notes to financial statements and supplementary information.

The FASB-35 disclosures provide a quasi "snap shot" view of how the Plan's assets compare to its liabilities if contributions stopped and accrued benefit claims had to be satisfied. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if the Plan were to terminate.

The GASB-25 actuarial liability is the same as the actuarial liability amount calculated for funding purposes.

Both the present value of accrued benefits (FASB-35) and the actuarial liability (GASB-25) are determined assuming that the Plan is on-going and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.50% per annum.

FASB Statement No. 35 specifies that a comparison of the present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of May 1, 2008 are exhibited in Table V-1. Finally, Table V-2 reconciles the FASB-35 liabilities determined as of the prior valuation, May 1, 2007, to the liabilities as of May 1, 2008.

Tables V-3 through V-5 are exhibits to be used with the City's CAFR report. Table V-3 is the Note to Required Supplementary Information, Table V-4 is a history of gains and losses in actuarial liability, and Table V-5 is the Solvency Test which shows the portion of actuarial liability covered by assets.

Finally, Tables V-6 and V-7 are additional GASB supplemental exhibits. Table V-6 shows historical GASB ARC information, compared to what the City actually contributed. Table V-7 shows historical UAL information, funding ratios, and the UAL as a percent of payroll.



SECTION V ACCOUNTING STATEMENT INFORMATION

		Table V-1			
		Accounting Statement In	ıfor	mation	
				May 1, 2007	May 1, 2008
А.		SB No. 35 Basis Present Value of Benefits Accrued and Vested to Date			
		a. Members Currently Receiving Paymentsb. Former Vested Membersc. Active Members	\$	438,527,834 8,380,606 281,185,412	\$ 459,623,791 8,865,443 331,502,452
	2.	 Total Present Value of Accrued Benefits (1a. + 1b. + 1c.) Assets at Market Value 		728,093,852	\$ 799,991,686
	3.			914,460,201	 883,100,233
	4.	Unfunded Present Value of Accrued Benefits $(2-3)$	\$	(186,366,349)	\$ (83,108,547)
	5.	Ratio of Assets to Present Value of Benefits (3 / 2)		125.6%	110.4%
B.	GA	ASB No. 25 Basis			
	1.	Actuarial Liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$	446,908,440	\$ 468,489,234
	2.	Actuarial Liabilities for current employees		400,484,727	 465,844,631
	3.	Total Actuarial Liability (1 + 2)	\$	847,393,167	\$ 934,333,865
	4.	Net Actuarial Assets available for benefits		823,014,181	 873,680,276
	5.	Unfunded Actuarial Liability (3 – 4)	\$	24,378,986	\$ 60,653,589



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-2 Statement of Changes in Total Actuarial Present Value of All Accrued Benefits	 umulated Benefit igation (FASB 35)
Actuarial Present Value of Accrued Benefits at April 30, 2007	\$ 728,093,852
Increase (Decrease) During Years Attributable to: Passage of Time and Gains/Losses Benefit Paid – FY 2008 Assumption Change Benefits Accrued	64,379,403 (43,806,332) 22,506,016 28,818,747
Net Increase (Decrease)	 71,897,834
Actuarial Present Value of Accrued Benefits at April 30, 2008	\$ 799,991,686



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-3 NOTE TO REQUIRED SUPPLEMENTARY INFORMATION

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

Valuation date	May 1, 2008
Actuarial cost method	Entry Age
Amortization method	20-year layered amortization, level percent of pay
Remaining amortization period for May 1, 200	08 UAL 20-years
Asset valuation method	5-year smoothed market
Actuarial assumptions: Investment rate of return Projected salary increases Cost-of-living adjustments	7.50% 4.0% 3.0% simple

The actuarial assumptions used have been recommended by the actuary and adopted by the Plan's Board of Trustees.

The rate of employer contributions to the Plan is composed of the normal cost and an amortization of the unfunded actuarial liability. The normal cost is a level percent of payroll cost which, along with member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability.



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-4 ANALYSIS OF FINANCIAL EXPERIENCE											
Gain and Loss in Actuarial Liability During Years Ended April 30 Resulting from Differences Between Assumed Experience and Actual Experience Gain (or Loss) for Year ending April 30, (expressed in thousands)											
Type of Activity		2006	· •	2007		2008					
Investment Income Combined Liability Experience Gain (or Loss) During Year from Financial Experience Non-Recurring Gain (or Loss) Items Composite Gain (or Loss) During Year	\$ 	66,735 20,987 87,722 0 87,722	\$ 	35,814 (6,602) 29,212 0 29,212	\$ 	3,140 (18,452) (15,312) (27,234) (42,546)					

Table V-5 SOLVENCY TEST Aggregate Actuarial Liabilities for (expressed in thousands)									
Valuation Date May 1	Active Member Contributions	Retirees & Beneficiaries	Active Member Employer Financed Contributions	Actuarial Value of Reported Assets	Cove	n of Actuarial Lia red by Reported A	Assets		
	(1)	(2)	(3)		(1)	(2)	(3)		
2007	73,078	446,908	327,407	823,014	100%	100%	93%		
2008	78,339	468,489	387,506	873,680	100%	100%	84%		

SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-6 Supplementary Information Required by GASB - Schedule of City Contributions									
Plan Year Ended April 30	Annual Required Contributions	Actual Contributions	Percentage Contributed						
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	\$14,825,719	63.3%						
2006	\$25,770,978	\$17,557,758	68.1%						
2007	\$17,652,900	\$18,496,476	104.8%						
2008	\$15,623,936	\$20,011,617	128.1%						
2009	\$19,364,846								

SECTION V ACCOUNTING STATEMENT INFORMATION

	Table V-7 Supplementary Information Required by GASB - Schedule of Funding Progress										
	S SPP STORE					UAL as a Percentage of					
Actuarial Valuation	Actuarial Value of	Actuarial Liability	Unfunded Actuarial	Funded Ratio	Covered Payroll	Covered Payroll*					
Date	Assets (a)	(b)	Liability (b) - (a)	(a) / (b)	(c)	[(b) - (a)] / (c)					
5/1/1998	\$465,619,424	\$394,943,900	(\$70,675,524)	117.90%	\$111,639,400	N/A					
5/1/1999	\$508,281,673	\$445,761,900	(\$62,519,773)	114.03%	\$117,018,100	N/A					
5/1/2000	\$597,085,624	\$517,046,400	(\$80,039,224)	115.48%	\$122,645,800	N/A					
5/1/2001	\$623,249,552	\$573,339,758	(\$49,909,794)	108.71%	\$136,263,216	N/A					
5/1/2002	\$634,025,842	\$630,683,891	(\$3,341,951)	100.53%	\$146,816,820	N/A					
5/1/2003	\$624,897,653	\$707,513,176	\$82,615,523	88.32%	\$130,028,040	63.54%					
5/1/2004	\$627,078,139	\$740,186,346	\$113,108,207	84.72%	\$137,207,640	82.44%					
5/1/2005	\$645,609,869	\$781,899,987	\$136,290,118	82.57%	\$141,605,640	96.25%					
5/1/2006	\$745,720,993	\$800,839,808	\$55,118,815	93.12%	\$146,365,332	37.66%					
5/1/2007	\$823,014,181	\$847,393,167	\$24,378,986	97.12%	\$158,779,836	15.35%					
5/1/2008	\$873,680,276	\$934,333,865	\$60,653,589	93.51%	\$169,867,066	35.71%					

* Not less than zero.

APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Active Member Data									
		May 1, 2007		May 1, 2008	% Change				
<u>Total</u>									
Count		3,573		3,688	3.2%				
Average Current Age		45.0		45.1	0.3%				
Average Service		9.7		10.0	3.7%				
Average Valuation Pay	\$	44,439	\$	46,059	3.6%				
Annual Compensation	\$	158,779,836	\$	169,867,066	7.0%				
<u>General</u>									
Count		3,556		3,668	3.1%				
Average Current Age		45.0		45.1	0.3%				
Average Service		9.7		10.1	3.9%				
Average Valuation Pay	\$	44,265	\$	45,828	3.5%				
Annual Compensation	\$	157,406,688	\$	168,095,371	6.8%				
Judges									
Count		5		7	40.0%				
Average Current Age		54.9		51.4	-6.3%				
Average Service		9.6		8.0	-16.7%				
Average Valuation Pay	\$	136,524	\$	139,249	2.0%				
Annual Compensation	\$	682,620	\$	974,743	42.8%				
Elected Officials									
Count		12		13	8.3%				
Average Current Age		57.4		52.2	-9.1%				
Average Service		6.0		3.1	-49.2%				
Average Valuation Pay	\$	57,544	\$	61,304	6.5%				
Annual Compensation	\$	690,528	\$	796,952	15.4%				

APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System									
1	able of Plan Coverage 5/1/2007	5/1/2008	% change						
Active Members in Valuation			8						
Number	3,573	3,688	3.2%						
Average Age	45.0	45.1	0.3%						
Average Service	9.7	10.0	3.7%						
Total Payroll	\$158,779,836	\$169,867,066	7.0%						
Average anticipated payroll	\$44,439	\$46,059	3.6%						
Account Balance	\$73,096,338	\$78,338,694	7.2%						
Eligible to Retire On:									
Normal Pension	49	60	22.4%						
Optional Pension	208	252	21.2%						
Early Pension	197	218	10.7%						
Deferred Pension	1,864	1,867	0.2%						
Total Active Vested Members	2,318	2,397	3.4%						
Vested Terminated Members	70	69	N/A						
Deaths During the Plan Year	83	76	N/A						
Pensioners:									
Number in Pay Status									
Retirees	1,499	1,521	1.5%						
Disabled Retirees	16	16	0.0%						
Total	1,515	1,537	1.5%						
Average Age	69.45	69.66	0.3%						
Average Monthly Benefit	\$1,744	\$1,799	3.1%						
Beneficiaries in Pay Status	407	407	0.0%						
Members Due Refunds	126	137	8.7%						

APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Summary of Participant Data							
1. Retired Participants as of Valuation Date (including 407	beneficiaries in payment status)	1,944					
2. Members Active as of May 1, 2008		3,688					
Fully Vested	2,397						
Non-vested	1,291						
3. Members Due Refunds as of May 1, 2008		137					



APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Age and Service as of May 1, 2008

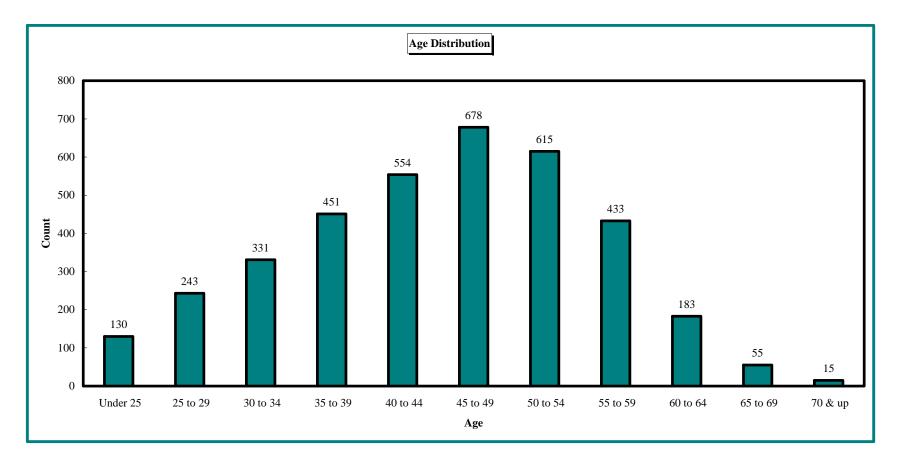
li i					UNID DI MOI						1
					Service	e					
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	69	58	3	0	0	0	0	0	0	0	130
25 to 29	66	133	43	1	0	0	0	0	0	0	243
30 to 34	50	141	117	23	0	0	0	0	0	0	331
35 to 39	52	131	141	106	21	0	0	0	0	0	451
40 to 44	38	123	151	149	65	26	2	0	0	0	554
45 to 49	41	126	136	142	98	73	59	3	0	0	678
50 to 54	32	95	99	117	76	72	92	30	2	0	615
55 to 59	24	64	96	91	55	47	28	25	2	1	433
60 to 64	10	28	41	36	25	22	11	5	5	0	183
65 to 69	1	6	16	11	11	7	0	0	2	1	55
70 & up	1	2	5	5	1	0	0	1	0	0	15
Total	384	907	848	681	352	247	192	64	11	2	3,688

COUNTS BY AGE/SERVICE



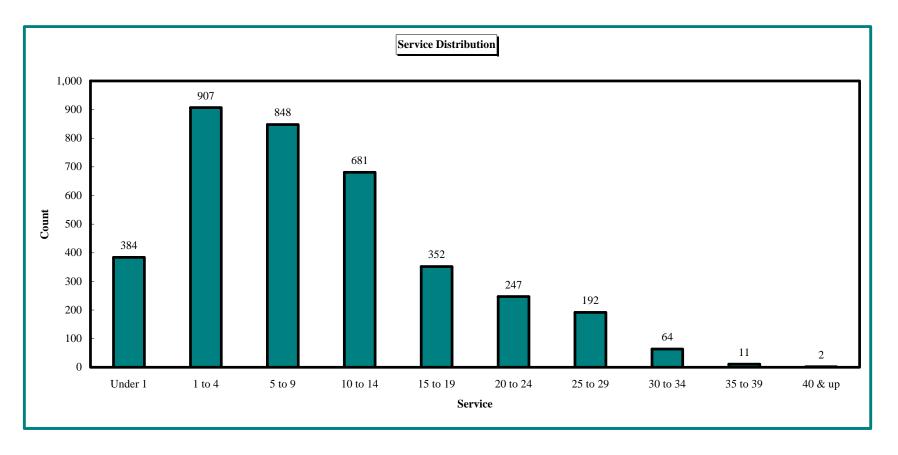
APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Age as of May 1, 2008



APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Service as of May 1, 2008



APPENDIX A MEMBERSHIP INFORMATION

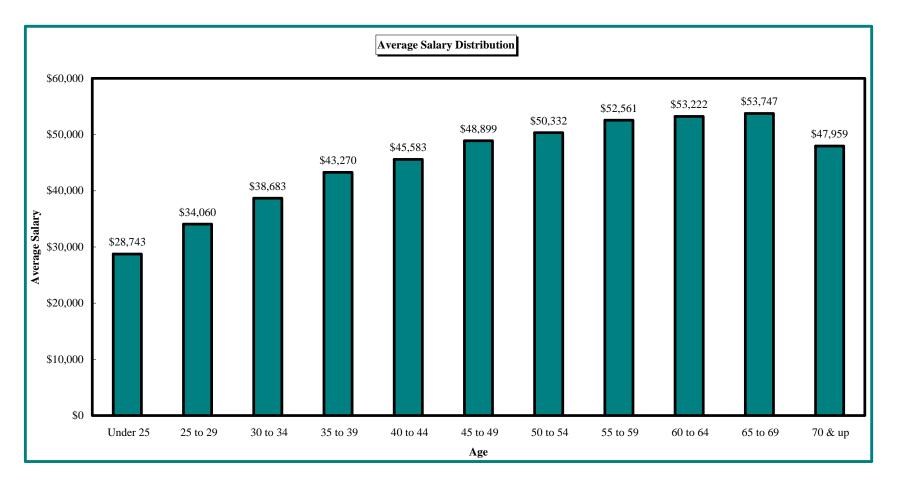
Kansas City Employees' Retirement System Distribution of Active Members by Age and Service as of May 1, 2008

					Servic	•				_	
					Servic	e					
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	\$28,297	\$29,083	\$32,440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,743
25 to 29	\$32,265	\$35,044	\$33,822	\$31,992	\$0	\$0	\$0	\$0	\$0	\$0	\$34,060
30 to 34	\$35,772	\$38,852	\$38,503	\$44,889	\$0	\$0	\$0	\$0	\$0	\$0	\$38,683
35 to 39	\$33,661	\$40,871	\$41,976	\$50,353	\$54,960	\$0	\$0	\$0	\$0	\$0	\$43,270
40 to 44	\$34,926	\$38,190	\$43,117	\$51,959	\$52,684	\$55,526	\$53,832	\$0	\$0	\$0	\$45,583
45 to 49	\$34,835	\$43,483	\$40,812	\$50,276	\$56,383	\$60,866	\$57,919	\$57,076	\$0	\$0	\$48,899
50 to 54	\$35,602	\$41,156	\$46,954	\$50,302	\$52,681	\$58,157	\$58,131	\$58,179	\$43,392	\$0	\$50,332
55 to 59	\$39,820	\$47,999	\$46,420	\$52,761	\$59,116	\$55,559	\$65,623	\$65,597	\$42,918	\$48,072	\$52,561
60 to 64	\$44,574	\$46,044	\$50,542	\$51,278	\$55,323	\$61,445	\$64,744	\$79,620	\$48,255	\$0	\$53,222
65 to 69	\$26,928	\$47,892	\$42,521	\$50,419	\$65,104	\$70,077	\$0	\$0	\$63,318	\$73,548	\$53,747
70 & up	\$27,528	\$33,456	\$43,723	\$60,127	\$56,580	\$0	\$0	\$49,116	\$0	\$0	\$47,959
Total	\$33,780	\$39,671	\$42,585	\$50,912	\$55,441	\$58,817	\$59,493	\$62,558	\$49,139	\$60,810	\$46,059

AVERAGE SALARY BY AGE/SERVICE

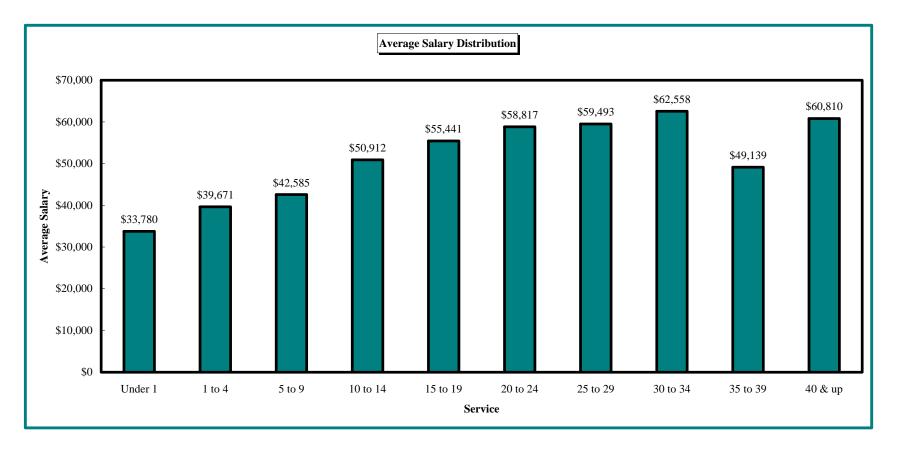
APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Age as of May 1, 2008



APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Service as of May 1, 2008





APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Pensions in Payment Status by Type and Monthly Amount							
Monthly Amount	Total	Normal	Early	Optional	Vested	Disability	Widows & QDRO
Total	1,944	155	188	1,078	100	16	407
Under \$500	397	27	76	33	31	3	22
\$500-1,000	416	42	68	151	48	7	100
1,000-1,500	307	28	28	188	15	6	42
1,500-2,000	273	19	8	220	4	0	22
2,000-2,500	194	13	3	170	2	0	(
2,500-3,000	124	7	2	111	0	0	2
3,000-3,500	71	7	1	61	0	0	
3,500-4,000	65	5	1	58	0	0	1
4,000-4,500	30	0	0	30	0	0	(
4,500-5,000	25	0	0	23	0	0	
5,000 & over	42	7	1	33	0	0]

APPENDIX A MEMBERSHIP INFORMATION

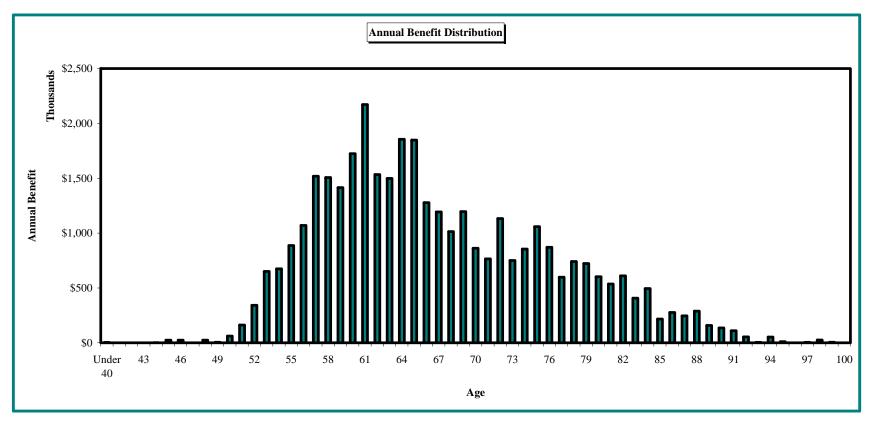
	een eu			or	1, 200	<i>,</i> 0	
Age	Count	Annual Benefit		Age	Count	Annual Benefit	
<25	0	\$0		73	48	\$750,486	
25	0	\$0		74	61	\$854,786	
26	0	\$0		75	65	\$1,059,458	
27	0			76	55	\$870,890	
28	0	\$0		77	52	\$598,557	
29	0	\$0		78	58	\$741,199	
30	0	\$0		79	51	\$722,066	
31	0	\$0		80	46	\$601,857	
32	0	\$0		81	49	\$535,975	
33	0	\$0		82	51	\$609,981	
34	0			83	43	\$407,747	
35	0			84	47	\$494,019	
36	0			85	23	\$216,782	
37	0	\$0		86	41	\$276,775	
38	0			87	28	\$246,041	
39	0	\$0		88	30	\$289,265	
40	1	\$2,963		89	24	\$159,060	
41	0			90	18	\$135,378	
42	0			91	13	\$110,022	
43	0	\$0		92	9	\$53,385	
44	1	\$1,463		93	2	\$4,258	
45	2			94	8	\$52,444	
46	1	\$23,661		95	3	\$9,890	
47	0			96	0	\$0	
48	2			97	1	\$4,273	
49	1			98	5	\$26,004	
50	4			99	2	\$5,193	
51	5			100	0	\$0	
52	13			101	0	\$0	
53	23			102	0	\$0	
54	23			103	0	\$0	
55	29			104	0	\$0	
56	40			105	0	\$0	
57	50			106	0	\$0	
58	55			107	0	\$0	
59	47			108	0	\$0	
60	60			109	0	\$0	
61	77			110	0	\$0	
62	56			111	0	\$0 \$0	
63	63			112	0	\$0	
64	76			113	0	\$0 \$0	
65	80			114	0	\$0 \$0	
66	60			115	0	\$0 \$0	
67	58			116	0	\$0	
68	53			117	0	\$0 \$0	
69	64			118	0	\$0 \$0	
70	49			119	0	\$0 \$0	
71	44			120	0	\$0	
72	58	\$1,132,414			1.000	\$26.275.225	
			Tota	18	1,928	\$36,276,233	

Kansas City Employees' Retirement System Distribution of Retired Members and Survivors as of May 1, 2008



APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Retired Members and Survivors as of May 1, 2008





APPENDIX A MEMBERSHIP INFORMATION

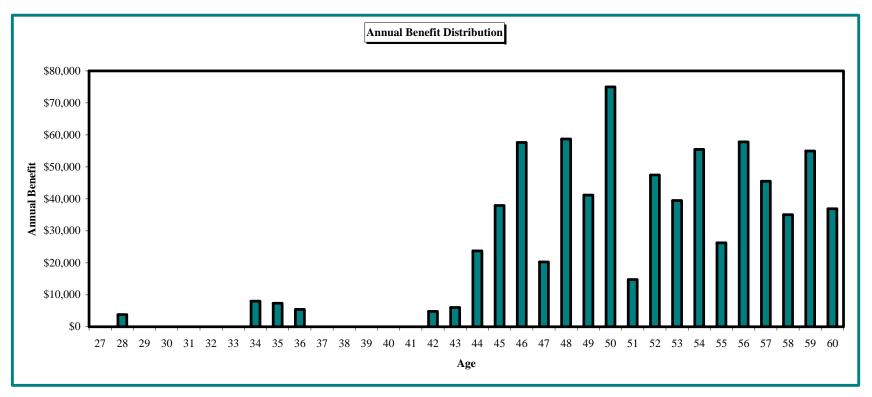
Kansas City Employees' Retirement System Distribution of Vested Members and Survivors as of May 1, 2008

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	0	\$0	73	0	\$0
25	0	\$0	74	0	\$0
26	0	\$0	75	0	\$0
27	0	\$0	76	0	\$0
28	1	\$3,790	77	0	\$0
29	0	\$0	78	0	\$0
30	0	\$0	79	0	\$ 0
31	0	\$0	80	0	\$O
32	0	\$0	81	0	\$ 0
33	0	\$0	82	0	\$O
34	2	\$7,985	83	0	\$0
35	1	\$7,371	84	0	\$0
36	1	\$5,449	85	0	\$ 0
37	0	\$0	86	0	\$0
38	0	\$0	87	0	\$0
39	0	\$0	88	0	\$0
40	0	\$0	89	0	\$0
41	0	\$0	90	0	\$0
42	1	\$4,810	91	0	\$O
43	1	\$6,027	92	0	\$0
44	2	\$23,730	93	0	\$0
45	4	\$37,924	94	0	\$0
46	6	\$57,635	95	0	\$0
47	3	\$20,254	96	0	\$0
48	5	\$58,688	97	0	\$0
49	4	\$41,156	98	0	\$0
50	6	\$74,978	99	0	\$0
51	2	\$14,763	100	0	\$0
52	3	\$47,477	101	0	\$0
53	3	\$39,464	102	0	\$0
54	4	\$55,456	103	0	\$0
55	3	\$26,241	104	0	\$0
56	3	\$57,813	105	0	\$0 * 0
57	6	\$45,506	106	0	\$0 * 0
58	2	\$35,041	107	0	\$0 * 0
59	5	\$54,978	108	0	\$0 #0
60	1	\$36,908	109	0	\$0 #0
61	0	\$0 \$0	110	0	\$0 \$0
62	0	\$0 \$0	111	0	\$0 \$0
63	0	\$0 \$0	112	0	\$0 \$0
64	0	\$0 \$0	113	0	\$0 \$0
65	0	\$0 \$0	114	0	\$0 \$0
66 67	0	\$0 \$0	115	0	\$0 \$0
67	0	\$0 \$0	116	0	\$0 \$0
68 60	0	\$0 \$0	117	0	\$0 \$0
69 70	0	\$0 \$0	118	0 0	\$0 \$0
70 71	0 0	\$0 \$0	119 120	0	\$0 \$0
71 72	0	\$0 \$0	120	0	ΦU
12	0	\$U	Totals	69	\$763,441
			10(a)5	09	ψ/05,771



APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Vested Members as of May 1, 2008



APPENDIX A MEMBERSHIP INFORMATION

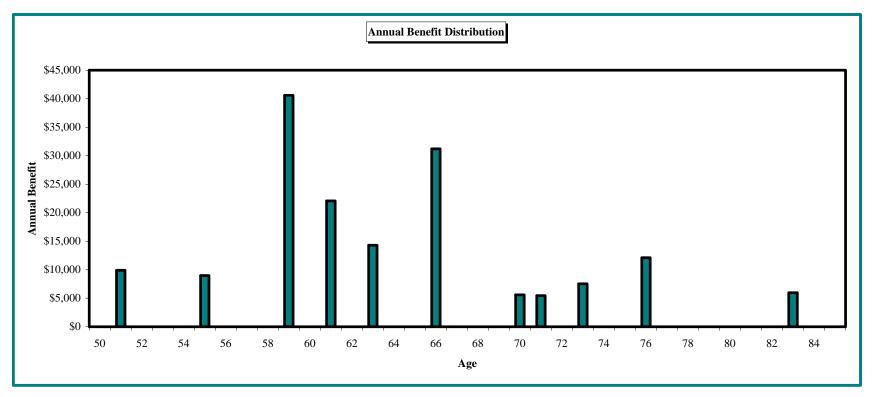
Kansas City Employees' Retirement System Distribution of Disabled Members and Survivors as of May 1, 2008

Age	Count	Annual Benefit	Age	Count	Annual Benefit	
<25	0	\$0	73	1	\$7,549	
25	0	\$0	74	0	\$0	
26	0	\$0	75	0	\$0	
27	0	\$0	76	1	\$12,110	
28	0	\$0	77	0	\$0	
29	0	\$0	78	0	\$0	
30	0	\$0	79	0	\$0	
31	0	\$0	80	0	\$0	
32	0	\$0	81	0	\$0	
33	0	\$0	82	0	\$0	
34	0	\$0	83	1	\$5,964	
35	0	\$0	84	0	\$0	
36	0	\$0	85	0	\$0	
37	0	\$0	86	0	\$0	
38	0	\$0	87	0	\$0	
39	0	\$0	88	0	\$0	
40	0	\$0	89	0	\$0	
41	0	\$0	90	0	\$0	
42	0	\$0	91	0	\$0	
43	0	\$0	92	0	\$0	
44	0	\$0	93	0	\$0	
45	0	\$0	94	0	\$0	
46	0	\$0	95	0	\$0	
47	0	\$0	96	0	\$0	
48	0	\$0	97	0	\$0	
49	0	\$0	98	0	\$0	
50	0	\$0	99	0	\$0	
51	1	\$9,910	100	0	\$0	
52	0	\$0	101	0		
53	0	\$0	102	0	\$0	
54	0	\$0	103	0	\$0	
55	1	\$8,984	104	0	\$0	
56	0	\$0	105	0		
57	0	\$0	106	0		
58	0	\$0	107	0		
59	3	\$40,588	108	0	\$0	
60	0	\$0	109	0	\$0	
61	2	\$22,091	110	0		
62	0	\$0	111	0		
63	1	\$14,307	112	0		
64	0	\$0 #0	113	0		
65	0	\$0 \$21,200	114	0		
66 (7	3	\$31,209	115	0		
67	0	\$0 \$0	116	0		
68	0	\$0 \$0	117	0		
69 70	0	\$0 \$5 508	118	0		
70 71	1	\$5,598 \$5,475	119	0		
71 72	1	\$5,475	120	0	\$0	
12	0	\$0	Totals	16	\$163,784	



APPENDIX A MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Disabled Members as of May 1, 2008



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions and Actuarial Cost Method

1. Demographic Assumptions

a. Mortality Rates

Healthy: 1994 Group Annuity Mortality Table (sample rates shown below)

Disabled: 1983 Railroad Retirement Board Disabled Life Mortality Table

b. Termination Rates before Retirement

		Ra	ite (%)		
	Mor	tality	Withdrawal*		
			General	Judges and	
Age	Male	Female	Employees**	Elected Officials	
20	0.05%	0.03%	10.74%	5.71%	
25	0.07%	0.03%	10.46%	5.14%	
30	0.08%	0.04%	10.09%	3.89%	
35	0.09%	0.05%	9.50%	2.47%	
40	0.11%	0.07%	8.46%	1.18%	
45	0.16%	0.10%	6.79%	0.28%	
50	0.26%	0.14%	4.35%		
55	0.44%	0.23%	1.55%		
60	0.80%	0.44%	0.15%		

*Withdrawal rates end upon first assumed retirement age.

**Select rates for first four years of service for General Employees:

Select Pe	eriod
Years of Service	Rate
0 - 1	20%
1 - 2	15%
2-3	12%
3-4	10%



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

c. Retirement Rates

Age	General Employees Age Plus Service Greater than or Equal to 80*	Other General Employees
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.

Elected Officials			
Age	Percent		
60	100%		
Judges			
65	100%		

d. Retirement Age for Inactive Vested Members

60

e. Unknown Data for Members

Same as those exhibited by Members with similar known characteristics. If not specified, Members are assumed to be male.



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

f. Percent Married

80% for males and 70% for females in active status

g. Age of Spouse

Females 4 years younger than males.

h. Net Investment Return

7.50% per annum, net of investment fees and administrative expenses.

i. Salary Increases

General En	nployees
Age	Rate (%)
Less than 25	6.00%
25 - 29	6.00
30 - 34	6.00
35 - 39	5.50
40 - 44	5.00
45 - 49	5.00
50 - 54	4.50
55 – 59	4.00
60 - 64	4.00
65 and up	4.00

Judges and Elected Officials: 6.00% per year for all ages.



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Actuarial Value of Assets

Asset values are gradually adjusted toward market value by adding 25% of the difference between the market value and expected actuarial asset value to the expected actuarial asset value. The expected actuarial asset value is the actuarial asset value at the beginning of the year plus contributions, less benefit payments, all with interest at the assumed net rate of investment return on an actuarial basis. If the actuarial value of assets is less than 85% or more than 110% of the market value, an adjustment is made to the actuarial value to bring the value within this corridor.

2. Actuarial Cost Method

Entry Age Normal Actuarial Cost Method. Entry age is the age at the time the participant commenced employment. Normal cost and actuarial liability are calculated on an individual basis and are allocated by salary, with normal cost determined as if the current benefit accrual rate had always been in effect.

3. Amortization of Unfunded Actuarial Liability/Surplus

20-year layered amortization method; level percent of pay. Under the layered approach, the May 1, 2008 unfunded actuarial liability will be written down over a 20-year period and all future changes to the unfunded actuarial liability will establish new 20-year amortization periods. Payroll is expected to increase 4.0% per year.

4. Changes Since Last Valuation

- a. <u>Asset Smoothing Method</u>: Prior method was preliminary asset value plus 20% of the difference between the market value and the preliminary asset value (actuarial asset value at the beginning of the year plus the sum of contributions, dividends and interest, less the sum of refunds, expenses and benefit payments). New method is 100% of expected returns plus 25% of actual returns above or below the expected return. The minimum asset corridor changed from 90% to 85%.
- b. <u>Amortization of UAL</u>: Changed from a 30-year rolling level dollar amortization method to a 20-year layered level percent of pay amortization method.
- c. Investment Return Assumption: Changed from 7.75% to 7.50%.



APPENDIX C SUMMARY OF PLAN PROVISIONS

1. Plan Year

May 1 through April 30.

2. Membership

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.

3. Credited Service

Total creditable service is defined as the sum of the number of years of membership service and prior service.

Membership Service:	Years and full calendar months of employment while a contributing member of this System.
Prior Service:	Years and full calendar months of employment preceding December 21, 1962, if continuous with membership service.

4. 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.			



APPENDIX C SUMMARY OF PLAN PROVISIONS

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.

5. Optional Retirement

6.

Age/Service Requirement:	60 and 10 years of creditable service, or the sum of age and service equals 80, if earlier.
Amount:	Same as normal retirement.
Early Retirement	
Age/Service Requirement:	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.
Amount:	Accrued benefit reduced by $\frac{1}{2}$ of 1% per month of age less than 60 or, if service is less than ten $\frac{1}{2}$ of 1% per month of age less than 65.

7. Disability Benefit

Disability benefits are provided through a separate long-term disability program, effective June 1, 1996.



APPENDIX C SUMMARY OF PLAN PROVISIONS

8. Vesting

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

9. Withdrawal (Refund) Benefit

Age Requirement:	None.
Service Requirement:	Less than five years of service.
Amount:	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.

10. Pre-Retirement Death Benefit

Service less than five years

Age Requirement:	None.
Service Requirement:	Less than five years.
Amount:	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.



APPENDIX C SUMMARY OF PLAN PROVISIONS

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

Age Requirement:	None.
Service Requirement:	Five or more years of service but less than 20 years.
Amount:	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:

Age Requirement:	None.
Service Requirement:	20 or more years of service.
Amount:	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.

11. Post-Retirement Death Benefit

Age Requirement:	None.
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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.



APPENDIX C SUMMARY OF PLAN PROVISIONS

12. 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.

13. 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.

14. 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^{st} in order to receive a COLA in the following year.

15. Contributions

a. Employee	-	4.00% of salary
	-	The City "picks up" these employee contributions.
b. City	-	9.50% 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.

16. Interest on Employee Contributions

5.25% per year, compounded.

17. Changes Since Last Valuation

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

