Wichita Employees' Retirement System

Actuarial Valuation Report as of December 31, 2004



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March 7, 2005

The Board of Trustees City of Wichita Employees' Retirement System City Hall, 12th Floor Wichita, KS 67202

Dear Members of the Board:

At your request, we have conducted an annual actuarial valuation of the City of Wichita Employees' Retirement System as of December 31, 2004. The results of the valuation are contained in the following report. There was no change in plan provisions or actuarial procedures from the prior valuation. The Board adopted a new set of actuarial assumptions as a result of the experience study conducted in 2004. The new assumptions are first reflected in this valuation.

In preparing our report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, plan provisions, member data and financial information. We have relied, without audit, on this data. If the underlying data or information is inaccurate or incomplete the results of our analysis may also be inaccurate or incomplete.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the System. Actuarial computations under GASB Statement No. 25 are for purposes of fulfilling financial accounting requirements. Determinations for purposes other than these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

We understand this report is considered a public document and, as such, may be subject to disclosure to third parties. However, Milliman does not intend to benefit, and assumes no liability to, any third party who receives the report in this fashion. Any distribution of the enclosed report must be in its entirety including this cover letter, unless prior written consent is obtained from Milliman. Inc.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional



Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We hereby certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are internally consistent, individually reasonable (taking into account the experience of the Plan and reasonable expectations of future experience) and which, in combination, offer our best estimate of anticipated experience under the Plan. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as outlined in Appendix C.

We would like to express our appreciation to Barbara Ketteman, Pension Manager, and to members of her staff, who gave substantial assistance in supplying the data on which this report is based.

We herewith submit the following report and look forward to discussing it with you.

Respectfully Submitted,

MILLIMAN, Inc.

I, Patrice A. Beckham, F.S.A. am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Patrice Beckhem. Patrice A. Beckham, F.S.A.

Consulting Actuary

I, Brent A. Banister, F.S.A. am a member of the American Academy of Actuaries and an Associate of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Brent A. Banister, F.S.A. Consulting Actuary

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SECTION 1

BOARD SUMMARY

OVERVIEW

This report presents the results of the December 31, 2004 actuarial valuation of the Wichita Employees' Retirement System (WER). The primary purposes of performing a valuation are to:

- determine the employer contribution rates required to fund the System on an actuarial basis.
- disclose asset and liability measures as of the valuation date,
- determine the experience of the System since the last valuation date, and
- analyze and report on trends in System contributions, assets, and liabilities over the past several years.

All new employees hired by the City participate in Plan 3 (a defined contribution plan) for the first seven years. After seven years, the member makes an election to either remain in the defined contribution plan or move to Plan 2. The members that elect to remain in the defined contribution plan are referred to as Plan 3b members. This report is intended to value assets and liabilities only for employees who are members of the defined benefit plans (Plan 1 and 2) or Plan 3 members who will have the right to elect such coverage in the future. Therefore, the member data, liability and asset values shown in this report exclude Plan 3b members.

There were no changes in the benefit provisions or methods from the last valuation. As a result of the experience study conducted during 2004, several assumptions were changed and are first reflected in this report. They include:

- Decrease in inflation assumption from 4.50% to 4.00%
- Decrease in general wage increase (inflation plus productivity) from 4.75% to 4.50%
- Change mortality assumption to the RP-2000 Generational Mortality Table.
- Change salary increase assumption from an age-based to a service-based assumption.
- Make minor adjustments to retirement rates for both Plans 1 and 2. Change assumed retirement age for Plan 1 inactive vested members from age 60 to age 55.
- Make minor adjustments to the termination of employment rates.
- Change assumption for choice of plan for Plan 3 members to all who reach 7 years of service elect Plan 2.
- Change forfeiture of vested benefit assumption to a service-based assumption.
- Change load for impact of unused sick leave from 5% to 4%.
- Change indexation of benefit amounts for inactive vested members from 5.5% to 4.5%.

The valuation results provide a "snapshot" view of the System's financial condition on December 31, 2004. The surplus of the actuarial value of assets over actuarial liability decreased by about \$10 million, due to experience during the year. A detailed analysis of the change in the unfunded actuarial liability from December 31, 2003 to December 31, 2004 is shown on page 4.



ASSETS

As of December 31, 2004, the System had total funds, when measured on a market value basis, of \$450.9 million, excluding Plan 3 assets for those members who have elected to stay in Plan 3. There was an increase of \$25.7 million from the December 31, 2003 figure of \$425.2 million. The components of the change in the market value of assets for the Retirement System (in millions) are set forth below:

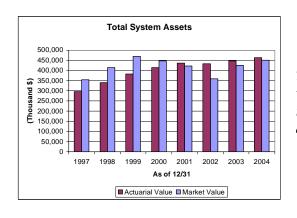
	Market Value (\$M)
Assets, December 31, 2003	\$425.2
City and Member Contributions	6.7
Benefit Payments, Refunds and Transfers	(20.7)
• Investment Income (net of expenses)	39.7
Assets, December 31, 2004	\$450.9

The market value of assets is not used directly in the calculation of the City's contribution rate. An asset valuation method is used to smooth the effect of market fluctuations. The actuarial value of assets is equal to the Expected Value (calculated using the actuarial assumed rate of 7.75%) plus 25% of the difference between the market and expected value. See Table 3 on page 11 for a detailed development of the actuarial value of assets. The change in the actuarial value of assets from December 31, 2003 to December 31, 2004 is shown below:

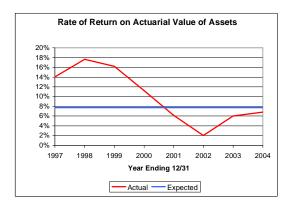
	Actuarial Value (\$M)
Assets, December 31, 2003	\$446.8
City and Member Contributions	6.7
Benefit Payments, Refunds and Transfers	(20.7)
• Investment Income (net of expenses)	30.2
Assets, December 31, 2004	\$463.0

The annualized dollar-weighted rate of return, measured on the actuarial value of assets, was 6.8% and, measured on the market value of assets, was approximately 9.5%. The actuarial value of assets as of December 31, 2004 was \$463.0 million, which represents an actuarial loss of about \$4 million.





The actuarial value of assets has exceeded the market value for the last four years. However, due to strong returns in 2003 and 2004, the difference between the actuarial and market value of assets has decreased.



In general, the rate of return on the actuarial value of assets has exceeded the assumed rate of 7.75%, resulting in experience gains for the Retirement System. The impact of unfavorable market performance in prior years continues to be recognized in the rate of return on the actuarial value of assets.

Due to the asset smoothing method, there is about \$12 million of deferred investment loss that has not been recognized. Absent investment returns above the 7.75% assumed rate of return in the next few years to offset this unrecognized investment loss, it will gradually be reflected in the actuarial value of assets. We estimate it would require a return of approximately 11% in 2005 to eliminate the unrecognized losses. As the deferred loss flows through the asset smoothing method, the valuation will show an actuarial loss. This will reduce the "surplus" assets, absent favorable liability experience to offset it.

LIABILITIES

The actuarial liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial liability (UAL), or (surplus) if the asset value exceeds the actuarial liability. The unfunded actuarial liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial liability. Benefit improvements, experience gains and losses, and changes in actuarial assumptions and procedures will also impact the total actuarial liability and the unfunded portion thereof.

The Actuarial Liability and Unfunded Actuarial Liability for the System is:

Actuarial Liability	\$413,159,236
Actuarial Value of Assets	462,994,047
Unfunded Actuarial Liability	(49,834,811)



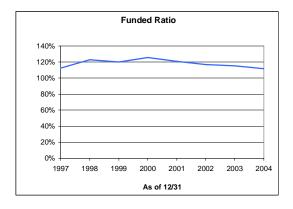
Between December 31, 2003 and December 31, 2004 the change in the unfunded actuarial liability for the System was as follows (in millions):

	\$(M)
UAL, December 31, 2003	(59.8)
+ Normal cost for year	8.9
+ Expected investment return for year	(3.9)
- Actual contributions (member + city)	6.7
- Interest on contribution	0.3
= Expected Unfunded Actuarial Liability, December 31, 2004	(61.8)
+ Change from amendments	0
+ Change from assumption changes	4.4
= Expected UAL after changes	(57.4)
Actual UAL, December 31, 2004	(49.8)
Experience gain/(loss) (Expected UAL – Actual UAL)	(7.6)

The experience loss for the 2004 plan year of \$7.6 million reflects the combined impact of an actuarial loss of about \$4 million on System assets (actuarial value), and a loss of about \$3.6 million on System liabilities.

Analysis of the unfunded actuarial liability strictly as a dollar amount can be misleading. Another way to evaluate the unfunded actuarial liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial liability. This information for recent years is shown below (in millions). Historical information is shown in the graph following the chart.

	12/31/00	12/31/01	12/31/02	12/31/03	12/31/04
Actuarial Liability (\$M)	\$329.4	\$349.6	\$370.4	\$387.0	\$413.2
Actuarial Value of Assets (\$M)	414.6	428.2	433.4	446.8	463.0
Funded Ratio (Assets/Liability)	125.9%	121.2%	117.0%	115.4%	112.1%



The System continues to have a funded ratio above 100%. However, this measurement is based on the actuarial value rather than market value. On a market value basis, the funded ratio is lower but still above 100%.



As mentioned earlier in this report, there is currently about \$12 million of deferred investment loss which may be reflected, in part or in total, in the actuarial value of assets over the next few years. If these deferred investment losses are recognized in the future, the surplus will decline by that amount. The surplus also declines by the amount of surplus amortized in the current plan year (used to reduce the contribution). The duration of the System's surplus funded status will be heavily dependent on investment returns in the next few years.

CONTRIBUTION RATES

Generally, contributions to the System consist of:

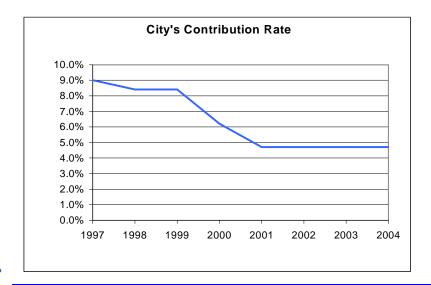
- a "normal cost" for the portion of projected liabilities allocated to service of members during the year following the valuation date, by the actuarial cost method, and
- an "unfunded actuarial liability or (surplus) contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

Contribution rates are computed with the objective of developing costs that are level as a percentage of covered payroll. The contribution rate for fiscal year 2006 is computed based on the December 31, 2004 actuarial valuation.

As of December 31, 2004, the actuarial value of assets exceeds the actuarial liability and a portion of the surplus is used to reduce the required employer contribution. Amortization of the surplus of actuarial assets over the actuarial liability over a 20 year rolling period results in a temporary amortization credit. A range of contributions is developed based on (1) contributing the full normal cost rate or (2) applying the amortization credit (which reduces the amount of surplus). This valuation indicates the range of City contributions to be 3.5% to 8.2%.

The current surplus is based on the actuarial value of assets, not market value. There is currently a difference of about \$12 million between the actuarial and market value of assets. Even if the 7.75% assumed rate of return is met in 2005 and later years, the surplus will be reduced as the deferred investment losses are recognized. Absent favorable experience, contribution rates in future years are expected to increase as surplus assets are reduced.

A summary of the City's historical contribution rate for the system is shown below:





COMMENTS

The System experienced a return on the market value of assets of about 22% for calendar year 2003 and over 9% for calendar year 2004. Despite the strong returns, the actuarial value of assets remains about 3% higher than market value. However, this is a marked improvement over the December 31, 2002 results when the actuarial value was 20% greater than market value. Due to the asset smoothing method, there is currently a difference of about \$12 million between the market and actuarial value of assets. Without investment returns above the assumed rate of 7.75% in the next few years, the deferred investment loss of \$12 million will eventually be recognized in the actuarial value of assets. As the deferred loss flows into the calculation of the actuarial value of assets, the amount of surplus will be reduced and the contribution range will narrow and become closer to the employer normal cost rate of 8.2%.

We conclude this Board Summary with the following exhibit which compares the principal results of the current and prior actuarial valuations.



SUMMARY OF PRINCIPAL RESULTS

1. PARTICIPANT DATA	12/31/2004 Valuation		12/31/2003 Valuation		% Change		
Number of:							
Active Members Plan 1 Plan 2 Plan 3 (excluding Plan 3b) Total	_	127 860 802 1,789		147 828 824 1,799		(13.6) 3.9 (2.7) (0.6)	% % % %
DROP Members Plan 1 Plan 2 Total	_	42 17 59		37 11 48		13.5 54.5 22.9	% % %
Retired Members and Beneficiaries		1,062		1,061		0.1	%
Inactive Members		120		115		4.3	%
Total Members		3,030		3,023		0.2	%
Annual Valuation Salaries of Active Mem- Plan 1 Plan 2 Plan 3 Total Annual Retirement Payments for Retired Members and Beneficiaries 2. ASSETS AND LIABILITIES	s \$	8,057,841 36,682,878 25,757,963 70,498,682 21,301,439	\$ _	8,602,943 33,558,418 25,413,677 67,575,038 20,180,421		(6.3) 9.3 1.4 4.3	% % % %
Total Actuarial Liability	\$	413,159,236	\$	387,036,905		6.7	%
Market Value of Assets	4	450,945,259		425,236,112		6.0	
Assets for Valuation Purposes		462,994,047		446,794,052		3.6	%
Unfunded Actuarial Liability/(Surplus)		(49,834,811)		(59,757,147)		(16.6)	%
3. EMPLOYER CONTRIBUTION RATES	S A S	S A PERCENT	r OI	F PAVROLL			
Normal Cost Member Financed Employer Normal Cost Amortization of Unfunded Actuarial Range of Employer Contribution Rates Full Normal Cost Rate With Amortization Credit		13.1 4.9 8.2 (4.7) 8.2 3.5	% % % %	13.8 4.9 8.9 (5.8) 8.9 3.1	% % % %	(5.1) 0.0 (7.9) (19.0) (7.9) 12.9	% % % %
/ WILL BAN SLORE, FIND							,



SECTION 2

SCOPE OF THE REPORT

This report presents the actuarial valuation of the City of Wichita Employees' System (WER) as of December 31, 2004. This valuation was prepared at the request of the System's Board of Trustees. The report is based on plan provisions that are unchanged from last year. As a result of the experience study, several assumptions were changed.

Please pay particular attention to our cover letter, where the guidelines employed in the preparation of this report are outlined. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings are based. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the System. Sections 4 and 5 describe how the obligations of the System are to be met under the actuarial cost method in use. Section 6 includes the information required for the financial reporting standards established by the Governmental Accounting Standards Board (GASB).

This report includes several appendices:

- · Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on the valuation date.
- Appendix C A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- · Appendix D A glossary of actuarial terms.



SECTION 3

ASSETS

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is December 31, 2004. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process then leads to a method of determining the contributions needed by members and the employer in the future to balance the System assets and liabilities.

Market Value of Assets

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, market values of assets provide a basis for measuring investment performance from time to time. At December 31, 2004 the market value of assets for the System excluding Plan 3 assets for members who have elected to remain in Plan 3 (Plan 3b), was \$451 million. Table 1 is a comparison, at market values, of System assets as of December 31, 2003, and December 31, 2004, in total and by investment category. Table 2 summarizes the change in the market value of assets from December 31, 2003 to December 31, 2004.

Actuarial Value of Assets

Neither the market value of assets, representing a "cash-out" value of System assets, nor the book values of assets, representing the cost of investments, may be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. This methodology, first adopted for the 12/31/02 valuation, smoothes market experience by recognizing 25% of the difference between expected actuarial value and market value. Table 3 shows the development of the actuarial value of assets (AVA) as of December 31, 2004.

For most of the recent past, the actuarial value has been lower than the market value of assets. However, due to the negative rate of return on the market value of assets from 2000 to 2002, the actuarial value of assets has been greater than the market value for the past four years. Currently there is about a \$12 million difference between the actuarial and market value of assets. Absent rates of return above the assumed rate of 7.75% in the short term, the unrecognized losses (difference between the market and actuarial value) will flow into the actuarial value of assets and create an actuarial loss in future valuations.



TABLE 1
WICHITA EMPLOYEES' RETIREMENT SYSTEM
ANALYSIS OF NET ASSETS AT MARKET VALUE

		As of December 31, 2004				As of December 32			
		Amount (\$ Millions)	% of <u>Total</u>		!	Amount (\$ Millions)	% of <u>Total</u>		
Cash & Equivalents	\$	11.9	2.7	%	\$	8.5	2.0	%	
Government Securities		16.8	3.8			13.0	3.1		
Corporate Debt		33.1	7.5			35.3	8.5		
Mortgage Backed Securities		22.2	5.0			19.7	4.7		
Pooled Funds		142.0	32.3			150.7	36.2		
Domestic Equity		160.3	36.4			147.0	35.4		
International Equity		62.5	14.2			43.1	10.4		
Real Estate		11.9	2.7			0.0	0.0		
Receivables		6.6	1.5			1.8	0.4		
Liabilities	-	(27.2)	(6.1)		_	(3.3)	(0.7)		
Total Plans 1 and 2	\$	440.1	100.0	%	\$	415.8	100.0	%	
Plan 3 Assets									
Members Electing to Stay in Plan 3	\$	0.8			\$	0.6			
Other Plan 3 Members	-	10.8			_	9.4			
Total		11.6				10.0			
Net Assets (Plans 1, 2, and 3)	\$	451.7			\$	425.8			



TABLE 2 WICHITA EMPLOYEES' RETIREMENT SYSTEM

SUMMARY OF CHANGES IN NET ASSETS DURING YEAR ENDED DECEMBER 31, 2004

(Market Value)

	_	Plans 1 & 2	_	Plan 3*	. <u>-</u>	Total
1. Market Value of Assets as of December 31, 2003	\$	415,827,707	\$	9,408,405	\$	425,236,112
2. Contributions:						
a. Members	\$	2,279,422	\$	1,182,148	\$	3,461,570
b. City		2,084,558		1,182,148		3,266,706
c. Other		0		0		0
d. Transfers		1,528,790		(1,607,367)		(78,577)
e. Total $[2(a) + 2(b) + 2(c) + 2(d)]$	\$	5,892,770	\$	756,929	\$	6,649,699
3. Investment Income						
a. Interest and Dividends	\$	7,718,781	\$	197,347	\$	7,916,128
b. Net Appreciation in Fair Value		32,815,383		897,832		33,713,215
c. Commission Recapture		74,085		1,579		75,664
d. Securities Lending Income		49,211		1,183		50,394
e. Total $[3(a) + 3(b) + 3(c) + 3(d)]$	\$	40,657,460	\$	1,097,941	\$	41,755,401
4. Expenditures						
a. Refunds of Member Contributionsb. Benefits Paid:	\$	387,089	\$	383,684	\$	770,773
(1) Pension and death benefits		18,882,250		0		18,882,250
(2) DROP payments		879,053		0		879,053
c. Administrative Expenses		271,128		31,698		302,826
d. Investment Expenses		1,816,989		44,062		1,861,051
e. Total $[4(a) + 4(b) + 4(c) + 4(d)]$	\$	22,236,509	\$	459,444	\$	22,695,953
5. Net Change $[2(e) + 3(e) - 4(e)]$		24,313,721		1,395,426		25,709,147
6. Market Value of Assets as of December 31, 2004 (1) + (5)	\$	440,141,428	\$	10,803,831	\$	450,945,259

^{*} Excludes assets for Plan 3b members. The December 31, 2004 value of the assets for this group was \$783,347.



TABLE 3 WICHITA EMPLOYEES' RETIREMENT SYSTEM

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

As of December 31, 2004

		<u>Plans 1 & 2</u>		Plan 3*	<u>Total</u>
1. Actuarial Value of Assets as of December 31, 2003	\$	436,934,360	\$	9,859,692	\$ 446,794,052
2. Actual Contribution/Disbursements					
 a. Contributions b. Transfers c. Benefit Payments and Refunds d. Net (a + b + c) 	_	4,363,980 1,528,790 (20,148,392) (14,255,622)	-	2,364,296 (1,607,367) (383,684) 373,245	6,728,276 (78,577) (20,532,076) (13,882,377)
3. Expected Value of Assets as of December 31, 2004 [(1) x 1.0775] + [(2d) x (1.0775) ^{.5}]		455,999,053		11,011,257	467,010,309
4. Market Value of Assets as of December 31, 2004		440,141,428		10,803,831	450,945,259
5. Difference Between Market and Expected Values (4) - (3)		(15,857,625)		(207,426)	(16,065,050)
6. Actuarial Value of Assets as of December 31, 2004 (3) + [(5) x 25%]		452,034,647		10,959,400	462,994,047
* Excludes Plan 3b.					
Actuarial Value of Assets/Market Value of Assets (6) / (4)		102.70%		101.44%	102.67%
Market Value less Actuarial Value of Assets	\$	(11,893,219)	\$	(155,569)	\$ (12,048,788)



SECTION 4

SYSTEM LIABILITIES

In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the System as of the valuation date, December 31, 2004. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 4 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries.

The liabilities summarized in Table 4 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes the measurement of both benefits already earned and future benefits to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and for the lives of the surviving beneficiaries.

All liabilities reflect the benefit provisions in place as of December 31, 2004.

Actuarial Liability

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to "breakdown" the present value of future benefits into two components:

- (1) that which is attributable to the past and
- (2) that which is attributable to the future.

Actuarial terminology calls the part attributable to the past the "past service liability" or the "actuarial liability". The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the "normal cost". Table 5 contains the calculation of actuarial liability for the System. The Entry Age Normal actuarial cost method is used to develop the actuarial liability.



TABLE 4
WICHITA EMPLOYEES' RETIREMENT SYSTEM

PRESENT VALUE OF FUTURE BENEFITS (PVFB) AS OF DECEMBER 31, 2004

		Plan 1	Plan 2	Plan 3	<u>Total</u>
1. Active	e employees				
a.	Retirement Benefit	\$ 44,159,477	\$ 124,458,373	\$ 42,898,038	\$ 211,515,888
b.	Pre-Retirement Death Benefit	352,498	1,901,996	647,160	2,901,654
c.	Withdrawal Benefit	2,554,518	12,779,959	6,933,300	22,267,777
d.	Disability Benefit	1,141,921	5,429,080	2,302,974	8,873,975
e.	Total	\$ 48,208,414	\$ 144,569,408	\$ 52,781,472	\$ 245,559,294
2. DRO	P Members				
a.	DROP Account Balance	\$ 2,894,346	\$ 510,081	\$ 0	\$ 3,404,427
b.	Monthly Retirement Benefit	 23,274,478	 2,694,348	 0	 25,968,826
c.	Total	\$ 26,168,824	\$ 3,204,429	\$ 0	\$ 29,373,253
3. Inacti	ve Vested Members	\$ 2,581,400	\$ 14,303,887	\$ 0	\$ 16,885,287
4. Inacti	ve Nonvested Members	\$ 0	\$ 0	\$ 0	\$ 0
5. In Pa	y Members				
a.	Disabled Members	\$ 2,209,755	\$ 1,037,019	\$ 0	\$ 3,246,774
b.	Retirees	163,613,074	17,608,988	0	181,222,062
c.	Beneficiaries	 15,447,685	 1,716,868	 0	 17,164,553
d.	Total	\$ 181,270,514	\$ 20,362,875	\$ 0	\$ 201,633,389
6. Total	PVFB				
(1e	(2c) + (2c) + (3) + (4) + (5d)	\$ 258,229,152	\$ 182,440,599	\$ 52,781,472	\$ 493,451,223



TABLE 5
WICHITA EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL LIABILITY AS OF DECEMBER 31, 2004

	<u>Plan 1</u>		Plan 2	Plan 3		Total
1. Active employees						
a. Present Value of Future Benefits	\$ 48,208,414	\$	144,569,408	\$ 52,781,472	\$	245,559,294
b. Present Value of Future Normal Costs	6,198,638		38,599,615	35,649,303		80,447,556
c. Actuarial Liability (1a) - (1b)	 42,009,776	_	105,969,793	 17,132,169	-	165,111,738
2. DROP Members	\$ 26,168,824	\$	3,204,429	\$ 0	\$	29,373,253
3. Inactive Vested Members	\$ 2,581,400	\$	14,303,887	\$ 0	\$	16,885,287
4. Inactive Nonvested Members	\$ 0	\$	0	\$ 0	\$	0
5. In Pay Members						
a. Disabled Members	\$ 2,209,755	\$	1,037,019	\$ 0	\$	3,246,774
b. Retirees	163,613,074		17,608,988	0		181,222,062
c. Beneficiaries	15,447,685		1,716,868	0		17,164,553
d. Total	\$ 181,270,514	\$	20,362,875	\$ 0	\$	201,633,389
6. Reserve for Plan 3 Members	\$ 0	\$	0	\$ 155,569	\$	155,569
7. Total Actuarial Liability						
(1c) + (2) + (3) + (4) + (5d) + (6)	\$ 252,030,514	\$	143,840,984	\$ 17,287,738	\$	413,159,236



TABLE 6 WICHITA EMPLOYEES' RETIREMENT SYSTEM

PRESENT VALUE OF ACCRUED BENEFITS AS OF DECEMBER 31, 2004

The present value of accrued benefits for the System reflects the benefits earned based on service, earnings, and the System provisions as of the valuation date. It also reflects the on-going nature of the System by using the same actuarial assumptions as are used for funding purposes. Further, although the System provides that the accrued benefits of deferred vested members are indexed until benefits begin, the present value of accrued benefit liability does not reflect this provision until the assumed termination of employment.

	<u>Plan 1</u>	Plan 2	Plan 3	<u>Total</u>
1. Active Members	\$ 31,078,511	\$ 61,056,275	\$ 10,803,831	\$ 102,938,617
2. DROP Members	\$ 26,168,824	\$ 3,204,429	\$ 0	\$ 29,373,253
3. Inactive Vested Members	\$ 2,581,400	\$ 14,303,887	\$ 0	\$ 16,885,287
4. In Pay Members				
a. Disabled Members	\$ 2,209,755	\$ 1,037,019	\$ 0	\$ 3,246,774
b. Retirees	163,613,074	17,608,988	0	181,222,062
c. Beneficiaries	15,447,685	1,716,868	0	17,164,553
d. Total	\$ 181,270,514	\$ 20,362,875	\$ 0	\$ 201,633,389
5. Total	\$ 241,099,249	\$ 98,927,466	\$ 10,803,831	\$ 350,830,546
6. Market Value of Assets*	\$ 312,086,560	\$ 128,054,868	\$ 10,803,831	\$ 450,945,259
7. Funded Ratio (6)/(5)	129%	129%	100%	129%

^{*} Split of assets between Plan 1 and Plan 2 is in proportion to the liabilities for illustration only.



SECTION 5

EMPLOYER CONTRIBUTIONS

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 3 and 4 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a completely closed fund, where no further contributions are anticipated. In an active system, there will almost always be a difference between the actuarial value of assets and total liabilities. This deficiency has to be made up by future contributions and investment returns. An actuarial valuation sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method the contributions required to meet the difference between current assets and current liabilities are allocated each year between two elements: (1) the normal cost rate and (2) the unfunded actuarial liability contribution rate.

The term "fully funded" is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial liability (UAL) exists. Likewise, when the actuarial value of assets is greater than the actuarial liability, a surplus exists.

Description of Contribution Rate Components

The individual Entry Age Normal (EAN) actuarial cost method is used for the valuation. Under that method, the normal cost for each year from entry age to assumed exit age is a constant percentage of the member's year by year projected compensation. The portion of the present value of future benefits not provided by the present value of future normal costs is the actuarial liability. The unfunded actuarial liability/(surplus) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. The unfunded actuarial liability is calculated each year and reflects experience gains/losses.

In general, contributions are computed in accordance with a level percent-of-payroll funding objective. The contribution rates based on this December 31, 2004 actuarial valuation will be used to determine employer contribution rates to the City of Wichita Employees' Retirement System for fiscal year 2006. In this context, the term "contribution rate" means the percentage, which is applied to a particular active member payroll to determine the actual employer contribution amount (i.e., in dollars) for the group.

As of December 31, 2004, the actuarial liability was fully covered by the valuation assets (in fact, a surplus exists). The City's funding policy is to amortize the surplus over a rolling 20 year period. The amortization of the existing surplus results in a temporary amortization credit, thereby reducing the employer contribution.



Contribution Rate Summary

In Table 7 the amortization credit related to the surplus assets, as of December 31, 2004, is developed. Table 8 develops the normal cost rate for the System. The derivation of the range of contribution rates for the City is shown in Table 9. Table 10 shows the historical summary of the City's contribution rates. Table 11 develops the experience gains/(loss) for the year ended December 31, 2004.

The rates shown in this report, which are based on the actuarial assumptions and cost methods described in Appendix C.



WICHITA EMPLOYEES' RETIREMENT SYSTEM

DECEMBER 31, 2004 VALUATION

DERIVATION OF UNFUNDED ACTUARIAL LIABILITY CONTRIBUTION RATE

1. Actuarial Accrued Liability	\$ 413,159,236
2. Actuarial Value of Assets	\$ 462,994,047
3. Unfunded Actuarial Liability/(Surplus Assets)	\$ (49,834,811)
4. Payment (Adjusted to Mid-Year) to Amortize Unfunded Actuarial Liability/(Surplus) Over 20 Years *	\$ (3,406,587)
5. Total Projected Payroll for the Year	\$ 72,067,448
6. Amortization Payment as a Percent of Payroll	(4.7) %

^{*} The City has elected to amortize the surplus as a level percent of payroll over a rolling 20 year period.



WICHITA EMPLOYEES' RETIREMENT SYSTEM

DERIVATION OF NORMAL COST RATE

Normal Cost at December 31, 2004	
Service pensions	\$ 6,612,818
Disability pensions	358,544
Survivor pensions	116,098
Termination benefits	
- Deferred service pensions	939,957
- Return of member contributions	695,734
Total Normal Cost	\$ 8,723,151
Normal Cost Adjusted to Mid-Year	\$ 9,054,866
Projected Payroll for Members Under Certain Retirement Age	\$ 68,916,814
Total Normal Cost Rate for Year	13.1%



WICHITA EMPLOYEES' RETIREMENT SYSTEM EMPLOYER CONTRIBUTION RATES FOR FISCAL YEAR COMMENCING IN 2006

	Range of Contribution				
	Requir	rements as '	% of Payroll		
Normal Cost					
Service pensions	10.0	%	10.0	%	
Disability pensions	0.5	%	0.5	%	
Survivor pensions	0.2	%	0.2	%	
Termination benefits					
- Deferred service pensions	1.4	%	1.4	%	
- Return of member contributions	1.0	%	1.0	%	
Total Normal Cost	13.1	%	13.1	%	
Unfunded Actuarial Accrued Liability					
Retired members and beneficiaries (1)	0.0	%	0.0	%	
Active and former members (2)	0.0	%	(4.7)	%	
Total UAAL Contribution	0.0	%	(4.7)	%	
Total Contribution Requirement					
Member Financed Portion (3)	4.9	%	4.9	%	
City Financed Portion	8.2	%	3.5	%	
Total	13.1	%	8.4	%	

- (1) Actuarial value of assets exceeds the actuarial liability as of December 31, 2004.
- (2) The excess of the actuarial value of assets over actuarial liability, financed as a level percent of active member payroll over a rolling 20 year period, produces a temporary amortization credit of 4.7% of payroll.
- (3) The weighted average of member contribution rates: 6.4% for Plan 1, 4.7% for Plan 2, and 4.7% for Plan 3.



WICHITA EMPLOYEES' RETIREMENT SYSTEM

HISTORICAL SUMMARY OF CITY CONTRIBUTION RATES

Contribution rates are computed in accordance with a level percent of payroll funding objective. As of December 31, 2004, actuarial liabilities continue to be fully covered by valuation assets. The excess is amortized over a rolling 20 year period, resulting in an amortization credit.

City Contributions as Percents of Active Member Pensionable Payroll

		1 Chistoriable 1 ayron			
Valuation	Fiscal	Funding	Amortization		
Date	Year	Objective	Credit		
11/30/90	1992	11.0%	-%		
11/30/91	1993	10.0	-		
11/30/92	1994	9.5	-		
11/30/93	1995	9.5	-		
11/30/94	1996	9.4	-		
12/31/95	1997	9.0	-		
12/31/96	1998	6.9 - 8.4	(1.5)		
12/31/97	1999	4.6 - 8.5	(3.9)		
12/31/98	2000	0.8 - 8.3	(7.5)		
12/31/99	2001	2.5 - 9.8	(7.3)		
12/31/00	2002	0.5 - 9.7	(9.2)		
12/31/01	2003	1.9 - 9.4	(7.5)		
12/31/02	2004	2.7 - 8.8	(6.1)		
12/31/03	2005	3.1 - 8.9	(5.8)		
12/31/04	2006	3.5 - 8.2	(4.7)		



WICHITA EMPLOYEES' RETIREMENT SYSTEM

DERIVATION OF SYSTEM EXPERIENCE GAIN/(LOSS)

		(\$M) Year Ended <u>12/31/04</u>
(1)	UAL* at start of year	(59.8)
(2) +	Normal cost for year	8.9
(3) +	Assumed investment return on (1) & (2)	(3.9)
(4) -	Actual contributions (member + City)	6.7
(5) -	Assumed investment return on (4)	0.3
(6) =	Expected UAL at end of year	(61.8)
(7) +	Increase (decr.) from amendments	0
(8) +	Increase (decr.) from assumption changes	4.4
(9) =	Expected UAL after changes	(57.4)
(10) =	Actual UAL at year end	(49.8)
(11) =	Experience gain (loss) (9) – (10)	(7.6)**
(12) =	Percent of beginning of year AL	2.0%

^{*} Unfunded Actuarial Liability



^{**} Of this amount, \$4 million of the experience loss is due to experience on the actuarial value of assets.

SECTION 6

ACCOUNTING INFORMATION

The actuarial accrued liability is a measure intended to help the reader assess (i) a retirement system's funded status on a going concern basis, and (ii) progress being made toward accumulating the assets needed to pay benefits as due. Allocation of the actuarial present value of projected benefits between past and future service was based on service using the individual entry-age actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the System's level percent of payroll annual required contribution between entry-age and assumed exit age. Entry-age was established by subtracting credited service from current age on the valuation date.

The preceding methods comply with the financial reporting standards established by the Governmental Accounting Standards Board.

The entry-age actuarial liability was determined as part of an actuarial valuation of the plan as of December 31, 2004. Significant actuarial assumptions used in determining the entry-age actuarial liability include:

- (a) a rate of return on the investment of present and future assets of 7.75% per year compounded annually,
- (b) projected salary increases of 4.50% per year compounded annually, (4.0% attributable to inflation, and 0.50% attributable to productivity),
- (c) additional projected salary increases of 0.0% to 5.5% per year attributable to seniority/merit, and
- (d) the assumption that benefits will increase 3.0% per year of retirement (non-compounded) for Plan 1 and 2.0% per year of retirement (non-compounded) for Plan 2.

Actuarial Liability:

Active members	\$165,267,307
DROP members	29,373,253
Retired members and beneficiaries currently receiving benefits	201,633,389
Vested terminated members not yet receiving benefits	16,885,287
Total Actuarial Liability	413,159,236
Actuarial Value of Assets (market value was \$450,945,259)	462,994,047
Assets in Excess of Actuarial Liability	49,834,811

During the year ended December 31, 2004, the Plan experienced a net change of \$26.1 million in the actuarial liability.



TABLE 12
WICHITA EMPLOYEES' RETIREMENT SYSTEM

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b)–(a)	Funded Ratio (a)/(b)	Active Member Covered Payroll (c)	Unfunded AAL as a Percentage of Active Member Covered Payroll ((b-a)/c)
11/30/90	\$143,758	\$178,659	\$ 34,901	80.5%	\$ 44,509	78.4%
11/30/91	163,047	190,748	27,701	85.5	47,017	58.9
11/30/92	182,186	204,730	22,544	89.0	49,552	45.5
11/30/93	200,853	218,603	17,750	91.9	52,093	34.1
11/30/94	215,385	230,217	14,832	93.6	52,169	28.4
12/31/95	238,441	242,354	3,913	98.4	54,039	7.2
12/31/96	266,404	252,968	(13,436)	105.3	53,534	(25.1)
12/31/97	296,705	263,573	(33,132)	112.6	54,346	(61.0)
12/31/98	340,417	276,980	(63,437)	122.9	56,093	(113.1)
12/31/99*	383,338	319,289	(64,049)	120.1	57,562	(111.3)
	·		, , ,			, ,
12/31/00	414,643	329,390	(85,253)	125.9	61,112	(139.5)
12/31/01	428,204	353,158	(75,046)	121.2	65,347	(114.8)
12/31/02	433,366**	370,399	(62,967)	117.0	68,117	(92.4)
12/31/03	446,794**	387,037	(59,757)	115.4	69,161	(86.4)
12/31/04*	462,994**	413,159	(49,835)	112.1	72,154	(69.1)

Dollar amounts are in thousands.

Analysis of the dollar amounts of actuarial value of assets, actuarial accrued liability, or actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the System's funded status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan's funding. The unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan's funding.



^{*}After changes in benefits and/or actuarial assumptions and/or actuarial cost methods.

^{**}Includes all members except Plan 3b.

TABLE 13
WICHITA EMPLOYEES' RETIREMENT SYSTEM
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year	Actuarial Valuation Date	Annual Required Contribution	Percent Contribution
1995	11/30/93	5,688,326	100.0
1996	11/30/94	4,751,698	100.0
1997	12/31/95	4,459,654	100.0
1998	12/31/96	4,140,163	100.0
1999	12/31/97	4,134,826	100.0
2000	12/31/98	2,751,084	100.0
2001	12/31/99	1,843,213	100.0
2002	12/31/00	3,137,912*	100.0
2003	12/31/01	3,189,513*	100.0
2004	12/31/02	3,266,706*	100.0

^{*}Reflects contributions to Plans 1, 2 and 3. Excludes contributions for Plan 3b members.

Notes to Required Supplementary Information Summary of Actuarial Methods and Assumptions

Valuation Date December 31, 2004

Actuarial Cost Method Individual Entry Age Normal

Amortization Method Level percent of payroll, open

Remaining Amortization Period 20 years

Asset Valuation Method Expected + 25% of (Market – Expected Values)

Actuarial Assumptions:

Investment Rate of Return* 7.75%
Projected Salary Increases* 4.50% - 10.00%

* Includes Inflation at 4.00%

Cost-of-Living Adjustments 3.00% Non-compounded (Plan 1)

2.00% Non-compounded (Plan 2)



TABLE 14
WICHITA EMPLOYEES' RETIREMENT SYSTEM
SOLVENCY TEST

Aggregate Actuarial Liability For

Valuation	(1) (2) Active Retirants Member and		(3) Active Members (Employer	Reported Valuation	Portion of Actuarial Liabilities Covered by Reported Assets			
Date	Contributions	Beneficiaries*	Financed Portion)	<u>Assets</u>	(1)	(2)	(3)	
11/30/94	25,426,998	111,681,938	93,108,469	215,385,559	100.0	100.0	84.1	
12/31/95	28,549,082	123,759,638	90,046,029	238,441,351	100.0	100.0	95.7	
12/31/96	28,996,944	133,093,326	90,877,809	266,403,759	100.0	100.0	114.8	
12/31/97	29,881,922	141,922,445	91,768,436	296,704,769	100.0	100.0	136.1	
12/31/98	29,694,389	156,764,183	90,521,375	340,417,265	100.0	100.0	170.1	
12/31/99	32,017,094	169,602,958	117,669,351	383,337,991	100.0	100.0	154.4	
12/31/00	34,189,528	177,095,907	118,104,491	414,642,694	100.0	100.0	172.2	
12/31/01	33,516,616	179,374,487	140,266,410	428,204,828	100.0	100.0	153.5	
12/31/02	38,291,472	192,615,216	139,492,410	433,365,890	100.0	100.0	145.1	
12/31/03	39,847,119	205,799,341	141,390,445	446,794,052	100.0	100.0	142.3	
12/31/04	41,852,724	218,518,676	152,632,267	462,994,047	100.0	100.0	132.8	

During the twelve months ended December 31, 2004, the City of Wichita Employees' Retirement System generated a net experience loss of \$7.6 million dollars. The amount is 2.0% of the actuarial liability at the beginning of the year.



^{*}Includes vested terminated members

SUMMARY OF MEMBERSHIP DATA

MEMBER DATA RECONCILIATION

December 31, 2003 to December 31, 2004

The number of members included in the valuation, as summarized in the table below, is in accordance with the data submitted by the System for members as of the valuation date.

	Active Participants		DROP Participants		Retirees & Beneficiaries		Terminated Vested		Total	
	Plan 1	Plan 2	Plan 3	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	
Members as of 12/31/03	147	828	824	37	11	894	167	17	98	3,023
New Members	0	+7	+136	0	0	+14	+6	0	0	+163
Transfers	0	+70	-77	0	0	0	0	0	0	-7
Terminations				0	0					
Refunded	0	-12	-80	0	0	0	0	0	-3	-95
Deferred Vested	0	-10	0	0	0	0	0	0	+10	0
Retirements										
Service	-7	-13	0	-8	-3	+15	+18	0	-2	0
Disability	0	0	0	0	0	0	0	0	0	0
DROP	-13	-9	0	+13	+9	0	0	0	0	0
Deaths				0	0					
Cashed Out	0	0	-1	0	0	0	0	0	0	-1
With Beneficiary	0	-1	0	0	0	-14	-5	0	0	-20
Without Beneficiary	0	0	0	0	0	-29	-5	0	0	-34
Data Adjustments	0	0	0	0	0	0	+1	0	0	+1
Members as of 12/31/04	127	860	802	42	17	880	182	17	103	3,030

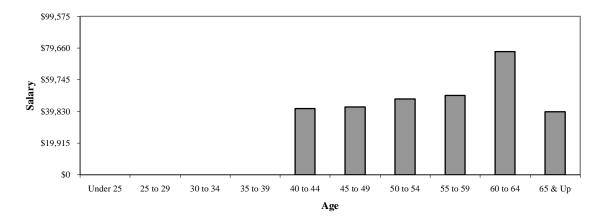


WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF ACTIVE MEMBERS

as of December 31, 2004

Plan 1

			Salaries						
Age	Male	Female	Total		Male		Female		Total
Under 25	0	0	0	\$	-	\$	-	\$	_
25 to 29	0	0	0		-	·	-		-
30 to 34	0	0	0		-		_		_
35 to 39	0	0	0		-		-		-
40 to 44	6	1	7		253,017		38,647		291,664
45 to 49	36	17	53		1,531,137		734,467		2,265,604
50 to 54	30	15	45		1,486,470		663,052		2,149,522
55 to 59	12	4	16		624,936		172,143		797,079
60 to 64	3	1	4		267,213		42,480		309,693
65 & Up	0	2	2		-		79,146		79,146
Total	87	40	127	\$	4,162,773	\$	1,729,935	\$	5,892,708



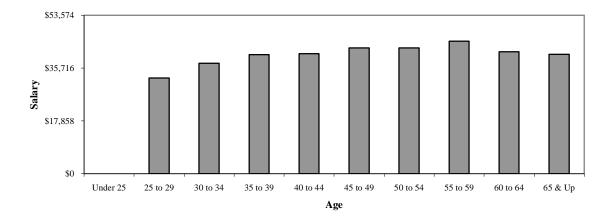


WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF ACTIVE MEMBERS

as of December 31, 2004

Plan 2

	Number				Salaries						
Age	Male	Female	Total		Male		Female		Total		
Under 25	0	0	0	\$	-	\$	-	\$	-		
25 to 29	6	1	7		190,437		35,887		226,324		
30 to 34	15	7	22		575,696		247,055		822,751		
35 to 39	52	31	83		2,062,909		1,283,324		3,346,233		
40 to 44	85	55	140		3,437,550		2,245,709		5,683,259		
45 to 49	112	76	188		4,850,104		3,144,958		7,995,062		
50 to 54	143	82	225		6,076,208		3,507,052		9,583,260		
55 to 59	68	46	114		3,289,002		1,824,741		5,113,743		
60 to 64	37	27	64		1,505,836		1,135,320		2,641,156		
65 & Up	9	8	17		388,999		296,969		685,968		
Total	527	333	860	\$	22,376,741	\$	13,721,015	\$	36,097,756		



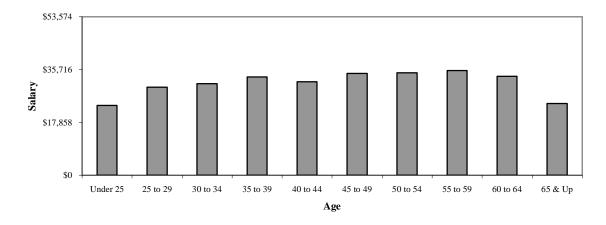


WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF ACTIVE MEMBERS

as of December 31, 2004

Plan 3

	Number				Salaries						
Age	Male	Female	Total	Male		Female			Total		
Under 25	37	9	46	\$	878,100	\$	210,271	\$	1,088,371		
25 to 29	59	39	98		1,721,108		1,196,843		2,917,951		
30 to 34	66	39	105		2,046,094		1,201,278		3,247,372		
35 to 39	65	44	109		2,057,588		1,571,266		3,628,854		
40 to 44	89	53	142		2,701,545		1,786,571		4,488,116		
45 to 49	85	43	128		2,946,695		1,463,297		4,409,992		
50 to 54	53	40	93		1,875,728		1,351,483		3,227,211		
55 to 59	33	22	55		1,210,548		734,591		1,945,139		
60 to 64	14	5	19		502,799		132,167		634,966		
65 & Up	6	1	7		147,538		22,453		169,991		
Total	507	295	802	\$	16,087,743	\$	9,670,220	\$	25,757,963		



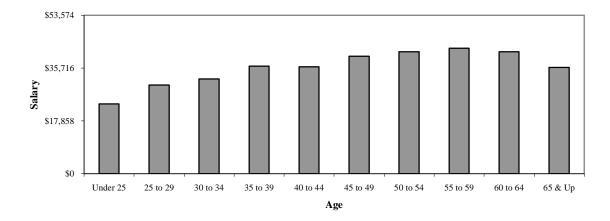


WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF ACTIVE MEMBERS

as of December 31, 2004

All Plans

	Number				Salaries						
Age	Male	Male Female Total		Male			Female			Total	
Under 25	37	9	46	\$	6	878,100	\$	210,271	\$	1,088,371	
25 to 29	65	40	105			1,911,545		1,232,730		3,144,275	
30 to 34	81	46	127			2,621,790		1,448,333		4,070,123	
35 to 39	117	75	192			4,120,497		2,854,590		6,975,087	
40 to 44	180	109	289			6,392,112		4,070,927		10,463,039	
45 to 49	233	136	369			9,327,936		5,342,722		14,670,658	
50 to 54	226	137	363			9,438,406		5,521,587		14,959,993	
55 to 59	113	72	185			5,124,486		2,731,475		7,855,961	
60 to 64	54	33	87			2,275,848		1,309,967		3,585,815	
65 & Up	15	11	26			536,537		398,568		935,105	
Total	1,121	668	1,789	\$	6	42,627,257	\$	25,121,170	\$	67,748,427	



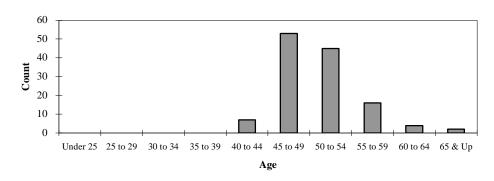


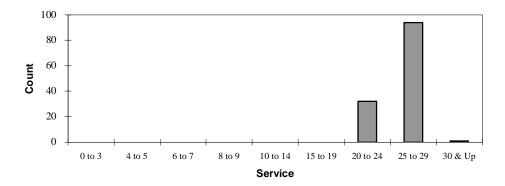
WICHITA EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS as of December 31, 2004

Plan 1

	Service											
Age	0 to 3	4 to 5	6 to 7	8 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total		
Under 25	0	0	0	0	0	0	0	0	0	0		
25 to 29	0	0	0	0	0	0	0	0	0	0		
30 to 34	0	0	0	0	0	0	0	0	0	0		
35 to 39	0	0	0	0	0	0	0	0	0	0		
40 to 44	0	0	0	0	0	0	3	4	0	7		
45 to 49	0	0	0	0	0	0	14	39	0	53		
50 to 54	0	0	0	0	0	0	11	33	1	45		
55 to 59	0	0	0	0	0	0	3	13	0	16		
60 to 64	0	0	0	0	0	0	0	4	0	4		
65 & Up	0	0	0	0	0	0	1	1	0	2		
Total	0	0	0	0	0	0	32	94	1	127		

Age Distribution







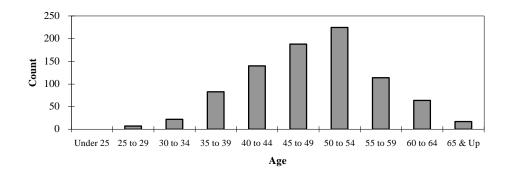
WICHITA EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS

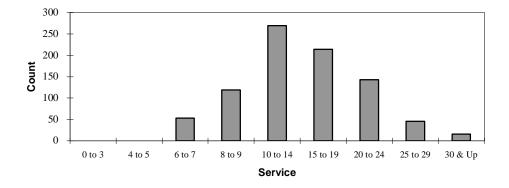
as of December 31, 2004

Plan 2

	Service										
Age	0 to 3	4 to 5	6 to 7	8 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total	
Under 25	0	0	0	0	0	0	0	0	0	0	
25 to 29	0	0	1	6	0	0	0	0	0	7	
30 to 34	0	0	4	10	7	1	0	0	0	22	
35 to 39	0	0	6	11	51	15	0	0	0	83	
40 to 44	0	0	6	16	50	43	23	2	0	140	
45 to 49	0	0	12	18	59	50	40	8	1	188	
50 to 54	0	0	8	31	60	57	40	24	5	225	
55 to 59	0	0	14	12	23	26	21	10	8	114	
60 to 64	0	0	2	11	16	14	18	1	2	64	
65 & Up	0	0	0	4	3	8	1	1	0	17	
Total	0	0	53	119	269	214	143	46	16	860	

Age Distribution







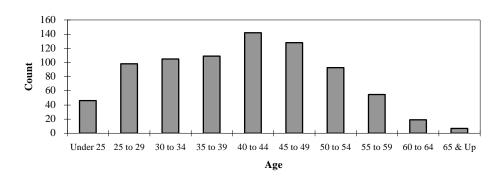
WICHITA EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS

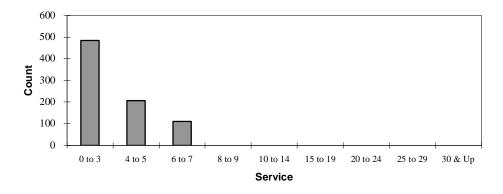
as of December 31, 2004

Plan 3

	Service										
Age	0 to 3	4 to 5	6 to 7	8 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total	
Under 25	44	2	0	0	0	0	0	0	0	46	
25 to 29	67	29	2	0	0	0	0	0	0	98	
30 to 34	61	33	11	0	0	0	0	0	0	105	
35 to 39	57	26	26	0	0	0	0	0	0	109	
40 to 44	86	34	22	0	0	0	0	0	0	142	
45 to 49	75	35	18	0	0	0	0	0	0	128	
50 to 54	53	22	18	0	0	0	0	0	0	93	
55 to 59	31	17	7	0	0	0	0	0	0	55	
60 to 64	7	6	6	0	0	0	0	0	0	19	
65 & Up	4	2	1	0	0	0	0	0	0	7	
Total	485	206	111	0	0	0	0	0	0	802	

Age Distribution







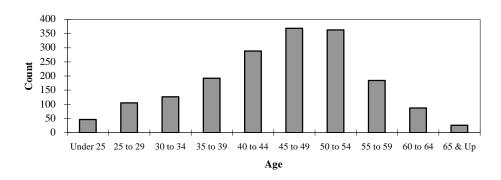
WICHITA EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS

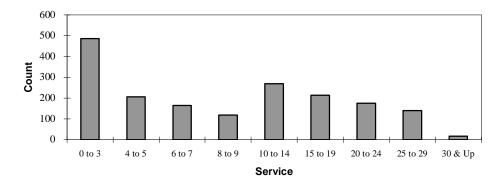
as of December 31, 2004

All Plans

	Service									
Age	0 to 3	4 to 5	6 to 7	8 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	44	2	0	0	0	0	0	0	0	46
25 to 29	67	29	3	6	0	0	0	0	0	105
30 to 34	61	33	15	10	7	1	0	0	0	127
35 to 39	57	26	32	11	51	15	0	0	0	192
40 to 44	86	34	28	16	50	43	26	6	0	289
45 to 49	75	35	30	18	59	50	54	47	1	369
50 to 54	53	22	26	31	60	57	51	57	6	363
55 to 59	31	17	21	12	23	26	24	23	8	185
60 to 64	7	6	8	11	16	14	18	5	2	87
65 & Up	4	2	1	4	3	8	2	2	0	26
Total	485	206	164	119	269	214	175	140	17	1,789

Age Distribution







WICHITA EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF DROP MEMBERS

as of December 31, 2004

Plan 1

Service										
Age	Under 20	20 to 24	25 to 29	30 to 34	35 & Up	Total				
Under 50	0	0	4	0	0	4				
50-54	0	0	18	0	0	18				
55-59	0	0	9	2	1	12				
60-64	0	0	3	1	0	4				
65 & Up	0	1	1	1	1	4				
Total	0	1	35	4	2	42				

DROP Duration Elected (months)

Age	1 to 12	13 to 24	25 to 36	37 to 48	48 to 60	Total
Under 50	1	1	0	0	2	4
50-54	0	0	1	3	14	18
55-59	0	0	0	0	12	12
60-64	0	0	0	0	4	4
65 & Up	0	0	0	2	2	4
Total	1	1	1	5	34	42

Age	Mo	nthly Benefits	Estimated Balance
Under 50	\$	12,421	\$ 36,009
50-54		64,418	1,096,317
55-59		35,697	1,148,640
60-64		9,487	391,163
65 & Up	_	10,389	222,216
Total	\$	132,412	\$ 2,894,345



WICHITA EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF DROP MEMBERS

as of December 31, 2004

Plan 2

Service										
Age	Under 10	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	Total		
Under 50	0	0	0	0	0	0	0	0		
50-55	0	0	0	0	0	0	0	0		
55-59	0	0	0	1	0	2	0	3		
60-64	1	1	3	3	0	0	1	9		
65 & Up	1	1	1	0	1	1	0	5		
Total	2	2	4	4	1	3	1	17		

DROP Duration Elected (months)

Age	1 to 12	13 to 24	25 to 36	37 to 48	48 to 60	Total
Under 50	0	0	0	0	0	0
50-55	0	0	0	0	0	0
55-59	0	0	0	0	3	3
60-64	0	0	2	5	2	9
65 & Up	0	1	1	1	2	5
Total	0	1	3	6	7	17

Age	Mon	thly Benefi	ts	Estimated Balanc		
Under 50	\$	0		\$	0	
50-54		0			0	
55-59		6,670			238,023	
60-64		10,315			77,111	
65 & Up	_	9,148		_	194,946	
Total	\$	26,133		\$	510,080	



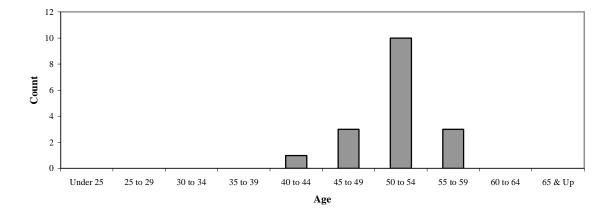
WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF DEFERRED VESTED MEMBERS

as of December 31, 2004

Plan 1

			Current Monthly Benefit at Retirement					
Age	Male	Female	Total		Male	Female		Total
Under 25	0	0	0	\$	-	\$ -	\$	-
25 to 29	0	0	0		-	=		-
30 to 34	0	0	0		-	-		-
35 to 39	0	0	0		-	-		-
40 to 44	0	1	1		-	867		867
45 to 49	1	2	3		1,373	3,270		4,643
50 to 54	6	4	10		9,089	4,416		13,505
55 to 59	2	1	3		1,625	1,404		3,029
60 to 64	0	0	0		-	-		-
65 & Up	0	0	0		-	-		-
Total	9	8	17	\$	12,087	\$ 9,957	\$	22,044

Age Distribution





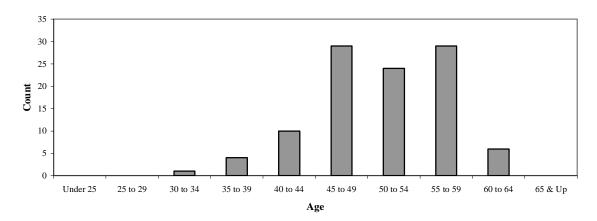
WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF DEFERRED VESTED MEMBERS

as of December 31, 2004

Plan 2

		Number		Current Monthly Benefit at Retirement					
Age	Male	Female	Total		Male	Female		Total	
Under 25	0	0	0	\$	_	\$ -	\$		
25 to 29	0	0	0	Ф	-	\$ -	Ф	_	
30 to 34	0	1	1		_	725		725	
35 to 39	3	1	4		2,294	502		2,796	
40 to 44	5	5	10		5,574	5,898		11,472	
45 to 49	10	19	29		12,429	18,036		30,465	
50 to 54	15	9	24		17,860	11,554		29,414	
55 to 59	14	15	29		20,180	18,224		38,404	
60 to 64	2	4	6		3,609	6,566		10,175	
65 & Up	0	0	0		-	-		-	
Total	49	54	103	\$	61,946	\$ 61,505	\$	123,451	

Age Distribution





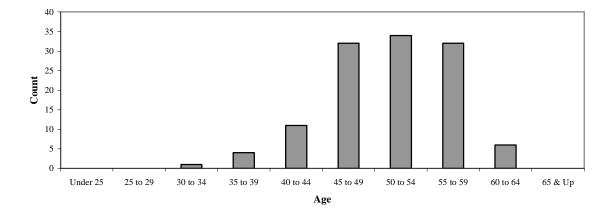
WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF DEFERRED VESTED MEMBERS

as of December 31, 2004

All Plans

		Number		 Current M	onthly Be	nefit at I	Retir	ement
Age	Male	Female	Total	Male	Fem	ale		Total
Under 25	0	0	0	\$ -	\$	-	\$	-
25 to 29	0	0	0	-		-		-
30 to 34	0	1	1	-		725		725
35 to 39	3	1	4	2,294		502		2,796
40 to 44	5	6	11	5,574		6,765		12,339
45 to 49	11	21	32	13,802		21,306		35,108
50 to 54	21	13	34	26,949		15,970		42,919
55 to 59	16	16	32	21,805		19,628		41,433
60 to 64	2	4	6	3,609		6,566		10,175
65 & Up	0	0	0	 -		-		-
Total	58	62	120	\$ 74,033	\$	71,462	\$	145,495

Age Distribution





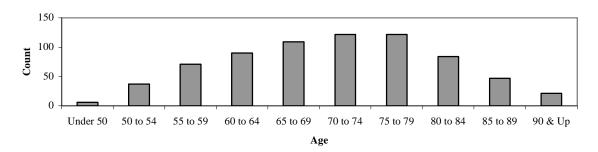
WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF RETIRED MEMBERS

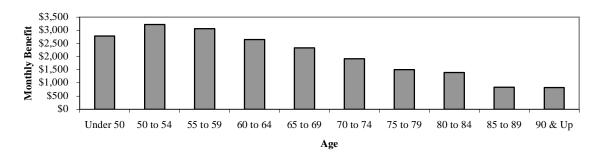
as of December 31, 2004

Plan 1

		Number			Mo	nthly Benefit	
Age	Male	Female	Total	 Male		Female	Total
Under 50	4	2	6	\$ 13,053	\$	3,647	\$ 16,700
50 to 54	29	8	37	100,775		18,198	118,973
55 to 59	51	20	71	163,746		53,567	217,313
60 to 64	60	30	90	180,013		58,872	238,885
65 to 69	74	35	109	186,674		68,027	254,701
70 to 74	72	50	122	156,179		78,653	234,832
75 to 79	70	52	122	131,578		51,691	183,269
80 to 84	45	39	84	80,919		36,410	117,329
85 to 89	23	24	47	24,511		14,650	39,161
90 & Up	6	15	21	5,838		11,535	17,373
Total	434	275	709	\$ 1,043,286	\$	395,250	\$ 1,438,536

Age Distribution







WICHITA EMPLOYEES' RETIREMENT SYSTEM

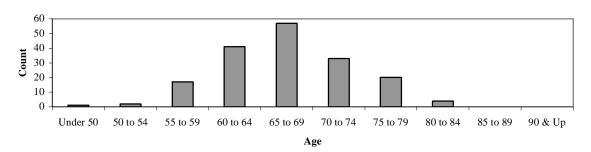
SUMMARY OF RETIRED MEMBERS

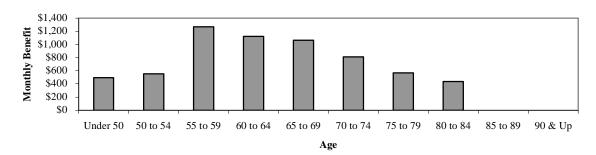
as of December 31, 2004

Plan 2

		Number			Mo	onthly Benefit	
Age	Male	Female	Total	Male		Female	Total
Under 50	1	0	1	\$ 494	\$	-	\$ 494
50 to 54	2	0	2	1,105		-	1,105
55 to 59	12	5	17	17,377		4,194	21,571
60 to 64	23	18	41	28,865		17,215	46,080
65 to 69	26	31	57	31,880		28,868	60,748
70 to 74	22	11	33	17,358		9,402	26,760
75 to 79	8	12	20	4,435		6,888	11,323
80 to 84	1	3	4	913		826	1,739
85 to 89	0	0	0	-		-	-
90 & Up	0	0	0	-		-	-
Total	95	80	175	\$ 102,427	\$	67,393	\$ 169,820

Age Distribution







WICHITA EMPLOYEES' RETIREMENT SYSTEM

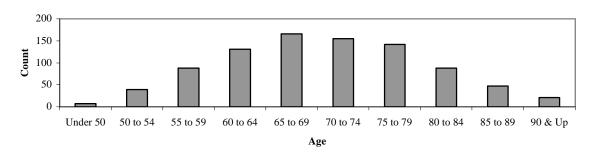
SUMMARY OF RETIRED MEMBERS

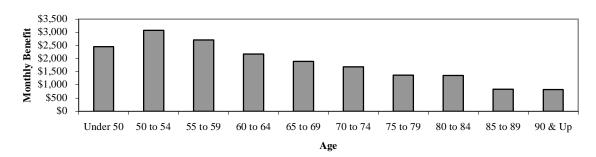
as of December 31, 2004

All Plans

		Number			Mo	onthly Benefit	
Age	Male	Female	Total	 Male		Female	Total
Under 50	5	2	7	\$ 13,547	\$	3,647	\$ 17,194
50 to 54	31	8	39	101,880		18,198	120,078
55 to 59	63	25	88	181,123		57,761	238,884
60 to 64	83	48	131	208,878		76,087	284,965
65 to 69	100	66	166	218,554		96,895	315,449
70 to 74	94	61	155	173,537		88,055	261,592
75 to 79	78	64	142	136,013		58,579	194,592
80 to 84	46	42	88	81,832		37,236	119,068
85 to 89	23	24	47	24,511		14,650	39,161
90 & Up	6	15	21	5,838		11,535	17,373
Total	529	355	884	\$ 1,145,713	\$	462,643	\$ 1,608,356

Age Distribution







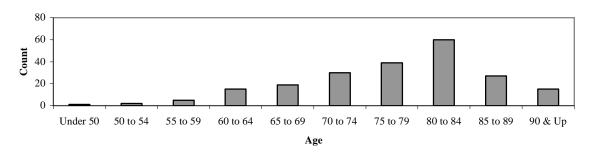
WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF BENEFICIARIES

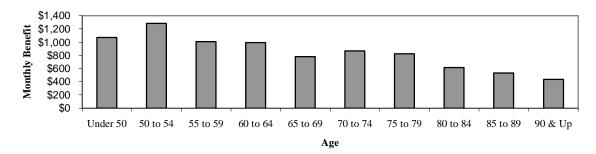
as of December 31, 2004

Plan 1

		Number			Mo	onthly Benefit	
Age	Male	Female	Total	 Male		Female	Total
Under 50		1	1	\$ _	\$	1,073	\$ 1,073
50 to 54		2	2	_	Ċ	2,573	2,573
55 to 59		5	5	-		5,045	5,045
60 to 64	2	13	15	1,230		13,660	14,890
65 to 69	4	15	19	2,656		12,172	14,828
70 to 74	4	26	30	2,903		23,089	25,992
75 to 79	5	34	39	2,065		30,077	32,142
80 to 84	4	56	60	1,748		35,198	36,946
85 to 89	1	26	27	171		14,253	14,424
90 & Up		15	15	-		6,533	6,533
Total	20	193	213	\$ 10,773	\$	143,673	\$ 154,446

Age Distribution







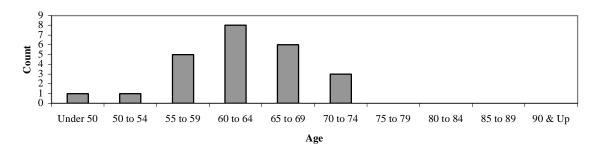
WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF BENEFICIARIES

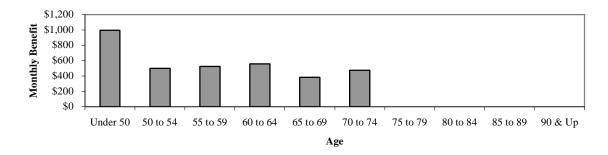
as of December 31, 2004

Plan 2

		Number			Mo	onthly Benefit	
Age	Male	Female	Total	Male		Female	Total
Under 50	1	0	1	\$ 998	\$	-	\$ 998
50 to 54	0	1	1	-		501	501
55 to 59	0	5	5	-		2,635	2,635
60 to 64	1	7	8	151		4,321	4,472
65 to 69	0	6	6	-		2,293	2,293
70 to 74	0	3	3	-		1,422	1,422
75 to 79	0	0	0	-		-	-
80 to 84	0	0	0	-		-	-
85 to 89	0	0	0	-		-	-
90 & Up	0	0	0	-		-	-
Total	2	22	24	\$ 1,149	\$	11,172	\$ 12,321

Age Distribution







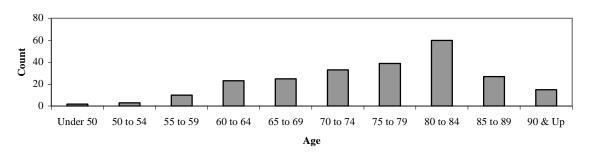
WICHITA EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF BENEFICIARIES

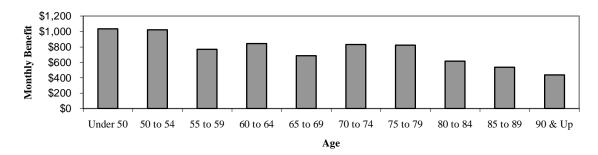
as of December 31, 2004

All Plans

		Number			Mo	onthly Benefit	
Age	Male	Female	Total	 Male		Female	Total
Under 50	1	1	2	\$ 998	\$	1,073	\$ 2,071
50 to 54	0	3	3	-		3,074	3,074
55 to 59	0	10	10	-		7,680	7,680
60 to 64	3	20	23	1,381		17,981	19,362
65 to 69	4	21	25	2,656		14,465	17,121
70 to 74	4	29	33	2,903		24,511	27,414
75 to 79	5	34	39	2,065		30,077	32,142
80 to 84	4	56	60	1,748		35,198	36,946
85 to 89	1	26	27	171		14,253	14,424
90 & Up	0	15	15	 -		6,533	6,533
Total	22	215	237	\$ 11,922	\$	154,845	\$ 166,767

Age Distribution







APPENDIX B

SUMMARY OF BENEFIT PROVISIONS

DEFINED BENEFIT PLANS 1 AND 2

- **Plan 1** is applicable to members employed prior to July 18, 1981 who have not elected to be covered by Plan 2.
- **Plan 2** is applicable to members employed or re-employed on or after July 18, 1981 and before January 1, 1994 and to other employees who have elected Plan 2 coverage.

Normal Retirement (no reduction factor)

Eligibility – Plan 1: Age 60 with 7 or more years of service, or any age with 30 or more years of service.

Plan 2: Age 62 with 7 or more years of service (effective August 1, 1990).

Annual Amount – Plan 1: Service times 2.5% of average annual compensation to a maximum of 75% of average annual salary.

Plan 2: Service times 2.25% of average annual compensation, to a maximum of 75% of average annual compensation (effective January 1, 2000).

Average Annual Compensation – Highest 3 consecutive years out of last 10.

Early Retirement (with reduction factor)

Eligibility - Plan 1: Age 55 with 7 or more years of service.

Plan 2: Age 55 with 7 or more years of service.

Annual Amount – An amount computed as for normal retirement but reduced for each month retirement precedes age 60 under Plan 1 and age 62 under Plan 2. The amount of reduction per month of early retirement is:

Plan 1 Plan 2

A service graduated percentage for each month retirement precedes age 60. The percentage is .05 of 1% if service is 29 years but less than 30 years, increasing by .05 of 1% for each additional year service is less than 30 years to a maximum of .50 of 1% if service is less than 20 years.

An age graduated percentage for each month retirement precedes age 62. The percentage is 0.6% for each month that the member's age precedes age 62.



Deferred Retirement (Vested Termination)

Eligibility – 7 or more years of service. Terminated employee may apply for a reduced pension upon meeting the applicable age requirement for early retirement or an unreduced pension upon meeting the applicable age requirement for normal retirement. Terminated employee may elect a refund of employee contributions in lieu of a deferred retirement benefit.

Annual Amount — An amount computed as for normal retirement. Vested deferred pensions are adjusted during the deferral period based on changes in National Average Earnings, up to 5.5% annual adjustments.

Deferred Retirement Option Plan (DROP)

Eligibility – Member must be eligible to retire under early reduced or normal age and/or service requirements and elect to participate in DROP for up to 5 years.

Amount – Benefit computed based on years of service, final average salary as of the DROP election date, and length of DROP period. Benefit is paid into member's notational DROP account during the deferral period. Member continues to make required employee contributions during the deferral period. Interest at an annual rate of 5% is credited to the notational DROP account. Voluntary termination of employment during the DROP period results in loss of accrued interest. Balance of DROP account is payable within 90 days of actual termination of employment.

Service Connected Disability

Eligibility – No age or service requirement. Requires total and permanent disability, as defined in State worker's compensation act, for employment by the City in a position commensurate with the employee's training, experience and education.

Annual Amount – Plan 1: 60% of final rate of salary. Plan 2: 50% of final rate of salary.

Non Service Connected Disability

Eligibility – 7 or more years of service. Requires total and permanent disability for employment by the City in a position commensurate with the employee's training, experience and education.

Annual Amount – Plan 1: 30% of average annual compensation plus 1% of average annual compensation for each year of service in excess of 7 years. Maximum is 50% of average annual compensation.

Plan 2: 25% of final rate of salary.



Post-Retirement Survivor Benefits

Eligibility: Surviving Spouse - must have been married to retired employee for 1 year or more, at time of death.

Minor Children - under age 18.

Annual Amount: Surviving Spouse - 50% of amount that was being paid to retiree.

Minor Child with Surviving Spouse - 10% of the member's final average salary for each child under age 18. Maximum including surviving spouse benefit is 75% of final average salary.

Minor Child without Surviving Spouse - 20% of the member's final average salary for each child under age 18. Maximum including surviving spouse benefit is 60% of final average salary.

Post-Retirement Funeral Benefit

Eligibility: Designated Beneficiary - must have been designated by the retired employee.

Amount - Plan 1: \$1,500 funeral benefit.

Plan 2: No funeral benefit provided.

Pre-Retirement Survivor Benefits

Eligibility: Surviving Spouse - Plan 1: Death of employee with 7 or more years of credited service.

Plan 2: Death of employee with 7 or more years of credited service.

Annual Amount - 50% of amount that the deceased employed would have been entitled to had he/she been retired at time of death.

Eligibility: Designated Beneficiary – The beneficiary designated by an unmarried member or by a member who fails to meet the 7 year service requirement for the surviving spouse benefit.

Amount – The deceased employee's accumulated contributions plus one month's salary for each full year of service up to a maximum of 6 years.

Other Termination Benefits

Eligibility – Termination of employment without eligibility for any other benefit.

Amount – Accumulated employee contributions with interest are refunded.



Post-Retirement Adjustment of Annual Benefits

Eligibility – Plan 1: Completion of 12 full months of retirement and annually thereafter.

Plan 2: If retired on or after January 1, 2000: Completion of 12 full months of retirement. If retired before January 1, 2000: Benefit not provided (effective 2/18/2000).

Annual Amount - Plan 1: 3.0% of the base amount of benefit (increases are not compounded).

Plan 2: 2.0% of the base amount of benefit (increases are not compounded).

Employee Contributions

Plan 1: 6.4% of total compensation.

Plan 2: 4.7% of base salary and longevity pay (effective February 19, 2000).

City Contributions

Actuarially determined amount which together with employee contributions and investment earnings will fund the obligations of the Plan in accordance with accepted actuarial principles.

Unused Sick Leave

Each month of accumulated unused sick leave is considered to be a month of service for the purpose of computing annual benefit amounts.



SUMMARY OF BENEFIT PROVISIONS DEFINED BENEFIT PLAN 3

Plan 3 is applicable to members employed after January 1, 1994 who have not become covered by Plan 2. Plan 3 members are automatically transferred to Plan 2 at the time they acquire 7 years of service unless they file an irrevocable election to remain in Plan 3.

Employee Contributions

4.7% of compensation (effective 2/19/2000).

City Contributions

4.7% of compensation, less forfeitures from non-vested terminations (effective 2/19/2000).

Vesting of Contributions

Member contributions and investment earnings thereon are 100% vested.

City contributions and investment earnings thereon are 25% vested after 3 years of service, 50% vested after 5 years of service, and 100% vested after 7 years of service.

Distribution of Vested Accounts

Vested accounts are payable upon termination of City employment or death. Available forms of payment are prescribed by the Board.

Disability Retirement

Service and non-service connected disability benefits are the same as those of Plan 2.

Plan 3 members may alternatively elect to receive a refund of their Plan 3 account balance.



APPENDIX C

ACTUARIAL COST METHOD AND ASSUMPTIONS

Actuarial Cost Method

The actuarial cost method is a procedure for allocating the actuarial present value of pension benefits and expenses to time periods. The method used for the valuation is known as the individual entry-age actuarial cost method, and has the following characteristics.

- (i) The annual normal costs for each individual active member are sufficient to accumulate the value of the member's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the member's year-by-year projected covered compensation.

The entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry-age of the member and the assumed exit ages.

The portion of the actual present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called actuarial accrued liability. Deducting accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability. The unfunded actuarial accrued liability is financed as a level percent of member payroll over an open 20-year period and used to reduce the City's contribution rate.

Actuarial Assumptions Used for the Valuation

Retirement System contribution requirements and actuarial present values are calculated by applying experience assumptions to the benefit provisions and people information of the Retirement System, using the actuarial cost method.

The principal areas of risk which require experience assumptions about future activities of the Retirement System 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 monetary effect of each assumption is calculated for as long as a present covered person survives - - a period of time which can be as long as a century.

Actual experience of the Retirement System will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experiences. 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 are modified to reflect experience trends (but not random or temporary year-to-year fluctuations). A complete review of the actuarial assumptions was completed in 2004. The use of updated assumptions was effective with the 2004 valuation.

The investment return rate (net of administrative expenses) used for actuarial valuation calculations was 7.75% a year, compounded annually. This rate consists of 4.00% in recognition of long term price inflation and a 3.75% a year real rate of return over price inflation. This assumption, used to equate the value of payments due at different points in time, was adopted by the Board and was first used for the December 31, 1999 valuation, although the allocation between inflation and real return was changed in 2004.

Salary increase rates used to project current pays to those upon which a benefit will be based are represented by the following table and were first used for the December 31, 2004 valuation.

	Annual R	Rate of Salary Inc	crease for Sampl	e Ages
Years	Inflation	Productivity	Merit and	
Of Service	Component	Component	Longevity	Total
1	4.00%	0.50%	5.50%	10.00%
2	4.00	0.50	4.50	9.00
3	4.00	0.50	3.50	8.00
4	4.00	0.50	3.50	8.00
5	4.00	0.50	3.00	7.50
6	4.00	0.50	2.64	7.14
7	4.00	0.50	2.28	6.78
8	4.00	0.50	1.92	6.42
9	4.00	0.50	1.56	6.06
10	4.00	0.50	1.20	5.70
11	4.00	0.50	1.10	5.60
12	4.00	0.50	1.00	5.50
13	4.00	0.50	0.90	5.40
14	4.00	0.50	0.80	5.30
15	4.00	0.50	0.70	5.20
16	4.00	0.50	0.56	5.06
17	4.00	0.50	0.42	4.92
18	4.00	0.50	0.28	4.78
19	4.00	0.50	0.14	4.64
20+	4.00	0.50	0.00	4.50



The salary increase assumptions will produce 4.50% annual increases in active member payroll (the inflation and productivity base rate) given a constant active member group size. This is the same payroll growth assumption used to amortize unfunded actuarial liability. The real rate of return over assumed wage growth is 3.25% per year.

Changes actually experienced in average pay and total payroll have been as follows:

			Year Ended	l		5 Year (Average) Compounded
	12-31-03	12-31-02	12-31-01	12-31-00	12-31-99	Annual Increase
Average pay	2.3%	2.3%	8.5%	3.9%	1.7%	3.7%
Total payroll	0.1%	4.2%	6.9%	6.0%	2.6%	3.9%

Mortality Table: This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each pension payment being made after retirement.

Healthy Retirees: RP-2000 Healthy Annuitant Tables

Disabled Retirees: RP-2000 Disabled Table

Actives: RP-2000 Employee Table

Sample		Value of nly for Life	Future Life Expectancy (Years)			
Ages ⁽¹⁾	Men	Women	Men	Women		
50	\$136.27	\$141.98	30.4	34.6		
55	128.67	135.41	25.7	29.7		
60	118.41	127.04	21.2	25.1		
65	150.86	116.91	16.9	20.7		
70	91.20	104.80	13.0	16.7		
75	75.12	90.90	9.7	13.0		
80	58.98	75.76	6.9	9.8		
85	44.42	60.2	4.8	7.1		

(1) Ages in 2000

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each pension payment being made after retirement. This table was first used for the December 31, 2004 actuarial valuation.



Rates of Retirement and Deferred Retirement Option Plan (DROP) Elections. These rates are used to measure the probability of eligible members retiring under either the regular retirement provisions or from the Deferred Retirement Option Plan. This table was first used in the December 31, 2004 actuarial valuation.

	Percent Retiri	ng During Year
Retirement		-
Age	Plan 1	Plan 2
< 55	15%	0%
55	25	5
56	10	5
57	10	5
58	10	5
59	10	5
60	20	5
61	20	5
62	35	45
63	30	25
64	40	20
65	70	45
66	55	45
67	80	55
68	90	55
69	95	55
70	100	100

Plan 1 members acquiring 30 years of service were assumed to elect the most advantageous plan provisions, (i.e., DROP or regular retirement).

Plan 2 members acquiring 33.33 years of service were assumed to elect the most advantageous plan provisions, (i.e. DROP or regular retirement).

All members of the retirement system were assumed to retire on or before age 70.



Rates of Separation from Active Membership. This assumption measures the probabilities of a member terminating employment. The rates do not apply to members who are eligible to retire. This assumption was last revised for the December 31, 2004 valuation.

Sample Ages	Years of Service	Probability of Terminating During Year
Any	0 1 2 3 4	25.00% 19.00 14.00 11.00 9.00
25 30 35 40 45 50 55 60	Over 4	7.50 6.50 5.25 4.00 3.50 2.50 1.50

Administrative expenses were assumed to be paid from investment earnings.

Forfeiture of Vested Benefits. The assumption is that a percentage of the actuarial present value of vested termination benefits will be forfeited by a withdrawal of accumulated contributions. This table was first used for the December 31, 2004 actuarial valuation.

Years of	Percent
Service	Forfeiting
Under 15	60%
15 – 19	40%
20 – 24	20%
25 or more	0%



Rates of Disability. This assumptions measures the probabilities of a member becoming disabled.

Sample Ages	% of Active Members Becoming Disabled During Next Year Becoming Disabled
25	0.03%
30	0.04
35	0.05
40	0.09
45	0.14
50	0.24
55	0.43
60	0.71

The current rates were first used for the December 31, 1999 valuation.

Disabilities are assumed to be non-duty related.

Active Member Group Size. The number of active members was assumed to remain constant.

Vested Deferred Pensions: Amounts are assumed to increase during the deferral period at 4.5% per year. This assumption was changed with the December 31, 2004 valuation.

Miscellaneous and Technical Assumptions

Marriage Assumption: 70% of participants are assumed to be married for purposes of death

benefits. In each case the male was assumed to be 3 years older than

the female.

Pay Increase Timing: Assumed to occur mid-year.

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 half year on the date the decrement is

assumed to occur.

Benefit Service: Service rounded to 0.50 as of the decrement date is used to

determine the amount of benefit payable.

Other: Disability and turnover decrements do not operate during retirement

eligibility.

Miscellaneous Loading Factors: The calculated normal retirement benefits were increased by 4% to

account for the inclusion of unused sick leave in the calculation of

Average Compensation.



Plan 3 Transfer Assumption:

For purposes of the valuation, Plan 3 members are assumed to transfer to Plan 2 if they acquire 7 years of service. An additional reserve is held for the difference between the market and actuarial value of assets. This assumption was changed with the December 31, 2004 valuation.



APPENDIX D

GLOSSARY OF TERMS

Actuarial Liability The difference between the actuarial present value of system

benefits and the actuarial value of future normal costs. Also

referred to as "accrued 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.

Accrued Service Service credited under the system which was rendered before the

date of the actuarial valuation.

Actuarial Equivalent A single amount or series of amounts of equal actuarial value to

another single amount or series of amounts, computed on the

basis of appropriate assumptions.

Actuarial Cost Method A mathematical budgeting procedure for allocating the dollar

amount of the actuarial present value of retirement system benefit between future normal cost and actuarial liability. Sometimes

referred to as the "actuarial funding method."

Experience Gain (Loss)The difference between actual experience and actuarial

assumptions anticipated experience during the period between two

actuarial valuation dates.

Actuarial Present ValueThe amount of funds currently required to provide a payment or

series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by

probabilities of payment.

Amortization Paying off an interest-discounted amount with periodic payments

of interest and principal, as opposed to paying off with lump sum

payment.

Normal Cost The actuarial present value of retirement system benefits allocated

to the current year by the actuarial cost method.



Unfunded Actuarial Liability

The difference between actuarial liability and the valuation assets.

Most retirement systems have unfunded actuarial liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial liability and the trend in its amount.

