



WICHITA EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2009

Prepared by:

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**Wichita Employees' Retirement System
Actuarial Valuation Report
as of December 31, 2009**

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March 31, 2010

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

Dear Members of the Board:

At your request, we have performed an annual actuarial valuation of the Wichita Employees' Retirement System as of December 31, 2009 for determining the contribution rate for fiscal year 2011. The major findings of the valuation are contained in this report. This report reflects the benefit provisions in effect as of December 31, 2009. There was no change in the actuarial methods from the prior valuation. The assumptions were revised to reflect the experience study performed in 2009.

In preparing this 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. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

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 Actuarial Standards of Practice promulgated by the Actuarial Standards Board (ASB) and the applicable Guides to Professional Conduct, amplifying Opinions and Supporting Recommendations of American Academy of Actuaries.

We further 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 individually reasonable (taking into account the experience of the System and reasonable expectations of future experience); and which, in combination, offer our best estimate of anticipated experience affecting the System. 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.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the System. Actuarial computations presented in this report under GASB Statements No. 25 and 27 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals, and of GASB Statements No. 25 and 27. 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.

Milliman's work product was prepared exclusively for the Wichita Employees' Retirement System of Wichita, Kansas for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning the Wichita Employees' Retirement System of Wichita, Kansas operations, and uses data from the Wichita Employees' Retirement System of Wichita, Kansas, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

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

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.

I, Brent A. Banister, 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.

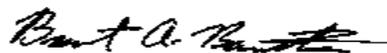
We herewith submit the following report and look forward to discussing it with you.

Respectfully Submitted,

MILLIMAN, Inc.



Patrice A. Beckham, F.S.A.
Consulting Actuary



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

SECTION 1

BOARD SUMMARY

OVERVIEW

This report presents the results of the December 31, 2009 actuarial valuation of the Wichita Employees' Retirement System (WER). The primary purposes of performing a valuation are to:

- to estimate the liabilities for the benefits provided by the System,
- determine the employer contribution rates required to fund the System on an actuarial basis,
- disclose certain asset and liability measures as of the valuation date,
- to monitor any deviation between actual plan experience and experience predicted by the actuarial assumptions, so that recommendations for assumption changes can be made when appropriate,
- to analyze and report on any significant trends in 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 in this report. 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 (those who have elected to remain in the defined contribution plan).

There were no changes in the benefit provisions from the last valuation. This valuation reflects the new set of assumptions adopted by the Board as the result of the experience study prepared in 2009. The changes to the assumptions included:

- Decrease in the general wage growth assumption from 4.5% to 4.0% as a result of decreasing the price inflation assumption from 4.0% to 3.5%.
- Modification of the retirement rates for both Plans 1 and 2 to better reflect actual experience. The changes increased rates at some ages and decreased them at others.
- Increase in the rates of termination of employment for ages under 32 for the ultimate assumption.
- Lower assumption for indexation of benefits for terminated vested members from 4.5% to 4.0% to be consistent with the general wage growth assumption.

The net impact of the assumption changes, first reflected in this valuation, was a small decrease of \$2.7 million in the unfunded actuarial liability (UAL) and a small increase of 0.10% in the normal cost rate.

In the 2008 valuation, actuarial assets were slightly higher than actuarial liability, so there was a small amount of surplus assets. However, the 2009 valuation shows an unfunded actuarial liability of \$19.8 million (actuarial liability exceeds actuarial assets). A detailed analysis of the change in the unfunded actuarial liability/(surplus) from December 31, 2008 to December 31, 2009 is shown on page 4. The actuarial valuation results provide a "snapshot" view of the Plan's financial condition on December 31, 2009. The valuation results reflect net unfavorable experience for the past plan year as demonstrated by an unfunded actuarial liability that was higher than expected based on the actuarial assumptions used in the December 31, 2008 actuarial valuation. Unfavorable experience on the actuarial value of assets resulted in a loss of \$21.7 million and favorable experience on liabilities resulted in a gain of \$1.3 million. Net experience was an actuarial loss of \$20.4 million.

The Plan uses an asset smoothing method in the valuation process. As a result, the plan's funded status and the actuarial contribution rate are based on the actuarial (smoothed) value of assets – not the market value. Significant investment losses in 2008 resulted in a deferred (unrecognized) loss of \$127 million in the December 31, 2008 valuation. Due to the magnitude of the deferred loss, there was a loss on the actuarial value of assets this year despite a return on market value of 21%. The loss recognized in the December 31, 2009 valuation was less than it would have been if the rate of return in 2009 had been lower. However, as of December 31, 2009, the actuarial value of assets exceeds the market value by about \$65 million or 15%, so there are still significant deferred investment losses. Actual returns over the next few years will determine if and how, the \$65 million of deferred investment loss is recognized. For example, a return of 22% on the market value of assets in 2010 would be necessary to attain a return of 7.75% on the actuarial value of assets.

In the following pages the change in the assets, liabilities, and contributions of the Plan over the last year are discussed in more detail.

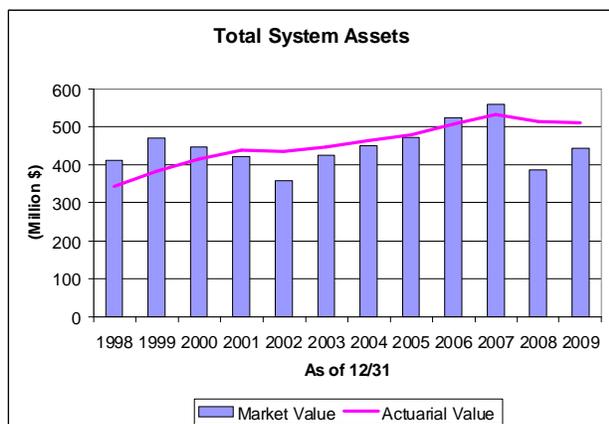
ASSETS

As of December 31, 2009, the System had total assets, when measured on a market value basis, of \$444 million. This was an increase of \$58 million from the December 31, 2008 figure of \$386 million. The market value of assets is not used directly in the calculation of the City's contribution rate. An asset valuation method, which smoothes the effect of market fluctuations, is used to determine the value of assets used in the valuation, called the "actuarial value of assets". 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 12 for a detailed development of the actuarial value of assets. Because part of the deferred investment loss from 2008 was recognized this year, the rate of return on the actuarial value of assets was 4%. Even with strong returns in 2009, the actuarial value of assets remains 15% higher than the actual market value.

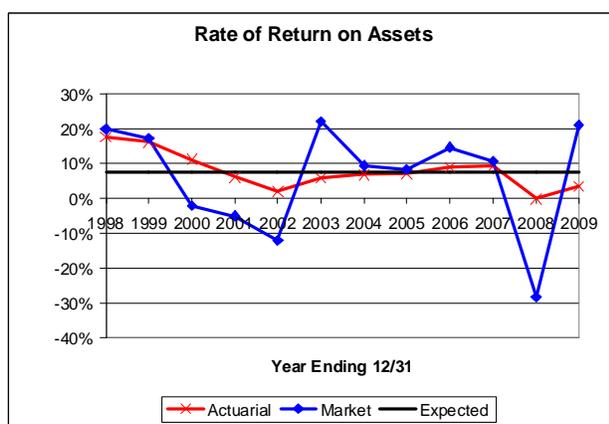
The components of the change in the market and actuarial value of assets for the Retirement System (in millions) are set forth below:

	Market Value (\$M)	Actuarial Value (\$M)
Assets, December 31, 2008	\$385.6	\$512.9
• City and Member Contributions	7.9	7.9
• Benefit Payments, Refunds and Transfers	(28.5)	(28.5)
• Investment Income (net of expenses)	79.4	17.2
Assets, December 31, 2009	\$444.4	\$509.5

The unrecognized investment losses represent about 15% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$65 million loss is expected to have a significant impact on the future funded ratio and actuarial contribution requirement. If the deferred losses were recognized immediately in the actuarial value of assets, the funded percentage would decrease from 96% to 84% and the actuarially determined contribution rate would increase from 10.2% to 15.8%.



The actuarial value of assets has both been greater than and less than the market value of assets during this period, which is expected when using a smoothing method.



The rate of return on the actuarial value of assets has been less volatile than the market value return, which is the main reason for using an asset smoothing method.

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 are:

Actuarial Liability	\$529,271,471
Actuarial Value of Assets	509,493,888
Unfunded Actuarial Liability/(Surplus)	\$ 19,777,583

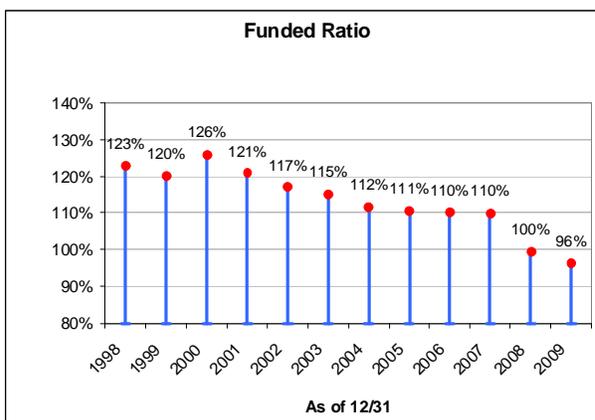
Between December 31, 2008 and December 31, 2009 the change in the unfunded actuarial liability for the System was as follows (in millions):

	\$(M)
UAL, December 31, 2008	(0.5)
+ Normal cost for year	10.1
+ Assumed investment return for year	0.7
- Actual contributions (member + City)	7.9
- Assumed investment return on contributions	0.3
= Expected Unfunded Actuarial Liability, December 31, 2009	2.1
+ Change from amendments	0.0
+ Change from assumption changes	(2.7)
= Expected UAL after changes	(0.6)
Actual UAL, December 31, 2009	19.8
Experience gain/(loss) (Expected UAL – Actual UAL)	(20.4)

The experience loss for the 2009 plan year of \$20.4 million reflects the combined impact of an actuarial loss of about \$21.7 million on System assets (actuarial value), and an actuarial gain of about \$1.3 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.

	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09
Actuarial Liability (\$M)	\$433.3	\$459.1	\$483.4	\$512.4	\$529.3
Actuarial Value of Assets (\$M)	479.3	505.8	533.9	512.9	509.5
Funded Ratio (Actuarial Value)	110.6%	110.2%	110.5%	100.1%	96.3%
Funded Ratio (Market Value)	108.8%	114.1%	115.8%	75.3%	84.0%



The funded ratio has declined over the last decade due to various reasons including benefit improvements, assumption changes and most significantly, investment experience. There are still significant deferred investment losses that will be recognized in future years, absent investment returns above the 7.75% assumption. If this occurs, the funded ratio will continue to decline.

As mentioned earlier in this report, due to the asset smoothing method there is currently about \$65 million difference between the actuarial value and the market value of assets. To the extent there is not favorable investment experience to offset the deferred losses, the \$65 million loss will be recognized in future years and the System's funded status will decline. The System's funded status in future years will be heavily dependent on actual investment returns.

CONTRIBUTION RATES

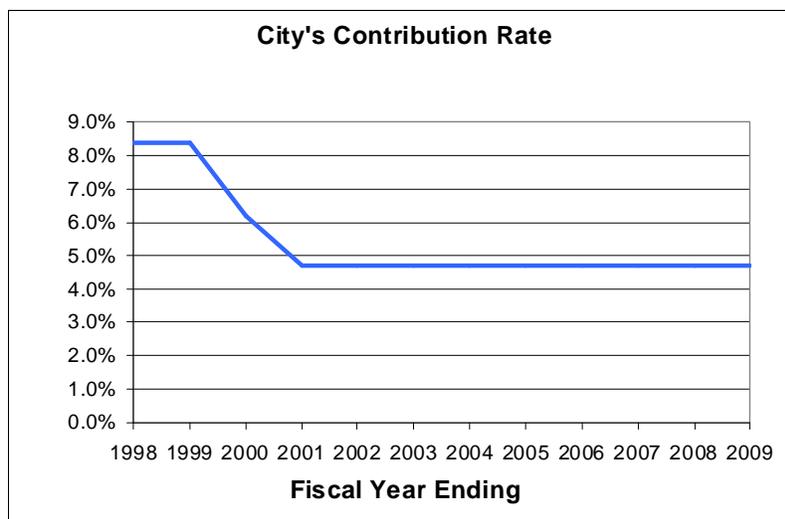
Generally, contributions to the System consist of:

- 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 2011 is based on the December 31, 2009 actuarial valuation results.

As of December 31, 2009, the actuarial liability exceeds the actuarial value of assets. The resulting unfunded actuarial liability, when amortized over a 20-year rolling period, results in an amortization cost of 1.7% of pay. The contribution rate is the sum of the employer portion of the normal cost rate and the amortization cost. This valuation indicates the City's contribution rate to be 10.2% of pay.

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



COMMENTS

The stock market losses in 2008 are still impacting most public retirement plans. The December 31, 2009 valuation reflected a loss on the actuarial value of assets despite a return on market value of 21%, due to the use of an asset smoothing method, which smoothes out the peaks and valleys of investment returns. The System utilizes an asset smoothing method that determines the actuarial value of assets as 75% of the expected value (using the 7.75% actuarial assumed rate of return) and 25% of actual market value. Because part of the 2008 deferred loss was recognized this year, the rate of return on the actuarial value of assets for the 2009 plan year was about 4% despite a return on market value of 21%.

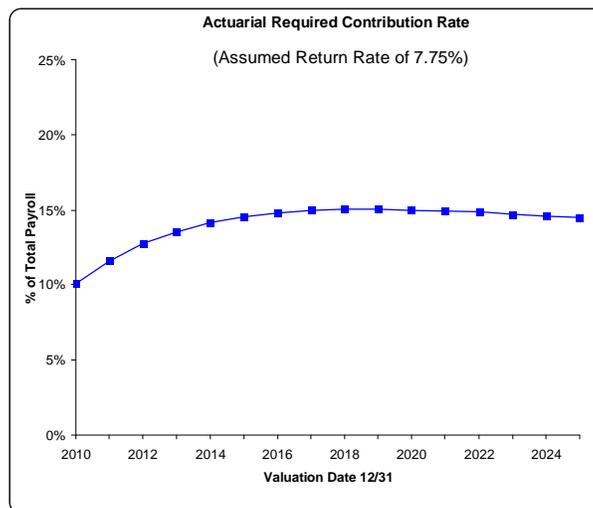
Given the size of the deferred investment loss (\$65M), the System's funded status could decrease and the actuarial contribution rate increase in future valuations absent favorable experience to offset the impact of the deferred losses. The City should be prepared for significantly higher contribution rates in the next few years, and perhaps longer depending on future rates of return.

While the use of an asset smoothing method is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred (unrecognized) investment experience. The key valuation results from the December 31, 2009 actuarial valuation are shown below using both the actuarial value of assets and the pure market value.

	Using Actuarial Value of Assets	Using Market Value of Assets
Actuarial Liability	\$ 529,271,471	\$529,271,471
Asset Value	509,493,888	444,447,344
Unfunded actuarial liability	\$ 19,777,583	\$ 84,824,127
Funded Ratio	96.3%	84.0%
Normal Cost Rate	13.3%	13.3%
UAL Contribution Rate	<u>1.7%</u>	<u>7.3%</u>
Total Contribution Rate	15.0%	20.6%
Employee Contribution Rate	<u>(4.8%)</u>	<u>(4.8%)</u>
Employer Contribution Rate	10.2%	15.8%

The asset smoothing method impacts only the timing of recognizing the actual market experience on the assets. Due to deferred investment experience from 2008, the actuarial value of assets exceeds the pure market value by 15%, despite strong returns in 2009. If there are not higher returns than 7.75% consistently over the next few years, the \$65 million of deferred investment experience will be recognized and the ultimate impact on the employer contribution rate can be expected to be similar to the column shown above using market value of assets.

The following graph shows the expected increase in the employer contribution rate in future years if 7.75% is earned in all future years and the full actuarial contribution rate is made by the City in all future years.



SUMMARY OF PRINCIPAL RESULTS

1. PARTICIPANT DATA	12/31/2009 Valuation	12/31/2008 Valuation	% Change
Number of:			
Active Members			
Plan 1	18	34	(47.1)%
Plan 2	981	941	4.3%
Plan 3 (excluding Plan 3b)	740	852	(13.1)%
Total	1,739	1,827	(4.8)%
DROP Members			
Plan 1	62	58	6.9%
Plan 2	17	17	0.0%
Total	79	75	5.3%
Retired Members and Beneficiaries	1,181	1,167	1.2%
Inactive Vested Members	131	131	0.0%
Total Members	3,130	3,200	(2.2)%
Annual Valuation Payroll of Active Members (Including DROP)			
Plan 1	\$ 4,656,987	\$ 5,233,211	(11.0)%
Plan 2	50,505,323	46,988,203	7.5%
Plan 3	27,556,452	29,824,401	(7.6)%
Total	\$ 82,718,762	\$ 82,045,815	0.8%
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 28,730,505	\$ 27,520,308	4.4%
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	\$ 529,271,471	\$ 512,373,522	3.3%
Market Value of Assets	444,447,344	385,599,194	15.3%
Assets for Valuation Purposes	509,493,888	512,853,345	(0.7)%
Unfunded Actuarial Liability/(Surplus)	\$ 19,777,583	\$ (479,823)	(4,221.8) %
Funded Ratio	96.3%	100.1%	(3.8)%
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	13.3%	13.2%	0.8%
Member Financed	4.8%	4.8%	0.0%
Employer Normal Cost	8.5%	8.4%	1.2%
Amortization of Unfunded Actuarial Liability/(Surplus)	1.7%	0.0%	NA
Range of Employer Contribution Rates			
Minimum (Normal Cost Rate)	NA	8.4%	NA
With Amortization Charge/(Credit)	10.2%	8.4%	21.4%

SECTION 2

SCOPE OF THE REPORT

This report presents the actuarial valuation of the Wichita Employees' Retirement System (WER) as of December 31, 2009. This valuation was prepared at the request of the System's Board of Trustees.

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, 2009. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System. 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, 2009, the market value of assets for the System, excluding Plan 3b assets for members who have elected to remain in Plan 3, was \$444 million. Table 1 is a comparison, at market values, of System assets as of December 31, 2008, and December 31, 2009, in total and by investment category. Table 2 summarizes the change in the market value of assets from December 31, 2008 to December 31, 2009.

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 December 31, 2002 valuation, smoothes market experience by recognizing 25% of the difference between expected value (based on the actuarial assumption) and market value. Table 3 shows the development of the actuarial value of assets (AVA) as of December 31, 2009.

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

	As of December 31, 2009		As of December 31, 2008	
	<u>Amount</u> <u>(\$ Millions)</u>	<u>% of</u> <u>Total</u>	<u>Amount</u> <u>(\$ Millions)</u>	<u>% of</u> <u>Total</u>
Cash and Equivalents	\$ 0.1	0.0 %	\$ 0.1	0.0 %
Government Securities	29.2	6.8	30.7	8.2
Corporate Debt	49.6	11.5	50.5	13.4
Mortgage Backed Securities	52.9	12.2	65.1	17.3
Pooled Funds	63.6	14.7	43.9	11.7
Domestic Equity	148.2	34.3	113.4	30.2
International Equity	81.0	18.8	63.9	17.0
Real Estate	13.6	3.1	26.2	7.0
Securities Lending Collateral Pool	68.9	15.9	55.2	14.7
Other	0.4	0.1	0.4	0.1
Receivables	6.3	1.5	8.6	2.3
Liabilities	<u>(81.5)</u>	<u>(18.9)</u>	<u>(82.1)</u>	<u>(21.9)</u>
Total Plans 1 and 2	\$ 432.3	100.0 %	\$ 375.9	100.0 %
Plan 3 Assets				
Members Electing to Stay in Plan 3	\$ 3.0		\$ 2.2	
Other Plan 3 Members	<u>12.2</u>		<u>9.7</u>	
Total Plan 3 and 3b	15.2		11.9	
Net Assets (Plans 1, 2, and 3)	\$ 447.5		\$ 387.8	

TABLE 2
WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF CHANGES IN NET ASSETS
DURING YEAR ENDED DECEMBER 31, 2009

(Market Value)

	Plans 1 & 2	Plan 3*	Total
1. Market Value of Assets as of December 31, 2008	\$ 375,864,154	\$ 9,735,040	\$ 385,599,194
2. Contributions:			
a. Members	\$ 2,639,080	\$ 1,341,754	\$ 3,980,834
b. City	2,545,331	1,341,754	3,887,085
c. Other	0	0	0
d. Transfers	1,664,681	(1,877,852)	(213,171)
e. Total [2(a) + 2(b) + 2(c) + 2(d)]	\$ 6,849,092	\$ 805,656	\$ 7,654,748
3. Investment Income:			
a. Interest and Dividends	\$ 12,334,799	\$ 328,324	\$ 12,663,123
b. Net Appreciation in Fair Value	67,115,314	1,829,426	68,944,740
c. Commission Recapture	53,553	1,405	54,958
d. Securities Lending Income	374,634	9,873	384,507
e. Total [3(a) + 3(b) + 3(c) + 3(d)]	\$ 79,878,300	\$ 2,169,028	\$ 82,047,328
4. Expenditures:			
a. Refunds of Member Contributions	\$ 247,890	\$ 362,729	\$ 610,619
b. Benefits Paid:			
(1) Pension and death benefits	25,329,859	0	25,329,859
(2) DROP payments	2,352,858	0	2,352,858
c. Administrative Expenses	508,727	130,030	638,757
d. Investment Expenses	1,867,182	54,651	1,921,833
e. Total [4(a) + 4(b) + 4(c) + 4(d)]	\$ 30,306,516	\$ 547,410	\$ 30,853,926
5. Net Change [2(e) + 3(e) - 4(e)]	\$ 56,420,876	\$ 2,427,274	\$ 58,848,150
6. Market Value of Assets as of December 31, 2009 (1) + (5)	\$ 432,285,030	\$ 12,162,314	\$ 444,447,344

* Excludes assets for Plan 3b members. The December 31, 2009 value of the assets for this group was \$3,032,679.

TABLE 3
WICHITA EMPLOYEES' RETIREMENT SYSTEM
DEVELOPMENT OF ACTUARIAL
VALUE OF ASSETS
AS OF DECEMBER 31, 2009

	<u>Plans 1 & 2</u>	<u>Plan 3*</u>	<u>Total</u>
1. Actuarial Value of Assets as of December 31, 2008	\$ 499,953,746	\$ 12,899,599	\$ 512,853,345
2. Actual Contributions/Disbursements			
a. Contributions	\$ 5,184,411	\$ 2,683,508	\$ 7,867,919
b. Transfers	1,664,681	(1,877,852)	(213,171)
c. Benefit Payments and Refunds	(27,930,607)	(362,729)	(28,293,336)
d. Net (a + b + c)	\$ <u>(21,081,515)</u>	\$ <u>442,927</u>	\$ <u>(20,638,588)</u>
3. Expected Value of Assets as of December 31, 2009 [(1) x 1.0775] + [(2d) x (1.0775) ⁻⁵]	\$ 516,816,980	\$ 14,359,088	\$ 531,176,068
4. Market Value of Assets as of December 31, 2009	\$ 432,285,030	\$ 12,162,314	\$ 444,447,344
5. Difference Between Market and Expected Values (4) - (3)	\$ (84,531,950)	\$ (2,196,774)	\$ (86,728,724)
6. Actuarial Value of Assets as of December 31, 2009 (3) + [(5) x 25%]	\$ 495,683,993	\$ 13,809,895	\$ 509,493,888
7. Actuarial Value of Assets/Market Value of Assets (6) / (4)	114.67%	113.55%	114.64%
8. Market Value less Actuarial Value of Assets (4) - (6)	\$ (63,398,963)	\$ (1,647,581)	\$ (65,046,544)

* Excludes Plan 3b.

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, 2009. 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, 2009.

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, 2009

	<u>Plan 1</u>		<u>Plan 2</u>		<u>Plan 3</u>		<u>Total</u>
1. Active employees							
a. Retirement Benefit	\$ 8,890,743	\$	198,180,213	\$	43,259,337	\$	250,330,293
b. Pre-Retirement Death Benefit	5,960		2,280,058		586,519		2,872,537
c. Withdrawal Benefit	71,269		12,826,335		6,898,929		19,796,533
d. Disability Benefit	13,904		5,285,989		1,619,761		6,919,654
e. Total	\$ <u>8,981,876</u>	\$	<u>218,572,595</u>	\$	<u>52,364,546</u>	\$	<u>279,919,017</u>
2. DROP Members							
a. DROP Account Balance	\$ 7,558,697	\$	804,653	\$	0	\$	8,363,350
b. Monthly Retirement Benefit	38,726,544		5,123,863		0		43,850,407
c. Total	\$ <u>46,285,241</u>	\$	<u>5,928,516</u>	\$	<u>0</u>	\$	<u>52,213,757</u>
3. Inactive Vested Members	\$ 1,039,283	\$	18,744,844	\$	0	\$	19,784,127
4. Inactive Nonvested Members	\$ 0	\$	0	\$	0	\$	0
5. In Pay Members							
a. Disabled Members	\$ 1,941,207	\$	1,581,261	\$	0	\$	3,522,468
b. Retirees	192,549,319		42,366,472		0		234,915,791
c. Beneficiaries	17,473,681		3,700,906		0		21,174,587
d. Total	\$ <u>211,964,207</u>	\$	<u>47,648,639</u>	\$	<u>0</u>	\$	<u>259,612,846</u>
6. Total PVFB							
(1e) + (2c) + (3) + (4) + (5d)	\$ 268,270,607	\$	290,894,594	\$	52,364,546	\$	611,529,747

TABLE 5
WICHITA EMPLOYEES' RETIREMENT SYSTEM
ACTUARIAL LIABILITY
AS OF DECEMBER 31, 2009

	<u>Plan 1</u>		<u>Plan 2</u>		<u>Plan 3</u>		<u>Total</u>
1. Active employees							
a. Present Value of Future Benefits	\$ 8,981,876	\$	218,572,595	\$	52,364,546	\$	279,919,017
b. Present Value of Future Normal Costs	1,208,682		47,660,839		35,036,336		83,905,857
c. Actuarial Liability (1a) - (1b)	\$ <u>7,773,194</u>	\$	<u>170,911,756</u>	\$	<u>17,328,210</u>	\$	<u>196,013,160</u>
2. DROP Members	\$ 46,285,241	\$	5,928,516	\$	0	\$	52,213,757
3. Inactive Vested Members	\$ 1,039,283	\$	18,744,844	\$	0	\$	19,784,127
4. Inactive Nonvested Members	\$ 0	\$	0	\$	0	\$	0
5. In Pay Members							
a. Disabled Members	\$ 1,941,207	\$	1,581,261	\$	0	\$	3,522,468
b. Retirees	192,549,319		42,366,472		0		234,915,791
c. Beneficiaries	17,473,681		3,700,906		0		21,174,587
d. Total	\$ <u>211,964,207</u>	\$	<u>47,648,639</u>	\$	<u>0</u>	\$	<u>259,612,846</u>
6. Reserve for Plan 3 Members	\$ 0	\$	0	\$	1,647,581	\$	1,647,581
7. Total Actuarial Liability							
(1c) + (2) + (3) + (4) + (5d) + (6)	\$ 267,061,925	\$	243,233,755	\$	18,975,791	\$	529,271,471

TABLE 6
WICHITA EMPLOYEES' RETIREMENT SYSTEM
PRESENT VALUE OF ACCRUED BENEFITS
AS OF DECEMBER 31, 2009

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 the accrued benefit liability does not reflect this provision until the assumed termination of employment.

	<u>Plan 1</u>		<u>Plan 2</u>		<u>Plan 3</u>		<u>Total</u>
1. Active Members	\$ 8,233,785	\$	109,868,049	\$	12,162,314	\$	130,264,148
2. DROP Members	\$ 46,285,241	\$	5,928,516	\$	0	\$	52,213,757
3. Inactive Vested Members	\$ 1,039,283	\$	18,744,844	\$	0	\$	19,784,127
4. In Pay Members							
a. Disabled Members	\$ 1,941,207	\$	1,581,261	\$	0	\$	3,522,468
b. Retirees	192,549,319		42,366,472		0		234,915,791
c. Beneficiaries	17,473,681		3,700,906		0		21,174,587
d. Total	\$ <u>211,964,207</u>	\$	<u>47,648,639</u>	\$	<u>0</u>	\$	<u>259,612,846</u>
5. Total	\$ 267,522,516	\$	182,190,048	\$	12,162,314	\$	461,874,878
6. Market Value of Assets*	\$ 257,155,321	\$	175,129,709	\$	12,162,314	\$	444,447,344
7. Funded Ratio (6)/(5)	96%		96%		100%		96%

* Split of assets between Plan 1 and Plan 2 is in proportion to the liabilities for illustrative purposes 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 Entry Age Normal (EAN) actuarial cost method is used for the valuation. Under this 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, 2009 actuarial valuation will be used to determine employer contribution rates to the Wichita Employees' Retirement System for fiscal year 2011. 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, 2009, the actuarial value of assets was less than the actuarial liability, resulting in an unfunded actuarial liability (UAL). The City's funding policy is to amortize the UAL over a rolling 20-year period. The amortization of the UAL is in addition to the employer normal cost rate.

Contribution Rate Summary

In Table 7, the amortization credit related to the surplus, as of December 31, 2009, is developed. Table 8 develops the normal cost rate for the System. The derivation of the contribution rate 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 gain/(loss) for the year ended December 31, 2009.

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

TABLE 7

WICHITA EMPLOYEES' RETIREMENT SYSTEM

DECEMBER 31, 2009 VALUATION

DERIVATION OF UNFUNDED ACTUARIAL LIABILITY CONTRIBUTION RATE

1. Actuarial Liability	\$	529,271,471	
2. Actuarial Value of Assets	\$	509,493,888	
3. Unfunded Actuarial Liability/(Surplus)	\$	19,777,583	
4. Payment (Adjusted to Mid-Year) to Amortize Unfunded Actuarial Liability/(Surplus) Over 20 Years *	\$	1,407,594	
5. Total Projected Payroll for the Year	\$	84,356,917	
6. Amortization Payment as a Percent of Payroll			1.7 %

* The UAL is amortized as a level percent of payroll over a rolling 20-year period.

TABLE 8
WICHITA EMPLOYEES' RETIREMENT SYSTEM
DECEMBER 31, 2009 VALUATION
DERIVATION OF NORMAL COST RATE

Normal Cost at December 31, 2009		
Service pensions	\$	8,022,373
Disability pensions		312,961
Survivor pensions		129,627
Termination benefits		
- Deferred service pensions		947,198
- Return of member contributions		837,832
Total Normal Cost	\$	<u>10,249,991</u>
 Covered Payroll for Members Under Certain Retirement Age	 \$	 77,283,701
 Total Normal Cost Rate for Year		 13.3%

TABLE 9**WICHITA EMPLOYEES' RETIREMENT SYSTEM
EMPLOYER CONTRIBUTION RATES
FOR FISCAL YEAR
COMMENCING IN 2011**

	Contribution Requirements as % of Payroll
Normal Cost	
Service pensions	10.4 %
Disability pensions	0.4 %
Survivor pensions	0.2 %
Termination benefits	
- Deferred service pensions	1.2 %
- Return of member contributions	1.1 %
Total Normal Cost	13.3 %
Unfunded Actuarial Liability	
Retired members and beneficiaries (1)	0.0 %
Active and former members (2)	1.7 %
Total UAL Contribution	1.7 %
Total Contribution Requirement	
Member Financed Portion (3)	4.8 %
City Financed Portion	10.2 %
Total	15.0 %

(1) Actuarial value of assets exceeds the actuarial liability for retirees and beneficiaries as of December 31, 2009.

(2) The unfunded actuarial liability is amortized as a level percent of active member payroll over a rolling 20-year period.

(3) The weighted average of member contribution rates: 6.4% for Plan 1, 4.7% for Plan 2, and 4.7% for Plan 3.

TABLE 10

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, 2009, the actuarial value of assets is less than actuarial liabilities resulting in an unfunded actuarial liability (UAL). The UAL is amortized over a rolling 20-year period.

Valuation Date	Fiscal Year	City Contributions as Percents of Active Member Pensionable Payroll	
		Funding Objective	Amortization 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)
12/31/05	2007	3.9 – 8.2	(4.3)
12/31/06	2008	4.2 – 8.3	(4.1)
12/31/07	2009	4.2 – 8.4	(4.2)
12/31/08	2010	8.4	0.0
12/31/09	2011	10.2	0.0

TABLE 11

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
DERIVATION OF SYSTEM EXPERIENCE GAIN/(LOSS)**

	(SM) Year Ended <u>12/31/09</u>
(1) UAL* at start of year	(0.5)
(2) + Normal cost for year	10.1
(3) + Assumed investment return on (1) & (2)	0.7
(4) - Actual contributions (member + City)	7.9
(5) - Assumed investment return on (4)	0.3
(6) = Expected UAL at end of year	2.1
(7) + Increase (decr.) from amendments	0.0
(8) + Increase (decr.) from assumption change	(2.7)
(9) = Expected UAL after changes	(0.6)
(10) = Actual UAL at year end	19.8
(11) = Experience gain (loss) (9) – (10)	(20.4)**
(12) = Percent of beginning of year AL	4.0%

* *Unfunded Actuarial Liability/(Surplus)*

** *Of this amount, \$21.7 million of the experience loss is due to an experience loss on the actuarial value of assets and \$1.3 million represents an experience gain on liabilities.*

SECTION 6

ACCOUNTING INFORMATION

The actuarial liability is a measure intended to help the reader assess (i) a retirement system's funded status on an on-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 Entry Age Normal 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 Normal actuarial liability was determined as part of an actuarial valuation of the plan as of December 31, 2009. Significant actuarial assumptions used in determining the 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 4.00% per year compounded annually, (3.5% attributable to inflation, and 0.50% attributable to productivity),
- (c) additional projected salary increases of 0.25% to 3.2% per year attributable to seniority/merit, and
- (d) the assumption that benefits will increase after retirement 3.0% per year (non-compounded) for Plan 1 and 2.0% per year (non-compounded) for Plan 2.

Actuarial Liability:

Active members	\$197,660,741
DROP members	52,213,757
Retired members and beneficiaries currently receiving benefits	259,612,846
Vested terminated members not yet receiving benefits	<u>19,784,127</u>
Total Actuarial Liability	\$529,271,471
Actuarial Value of Assets (market value was \$444,447,344)	\$509,493,888
Unfunded Actuarial Liability	19,777,583

During the year ended December 31, 2009, the Plan experienced a net increase of \$17 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 Liability (AL) (b)	Unfunded AL (UAL) (b)-(a)	Funded Ratio (a)/(b)	Active Member Covered Payroll (c)	UAL 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)
12/31/05*	479,275**	433,297	(45,978)	110.6	72,367	(63.5)
12/31/06*	505,756**	459,062	(46,694)	110.2	75,881	(61.5)
12/31/07*	533,911**	483,387	(50,524)	110.5	78,736	(64.2)
12/31/08*	512,853**	512,374	(480)	100.1	81,580	(0.6)
12/31/09*	509,494**	529,271	19,778	96.3	82,704	23.9

Rounded dollar amounts are in thousands.

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

*** Includes all members except Plan 3b.*

Analysis of the dollar amounts of actuarial value of assets, actuarial liability, or unfunded actuarial liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial liability provides one indication of the System's funded status on an on-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 liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial 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.

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
2005	12/31/03	3,589,063*	100.0
2006	12/31/04	3,566,429*	100.0
2007	12/31/05	3,700,590*	100.0
2008	12/31/06	3,834,270*	100.0
2009	12/31/07	3,887,085*	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, 2009
Actuarial Cost Method	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*	4.25% - 7.20%
* Includes Inflation at	3.50%
Cost-of-Living Adjustments	3.00% Non-compounded (Plan 1) 2.00% Non-compounded (Plan 2)

TABLE 14
WICHITA EMPLOYEES' RETIREMENT SYSTEM
SOLVENCY TEST

Valuation Date	Aggregate Actuarial Liability For				Portion of Actuarial Liabilities Covered by Reported Assets		
	(1) Active Member Contributions	(2) Retirants and Beneficiaries*	(3) Active Members (Employer Financed Portion)	Reported Valuation Assets	(1)	(2)	(3)
	11/30/94	\$25,426,998	\$111,681,938	\$93,108,469	\$215,385,559	100.0%	100.0%
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
12/31/05	43,397,403	228,408,201	161,491,272	479,274,508	100.0	100.0	128.5
12/31/06	45,475,389	237,860,848	175,725,905	505,755,995	100.0	100.0	126.6
12/31/07	46,189,489	256,374,002	180,823,537	533,911,465	100.0	100.0	127.9
12/31/08	46,541,280	272,176,420	193,655,822	512,853,345	100.0	100.0	100.2
12/31/09	49,152,328	279,396,973	200,722,170	509,493,888	100.0	100.0	90.1

During the twelve months ended December 31, 2009, the Wichita Employees' Retirement System generated a net experience loss of \$20 million dollars. The amount is 3.9% of the actuarial liability at the beginning of the year.

**Includes vested terminated members*

APPENDIX A
SUMMARY OF MEMBERSHIP DATA

MEMBER DATA RECONCILIATION

December 31, 2008 to December 31, 2009

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 12/31/08	34	941	852	58	17	867	300	6	125	3,200
New Members	0	0	+51	0	0	+12	+5	0	0	+68
Transfers	0	+85	-98	0	0	0	0	0	0	-13
Terminations				0	0					
Refunded	0	-6	-62	0	0	0	0	0	-1	-69
Deferred Vested	0	-10	0	0	0	0	0	0	+10	0
Retirements										
Service	-4	-20	0	-8	-5	+14	+33	-2	-8	0
Disability	-0	-2	0	0	0	0	+2	0	0	0
DROP	-12	-5	0	+12	+5	0	0	0	0	0
Deaths				0	0					
Cashed Out	0	-1	-3	0	0	0	0	0	-1	-5
With Beneficiary	0	-1	0	0	0	-11	-4	0	0	-16
Without Beneficiary	0	0	0	0	0	-32	-5	0	0	-37
Data Adjustments	0	0	0	0	0	0	0	0	+2	+2
Members as of 12/31/09	18	981	740	62	17	850	331	4	127	3,130

APPENDIX A (continued)

WICHITA EMPLOYEES' RETIREMENT SYSTEM

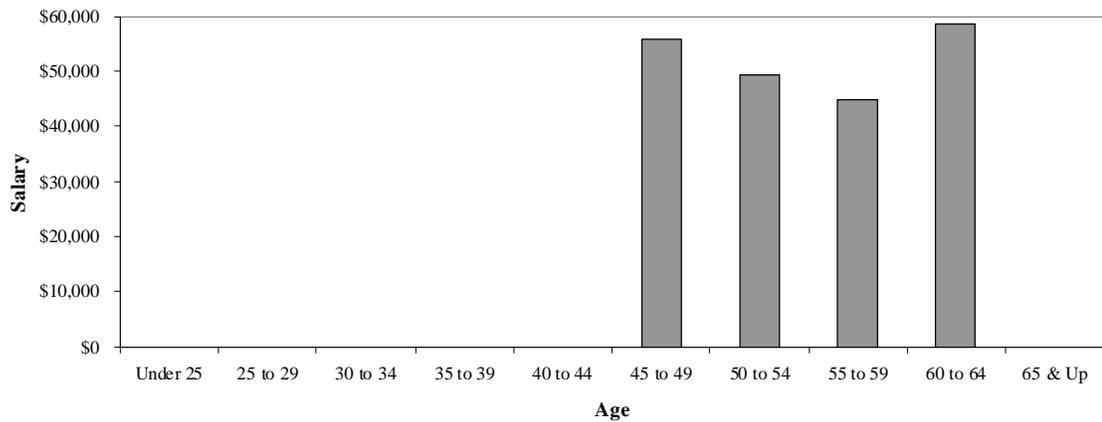
SUMMARY OF ACTIVE MEMBERS

(Excluding DROP Members)

as of December 31, 2009

Age	Plan 1					
	Number			Valuation Salaries		
	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	0	0	-	-	-
45 to 49	2	0	2	111,800	-	111,800
50 to 54	4	2	6	202,968	93,345	296,313
55 to 59	4	5	9	182,169	222,964	405,133
60 to 64	0	1	1	-	58,488	58,488
65 & Up	0	0	0	-	-	-
Total	10	8	18	\$ 496,937	\$ 374,797	\$ 871,734

Average Salary by Age

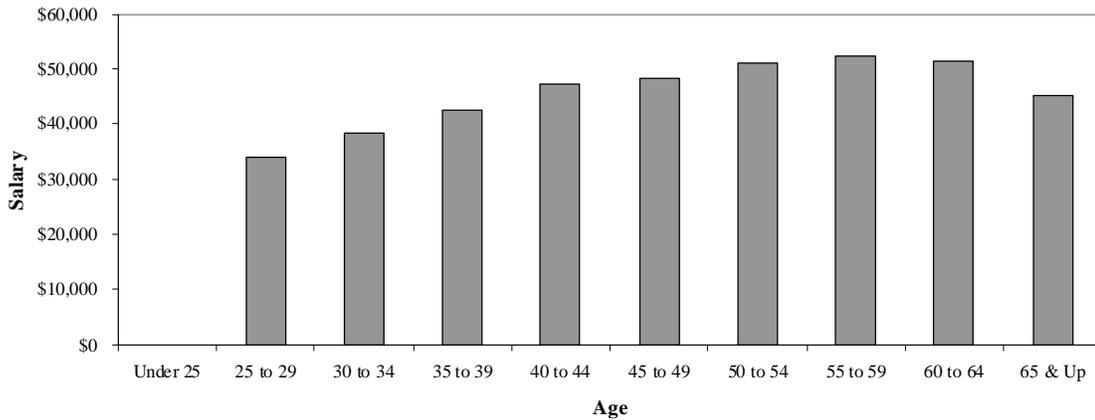


APPENDIX A (continued)

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF ACTIVE MEMBERS
(Excluding DROP Members)
as of December 31, 2009**

Age	Plan 2			Valuation Salaries		
	Number			Valuation Salaries		
	Male	Female	Total	Male	Female	Total
Under 25	0	0	0	\$ -	\$ -	\$ -
25 to 29	10	1	11	339,297	35,876	375,173
30 to 34	18	13	31	668,841	519,215	1,188,056
35 to 39	33	22	55	1,422,263	911,085	2,333,348
40 to 44	66	53	119	3,127,707	2,508,616	5,636,323
45 to 49	108	68	176	5,079,069	3,420,663	8,499,732
50 to 54	137	91	228	7,036,097	4,583,475	11,619,572
55 to 59	144	93	237	7,512,697	4,905,461	12,418,158
60 to 64	67	45	112	3,692,949	2,081,369	5,774,318
65 & Up	7	5	12	328,564	215,427	543,991
Total	590	391	981	\$ 29,207,484	\$ 19,181,187	\$ 48,388,671

Average Salary by Age

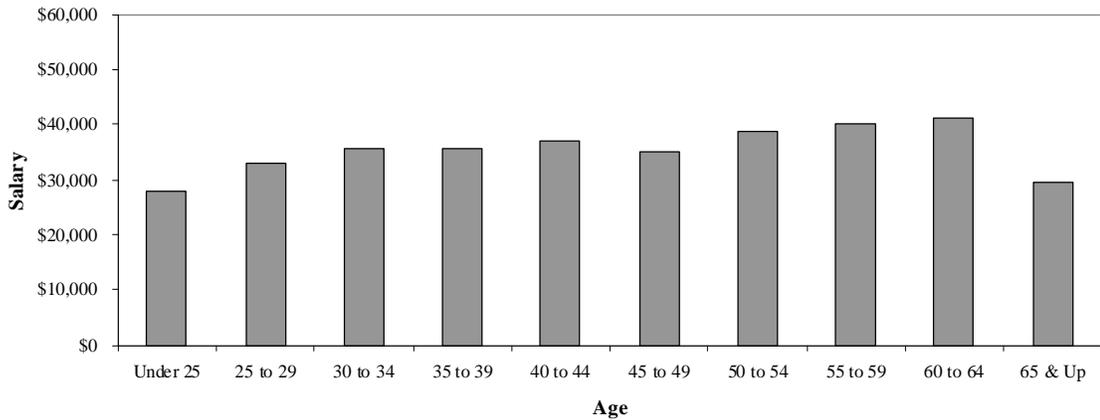


APPENDIX A (continued)

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF ACTIVE MEMBERS
as of December 31, 2009**

Age	Plan 3					
	Number			Valuation Salaries		
	Male	Female	Total	Male	Female	Total
Under 25	22	10	32	\$ 598,337	\$ 293,161	\$ 891,498
25 to 29	79	45	124	2,639,463	1,432,998	4,072,461
30 to 34	68	44	112	2,319,403	1,668,598	3,988,001
35 to 39	45	38	83	1,612,775	1,355,280	2,968,055
40 to 44	69	24	93	2,539,155	923,888	3,463,043
45 to 49	51	35	86	1,806,686	1,201,839	3,008,525
50 to 54	62	31	93	2,549,590	1,058,165	3,607,755
55 to 59	43	29	72	1,783,235	1,114,332	2,897,567
60 to 64	28	12	40	1,137,489	515,127	1,652,616
65 & Up	4	1	5	102,931	44,087	147,018
Total	471	269	740	\$ 17,089,064	\$ 9,607,475	\$ 26,696,539

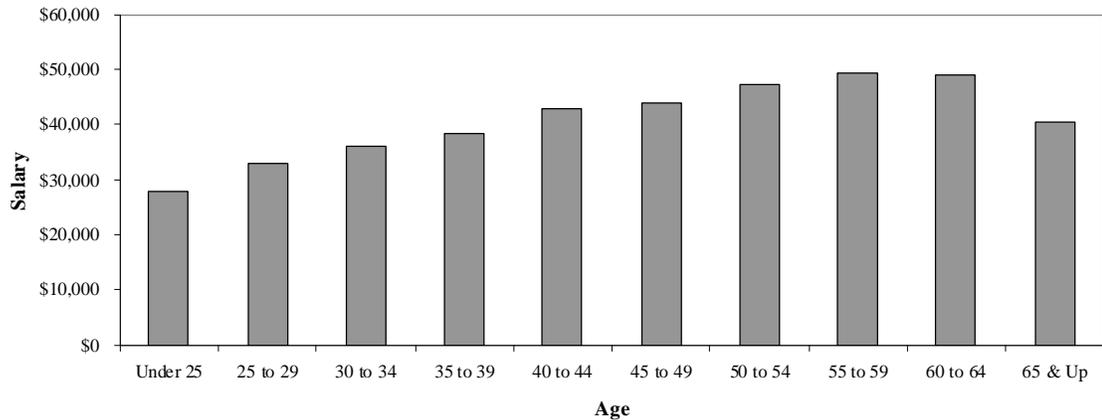
Average Salary by Age



APPENDIX A (continued)
WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF ACTIVE MEMBERS
(Excluding DROP Members)
as of December 31, 2009

Age	All Plans					
	Number			Valuation Salaries		
	Male	Female	Total	Male	Female	Total
Under 25	22	10	32	\$ 598,337	\$ 293,161	\$ 891,498
25 to 29	89	46	135	2,978,760	1,468,874	4,447,634
30 to 34	86	57	143	2,988,244	2,187,813	5,176,057
35 to 39	78	60	138	3,035,038	2,266,365	5,301,403
40 to 44	135	77	212	5,666,862	3,432,504	9,099,366
45 to 49	161	103	264	6,997,555	4,622,502	11,620,057
50 to 54	203	124	327	9,788,655	5,734,985	15,523,640
55 to 59	191	127	318	9,478,101	6,242,757	15,720,858
60 to 64	95	58	153	4,830,438	2,654,984	7,485,422
65 & Up	11	6	17	431,495	259,514	691,009
Total	1,071	668	1,739	\$ 46,793,485	\$ 29,163,459	\$ 75,956,944

Average Salary by Age

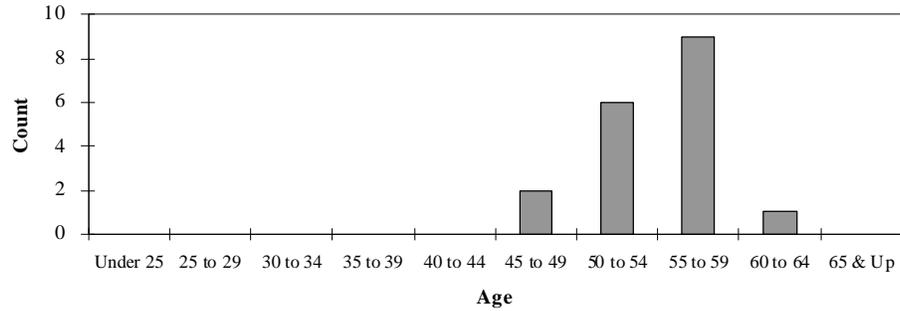


APPENDIX A (continued)
WICHITA EMPLOYEES' RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
(Excluding DROP Members)
as of December 31, 2009

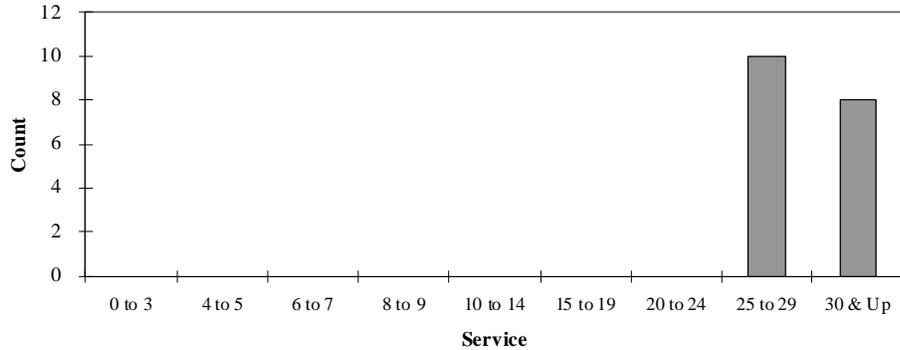
Plan 1

Age	Years of Service									Total
	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	
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	0	0	0	0
45 to 49	0	0	0	0	0	0	0	2	0	2
50 to 54	0	0	0	0	0	0	0	5	1	6
55 to 59	0	0	0	0	0	0	0	2	7	9
60 to 64	0	0	0	0	0	0	0	1	0	1
65 & Up	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	10	8	18

Age Distribution



Service Distribution



Average age: 54.5

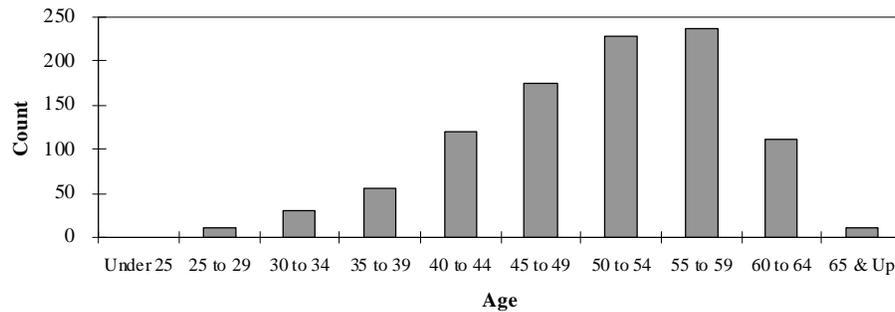
Average service: 29.7

APPENDIX A (continued)
WICHITA EMPLOYEES' RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
(Excluding DROP Members)
as of December 31, 2009

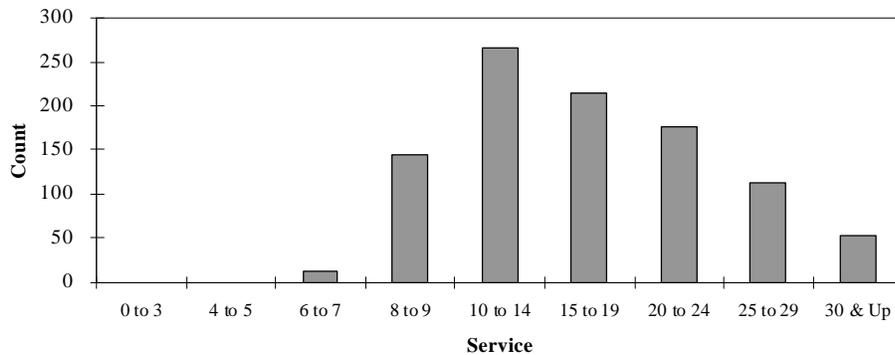
Plan 2

Age	Years of Service									Total
	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	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	1	10	0	0	0	0	0	11
30 to 34	0	0	0	17	13	1	0	0	0	31
35 to 39	0	0	0	17	32	5	1	0	0	55
40 to 44	0	0	6	19	35	38	21	0	0	119
45 to 49	0	0	2	28	40	44	36	24	2	176
50 to 54	0	0	0	25	56	51	47	39	10	228
55 to 59	0	0	2	14	55	50	49	38	29	237
60 to 64	0	0	1	11	34	21	22	12	11	112
65 & Up	0	0	0	4	2	5	1	0	0	12
Total	0	0	12	145	267	215	177	113	52	981

Age Distribution



Service Distribution



Average age: 50.7

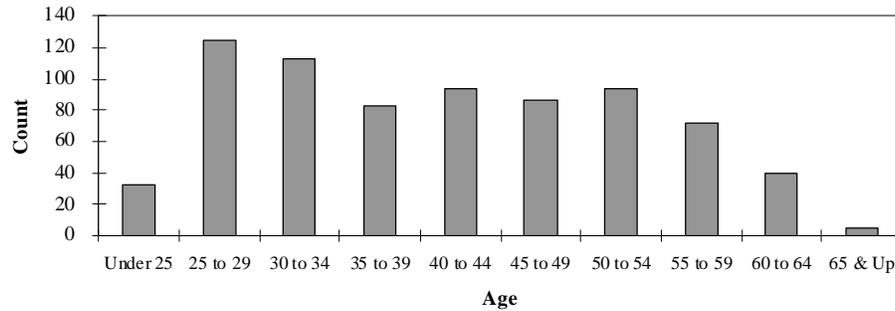
Average service: 16.7

APPENDIX A (continued)
WICHITA EMPLOYEES' RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2009

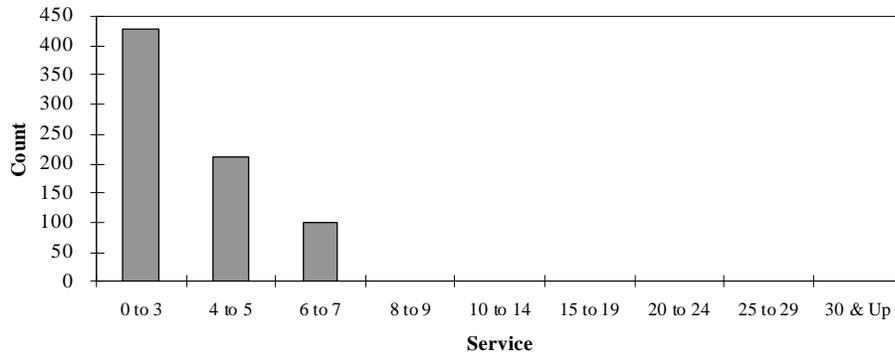
Plan 3

Age	Years of Service									Total
	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	
Under 25	29	3	0	0	0	0	0	0	0	32
25 to 29	80	36	8	0	0	0	0	0	0	124
30 to 34	74	30	8	0	0	0	0	0	0	112
35 to 39	51	19	13	0	0	0	0	0	0	83
40 to 44	50	32	11	0	0	0	0	0	0	93
45 to 49	41	24	21	0	0	0	0	0	0	86
50 to 54	42	31	20	0	0	0	0	0	0	93
55 to 59	36	25	11	0	0	0	0	0	0	72
60 to 64	21	13	6	0	0	0	0	0	0	40
65 & Up	4	0	1	0	0	0	0	0	0	5
Total	428	213	99	0	0	0	0	0	0	740

Age Distribution



Service Distribution



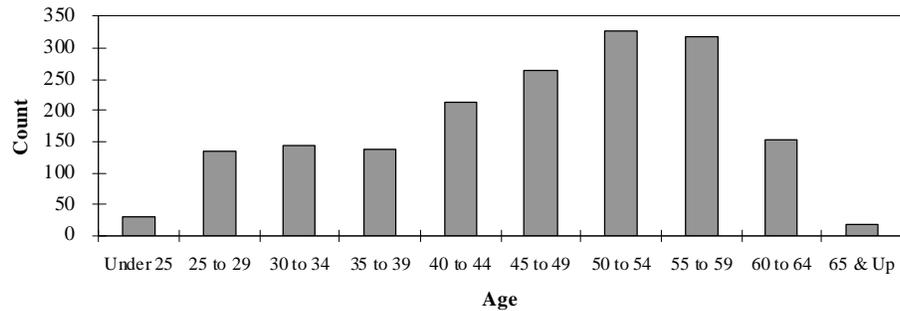
Average age: 41.0

Average service: 3.4

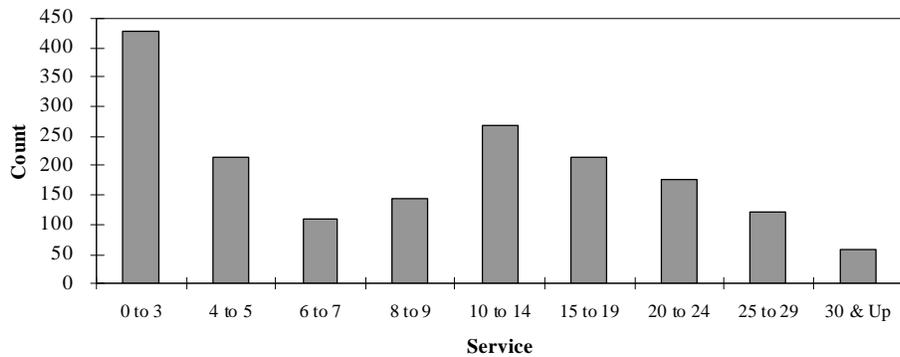
APPENDIX A (continued)
WICHITA EMPLOYEES' RETIREMENT SYSTEM
DISTRIBUTION OF ACTIVE MEMBERS
(Excluding DROP Members)
as of December 31, 2009
All Plans

Age	Years of Service									Total
	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	
Under 25	29	3	0	0	0	0	0	0	0	32
25 to 29	80	36	9	10	0	0	0	0	0	135
30 to 34	74	30	8	17	13	1	0	0	0	143
35 to 39	51	19	13	17	32	5	1	0	0	138
40 to 44	50	32	17	19	35	38	21	0	0	212
45 to 49	41	24	23	28	40	44	36	26	2	264
50 to 54	42	31	20	25	56	51	47	44	11	327
55 to 59	36	25	13	14	55	50	49	40	36	318
60 to 64	21	13	7	11	34	21	22	13	11	153
65 & Up	4	0	1	4	2	5	1	0	0	17
Total	428	213	111	145	267	215	177	123	60	1,739

Age Distribution



Service Distribution



Average age: 46.9

Average service: 11.9

APPENDIX A (continued)

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
DISTRIBUTION OF DROP MEMBERS
as of December 31, 2009**

Plan 1

Age	Service					Total
	Under 20	20 to 24	25 to 29	30 to 34	35 & Up	
Under 50	0	0	0	2	0	2
50-54	0	0	0	24	0	24
55-59	1	0	0	24	0	25
60-64	0	1	0	6	0	7
65 & Up	0	0	0	4	0	4
Total	1	1	0	60	0	62

Age	DROP Duration Elected (months)					Total
	1 to 12	13 to 24	25 to 36	37 to 48	48 to 60	
Under 50	0	0	0	0	2	2
50-54	0	0	0	1	23	24
55-59	0	1	0	1	23	25
60-64	0	0	0	0	7	7
65 & Up	0	0	1	0	3	4
Total	0	1	1	2	58	62

Age	Monthly Benefits	Current Balance
Under 50	\$ 5,368	\$ 75,679
50-54	76,337	2,117,903
55-59	89,109	3,402,711
60-64	20,520	1,061,184
65 & Up	18,813	901,219
Total	\$ 210,146	\$ 7,558,697

Covered Payroll: \$3,690,326

APPENDIX A (continued)

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
DISTRIBUTION OF DROP MEMBERS
as of December 31, 2009**

Plan 2

Age	Service							Total
	Under 10	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
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	0	0	0	0	0
60-64	0	0	1	3	1	1	2	8
65 & Up	0	1	5	0	2	1	0	9
Total	0	1	6	3	3	2	2	17

Age	DROP Duration Elected (months)					Total
	1 to 12	13 to 24	25 to 36	37 to 48	48 to 60	
Under 50	0	0	0	0	0	0
50-55	0	0	0	0	0	0
55-59	0	0	0	0	0	0
60-64	0	0	1	5	2	8
65 & Up	0	1	2	3	3	9
Total	0	1	3	8	5	17

Age	Monthly Benefits	Current Balance
Under 50	\$ 0	\$ 0
50-54	0	0
55-59	0	0
60-64	20,036	314,326
65 & Up	16,197	490,327
Total	\$ 36,233	\$ 804,653

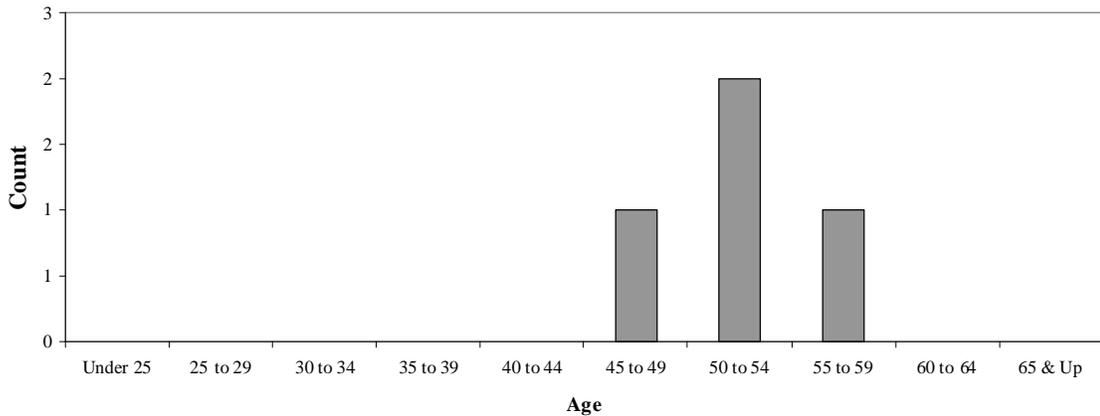
Covered Payroll: \$926,878

APPENDIX A (continued)

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF DEFERRED VESTED MEMBERS
as of December 31, 2009**

Age	Plan 1			Current Monthly Benefit at Retirement		
	Number		Total	Male	Female	Total
	Male	Female		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	0	0	-	-	-
45 to 49	0	1	1	-	1,369	1,369
50 to 54	1	1	2	1,946	2,416	4,362
55 to 59	1	0	1	2,645	-	2,645
60 to 64	0	0	0	-	-	-
65 & Up	0	0	0	-	-	-
Total	2	2	4	\$ 4,591	\$ 3,785	\$ 8,376

Age Distribution

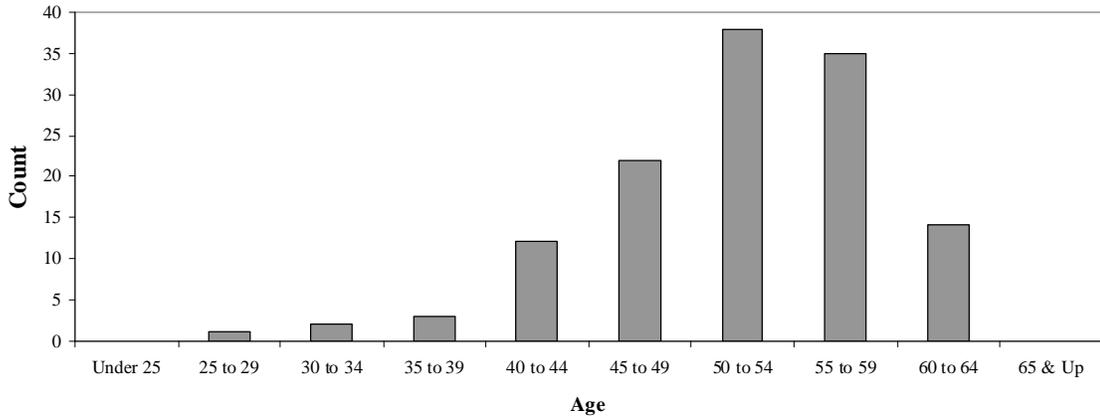


APPENDIX A (continued)

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF DEFERRED VESTED MEMBERS
as of December 31, 2009**

Age	Plan 2					
	Number			Current Monthly Benefit at Retirement		
	Male	Female	Total	Male	Female	Total
Under 25	0	0	0	\$ -	\$ -	\$ -
25 to 29	1	0	1	379	-	379
30 to 34	2	0	2	1,649	-	1,649
35 to 39	0	3	3	-	2,856	2,856
40 to 44	7	5	12	8,211	6,932	15,143
45 to 49	9	13	22	14,910	19,170	34,080
50 to 54	18	20	38	28,725	25,854	54,579
55 to 59	20	15	35	29,029	21,449	50,479
60 to 64	5	9	14	8,412	12,885	21,297
65 & Up	0	0	0	-	-	-
Total	62	65	127	\$ 91,317	\$ 89,146	\$ 180,464

Age Distribution

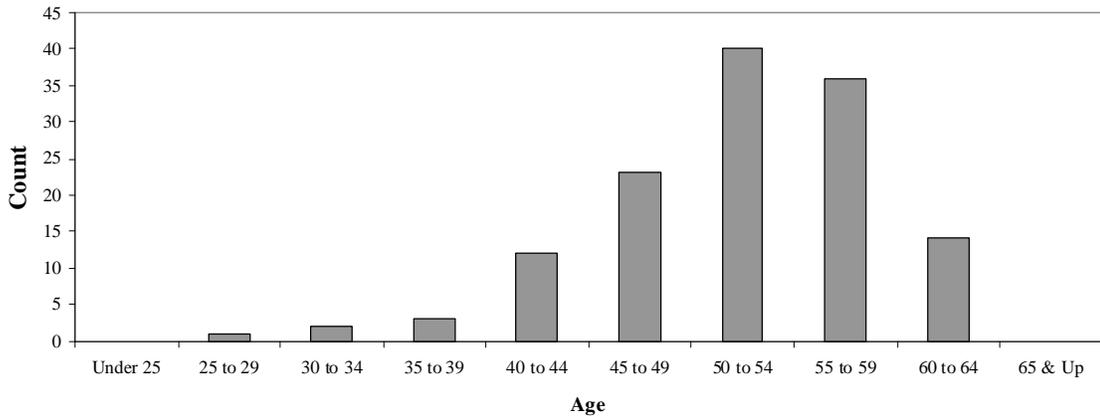


APPENDIX A (continued)

**WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF DEFERRED VESTED MEMBERS
as of December 31, 2009**

Age	All Plans					
	Number			Current Monthly Benefit at Retirement		
	Male	Female	Total	Male	Female	Total
Under 25	0	0	0	\$ -	\$ -	\$ -
25 to 29	1	0	1	379	-	379
30 to 34	2	0	2	1,649	-	1,649
35 to 39	0	3	3	-	2,856	2,856
40 to 44	7	5	12	8,211	6,932	15,143
45 to 49	9	14	23	14,910	20,539	35,449
50 to 54	19	21	40	30,672	28,269	58,941
55 to 59	21	15	36	31,675	21,449	53,124
60 to 64	5	9	14	8,412	12,885	21,297
65 & Up	0	0	0	-	-	-
Total	64	67	131	\$ 95,909	\$ 92,931	\$ 188,840

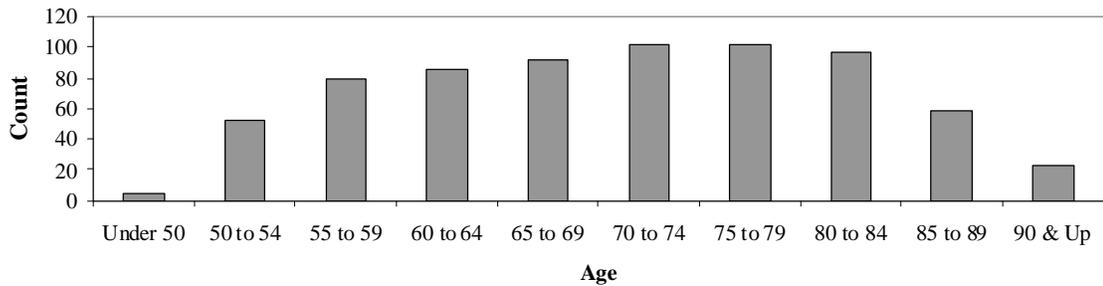
Age Distribution



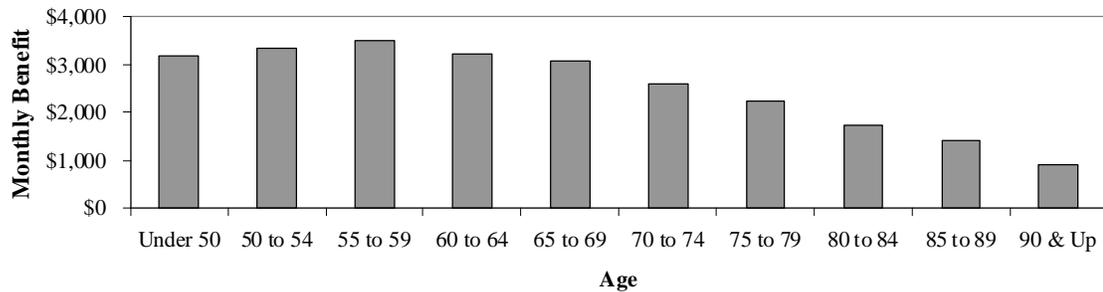
APPENDIX A (continued)
WICHITA EMPLOYEES' RETIREMENT SYSTEM
SUMMARY OF RETIRED MEMBERS*
as of December 31, 2009

Age	Plan 1			Monthly Benefit		
	Number		Total	Male	Female	Total
	Male	Female		Male	Female	Total
Under 50	4	1	5	\$ 13,079	\$ 2,808	\$ 15,886
50 to 54	35	18	53	121,797	54,100	175,897
55 to 59	59	21	80	219,801	57,965	277,766
60 to 64	62	24	86	206,407	71,421	277,829
65 to 69	61	31	92	212,254	69,810	282,064
70 to 74	66	35	101	186,523	74,788	261,311
75 to 79	59	43	102	148,972	80,006	228,979
80 to 84	53	43	96	116,723	49,714	166,437
85 to 89	25	34	59	52,040	31,470	83,511
90 & Up	7	16	23	7,082	13,463	20,544
Total	431	266	697	\$ 1,284,679	\$ 505,545	\$ 1,790,225

Age Distribution



Average Benefit



* Includes DROP members.

APPENDIX A (continued)

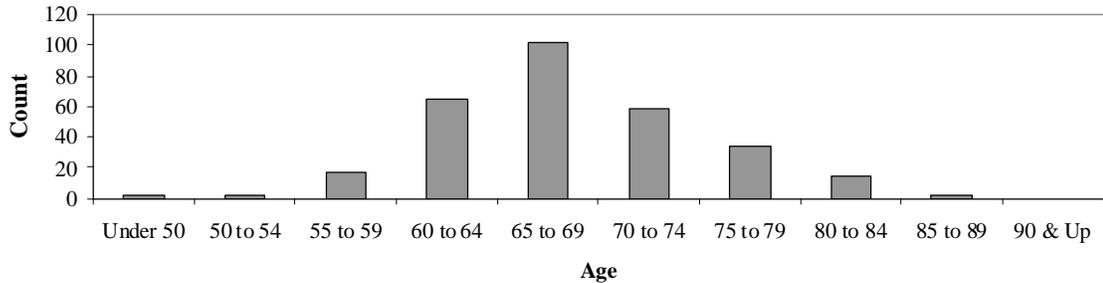
WICHITA EMPLOYEES' RETIREMENT SYSTEM

**SUMMARY OF RETIRED MEMBERS*
as of December 31, 2009**

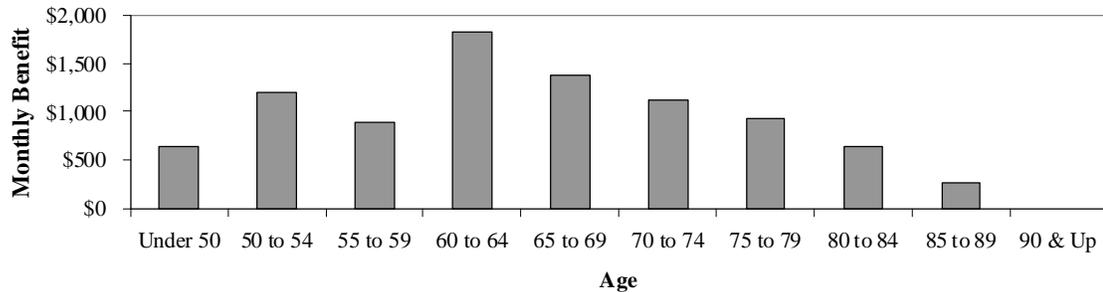
Plan 2

Age	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 50	1	1	2	\$ 494	\$ 772	\$ 1,266
50 to 54	1	1	2	934	1,461	2,395
55 to 59	13	4	17	13,092	2,160	15,251
60 to 64	39	26	65	79,081	39,661	118,742
65 to 69	58	44	102	77,017	63,502	140,519
70 to 74	27	32	59	33,972	32,814	66,786
75 to 79	22	12	34	19,396	12,582	31,978
80 to 84	5	10	15	3,150	6,357	9,507
85 to 89	0	2	2		535	535
90 & Up	0	0	0	-	-	-
Total	166	132	298	\$ 227,136	\$ 159,843	\$ 386,978

Age Distribution



Average Benefit



* Includes DROP members.

APPENDIX A (continued)

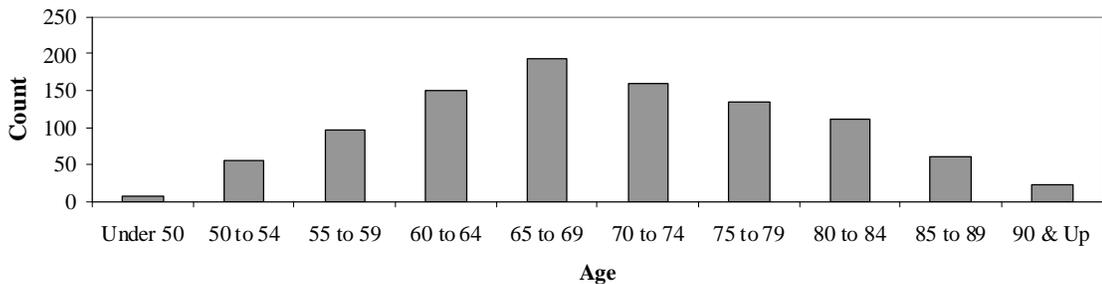
WICHITA EMPLOYEES' RETIREMENT SYSTEM

SUMMARY OF RETIRED MEMBERS*

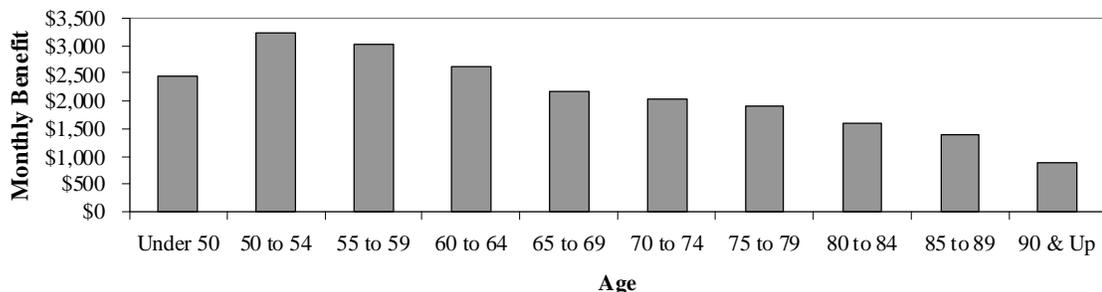
as of December 31, 2009

Age	All Plans					
	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 50	5	2	7	\$ 13,573	\$ 3,580	\$ 17,152
50 to 54	36	19	55	122,731	55,561	178,292
55 to 59	72	25	97	232,893	60,125	293,018
60 to 64	101	50	151	285,488	111,082	396,570
65 to 69	119	75	194	289,271	133,312	422,583
70 to 74	93	67	160	220,495	107,602	328,098
75 to 79	81	55	136	168,368	92,588	260,956
80 to 84	58	53	111	119,873	56,070	175,943
85 to 89	25	36	61	52,040	32,005	84,045
90 & Up	7	16	23	7,082	13,463	20,544
Total	597	398	995	\$ 1,511,815	\$ 665,388	\$ 2,177,203

Age Distribution



Average Benefit



* Includes DROP members.

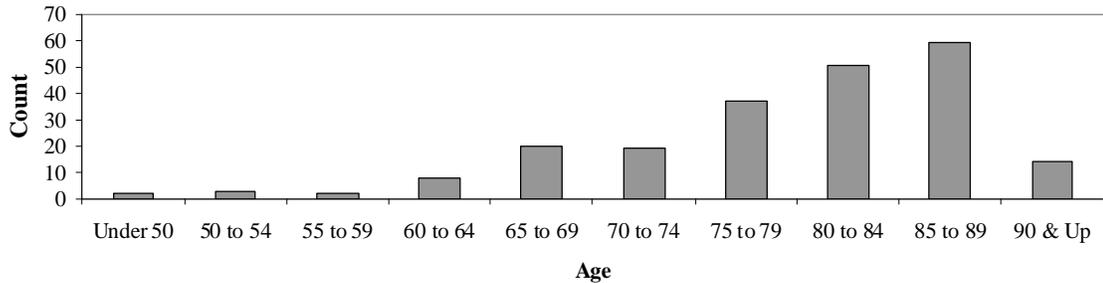
APPENDIX A (continued)

WICHITA EMPLOYEES' RETIREMENT SYSTEM

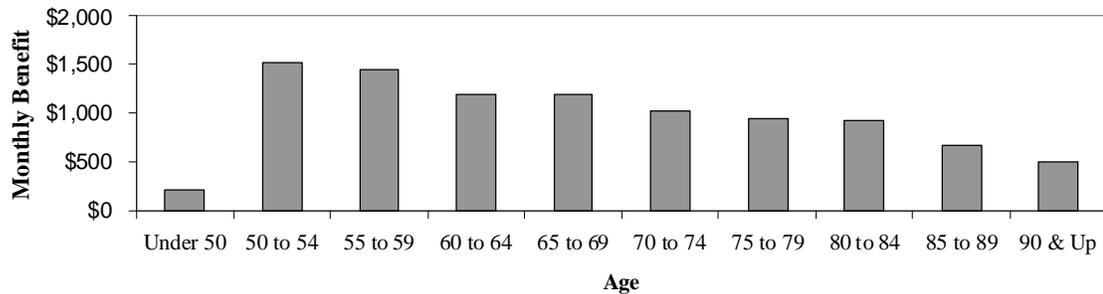
**SUMMARY OF BENEFICIARIES
as of December 31, 2009**

Age	Plan 1			Monthly Benefit		
	Number		Total	Male	Female	Total
	Male	Female		Male	Female	Total
Under 50	0	2	2	\$ -	\$ 439	\$ 439
50 to 54	0	3	3	-	4,591	4,591
55 to 59	0	2	2	-	2,897	2,897
60 to 64	1	7	8	1,270	8,355	9,625
65 to 69	2	18	20	1,368	22,511	23,879
70 to 74	3	16	19	2,337	17,094	19,430
75 to 79	7	30	37	4,893	30,207	35,100
80 to 84	7	44	51	3,327	43,665	46,992
85 to 89	5	54	59	2,219	38,203	40,422
90 & Up	1	13	14	276	6,824	7,100
Total	26	189	215	\$ 15,689	\$ 174,786	\$ 190,475

Age Distribution



Average Benefit



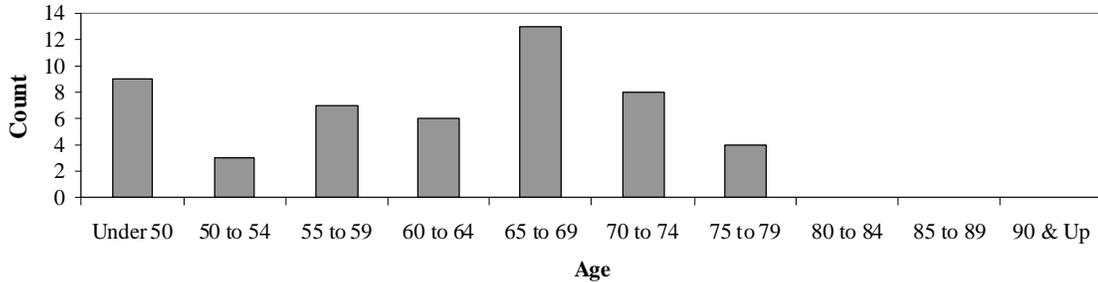
APPENDIX A (continued)

WICHITA EMPLOYEES' RETIREMENT SYSTEM

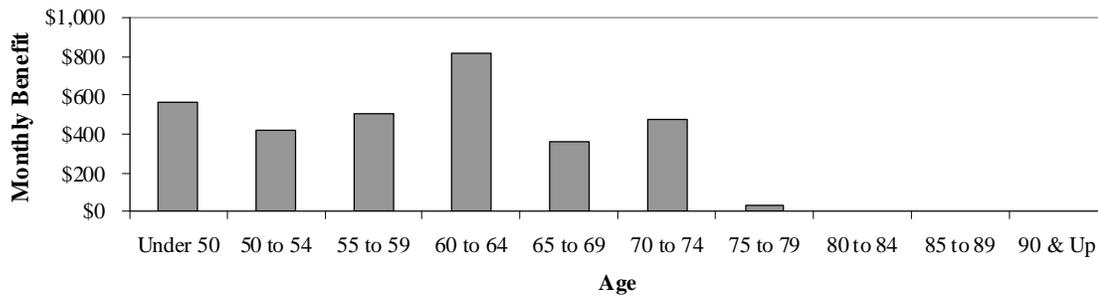
**SUMMARY OF BENEFICIARIES
as of December 31, 2009**

Age	Plan 2					
	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 50	3	6	9	\$ 1,726	\$ 3,378	\$ 5,104
50 to 54	1	2	3	884	380	1,264
55 to 59	0	7	7	-	3,553	3,553
60 to 64	0	6	6	583	4,342	4,925
65 to 69	3	10	13	151	4,507	4,658
70 to 74	1	7	8	-	3,854	3,854
75 to 79	0	4	4	-	126	126
80 to 84	0	0	0	-	-	-
85 to 89	0	0	0	-	-	-
90 & Up	0	0	0	-	-	-
Total	8	42	50	\$ 3,343	\$ 20,139	\$ 23,483

Age Distribution



Average Benefit



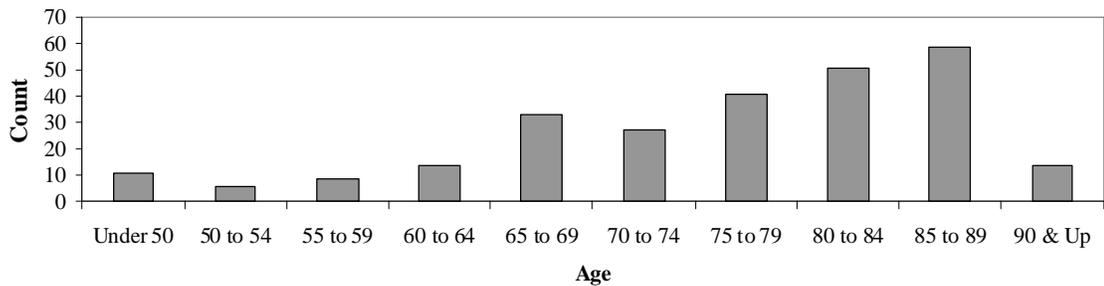
APPENDIX A (continued)

WICHITA EMPLOYEES' RETIREMENT SYSTEM

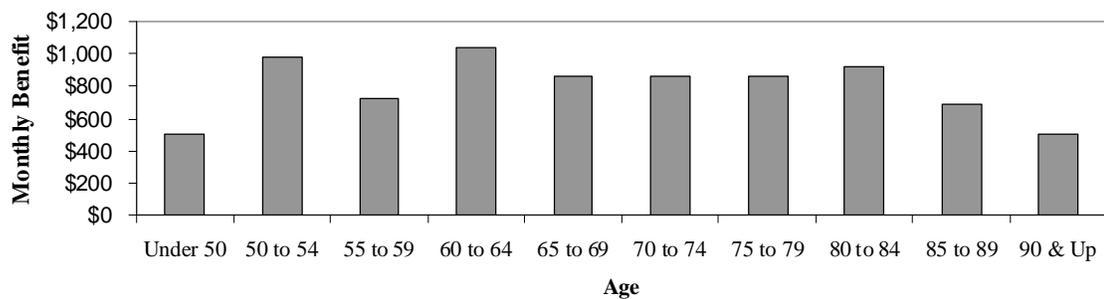
**SUMMARY OF BENEFICIARIES
as of December 31, 2009**

Age	All Plans					
	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 50	3	8	11	\$ 1,726	\$ 3,817	\$ 5,543
50 to 54	1	5	6	884	4,971	5,855
55 to 59	0	9	9	-	6,449	6,449
60 to 64	1	13	14	1,853	12,697	14,550
65 to 69	5	28	33	1,519	27,018	28,537
70 to 74	4	23	27	2,337	20,948	23,284
75 to 79	7	34	41	4,893	30,333	35,226
80 to 84	7	44	51	3,327	43,665	46,992
85 to 89	5	54	59	2,219	38,203	40,422
90 & Up	1	13	14	276	6,824	7,100
Total	34	231	265	\$ 19,033	\$ 194,925	\$ 213,958

Age Distribution



Average Benefit



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 Final Average Salary to a maximum of 75% of Final Average Salary.
Plan 2: Service times 2.25% of Final Average Salary, to a maximum of 75% of Final Average Salary (effective January 1, 2000).

Final Average Salary – all plans: Average for the 3 consecutive years of service which produce the highest average and which are within the last 10 years of service.

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, up to maximum of 50.4% at age 55.

APPENDIX B (continued)

Deferred Retirement (Vested Termination)

Eligibility – 7 or more years of service. A 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. A terminated employee may elect a refund of employee contributions, plus applicable interest, 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%, compounded monthly, 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 Final Average Salary plus 1% of Final Average Salary for each year of service in excess of 7 years. Maximum is 50% of Final Average Salary.
Plan 2: 25% of final rate of salary.

APPENDIX B (continued)

Post-Retirement Survivor Benefits

Eligibility: *Surviving Spouse* - must have been married to retired employee for one year or more, at time of death if retired after January 1, 2000. If retired prior to January 1, 2000, must have been married to retired employee at retirement.

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 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 employee would have been entitled to had he/she been on an unreduced retirement 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 contributions, plus applicable interest, 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.

APPENDIX B (continued)

Post-Retirement Adjustment of Benefits

Eligibility – Plan 1: Completion of 12 months of retirement and annually thereafter.
Plan 2: If retired on or after January 1, 2000: Completion of 12 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 bi-weekly service credit of accumulated unused sick leave is converted to a service credit for the purpose of computing annual benefit amounts.

APPENDIX B (continued)

SUMMARY OF BENEFIT PROVISIONS DEFINED CONTRIBUTION 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 Entry Age Normal 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 Normal actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's assumed pensionable compensation rates between the entry age of the member and the assumed exit ages.

The portion of the actuarial 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 liability. Deducting actuarial assets from the actuarial liability determines the unfunded actuarial liability or (surplus). The unfunded actuarial liability/(surplus) is financed as a level percent of member payroll over an open 20 year period.

Actuarial Assumptions

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.

APPENDIX C (continued)

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 2009. The use of updated assumptions was effective with the December 31, 2009 valuation.

Investment Return Rate (net of administrative expenses). This assumption is 7.75% a year, compounded annually and consists of 3.50% long-term price inflation and a 4.25% 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, 1981 valuation, although the allocation between inflation and real return has changed periodically, most recently in 2009.

Salary Increase Rates. These rates are used to project current pay amounts to those upon which a benefit will be based and were first used for the December 31, 2009 valuation.

Years Of Service	Annual Rate of Salary Increase for Sample Ages			
	Inflation Component	Productivity Component	Merit and Longevity	Total
1	3.50%	0.50%	3.20%	7.20%
2	3.50	0.50	3.00	7.00
3	3.50	0.50	2.80	6.80
4	3.50	0.50	2.60	6.60
5	3.50	0.50	2.40	6.40
6	3.50	0.50	2.20	6.20
7	3.50	0.50	2.00	6.00
8	3.50	0.50	1.80	5.80
9	3.50	0.50	1.70	5.70
10	3.50	0.50	1.60	5.60
11	3.50	0.50	1.50	5.50
12	3.50	0.50	1.40	5.40
13	3.50	0.50	1.30	5.30
14	3.50	0.50	1.20	5.20
15	3.50	0.50	1.06	5.06
16	3.50	0.50	0.92	4.92
17	3.50	0.50	0.78	4.78
18	3.50	0.50	0.64	4.64
19	3.50	0.50	0.50	4.50
20	3.50	0.50	0.50	4.50
21	3.50	0.50	0.50	4.50
22	3.50	0.50	0.50	4.50
23	3.50	0.50	0.50	4.50
24	3.50	0.50	0.50	4.50
25	3.50	0.50	0.50	4.50
Over 25	3.50	0.50	0.25	4.25

APPENDIX C (continued)

The salary increase assumptions will produce 4.25% 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 the unfunded actuarial liability. The real rate of return over assumed wage growth is 3.50% per year.

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

	Year Ended					5 Year (Average) Compounded Annual Increase
	12-31-09	12-31-08	12-31-07	12-31-06	12-31-05	
Average pay	5.5%	2.2%	3.0%	5.2%	1.0%	3.4%
Total payroll	0.8%	3.1%	3.7%	6.3%	2.4%	3.2%

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 and Beneficiaries: RP-2000 Healthy Annuitant Tables
(ages set forward 2 years for males, 0 for females)

Disabled Retirees: RP-2000 Disabled Table

Active Members: RP-2000 Employee Table (ages set forward 2 years for males, 0 for females)

The RP-2000 Tables are used with generational mortality.

Sample Ages ⁽¹⁾	Present Value of \$1 Monthly for Life		Future Life Expectancy (Years)	
	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	60.20	4.8	7.1

(1) Ages in 2000

This table was first used for the December 31, 2004 actuarial valuation.

APPENDIX C (continued)

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.

Percent Retiring During Year

Retirement Age	Plan 1	Plan 2
55	15%	5%
56	15	5
57	15	5
58	15	5
59	15	5
60	40	5
61	40	5
62	20	30
63	20	30
64	20	40
65	100	40
66	N/A	30
67	N/A	30
68	N/A	30
69	N/A	30
70	N/A	100

In addition, the following assumptions would apply to members in this category:

Plan 1: 70% of members with 30 or more years of service will elect the DROP with an average DROP period of 48 months. The remaining 30% are assumed to retire immediately.

Plan 2: 70% of members with 33.33 or more years of service and are at least age 62 will elect the DROP with an average DROP period of 36 months.

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

This assumption was first used in the December 31, 2009 actuarial valuation.

APPENDIX C (continued)

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.

Sample Ages	Years of Service	Probability of Terminating During Year
Any	0	25.00%
	1	19.00
	2	14.00
	3	11.00
	4	9.00
25	Over 4	9.00
30		7.00
35		5.25
40		4.00
45		3.50
50		2.50
55		1.50
60	1.50	

This assumption was first used for the December 31, 2009 valuation.

Administrative Expenses. 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.

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

This table was first used for the December 31, 2004 actuarial valuation.

APPENDIX C (continued)

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

Sample Ages	% of Active Members Becoming Disabled During Next Year
25	0.02%
30	0.03
35	0.04
40	0.07
45	0.10
50	0.18
55	0.32
60	0.53

These rates were first used for the December 31, 2009 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 4.0% per year. This assumption was first used for the December 31, 2009 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 whole year at the start of the year in which the decrement is assumed to occur.

Benefit Service: Service calculated to the nearest month as of the decrement date is used to determine the amount of benefit payable.

Other: The turnover decrement does not operate during retirement eligibility.

APPENDIX C (continued)

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 Service Credit. This assumption was changed with the December 31, 2004 valuation.

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

APPENDIX D (continued)

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.