City of Kansas City, Missouri Employees' Retirement System

Actuarial Valuation as of May 1, 2013

Produced by Cheiron

September 2013

CHEIRON Classic Values, Innovative Advice

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September 16, 2013

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

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the City of Kansas City, Missouri Employees' Retirement System (KCERS) as of May 1, 2013. The valuation is organized as follows:

- In Section I of the **Board Summary** we describe the purpose of an actuarial valuation and summarize the key results found in this valuation;

- The **Main Body** of the report presents details on the System's:

  - Section II - Assets
  - Section III - Liabilities
  - Section IV - Contributions
  - Section V - Required Accounting Disclosures (GASB)

- In the **Appendices** we conclude our report with detailed information describing the System's membership (Appendix A), actuarial assumptions and methods employed (Appendix B), a summary of pertinent plan provisions (Appendix C), and a glossary of terms (Appendix D).

The purpose of this report is to present the annual actuarial valuation of the City of Kansas City, Missouri Employees' Retirement System. This report is for the use of the Employees' Retirement Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of this report is not an intended user and is considered a third party.

In preparing our report, we relied without audit, on information (some oral and some written) supplied by KCERS' staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice #23.

The results of this report rely on future plan experience conforming to the underlying assumptions. To the extent that actual plan experience deviates from the underlying assumptions, the results would vary accordingly.

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Board of Pension Trustees
City of Kansas City, Missouri Employees' Retirement System
September 16, 2013

We hereby certify that, to the best of our knowledge, this report and its contents, which are work products of Cheiron, Inc., have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our report does not provide any legal services or advice.

This report was prepared solely for the Employees' Retirement System for the purposes described herein, except that the plan auditor may rely on this report solely for the purpose of completing an audit related to the matters herein. This valuation report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,
Cheiron

Stephen T. McElhaney, FSA, FCA, MAAA
Principal Consulting Actuary

Jacqueline King, ASA, MAAA
Associate Actuary

SECTION I
BOARD SUMMARY

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

- The financial condition of the System,
- Past and expected trends in the financial progress of the System,
- The City's annual required contribution for Fiscal Year Ending 2014, and
- Information required by the Governmental Accounting Standards Board (GASB).

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

A. Valuation Basis

This May 1, 2013 valuation represents Cheiron's seventh valuation performed for KCERS and there have been no changes in assumptions since the prior year. The assumptions, methodologies and plan provisions reflected in this valuation are the same as in the May 1, 2012 valuation. The data, methods, assumptions and plan provisions that serve as the basis for this valuation are all summarized in the appendices.

B. Key Findings of this Valuation

The key results of the May 1, 2013 actuarial valuation are as follows:

- The actuarially determined City contribution rate decreased from 17.18% as of May 1, 2012 to 16.52% as of May 1, 2013. The actual rate that the City is scheduled to contribute for the current year is 17.18% of payroll which is the actuarially determined City contribution rate for the prior year. This rate is an increase from the rates budgeted in previous years and results in an improved projection of future funded status.

- The Employees' Retirement System's (ERS) unfunded actuarial liability decreased from \$224 million on May 1, 2012 to \$215 million on May 1, 2013.

- The ERS's funding ratio, the ratio of actuarial asset value over liabilities increased from 79.1% as of May 1, 2012 to 80.7% as of May 1, 2013.

- This valuation fully recognizes all elections regarding plan membership for employees previously employed by a private ambulance company (known as "MAST"). The prior valuation estimated the effects of these elections. The supplemental contributions ("EMS supplemental contributions") for these employees received during the year reflect differences between what was actually contributed during the year and what had been estimated in the prior valuation.

SECTION I
BOARD SUMMARY

- The primary factor in the increase of the Plan's funded status was an overall actuarial gain of $11.1 million.

- During the year ended April 30, 2013, the System's assets earned 12.39% on a market value basis. The return on the actuarial asset value was 9.38% (as compared to 7.50% assumed). This resulted in an actuarial gain on investments of $15.7 million. However, the Plan experienced a loss of $3.5 million due to the difference between actual and recommended contributions as a result of payroll and timing differences.

- On the liability side, the System experienced an actuarial loss of $1.1 million, which is only about 0.1% of the total actuarial liability.

This report does not reflect any changes in pension accounting requirements from newly issued GASB Statements No. 67 and 68. Statement No. 67 will be effective for the plan year ending April 30, 2015. Statement No. 68 will be effective for the employer fiscal year ending April 30, 2016.

In addition, this report does not reflect the effect of any potential changes in plan benefits that may occur in connection with the City's pension reform initiatives.

SECTION I
BOARD SUMMARY

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

Table I-1
City of Kansas City, Missouri Employees' Retirement System
Summary of Principal Plan Results

Valuation as of:	**May 1, 2012**	**May 1, 2013**	**% Change**
Participant Counts			
Active Participants	3,300	3,266	(1.0%)
Disabled Participants	13	12	(7.7%)
Retirees and Beneficiaries	2,110	2,157	2.2%
Terminated Vested Participants	92	96	4.3%
Inactive Participants	82	108	31.7%
Total	**5,597**	**5,639**	0.8%
Annual Salaries of Active Members	$ 161,134,295	$ 166,877,689	3.6%
Annual Retirement Allowances for Retired Members and Beneficiaries*	$ 46,927,503	$ 49,477,032	5.4%
Assets and Liabilities			
Actuarial Liability (AL)	$ 1,070,752,440	$ 1,115,165,108	4.1%
Actuarial Value of Assets	847,089,856	900,061,516	6.3%
Unfunded Actuarial Liability (UAL)	$ 223,662,584	$ 215,103,592	(3.8%)
Funded Ratio	79.1%	80.7%	
Present Value of Accrued Benefits (PVAB)	$ 929,538,995	$ 967,590,403	4.1%
Market Value of Assets	866,536,996	947,069,626	9.3%
Unfunded PVAB	$ 63,001,999	$ 20,520,777	
Accrued Benefit Funding Ratio	93.2%	97.9%	
Contributions as a Percentage of Payroll	**Fiscal Year 2013**	**Fiscal Year 2014**	
Normal Cost Rate	8.96%	8.72%	
Unfunded Actuarial Liability Rate	8.22%	7.80%	
Total Actuarially Determined City Contribution Rate	17.18%	16.52%	
Annual Required Contribution (GASB)	$27,682,872	$27,568,194	(0.4%)

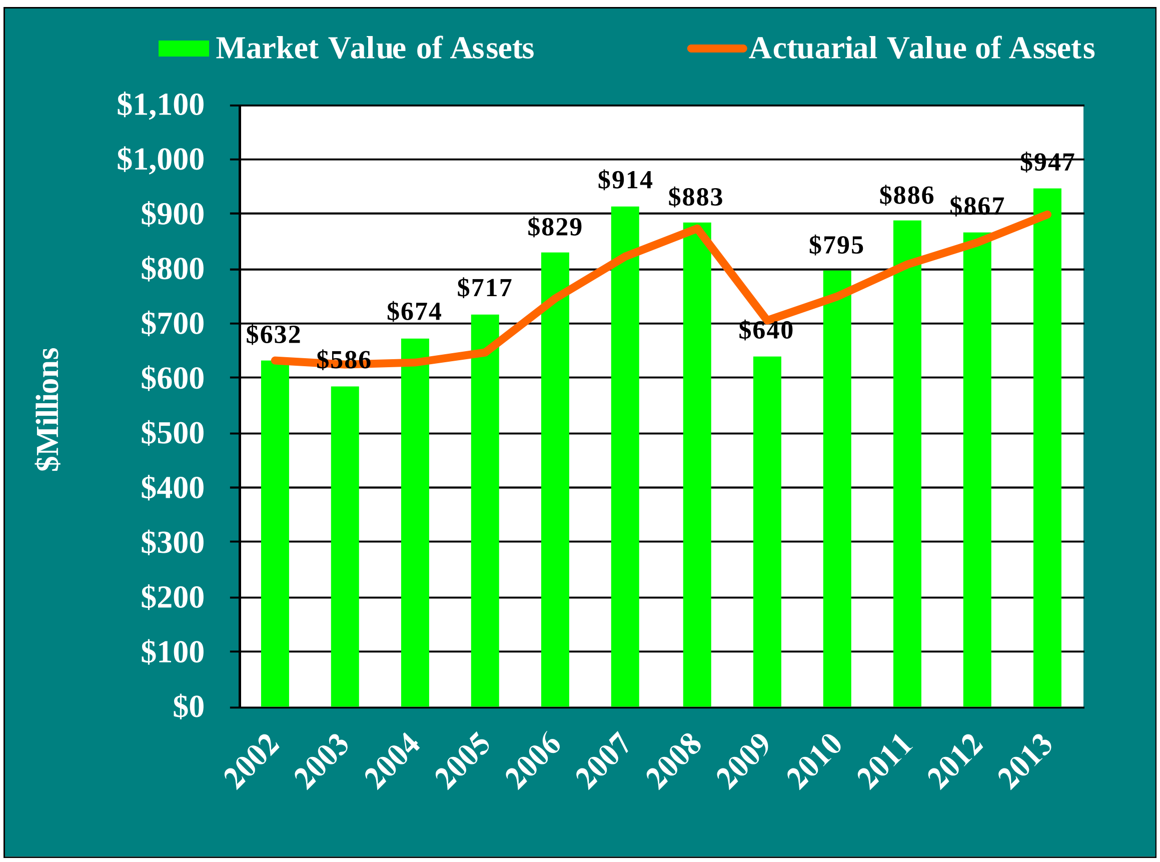
** The annual retirement allowances do not include the subsidy benefits*

SECTION I
BOARD SUMMARY

C. Historical Trends

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

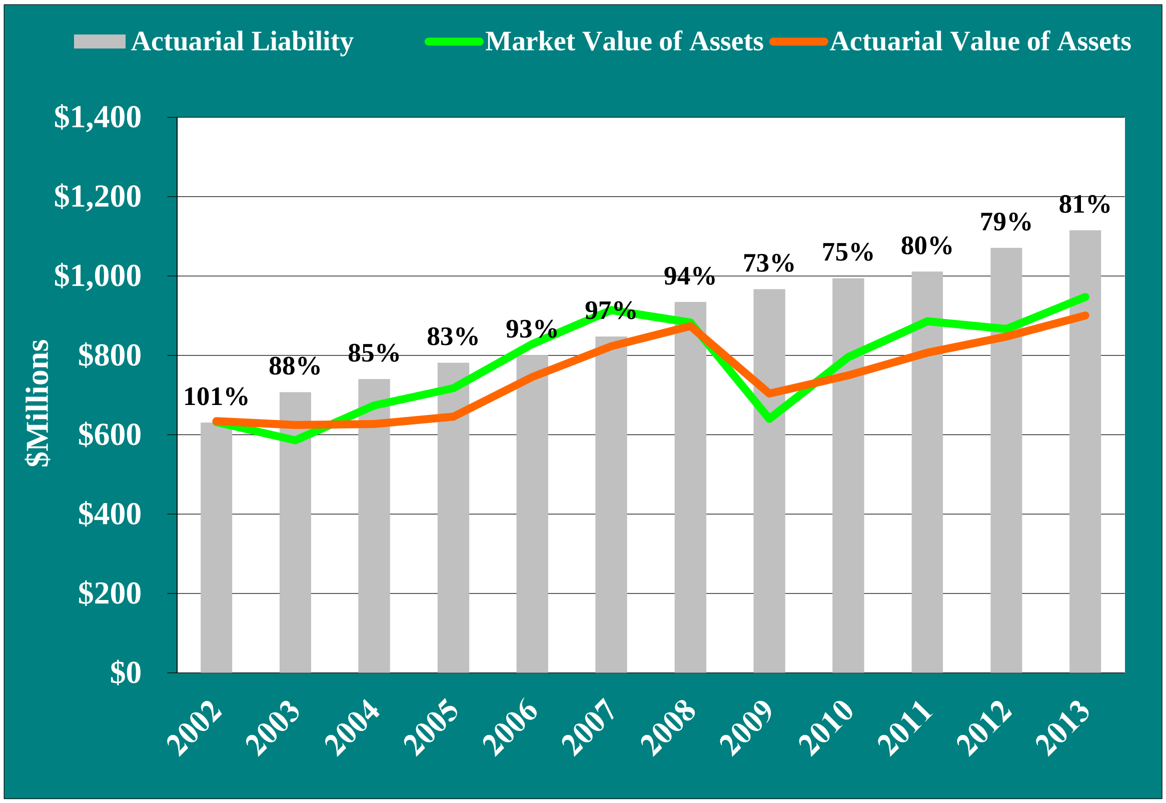
System Assets



There was a market value of assets (MVA) gain on investments in 2013, returning 12.39%, increasing from $867 million to $947 million. With the asset smoothing method in place, the actuarial value of assets has tracked a slightly smoother path through the volatility of the market value of assets. As can be seen in the graph, the actuarial value of assets (AVA) also increased from 2012 to 2013 returning 9.38% due to recent market gains.

SECTION I
BOARD SUMMARY

Assets and Liabilities

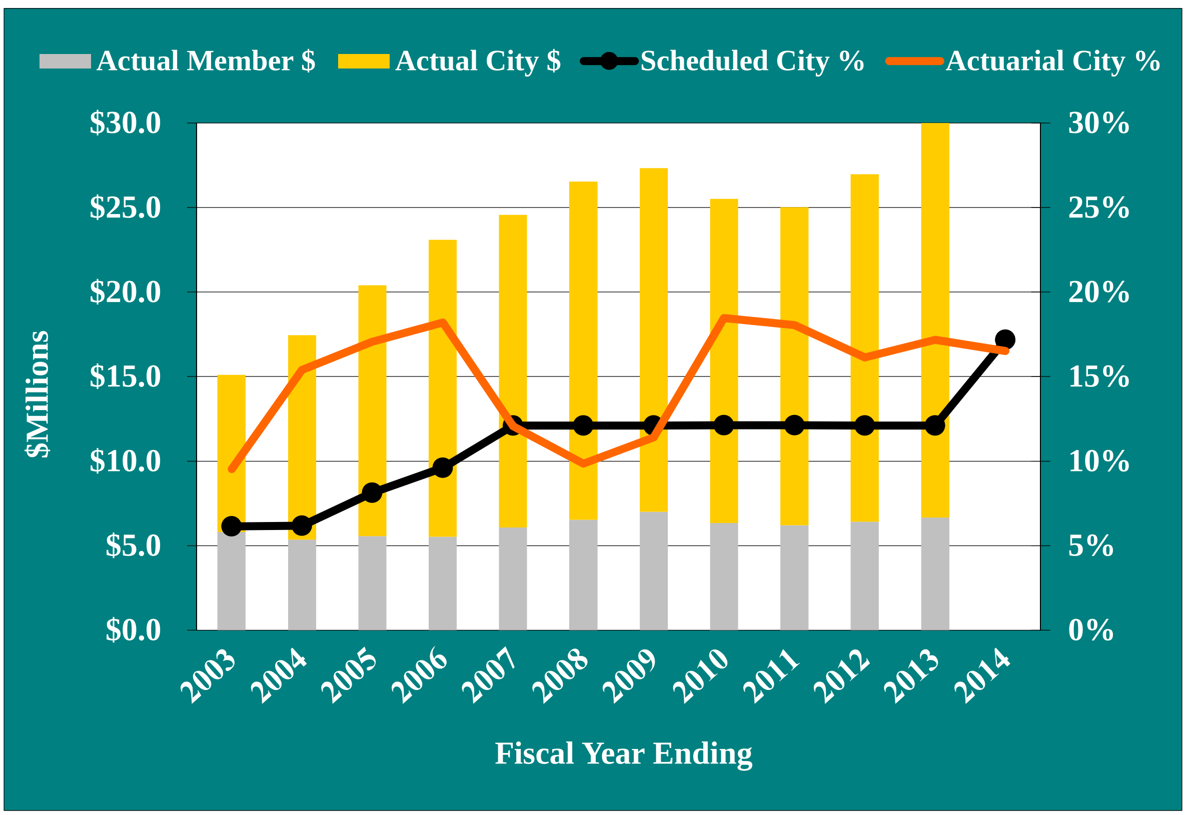


The above chart compares the actuarial value of assets to the actuarial liabilities as well as the funded ratio, sometimes referred to as the benefit security ratio. This chart shows that in 2009, the System had its lowest funded ratio in the past 10 years, but has since increased.

SECTION I
BOARD SUMMARY

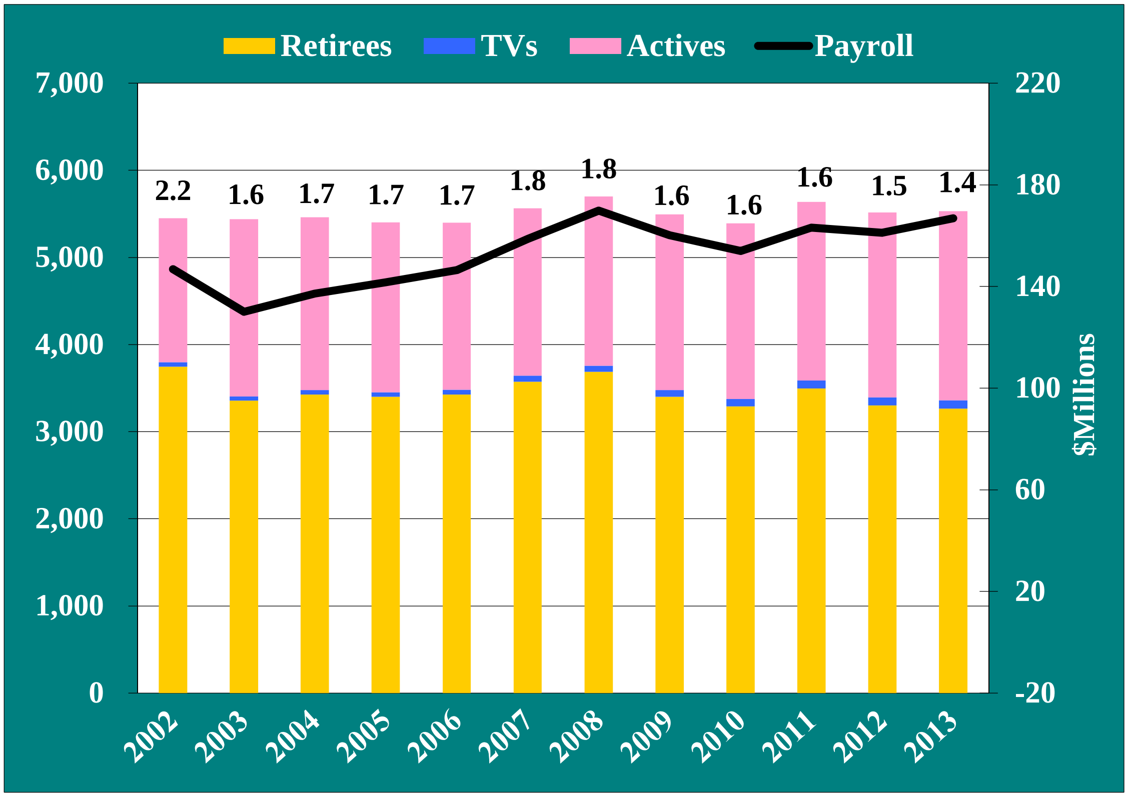
Contribution Rates

The stacked bars in this graph show the dollar amount of contributions made by the City and the members (depicted on the left hand scale) since Fiscal Year Ending 2004. The orange line shows the City's actuarial contribution rate as a percent of payroll (depicted on the right hand scale). The black line shows the scheduled City contribution rate as a percent of payroll (depicted on the right hand scale). The member contribution rate is set by City law at 4% (more than 4% for certain MAST employees) of payroll. For Fiscal Years Ending from 2007 through 2013, the City contribution rate was 9.50% of payroll plus 2.53% of payroll for the retirement window offered in 2003 (paid annually through April 30, 2013) for General Employees, and 19.50% of payroll for Judges and Elected Officials. For Fiscal Year Ending 2014, the scheduled City contribution rate is 17.18% of payroll for all employees, which is based upon the actuarial contribution rate as of the May 1, 2012 actuarial valuation. The actuarial contribution rate decreased from 17.18% of payroll in 2012 to 16.52% of payroll in 2013 primarily due to the actuarial gain on Plan assets.



**SECTION I
BOARD SUMMARY**

Participant Trends



The above chart provides a measure for the maturity in the plan, by comparing the ratio of active members to inactive members (retirees and terminated-vesteds). As with many public retirement systems, as the plan matures, the ratio of active members to inactive members has decreased. The System's active-to-inactive ratio was 2.2 in 2002, but there are 1.4 actives supporting each inactive member today. The black line shows the total active participating payroll for each valuation year.

D. Future Expected Financial Trends

The analysis of projected financial trends is perhaps the most important component of this valuation. In this Section, we present the implications of the May 1, 2013 valuation results in terms of (1) the projected City's contributions and (2) projected System's funded status (ratio of assets over liabilities). For each projection set we assume three future different investment return scenarios: baseline returns of 7.50%, optimistic returns of 9.00%, and pessimistic returns of 6.00%. The projections assume that the City pays the current scheduled cost which is equal to the prior year's actuarially determined contribution rate each year.

Due to the increased scheduled contribution rate, these graphs show more favorable projections than were shown in the May 1, 2012 valuation report.

1. Contribution Rate Projections

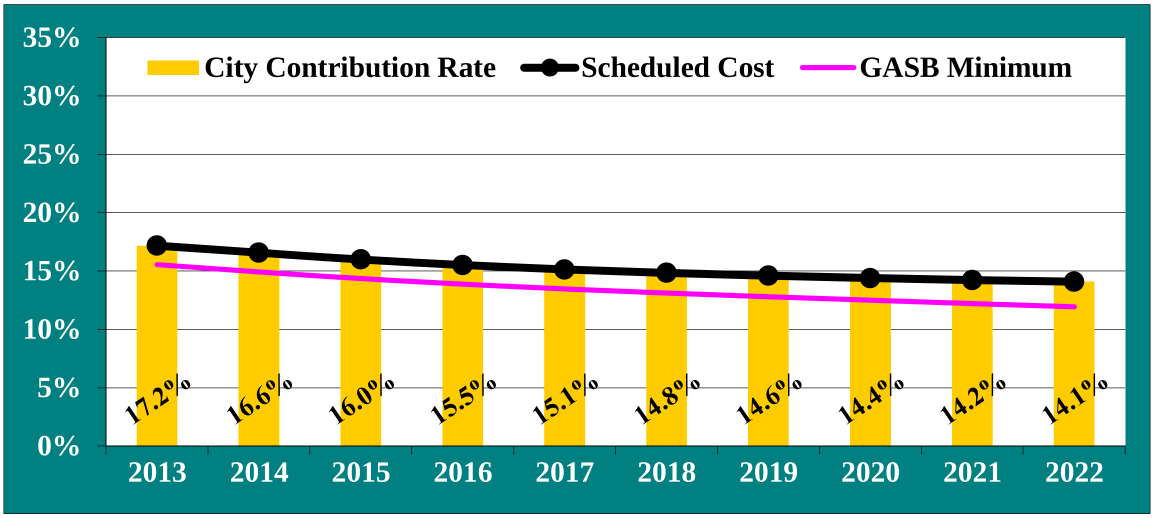
The first set of charts show the City's scheduled cost (black line), the GASB Minimum cost (pink line) which is Normal cost plus 30 year amortization of the UAL (shown for comparison purposes), and the actual City contribution rate (gold bars). The years shown in the charts are plan years beginning May 1st. (All projections of GASB Minimum are based upon the current GASB standards. See comments on page 2 regarding new GASB standards.)

These graphs show a comparison of the scheduled contribution rate and the GASB minimum assuming that the City always pays the current scheduled contribution rate.

SECTION I
BOARD SUMMARY

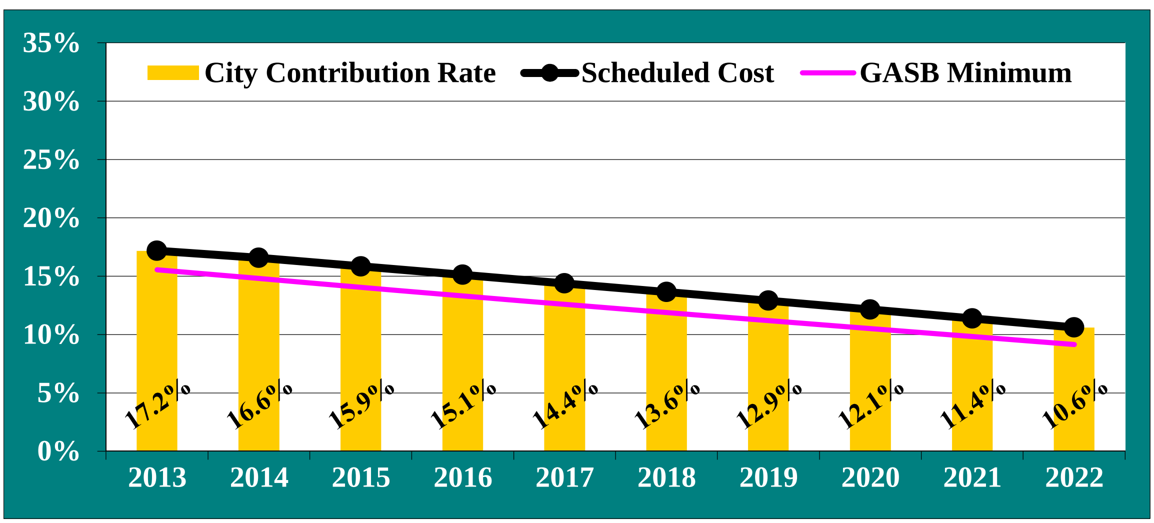
Baseline Returns of 7.50%

The chart below shows that the scheduled cost and GASB minimum will decrease over the next 10 years assuming that the fund earns the assumed investment rate of 7.5% on market value. Both the scheduled cost and GASB minimum are expected to gradually decrease over the period. The expected decreases are due to the gradual recognition of the excess of the Market Value of Assets over the Actuarial Value of Assets



Optimistic Returns of 9.00%

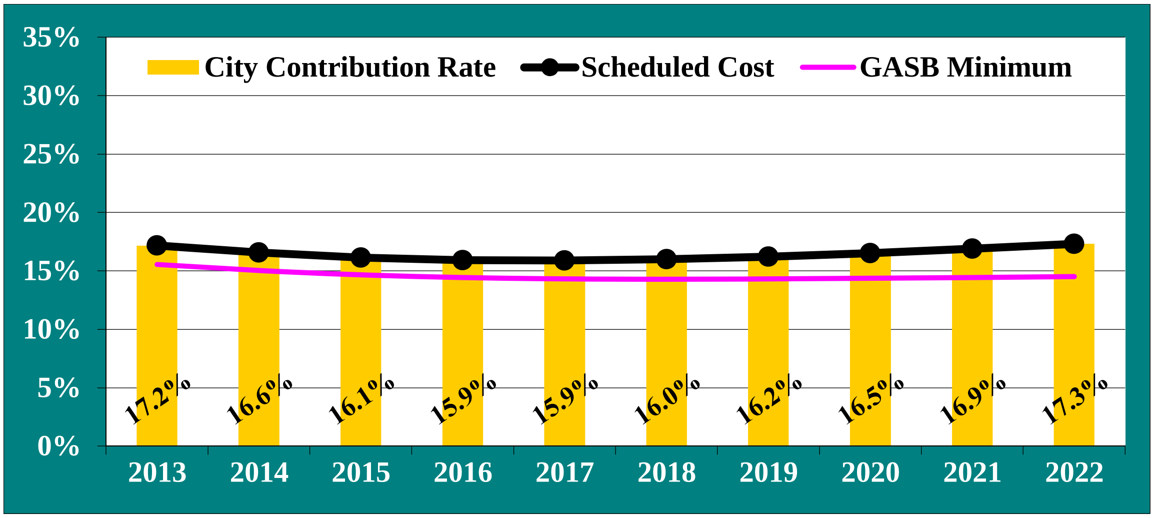
If the fund earns 1.50% greater than the assumed rate, the scheduled cost and the GASB minimum both decrease over the next 10 years to a greater extent than for the baseline.



SECTION I
BOARD SUMMARY

Pessimistic Returns of 6.00%

If the fund earns 1.50% less than the assumed rate, both the scheduled cost and the GASB Minimum begin to gradually increase by the end of the ten year period.



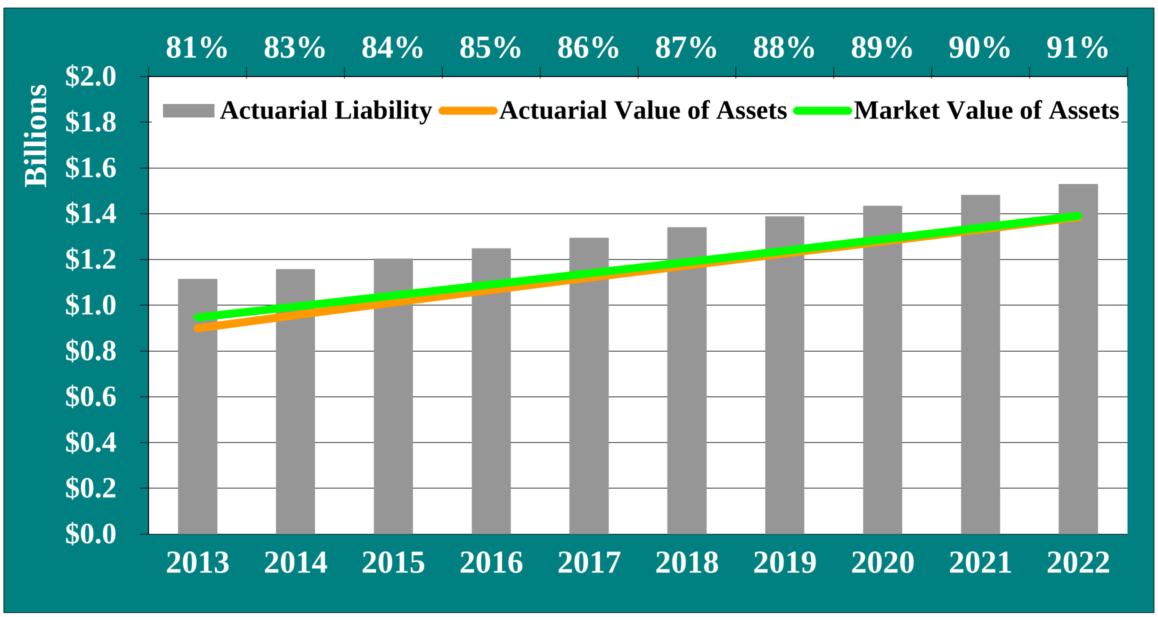
SECTION I
BOARD SUMMARY

2. Asset and Liability Projections:

The next set of projection charts compare the market value of assets (green line) and the actuarial or smoothed value of assets (gold line) to the System's actuarial liabilities (gray bars). In addition at the top of each chart, we show the System's funded ratio (ratio of actuarial value of assets to actuarial liabilities). The years shown in the chart are plan years beginning May 1st.

Baseline Returns of 7.50%

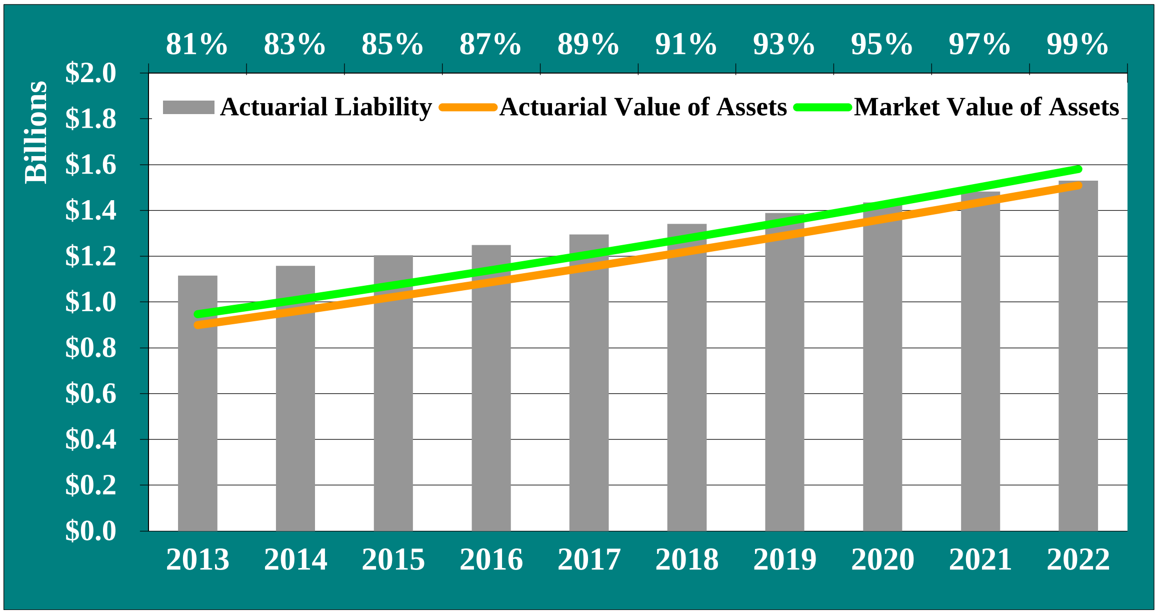
Assuming that the fund earns the assumed investment rate of 7.5% and that the City continues to contribute the current scheduled contributions rate equal to the prior year's actuarially determined contribution rate, the funded ratio will increase gradually to 91% over the next 10 years.



SECTION I
BOARD SUMMARY

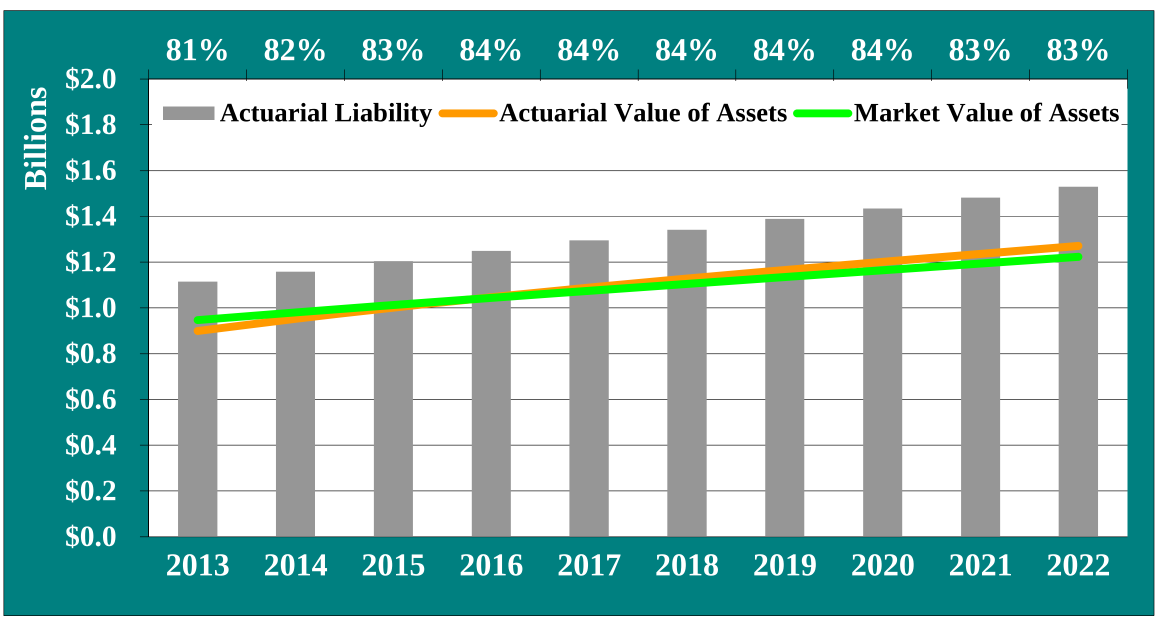
Optimistic Returns of 9.00%

If the fund earns 1.50% greater than the assumed rate of return the funded ratio will increase to 99% over the next 10 years.



Pessimistic Returns of 6.00%

If the fund earns 1.50% less than the assumed rate of return, the funded ratio will increase slightly in the first few years, but will start to decrease by the end of the ten year period.



SECTION II
ASSETS

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

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

- **Disclosure** of the System assets as of May 1, 2012 and May 1, 2013;
- Statement of the **changes** in market values during the year;
- Development of the **Actuarial Value of Assets**;
- An assessment of **investment performance**; and
- A projection of the System's expected **cash flows** for the next 10 years.

Disclosure

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

Table II-1 below discloses and compares each asset value as of April 30, 2012 and 2013.

Table II-1
Statement of Assets at Market Value as of April 30,

Assets	**2012**	**2013**	**% Change**
Cash*	$ 28,920,302	$ 24,014,783	(16.96%)
Stock and Collective Trusts	852,407,687	927,843,069	8.85%
Accounts Receivable	8,062,818	4,863,237	(39.68%)
Interest and Dividends	833,986	436,595	(47.65%)
Contributions Receivable	1,503,780	1,894,009	25.95%
Expenses	(771,395)	(997,675)	29.33%
Purchase of Investments	(24,420,182)	(10,984,392)	(55.02%)
Market Value of Assets	**$ 866,536,996**	**$ 947,069,626**	9.29%

* *For 2012, this line included an adjustment for prior employer and employee contributions related to MAST employees.*

SECTION II
ASSETS

Changes in Market Value

Table II-2 below shows the components of change between the market value of assets as of April 30, 2012 and April 30, 2013.

Table II-2
Changes in Market Values

Value of Assets – April 30, 2012			**$**	**866,536,996**
Additions				
Member Contributions	$	6,652,125		
Employer Contributions*		23,744,372		
Interest and Dividends		13,906,556		
Investment Return		94,935,181		
Total Additions	**$**	**139,238,234**		
Deductions				
Benefit Payments	$	(55,694,424)		
Expenses		(3,011,180)		
Total Deductions	**$**	**(58,705,604)**		
Value of Assets – April 30, 2013			**$**	**947,069,626**

** Includes EMS supplement contribution of $2,824,933*

SECTION II
ASSETS

Actuarial Value of Assets

The next table, Table II-3 shows how the actuarial value of assets is developed.

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

Table II-3
Development of Actuarial Value of Assets

1.	**Actuarial Value of Assets at May 1, 2012**	**$**	**847,089,856**
2.	Contributions		30,396,497
3.	Benefit Payments		(55,694,424)
4.	Expected Return		62,600,217
5.	Expected Actuarial Value at End of Year = (1) + (2) + (3) + (4)		884,392,146
6.	Actual Market Value of Assets at April 30, 2013		947,069,626
7.	Excess of (6) over (5)		62,677,480
8.	Adjustment toward market value: 25% of (7)		15,669,370
9.	Adjustment to be within 85%/110% corridor		0
10.	**Actuarial Value of Assets at May 1, 2013 = (5) + (8) + (9)**	**$**	**900,061,516**

SECTION II
ASSETS

Investment Performance

The market value of assets (MVA) returned 12.39% during plan year ending May 1, 2013, which is less than the assumed 7.50% return. A return of 9.38% was experienced on the actuarial value of assets (AVA). Below, we show additional historical returns.

Table II-4
Historical Returns

	MVA	AVA
2007	12.36%	12.58%
2008	(1.73%)	8.14%
2009	(25.78%)	(17.92%)
2010	28.14%	9.24%
2011	14.76%	10.62%
2012	0.68%	8.32%
2013	12.39%	9.38%

Projection of System's Future Cash Flows

Table II-5
Projection of System's Expected Cash Flows ($ thousands)

Year Beginning May 1,	Benefit Payments	Total Contributions*	Net Cash Flow
2013	$ (59,381)	$ 36,392	$ (22,989)
2014	(61,680)	36,776	(24,904)
2015	(65,471)	37,151	(28,320)
2016	(69,311)	37,729	(31,582)
2017	(73,132)	38,475	(34,657)
2018	(77,120)	39,387	(37,733)
2019	(81,266)	40,441	(40,825)
2020	(85,504)	41,607	(43,897)
2021	(89,734)	42,871	(46,863)
2022	(94,221)	44,268	(49,953)

* *Expected contributions include City contributions and Member contributions. For illustration purposes, we have assumed the City contribution rate will be based on the current scheduled cost which is equal to the prior year's actuarially determined contribution rate each year and that payroll will increase at the actuarially assumed rate of 4.00% per year.*

SECTION III
LIABILITIES

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

- **Disclosure** of the System liabilities as of May 1, 2012 and May 1, 2013, and
- Statement of **changes** in these liabilities during the year.

Disclosure

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

- **Present Value of All Future Benefits:** Used for measuring all future System obligations, represents the amount of money needed today to fully pay off all benefits of the System both earned as of the valuation date and those to be earned in the future by current plan participants, under the current plan provisions.

- **Actuarial Liability:** Used for funding calculations and GASB disclosures, this liability is calculated taking the present value of benefits and subtracting the present value of future member contributions and future employer normal costs under an acceptable actuarial funding method. This method is referred to as the **Entry Age Normal** funding method.

- **Present Value of Accrued Benefits:** Used for communicating the current level of liabilities, this liability represents the total amount of money needed today to fully pay off the current accrued obligations of the System, assuming no future accruals of benefits. These liabilities are also used for accounting purposes (Topic 960) and used to assess whether the Plan can meet its current benefit commitments.

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

SECTION III
LIABILITIES

Table III-1
Liabilities/Net (Surplus)/Unfunded

	May 1, 2012	May 1, 2013
Present Value of Future Benefits		
Active Participant Benefits	$ 640,607,455	$ 658,684,915
Retiree and Inactive Benefits	577,174,588	603,734,268
Present Value of Future Benefits (PVB)	**$ 1,217,782,043**	**$ 1,262,419,183**
Actuarial Liability		
Present Value of Future Benefits (PVB)	$ 1,217,782,043	$ 1,262,419,183
Present Value of Future Normal Costs (PVFNC)	147,029,603	147,254,075
Actuarial Liability (AAL = PVB – PVFNC)	**1,070,752,440**	**1,115,165,108**
Actuarial Value of Assets (AVA)	847,089,856	900,061,516
Net (Surplus)/Unfunded (AL – AVA)	**$ 223,662,584**	**$ 215,103,592**
Present Value of Accrued Benefits		
Present Value of Future Benefits (PVB)	$ 1,217,782,043	$ 1,262,419,183
Present Value of Future Benefit Accruals (PVFBA)	288,243,048	294,828,780
Present Value of Accrued Benefits (PVAB = PVB – PVFBA)	**929,538,995**	**967,590,403**
Market Value of Assets (MVA)	866,536,996	947,069,626
Net Unfunded/(Surplus)	**$ 63,001,999**	**$ 20,520,777**

SECTION III
LIABILITIES

Changes in Liabilities

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

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

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

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

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

In the table that follows, we show the components of change in the actuarial liability between May 1, 2012 and May 1, 2013.

Table III-2

	Actuarial Liability
Liabilities May 1, 2012	$ 1,070,752,440
Liabilities May 1, 2013	1,115,165,108
Liability Increase/(Decrease)	44,412,668
Change Due to:	
Plan Amendments	0
Assumption Changes	0
Actuarial (Gain)/Loss	1,130,371
Benefits Accumulated and Other Sources	43,282,297

SECTION III
LIABILITIES

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

TABLE III-3
(Gain)/Loss by Source as of May 1, 2013

Turnover	$	(1,044,000)
Retirement		(526,000)
Pre-retirement mortality		723,000
Post-retirement mortality		(2,708,000)
Salary increase more/(less) than expected for continuing actives		5,659,000
New entrants		2,986,000
Data Composition & Miscellaneous changes		(3,960,000)
Total (Gain)/Loss	**$**	**1,130,000**

Table III-4
Historical Liability (Gains)/losses ($ Millions)

Change due to:	2009	2010	2011	2012	2013
Turnover	$ (0.3)	$ 0.1	$ 1.6	$ 3.4	$ (1.1)
Retirement	(0.3)	(3.1)	(3.3)	(0.1)	(0.5)
Pre-retirement mortality	0.6	0.7	0.7	0.6	0.7
Post-retirement mortality	(0.9)	(1.8)	(1.1)	0.8	(2.7)
Salary Change	(6.7)	(17.2)	(18.1)	(1.6)	5.7
New entrants	0.7	0.5	3.8	0.7	3.0
Miscellaneous	(5.9)	4.8	22.5	1.7	(4.0)
Total (Gain)/Loss	**$ (12.8)**	**$ (16.0)**	**$ 6.1**	**$ 5.5**	**$ 1.1**

SECTION IV
CONTRIBUTIONS

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

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

For purposes of calculating the Annual Required Contribution under GASB, the unfunded actuarial liability is amortized under a layered approach over a 20-year period as a level percent of pay for all years except with respect to the experience loss for the plan year ending April 30, 2009. That loss was amortized over 30 years. All future gains or losses to the unfunded actuarial liability will establish new 20-year amortization periods. Payroll is expected to increase 4.0% per year.

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

Table IV-1
Employer Contribution Rate

	Fiscal Year Ending 2013	Fiscal Year Ending 2014
Entry Age Normal Cost Rate	8.96%	8.72%
Amortization Payment	8.22%	7.80%
Actuarially Determined Contribution	17.18%	16.52%

SECTION IV
CONTRIBUTIONS

Table IV-2 below presents the May 1, 2013 employer contribution rates for the System split between the General Employees and the Judges and Elected Officials. The employer contribution rate is based on the amortization schedule shown in Table IV-3. The employer contribution rates are then compared to what the City is expected to contribute for the current plan year. The current scheduled City contribution is 17.18% of payroll for all employees.

Table IV -2
Development of Plan Contribution Rate
as of May 1, 2013

	General Employees	Judges and Elected Officials	Total
1. Normal Cost (Monthly):			
a. Total Normal Cost	12.69%	18.85%	12.73%
b. Expected Members Contribution	4.01%	4.00%	4.01%
c. Employer Paid Normal Cost (a) - (b)	8.67%	14.85%	8.72%
2. Amortization of Unfunded Liability			
a. Actuarial Liability	$ 1,103,144,996	$ 12,020,112	$ 1,115,165,108
b. Actuarial Value of Assets	890,359,957	9,701,559	900,061,516
c. Unfunded Liability (a) - (b)	212,785,039	2,318,553	215,103,592
d. Amortization of Unfunded Liability	7.79%	8.36%	7.80%
3. Actuarially Determined Employer Contribution Rate (1) + (2d) [1]	16.47%	23.21%	16.52%
4. Scheduled City Contributions[2]	17.18%	17.18%	17.18%

[1] *Total payroll is $166,877,689, and the annual required contribution for plan year ending April 30, 2013 is $27,568,194 based on the total employer actuarially determined contribution rate. The payroll for the judges and elected officials is $1,528,414, and the annual required contribution for this group for the plan year ending April 30, 2013 is $354,745*

[2] *The scheduled contribution is the prior year's actuarially determined employer contribution rate for all employees.*

SECTION IV
CONTRIBUTIONS

For purposes of calculating the Annual Required Contribution under GASB, the Unfunded Actuarial Liability is amortized in accordance with the schedule below:

Initial unfunded actuarial liability (as of May 1, 2008)	20 years
Changes to the UAL on May 1, 2009	30 years
Changes to the UAL on and after May 1, 2010	20 years

Amortization payments as of May 1, 2013 are shown in the table below.

TABLE IV-3
Unfunded Actuarial Liabilitiy Amortization Schedule

Item	Date Created	Initial Years	Initial Balance	Remaining Years	Outstanding Balance	Amortization Payment	Amortization Factor
Initial UAL	5/1/2008	20	$ 60,653,589	15	$ 59,149,788	$ 5,051,752	11.709
2009 (Gain)/Loss*	5/1/2009	30	$ 201,970,870	26	$ 215,635,085	$ 12,440,221	17.334
2010 (Gain)/Loss*	5/1/2010	20	$ (21,123,472)	17	$ (21,025,902)	$ (1,626,613)	12.926
2011 (Gain)/Loss*	5/1/2011	20	$ (12,149,092)	18	$ (12,148,838)	$ (899,559)	13.505
2011 Assumption Change	5/1/2011	20	$ (32,092,544)	18	$ (32,091,874)	$ (2,376,237)	13.505
2012 (Gain)/Loss*	5/1/2012	20	$ 372,006	19	$ 372,529	$ 26,485	14.066
2012 Plan Amendment	5/1/2012	20	$ 16,284,519	19	$ 16,307,457	$ 1,159,384	14.066
2013 (Gain)/Loss*	5/1/2013	20	$ (11,094,653)	20	$ (11,094,653)	$ (759,509)	14.608
Total					**$ 215,103,592**	**$ 13,015,924**	

**Also included differences between the Annual Required Contribution and the actual contributions made.*

SECTION V
ACCOUNTING STATEMENT INFORMATION

Topic 960 of the Financial Accounting Standards Board requires the System to disclose certain information regarding its funded status. Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in notes to financial statements and supplementary information.

Topic 960 disclosures provide a quasi "snap shot" view of how the System's assets compare to its liabilities if contributions stopped and accrued benefit claims had to be satisfied. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if the System were to terminate.

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

Both the present value of accrued benefits (Topic 960) and the actuarial liability (GASB-25) are determined assuming that the System is on-going and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.50% per annum.

Topic 960 specifies that a comparison of the present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of May 1, 2013 are exhibited in Table V-1. Finally, Table V-2 reconciles the Topic 960 liabilities determined as of the prior valuation, May 1, 2012, to the liabilities as of May 1, 2013.

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

Finally, Tables V-6 and V-7 are additional GASB supplemental exhibits. Table V-6 shows historical GASB Annual Required Contribution information, compared to what the City actually contributed. Table V-7 shows historical unfunded actuarial liability (UAL) information, funding ratios, and the UAL as a percent of payroll.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-1
Accounting Statement Information

	May 1, 2012	May 1, 2013
A. Topic 960 Basis		
1. Present Value of Benefits Accrued to Date		
a. Members Currently Receiving Payments	$ 566,687,059	$ 591,216,582
b. Former Vested Members	10,487,529	12,517,686
d. Active Members	352,364,407	363,856,135
2. Total Present Value of Accrued Benefits (1a + 1b + 1c)	$ 929,538,995	$ 967,590,403
3. Assets at Market Value	866,536,996	947,069,626
4. Unfunded Present Value of Accrued Benefits (2 - 3)	$ 63,001,999	$ 20,520,777
5. Ratio of Assets to Present Value of Benefits (3 / 2)	93.2%	97.9%
B. GASB No. 25 Basis		
1. Actuarial Liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	$ 577,174,588	$ 603,734,268
2. Actuarial Liabilities for current employees	493,577,852	511,430,840
3. Total Actuarial Liability (1 + 2)	$ 1,070,752,440	$ 1,115,165,108
4. Net Actuarial Assets available for benefits	847,089,856	900,061,516
5. Unfunded Actuarial Liability (3 - 4)	$ 223,662,584	$ 215,103,592

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-2
Statement of Changes in Total Actuarial Present Value of All Accrued Benefits

	Accumulated Benefit Obligation (Topic 960)	
Actuarial Present Value of Accrued Benefits as of May 1, 2012	$	929,538,995
Increase/(Decrease) During Years Attributable to:		
Passage of Time and (Gains)/Losses	$	64,830,093
Benefit Paid – FY 2013		(55,694,424)
Assumption Change		0
Plan Amendment		0
Benefits Accrued		28,915,739
Net Increase/(Decrease)	$	38,051,408
Actuarial Present Value of Accrued Benefits as of May 1, 2013	$	967,590,403

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-3
NOTE TO REQUIRED SUPPLEMENTARY INFORMATION

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

Valuation date	May 1, 2013
Actuarial cost method	Entry age
Amortization method	20-year layered amortization, level percent of pay*
Remaining amortization period for the UAL	Weighted average of 24.0 years
Asset valuation method	Four year smoothing using Expected Value Method
Actuarial assumptions:	
Investment rate of return	7.50%
Projected salary increases	(Only ages 55 and under) 4.0%
Cost-of-living adjustments	3.0% simple
Inflation	3.0%

The actuarial assumptions used have been based upon recommendations by the actuary and adopted by the System's Board of Trustees. The most recent actuarial experience study was performed for the period May 1, 2006 through April 30, 2010.

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

** For all years except changes to the 5/1/2009 unfunded actuarial liability, which are amortized over 30 years.*

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-4
ANALYSIS OF FINANCIAL EXPERIENCE
Gain and Loss in Unfunded Actuarial Liability During Years Ended April 30
Resulting from Differences Between Assumed Experience and Actual Experience

	Gain (or loss) for Year ending April 30, (expressed in thousands)					
Type of Activity	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Investment Income	$ 3,140	$ (216,876)	$ 5,151	$ 18,253	$ 880	$ 12,225
Combined Liability Experience	(18,452)	12,781	15,972	(6,104)	(1,252)	(1,130)
Gain/(or loss) during Year from Financial Experience	$ (15,312)	$ (204,095)	$ 21,123	$ 12,149	$ (372)	$ 11,095
Non-Recurring Gain/(or Loss) Items	(27,234)	0	0	32,093	(16,285)	0
Composite Gain/(or Loss) during Year	$ (42,546)	$ (204,095)	$ 21,123	$ 44,242	$ (16,657)	$ 11,095

** Investment experience includes differences in actual and recommended contributions*

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-5
SOLVENCY TEST
Aggregate Actuarial Liabilities for
(expressed in thousands)

Valuation Date May 1	Active Member Contributions (1)	Retirees & Beneficiaries (2)	Active Member Employer Financed Contributions (3)	Actuarial Value of Reported Assets	Portion of Actuarial Liabilities Covered by Reported Assets (1)	(2)	(3)
2007	73,078	446,908	327,407	823,014	100%	100%	93%
2008	78,339	468,489	387,506	873,680	100%	100%	84%
2009	78,693	502,980	385,106	704,069	100%	100%	32%
2010	82,853	521,175	390,740	749,552	100%	100%	37%
2011	87,137	549,227	374,632	806,793	100%	100%	45%
2012	88,746	577,175	404,832	847,090	100%	100%	45%
2013	90,514	603,734	420,917	900,062	100%	100%	49%

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-6

Supplementary Information Required by GASB - Schedule of City Contributions

Plan Year Ended 30-Apr	Annual Required Contributions	Actual Contributions	Percentage Contributed
2004	$ 20,018,740	$ 12,100,061	60.44%
2005	23,406,798	14,825,719	63.34%
2006	25,770,978	17,557,758	68.13%
2007	17,652,900	18,496,476	104.78%
2008	15,623,936	20,011,617	128.08%
2009	19,364,846	20,330,486	104.99%
2010	29,589,060	19,186,317	64.84%
2011	27,772,227	18,822,709	67.78%
2012	26,326,555	20,543,487	78.03%
2013	27,682,872	23,744,372	85.77%
2014	27,568,194	--	--

**The annual required contribution for the current year is described in Section IV, Table IV-2.*

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-7

Supplementary Information Required by GASB - Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (b)	Unfunded Actuarial Liability (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
5/1/2003	$ 624,897,653	$ 707,513,176	$ 82,615,523	88.32%	$ 130,028,040	63.54%
5/1/2004	627,078,139	740,186,346	113,108,207	84.72%	137,207,640	82.44%
5/1/2005	645,609,869	781,899,987	136,290,118	82.57%	141,605,640	96.25%
5/1/2006	745,720,993	800,839,808	55,118,815	93.12%	146,365,332	37.66%
5/1/2007	823,014,181	847,393,167	24,378,986	97.12%	158,779,836	15.35%
5/1/2008	873,680,276	934,333,865	60,653,589	93.51%	169,867,066	35.71%
5/1/2009	704,069,429	966,779,322	262,709,893	72.83%	160,200,649	163.99%
5/1/2010	749,551,649	994,767,684	245,216,035	75.35%	153,948,044	159.28%
5/1/2011	806,792,596	1,010,996,133	204,203,537	79.80%	163,113,722	125.19%
5/1/2012	847,089,856	1,070,752,440	223,662,584	79.11%	161,134,295	138.81%
5/1/2013	900,061,516	1,115,165,108	215,103,592	80.71%	166,877,689	128.90%

** Not less than zero*

APPENDIX A
MEMBERSHIP INFORMATION

City of Kansas City, Missouri Employees' Retirement System Active Member Data	May 1, 2012	May 1, 2013	% Change
Total			
Count	3,300	3,266	-1.03%
Average Current Age	47.07	47.13	0.13%
Average Service	12.09	12.26	1.41%
Average Valuation Pay	$ 48,829	$ 51,095	4.64%
Annual Compensation	$ 161,134,294	$ 166,877,688	3.56%
General			
Count	3,287	3,252	-1.06%
Average Current Age	47.04	47.08	0.09%
Average Service	12.11	12.27	1.32%
Average Valuation Pay	$ 48,575	$ 50,845	4.67%
Annual Compensation	$ 159,667,450	$ 165,349,275	3.56%
Judges			
Count	8	8	0.00%
Average Current Age	54.14	55.09	1.75%
Average Service	10.78	11.72	8.72%
Average Valuation Pay	$ 144,875	$ 144,875	0.00%
Annual Compensation	$ 1,159,000	$ 1,159,000	0.00%
Elected Officials			
Count	5	6	20.00%
Average Current Age	57.42	60.19	4.82%
Average Service	5.00	7.33	46.60%
Average Valuation Pay	$ 61,569	$ 61,569	0.00%
Annual Compensation	$ 307,845	$ 369,414	20.00%

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System
Table of Plan Coverage

	5/1/2012	5/1/2013	% change
Active Members in Valuation			
Number	3,300	3,266	-1.03%
Average Age	47.07	47.13	0.13%
Average Service	12.09	12.26	1.41%
Total Payroll	$ 161,134,294	$ 166,877,688	3.56%
Average Anticipated Payroll	$ 48,829	$ 51,095	4.64%
Account Balance	$ 88,746,036	$ 90,514,262	1.99%
Eligible to Retire on:			
Normal Pension	70	81	15.71%
Optional Pension	378	392	3.70%
Early Pension	264	253	-4.17%
Deferred Pension	1,823	1,856	1.81%
Total Active Vested Members	2,535	2,582	1.85%
Vested Terminated Members	92	96	N/A
Deaths During the Plan Year	93	80	N/A
Pensioners:			
Number in Pay Status			
Retirees	1,728	1,772	2.55%
Disabled Retirees	13	12	-7.69%
Total	1,741	1,784	2.47%
Average Age	69.86	69.97	0.16%
Average Monthly Benefit	$ 2,056	$ 2,114	2.83%
Beneficiaries in Pay Status	382	385	0.79%
Members Due Refunds	82	108	31.71%

APPENDIX A
MEMBERSHIP INFORMATION

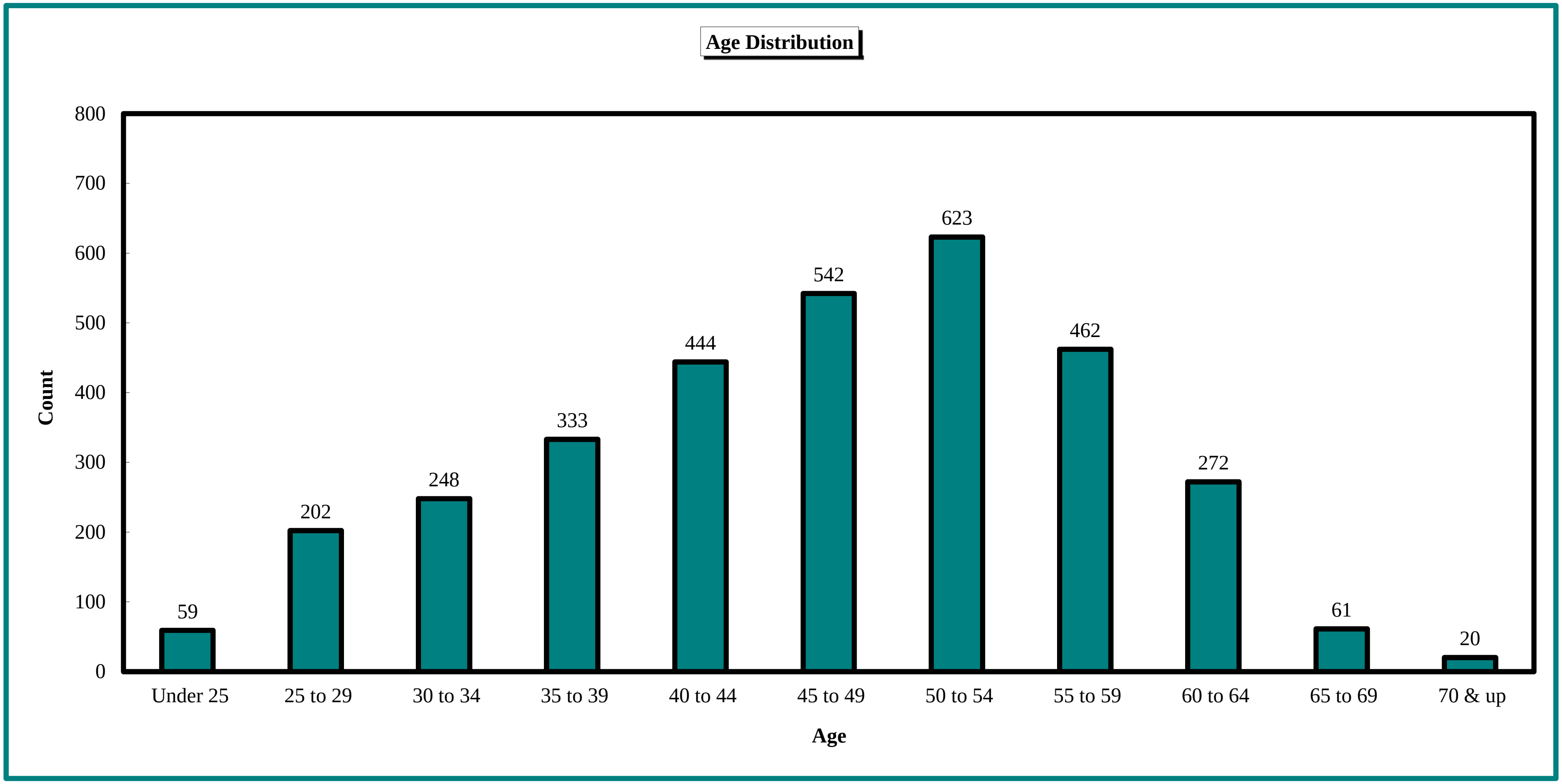
Kansas City Employees' Retirement System Distribution of Active Members by Age and Service as of May 1, 2013

COUNTS BY AGE/SERVICE

	Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	27	27	5	0	0	0	0	0	0	0	59
25 to 29	46	83	71	2	0	0	0	0	0	0	202
30 to 34	34	78	102	33	1	0	0	0	0	0	248
35 to 39	29	66	129	90	19	0	0	0	0	0	333
40 to 44	30	56	130	121	88	19	0	0	0	0	444
45 to 49	22	53	108	138	131	64	24	2	0	0	542
50 to 54	15	56	124	109	128	98	61	32	0	0	623
55 to 59	11	27	86	73	92	62	49	45	16	1	462
60 to 64	3	17	53	58	56	28	24	20	10	3	272
65 to 69	0	4	23	11	8	2	5	4	1	3	61
70 & up	0	0	6	2	3	6	0	0	0	3	20
Total	217	467	837	637	526	279	163	103	27	10	3,266

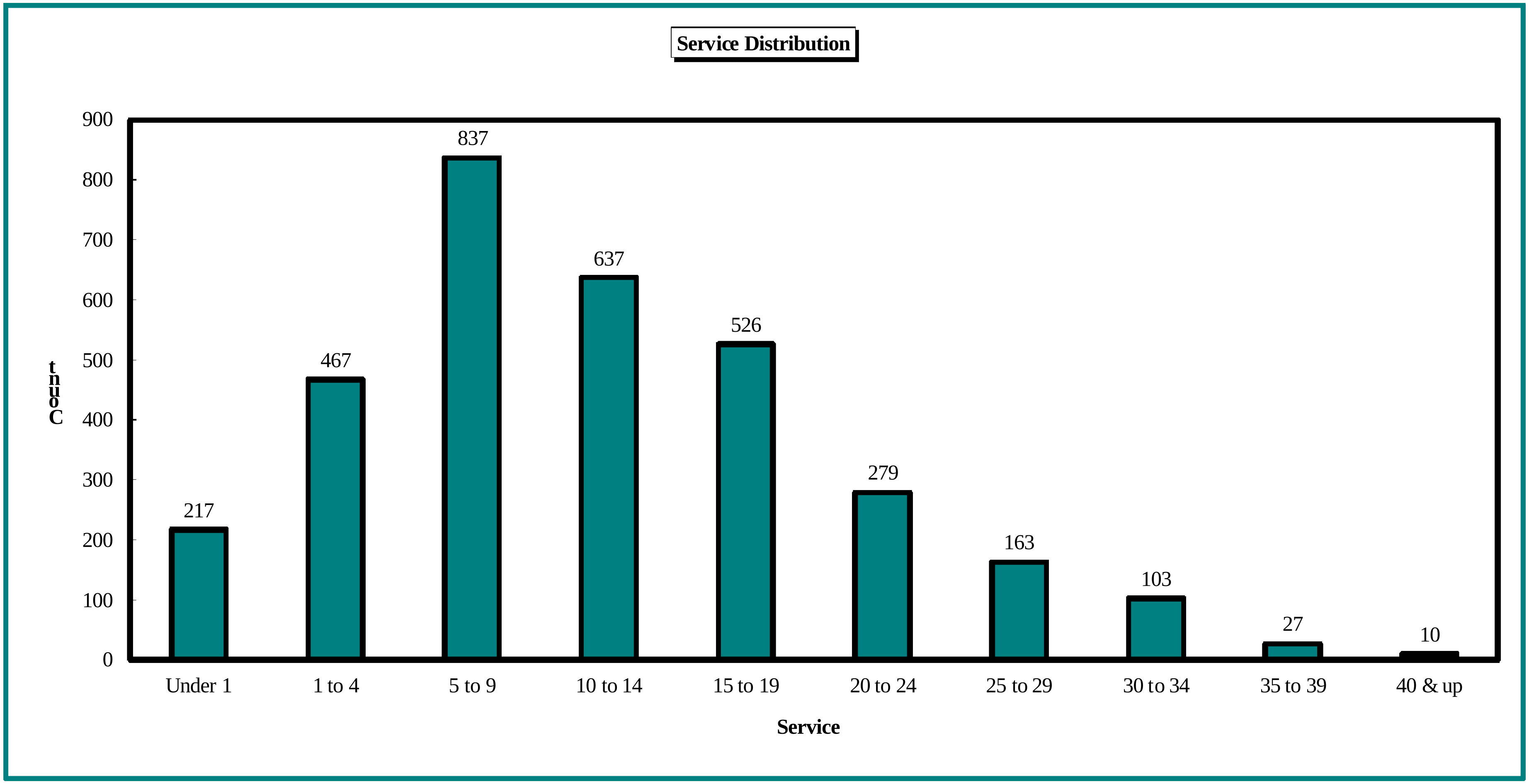
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Age as of May 1, 2013



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Service as of May 1, 2013



APPENDIX A
MEMBERSHIP INFORMATION

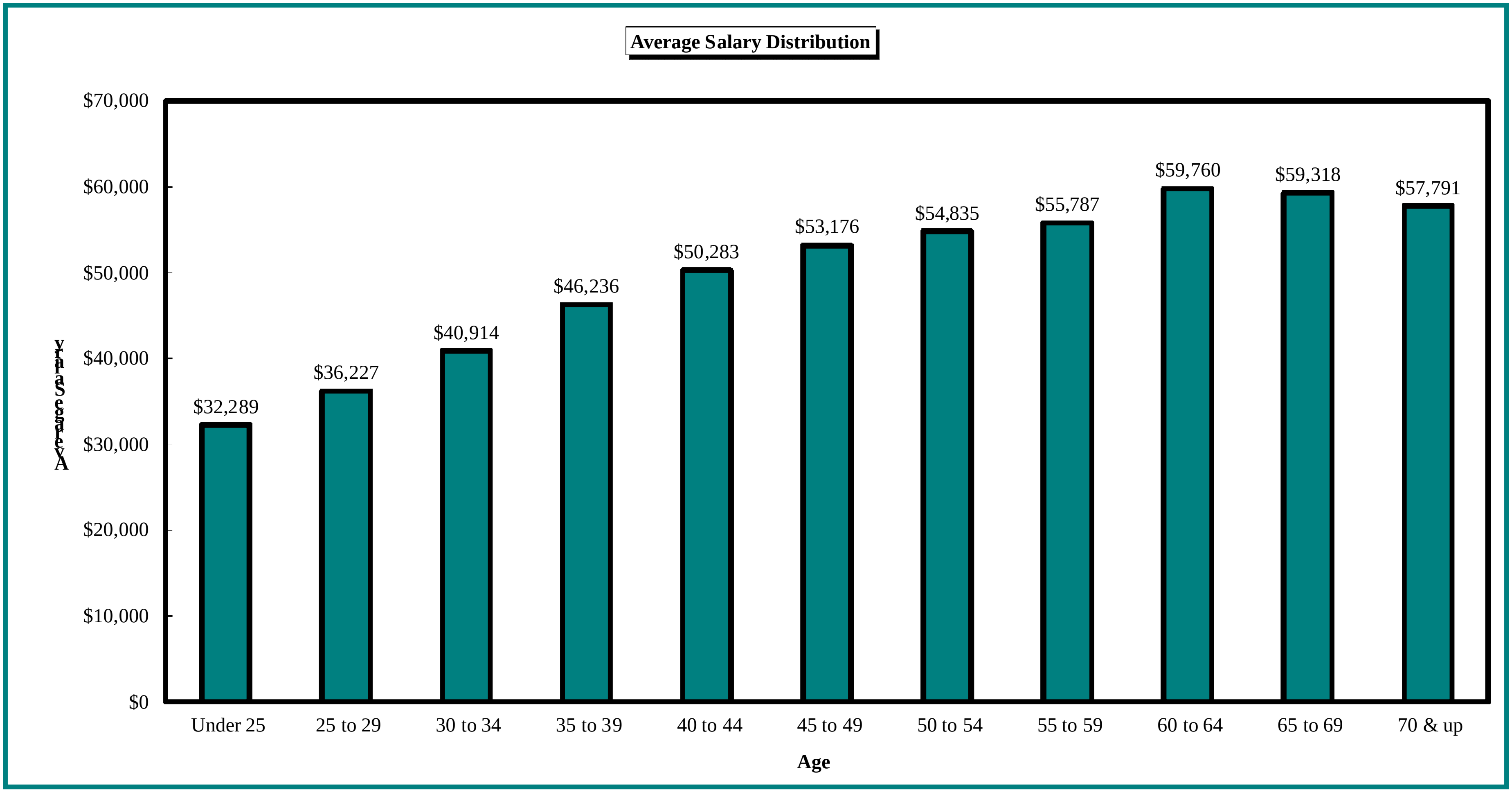
Kansas City Employees' Retirement System Distribution of Active Members by Age and Service as of May 1, 2013

AVERAGE SALARY BY AGE/SERVICE

	Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	$32,745	$31,653	$33,264	$0	$0	$0	$0	$0	$0	$0	$32,289
25 to 29	$36,368	$36,011	$36,047	$48,360	$0	$0	$0	$0	$0	$0	$36,227
30 to 34	$40,981	$40,944	$41,058	$40,288	$42,180	$0	$0	$0	$0	$0	$40,914
35 to 39	$39,860	$45,203	$47,133	$46,325	$53,046	$0	$0	$0	$0	$0	$46,236
40 to 44	$36,706	$44,030	$47,418	$51,012	$59,706	$61,471	$0	$0	$0	$0	$50,283
45 to 49	$40,696	$45,172	$45,513	$51,963	$61,829	$58,257	$62,338	$60,684	$0	$0	$53,176
50 to 54	$35,816	$39,106	$48,979	$48,926	$58,398	$65,138	$66,165	$66,684	$0	$0	$54,835
55 to 59	$34,791	$44,508	$46,939	$54,866	$58,447	$61,365	$63,515	$63,060	$60,545	$46,740	$55,787
60 to 64	$32,236	$52,379	$53,900	$52,876	$60,466	$71,203	$66,958	$70,159	$80,399	$50,016	$59,760
65 to 69	$0	$56,439	$48,896	$64,931	$63,284	$70,458	$71,979	$78,228	$71,400	$54,124	$59,318
70 & up	$0	$0	$41,206	$42,522	$59,348	$71,166	$0	$0	$0	$72,832	$57,791
Total	$37,417	$41,517	$45,893	$50,460	$59,556	$63,248	$65,100	$66,107	$68,300	$57,766	$51,095

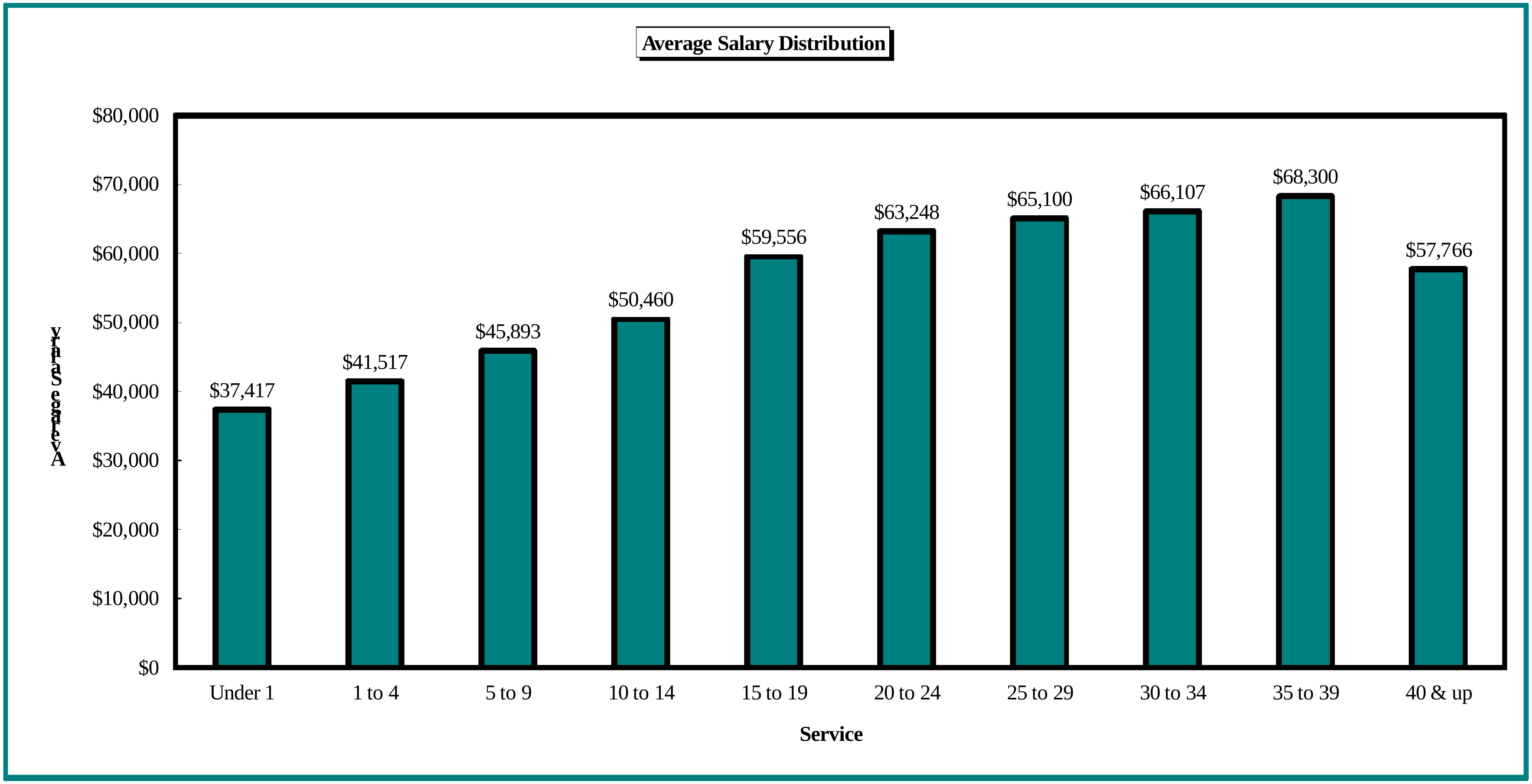
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Age as of May 1, 2013



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Service as of May 1, 2013



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System
Pensions in Payment Status by Type and Monthly Amount

Monthly Amount	Total	Normal	Early	Optional	Vested	Disability	Widows & QDRO
Total	**2,169**	**205**	**207**	**1,210**	**150**	**12**	**385**
Under $500	289	23	63	9	37	0	157
$500-1,000	422	54	84	104	64	5	111
1,000-1,500	311	35	36	157	27	7	49
1,500-2,000	298	33	15	206	13	0	31
2,000-2,500	257	19	4	214	7	0	13
2,500-3,000	204	11	2	179	2	0	10
3,000-3,500	120	8	1	103	0	0	8
3,500-4,000	83	7	1	75	0	0	0
4,000-4,500	60	4	0	54	0	0	2
4,500-5,000	36	3	0	33	0	0	0
5,000 & over	89	8	1	76	0	0	4

During the year ended April 30, 2013 there were 135 new pensions awarded (26 Normal, 16 Early, 61 Optional, 8 Vested, and 24 Widows and QDROs)

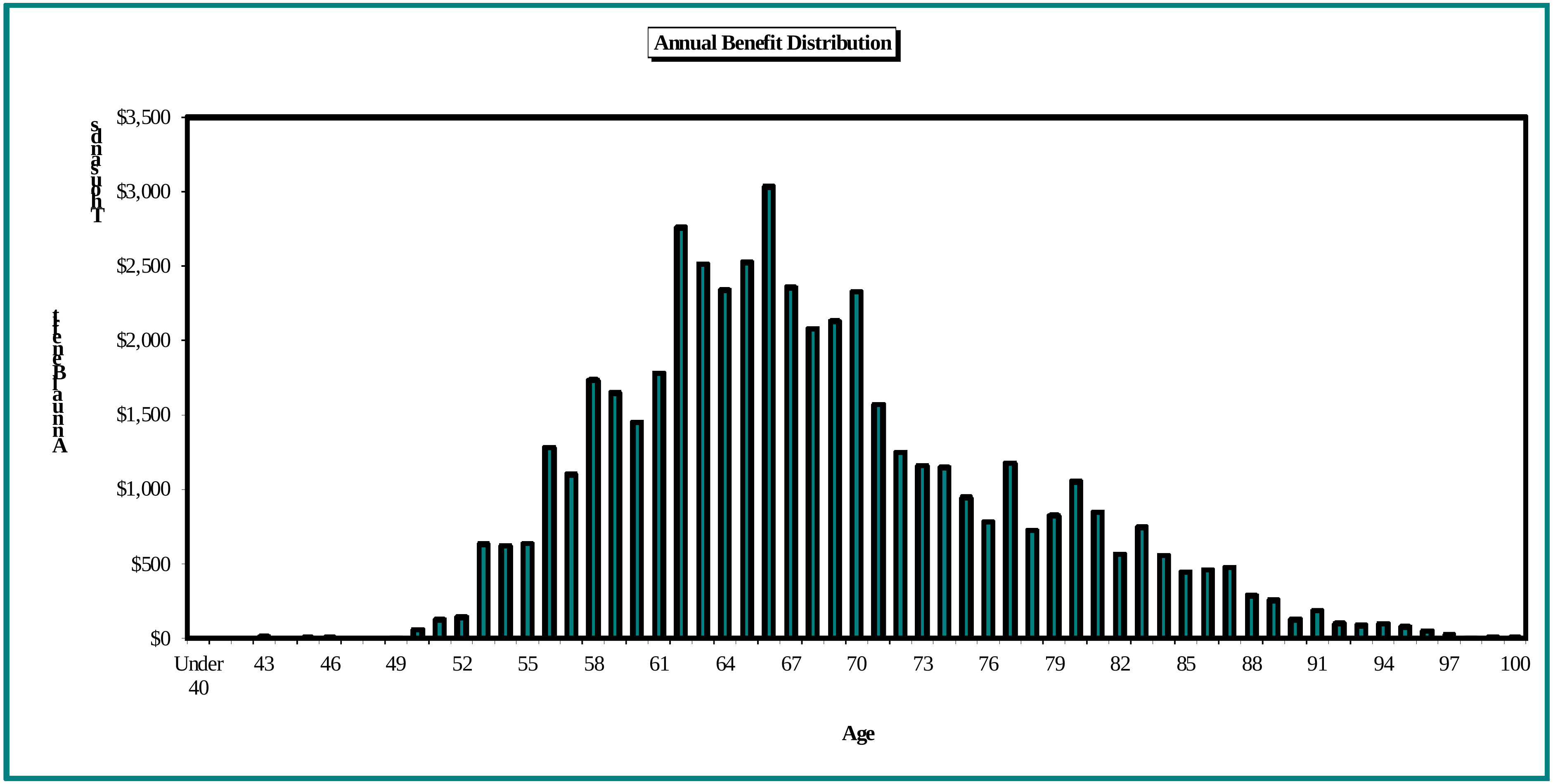
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Retired Members and Survivors as of May 1, 2013

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	0	$0	73	55	$1,161,617
25	0	$0	74	57	$1,146,729
26	0	$0	75	50	$947,085
27	0	$0	76	41	$781,307
28	0	$0	77	53	$1,178,254
29	0	$0	78	40	$723,912
30	0	$0	79	51	$825,607
31	0	$0	80	56	$1,053,531
32	0	$0	81	44	$847,478
33	0	$0	82	46	$564,876
34	0	$0	83	48	$747,040
35	0	$0	84	37	$556,503
36	0	$0	85	31	$443,871
37	0	$0	86	36	$460,849
38	0	$0	87	39	$476,548
39	0	$0	88	27	$288,607
40	0	$0	89	23	$255,678
41	0	$0	90	14	$127,559
42	0	$0	91	29	$185,519
43	1	$11,851	92	14	$100,370
44	0	$0	93	12	$86,467
45	1	$3,253	94	11	$99,029
46	1	$5,432	95	8	$75,881
47	0	$0	96	2	$49,760
48	0	$0	97	3	$20,840
49	1	$1,846	98	1	$1,572
50	3	$58,200	99	2	$6,145
51	4	$125,031	100	1	$5,608
52	4	$143,682	101	0	$0
53	20	$634,503	102	0	$0
54	17	$620,643	103	0	$0
55	20	$635,304	104	0	$0
56	42	$1,280,260	105	0	$0
57	39	$1,099,803	106	0	$0
58	60	$1,733,302	107	0	$0
59	53	$1,648,020	108	0	$0
60	56	$1,449,358	109	0	$0
61	70	$1,781,908	110	0	$0
62	94	$2,759,305	111	0	$0
63	89	$2,513,073	112	0	$0
64	85	$2,337,971	113	0	$0
65	92	$2,526,573	114	0	$0
66	109	$3,032,227	115	0	$0
67	79	$2,356,667	116	0	$0
68	84	$2,078,861	117	0	$0
69	83	$2,129,057	118	0	$0
70	93	$2,326,716	119	0	$0
71	68	$1,571,370	120	0	$0
72	58	$1,248,235			
			Totals	2,157	$49,330,693

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Retired Members and Survivors as of May 1, 2013



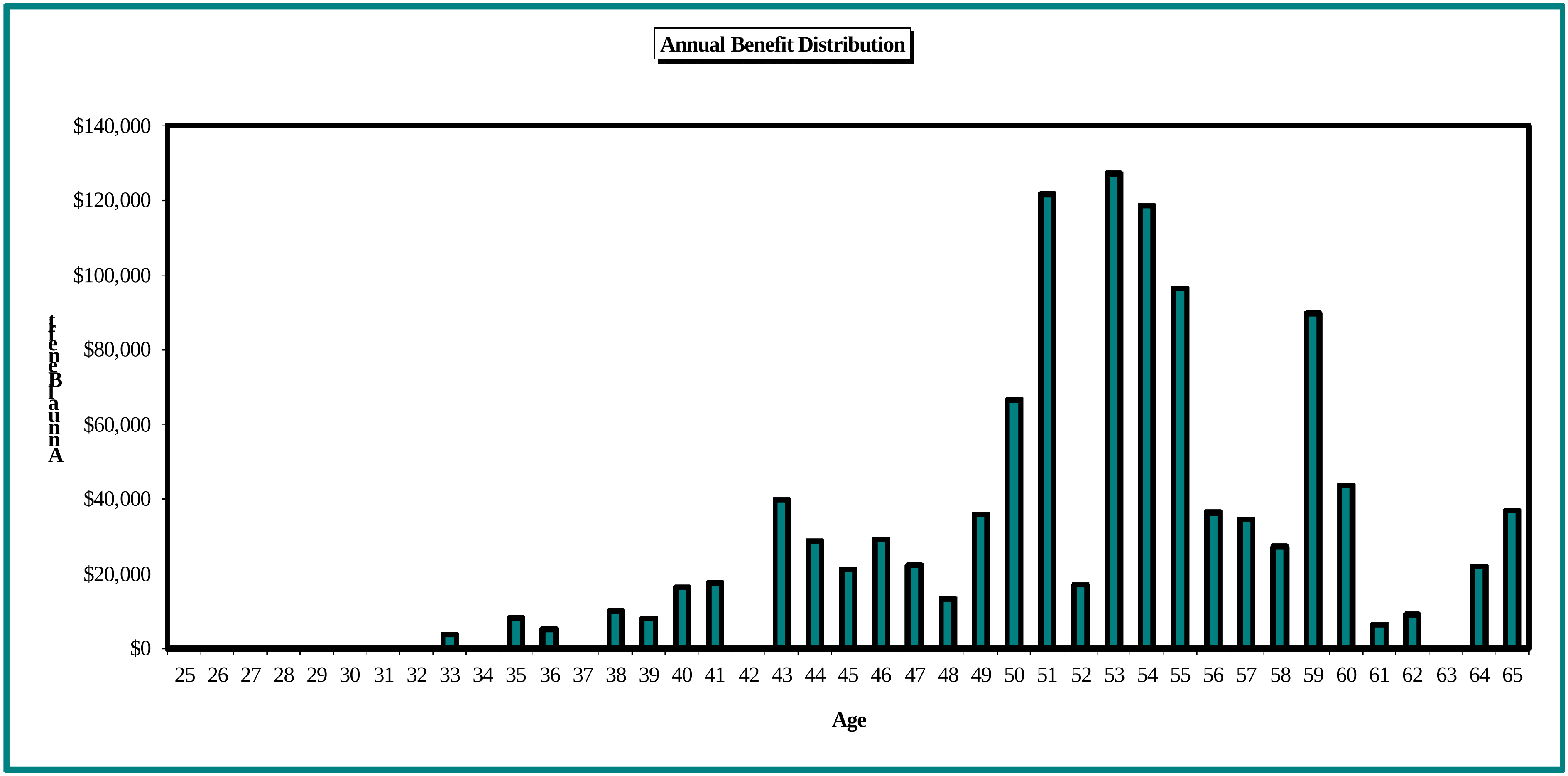
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Vested Members as of May 1, 2013

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	0	$0	73	0	$0
25	0	$0	74	0	$0
26	0	$0	75	0	$0
27	0	$0	76	0	$0
28	0	$0	77	0	$0
29	0	$0	78	0	$0
30	0	$0	79	0	$0
31	0	$0	80	0	$0
32	0	$0	81	0	$0
33	1	$3,790	82	0	$0
34	0	$0	83	0	$0
35	1	$8,173	84	0	$0
36	1	$5,273	85	0	$0
37	0	$0	86	0	$0
38	1	$10,093	87	0	$0
39	2	$7,985	88	0	$0
40	2	$16,407	89	0	$0
41	2	$17,625	90	0	$0
42	0	$0	91	0	$0
43	3	$39,861	92	0	$0
44	2	$28,824	93	0	$0
45	2	$21,335	94	0	$0
46	2	$29,157	95	0	$0
47	2	$22,396	96	0	$0
48	2	$13,452	97	0	$0
49	3	$35,927	98	0	$0
50	6	$66,691	99	0	$0
51	10	$121,687	100	0	$0
52	3	$17,075	101	0	$0
53	8	$127,167	102	0	$0
54	10	$118,522	103	0	$0
55	7	$96,453	104	0	$0
56	2	$36,545	105	0	$0
57	3	$34,675	106	0	$0
58	3	$27,311	107	0	$0
59	7	$89,687	108	0	$0
60	5	$43,725	109	0	$0
61	1	$6,425	110	0	$0
62	1	$9,066	111	0	$0
63	0	$0	112	0	$0
64	3	$22,006	113	0	$0
65	1	$36,908	114	0	$0
66	0	$0	115	0	$0
67	0	$0	116	0	$0
68	0	$0	117	0	$0
69	0	$0	118	0	$0
70	0	$0	119	0	$0
71	0	$0	120	0	$0
72	0	$0			
			Totals	96	$1,114,241

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Vested Members as of May 1, 2013



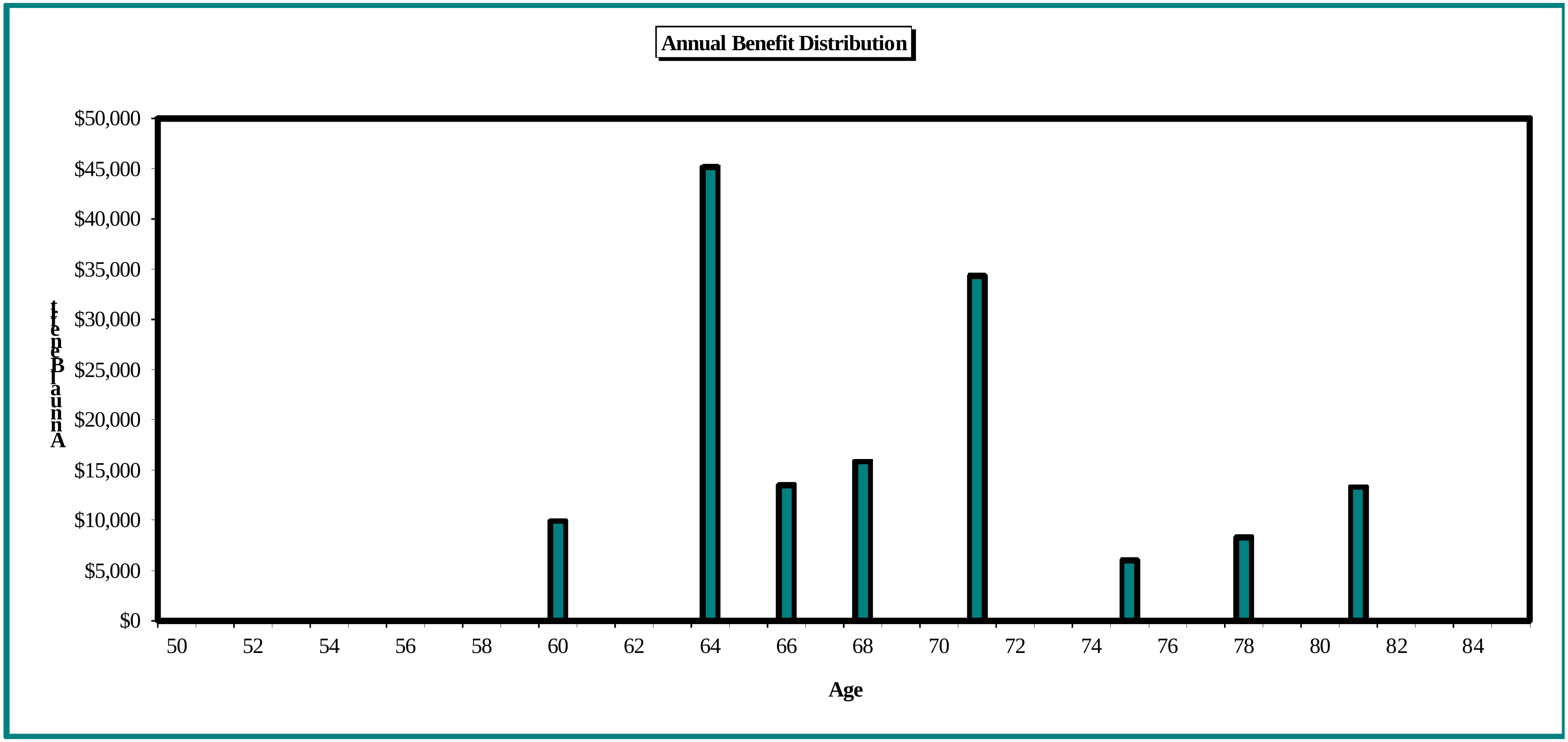
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Disabled Members as of May 1, 2013

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	0	$0	73	0	$0
25	0	$0	74	0	$0
26	0	$0	75	1	$6,010
27	0	$0	76	0	$0
28	0	$0	77	0	$0
29	0	$0	78	1	$8,299
30	0	$0	79	0	$0
31	0	$0	80	0	$0
32	0	$0	81	1	$13,298
33	0	$0	82	0	$0
34	0	$0	83	0	$0
35	0	$0	84	0	$0
36	0	$0	85	0	$0
37	0	$0	86	0	$0
38	0	$0	87	0	$0
39	0	$0	88	0	$0
40	0	$0	89	0	$0
41	0	$0	90	0	$0
42	0	$0	91	0	$0
43	0	$0	92	0	$0
44	0	$0	93	0	$0
45	0	$0	94	0	$0
46	0	$0	95	0	$0
47	0	$0	96	0	$0
48	0	$0	97	0	$0
49	0	$0	98	0	$0
50	0	$0	99	0	$0
51	0	$0	100	0	$0
52	0	$0	101	0	$0
53	0	$0	102	0	$0
54	0	$0	103	0	$0
55	0	$0	104	0	$0
56	0	$0	105	0	$0
57	0	$0	106	0	$0
58	0	$0	107	0	$0
59	0	$0	108	0	$0
60	1	$9,907	109	0	$0
61	0	$0	110	0	$0
62	0	$0	111	0	$0
63	0	$0	112	0	$0
64	3	$45,149	113	0	$0
65	0	$0	114	0	$0
66	1	$13,498	115	0	$0
67	0	$0	116	0	$0
68	1	$15,841	117	0	$0
69	0	$0	118	0	$0
70	0	$0	119	0	$0
71	3	$34,335	120	0	$0
72	0	$0			
			Totals	12	$146,337

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Disabled Members as of May 1, 2013



APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions and Actuarial Cost Method

1. Demographic Assumptions

a. Mortality Rates

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

Disabled: 1983 Railroad Retirement Board Disabled Life Mortality Table

The most recent experience study covering the period 2006-2010 showed that there are sufficient margins in these rates to provide for potential future improvement in mortality.

b. Termination Rates before Retirement

Sample Rate (%)					
	Mortality		Withdrawal*		
Age	Male	Female	General Employees**	Judges	Elected Officials
20	0.05%	0.03%	10.74%	--	10.00%
25	0.07%	0.03%	10.46%	--	10.00%
30	0.08%	0.04%	10.09%	--	10.00%
35	0.09%	0.05%	8.93%	--	10.00%
40	0.11%	0.07%	6.60%	--	10.00%
45	0.16%	0.10%	5.10%	--	10.00%
50	0.26%	0.14%	4.35%	--	--
55	0.44%	0.23%	2.37%	--	--
60	0.80%	0.44%	0.15%	--	--

* Withdrawal rates end upon first assumed retirement age.
** Select rates for first four years of service for General Employees:

Select Period	
Years of Service	Rate
0 – 1	20%
1 – 2	15%
2 – 3	12%
3 – 4	10%

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

c. Retirement Rates

Age	General Employees Age Plus Service Greater than or Equal to 80*	Other General Employees
Under 55	15%	0%
55	10%	2%
56	10%	2%
57	10%	2%
58	10%	2%
59	10%	2%
60	15%	10%
61	15%	10%
62	15%	20%
63	15%	20%
64	15%	20%
65	50%	50%
66	50%	50%
67	50%	50%
68	50%	50%
69	50%	50%
70	100%	100%

* 33% of General Employees younger than 65 are assumed to retire at first age when age plus service equals 80.

	Age	Percent
Elected Officials	65	100%
Judges	65	100%

d. Retirement Age for Inactive Vested Members

60 if years of service is greater than or equal to 10, and 65 if years of service is less than 10.

e. Unknown Data for Members

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

f. Percent Married

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

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

g. Age of Spouse

Females 3 years younger than males.

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h. Joint and Survivor Election Assumption

85% for married males and 70% for married females in active status.

i. Net Investment Return

7.50% per annum, net of investment fees and administrative expenses (*for the current year administrative expenses and investment fees represent approximately 0.4% of plan assets*)

j. Salary Increases

General Employees	
Age	**Rate (%)**
Less than 25	8.00%
25 – 29	7.00
30 – 34	6.50
35 – 39	5.50
40 – 44	5.00
45 – 49	5.00
50 – 54	4.50
55 – 59	4.00
60 – 64	4.00
65 and up	4.00

Judges and Elected Official: 5.00% per year for all ages.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Actuarial Value of Assets

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

2. Actuarial Cost Method

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

3. Amortization of Unfunded Actuarial Liability/Surplus

20-year layered amortization method; level percent of pay for all years except the 5/1/2009 Plan Year (30-year layer). Under the layered approach, the May 1, 2009 changes to the unfunded actuarial liability will be written down over a 30-year period and all future changes to the unfunded actuarial liability will establish new 20-year amortization periods. Payroll is expected to increase 4.0% per year.

4. Changes since Last Valuation

None.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

1. Plan Year

May 1 through April 30.

2. Membership

All full-time permanent employees in the classified and unclassified services shall become members as a condition of employment. Employees of any administrative board or board of control as organized and existing under general laws of Missouri and as defined in Revised Statutes of Missouri, Section 95.540, whose governing body has elected membership, shall become members. Unless otherwise provided, no members of the Council, including the Mayor, who commence a term of office after April 30, 2011 shall participate in this plan for any service after April 30, 2011. However, members of the Council, including the Mayor, elected on March 27, 2007 for a term beginning May 1, 2007 and also elected on March 22, 2011 for a term beginning May 1, 2011 are members of this plan as long as they are continuously a member of the council, including the mayor. Membership shall begin on the first day of employment.

3. Credited Service

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

Membership Service: Years and full calendar months of employment while a contributing member of this System.

Prior Service: Years and full calendar months of employment preceding December 21, 1962, if continuous with membership service.

MAST employees are credited with service after April 25, 2010, plus a fraction of their service earned prior to April 25, 2010. This Fraction is based on their age and service as of April 25, 2010 as shown in the following table:

APPENDIX C
SUMMARY OF PLAN PROVISIONS

Sum of Age and Prior Service as of 4/25/10 Less Adjustment for Prior Retirement Benefit	Percent of Prior Service Credit
Over 80	100%
74 to 79	90
68 to 73	80
62 to 67	70
56 to 61	60
50 to 55	50
44 to 49	40
38 to 43	30
32 to 37	20
26 to 31	10
20 to 25	5

4. Normal Retirement

Age Requirement: General Employees: 65
Judges and Elected Officials: Later of age 60 or expiration of term of office.

Service Requirement: General Employees: 5 years of creditable service.
Judges and Elected Officials: One elective term.

Amount: General Employees:
If unmarried or married and not electing a joint & survivor benefit at time of retirement, 2.22% of final average compensation multiplied by years and months of creditable service.

If married and electing a joint & survivor benefit at date of retirement, 2.00% of final average compensation multiplied by years and months of creditable service.

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

Maximum benefit: 70% of final average compensation.

Judges and Elected Officials:
2.22% of average monthly compensation received by then serving Judges and Elected Officials of the same office during the 24 months

APPENDIX C
SUMMARY OF PLAN PROVISIONS

preceding the beginning of the annuity multiplied by years and months of creditable service.

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

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

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

5. Optional Retirement

Age/Service Requirement: 60 and 10 years of creditable service, or the sum of age and service equals 80, if earlier.

Amount: Same as normal retirement.

6. Early Retirement

Age/Service Requirement: General Employees: 60 and 5 years of creditable service, or 55 and 10 years of creditable service.

Judges and Elected Officials: 55 and 10 years of creditable service.

Amount: Accrued benefit reduced by ½ of 1% per month of age less than 60 or, if service is less than ten ½ of 1% per month of age less than 65.

7. Disability Benefit

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

APPENDIX C
SUMMARY OF PLAN PROVISIONS

8. Vesting

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

9. Withdrawal (Refund) Benefit

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

10. Pre-Retirement Death Benefit

Service less than five years

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

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

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

APPENDIX C
SUMMARY OF PLAN PROVISIONS

date. The annuity is reduced for early retirement if paid at the member's early retirement date.

Service of 20 or more years of service:

Age Requirement: None.

Service Requirement: 20 or more years of service.

Amount: The surviving spouse may elect, in lieu of the settlements above, an annuity equal to 100% of the member's accrued annuity at the time of death, actuarially reduced for 100% joint and survivor coverage. The effective date of this annuity shall be the first day of the month following the member's death.

11. Post-Retirement Death Benefit

Age Requirement: None.

Service Requirement: None.

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

12. Minimum Surviving Spouses' Pension

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

13. Health Insurance Subsidy

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

14. Cost-of-Living Adjustment (COLA)

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

APPENDIX C
SUMMARY OF PLAN PROVISIONS

15. Contributions

a. Member
- 4.00% of salary for non MAST employees.
- Between 4.00% and 6.00% for MAST employees based on their age and service as of April 25, 2010. (see table following)
- The City "picks up" these employee contributions.

b. City
- For the year beginning May 1, 2013, the City is contributing the prior year's actuarially determined contribution rate. Future City contributions will be determined through the City's budgeting process.

The contribution rate for MAST employees is based upon the following table:

Sum of Age and Prior Service as of 4/25/10 Less Adjustment for Prior Retirement Benefit	Contribution Rate
Over 80	6.0%
74 to 79	5.0%
68 to 73	4.8%
62 to 67	4.6%
56 to 61	4.4%
50 to 55	4.2%
44 to 49	4.1%
38 to 43	4.0%
32 to 37	4.0%
26 to 31	4.0%
20 to 25	4.0%

16. Interest on Employee Contributions

5.25% per year, compounded.

17. Changes since Last Valuation

The City contribution rate has changed for the current year from the scheduled rate of 9.50% of payroll for General Employees and 19.50% of payroll for Judges and Elected Officials, to the prior year's actuarially determined contribution rate.

APPENDIX D
GLOSSARY OF TERMS

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disability, and retirement; changes in compensation; inflation; rates of investment earnings, and asset appreciation or depreciation; and other relevant items.

2. Actuarial Cost Method

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a Normal Cost and an Actuarial Liability.

3. Actuarial Gain/(Loss)

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

4. Actuarial Liability

The portion of the Actuarial Present Value of Projected Benefits which will not be paid by future Normal Costs. It represents the value of the past Normal Costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The Actuarial Present Value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made. As a simple example: assume you owe $100 to a friend one year from now. Also, assume there is a 1% probability of your friend dying over the next year, in which case you won't be obligated to pay him. If the assumed investment return is 10%, the actuarial present value is:

Amount		Probability of Payment	1/(1+Investment Return)		
$100	x	(1 - .01)	1/(1+.1)	=	$90

6. Actuarial Valuation

The determination, as of a specified date, of the Normal Cost, Actuarial Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

APPENDIX D
GLOSSARY OF TERMS

7. Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension plan as used by the actuary for the purpose of an Actuarial Valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values. This way long-term costs are not distorted by short-term fluctuations in the market.

8. Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of actuarial assumptions.

9. Amortization Payment

The portion of the pension plan contribution which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

11. Normal Cost

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

12. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets.

13. Projected Benefits

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and increases in future compensation and service credits.

14. Funded Percentage

The ratio of the Actuarial Liabilities to the Actuarial Value of Assets.

APPENDIX D
GLOSSARY OF TERMS

15. Mortality Table

A set of percentages which estimate the probability of death at a particular point in time. Typically, the rates are annual and based on age and sex.

16. Investment Return Assumption

The assumed interest rate used for projecting dollar related values in the future.