City of Kansas City, Missouri Employees' Retirement System

Actuarial Valuation as of May 1, 2014

Produced by Cheiron

September 2014

Classic Values, Innovative Advice

Table of Contents

APPENDICES

September 15, 2014

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, 2014. 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 - Accounting Statement Information

- 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.

1750 Tysons Boulevard, Suite 1100, McLean, VA 22102 Tel: 703.893.1456 Fax: 703.893.2006 www.cheiron.us

Board of Pension Trustees
City of Kansas City, Missouri Employees' Retirement System
September 15, 2014

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, EA, MAAA	Jacqueline King, ASA, EA, MAAA
Principal Consulting Actuary	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 2015, 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, 2014 valuation represents Cheiron's eighth valuation performed for KCERS and there have been no changes in assumptions since the prior year. The assumptions and methodologies reflected in this valuation are the same as in the May 1, 2013 valuation. The plan provisions reflected in this valuation include the plan changes under Ordinance No. 140035. 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, 2014 actuarial valuation are as follows:

- We have calculated the City's contribution rate on two bases:
  - The actuarially determined City contribution rate under the Board's funding policy decreased from 16.52% as of May 1, 2013 to 14.64% as of May 1, 2014. The actual rate that the City is scheduled to contribute for the current year is 16.52% of payroll which is the actuarially determined City contribution rate for the prior year.
  - Under the City ordinance, the City's budgeted contribution rate for the year beginning May 1, 2015 will be based upon a 30-year open amortization for the entire amount of unfunded actuarial liability. This rate is 13.67% as of May 1, 2014.

- The Employees' Retirement System's (ERS) unfunded actuarial liability decreased from \$215 million on May 1, 2013 to \$188 million on May 1, 2014.

- The ERS's funding ratio, the ratio of actuarial asset value over liabilities, increased from 80.7% as of May 1, 2013 to 83.7% as of May 1, 2014.

SECTION I
BOARD SUMMARY

- The primary factor in the increase of the Plan's funded status was an overall actuarial gain of $29.8 million.

- During the year ended April 30, 2014, the System's assets earned 11.44% on a market value basis. The return on the actuarial asset value was 9.96% (as compared to 7.50% assumed). This resulted in an actuarial gain on investments of $21.8 million. However, the Plan also experienced a loss of $0.9 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 gain of $8.9 million.

- This valuation reflects changes under Ordinance No. 140035 which includes:
  - 1.00% member contribution rate increase effective April 20, 2014 for all employees.
  - The introduction of a new tier of benefits for all members hired on or after April 20, 2014.

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.

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, 2013**	**May 1, 2014**	**% Change**
Participant Counts			
Active Participants	3,266	3,211	(1.7%)
Disabled Participants	12	10	(16.7%)
Retirees and Beneficiaries	2,157	2,202	2.1%
Terminated Vested Participants	96	95	(1.0%)
Inactive Participants	108	133	23.1%
Total	**5,639**	**5,651**	0.2%
Annual Salaries of Active Members	$ 166,877,688	$ 167,629,048	0.5%
Annual Retirement Allowances for Retired Members and Beneficiaries*	$ 49,477,032	$ 52,055,562	5.2%
Assets and Liabilities			
Actuarial Liability (AL)	$ 1,115,165,108	$ 1,149,883,725	3.1%
Actuarial Value of Assets	900,061,516	962,152,010	6.9%
Unfunded Actuarial Liability (UAL)	$ 215,103,592	$ 187,731,715	(12.7%)
Funded Ratio	80.7%	83.7%	
Present Value of Accrued Benefits (PVAB)	$ 967,590,403	$ 1,010,547,311	4.4%
Market Value of Assets	947,069,626	1,027,655,034	8.5%
Unfunded/(Surplus) PVAB	$ 20,520,777	$ (17,107,723)	
Accrued Benefit Funding Ratio	97.9%	101.7%	
Contributions as a Percentage of Payroll under Board's Funding Policy	**Fiscal Year 2014**	**Fiscal Year 2015**	
Normal Cost Rate	8.72%	7.77%	
Unfunded Actuarial Liability Rate	7.80%	6.87%	
Total Actuarially Determined City Contribution Rate	16.52%	14.64%	
Annual Required Contribution (GASB)	$27,568,194	$24,540,893	(11.0%)

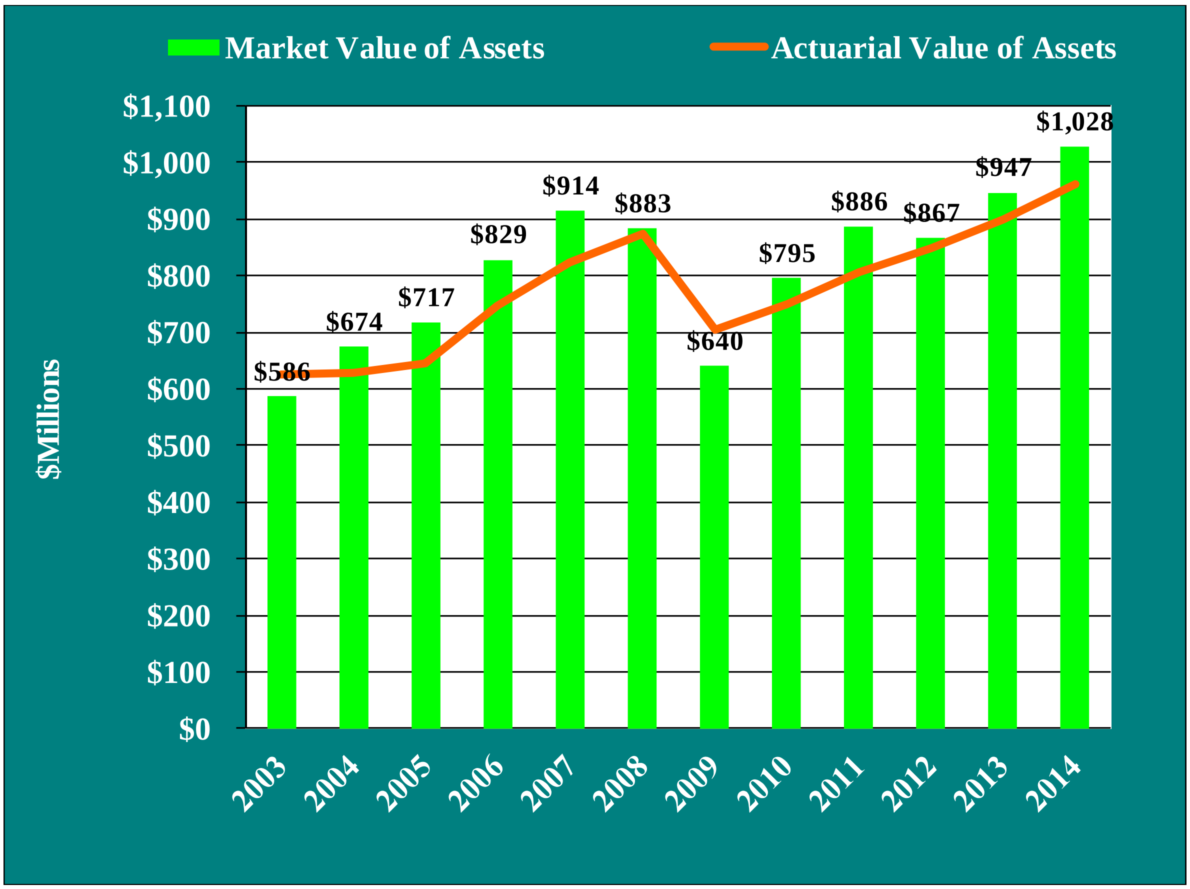
** The annual retirement allowances do not include the subsidy benefits*

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.

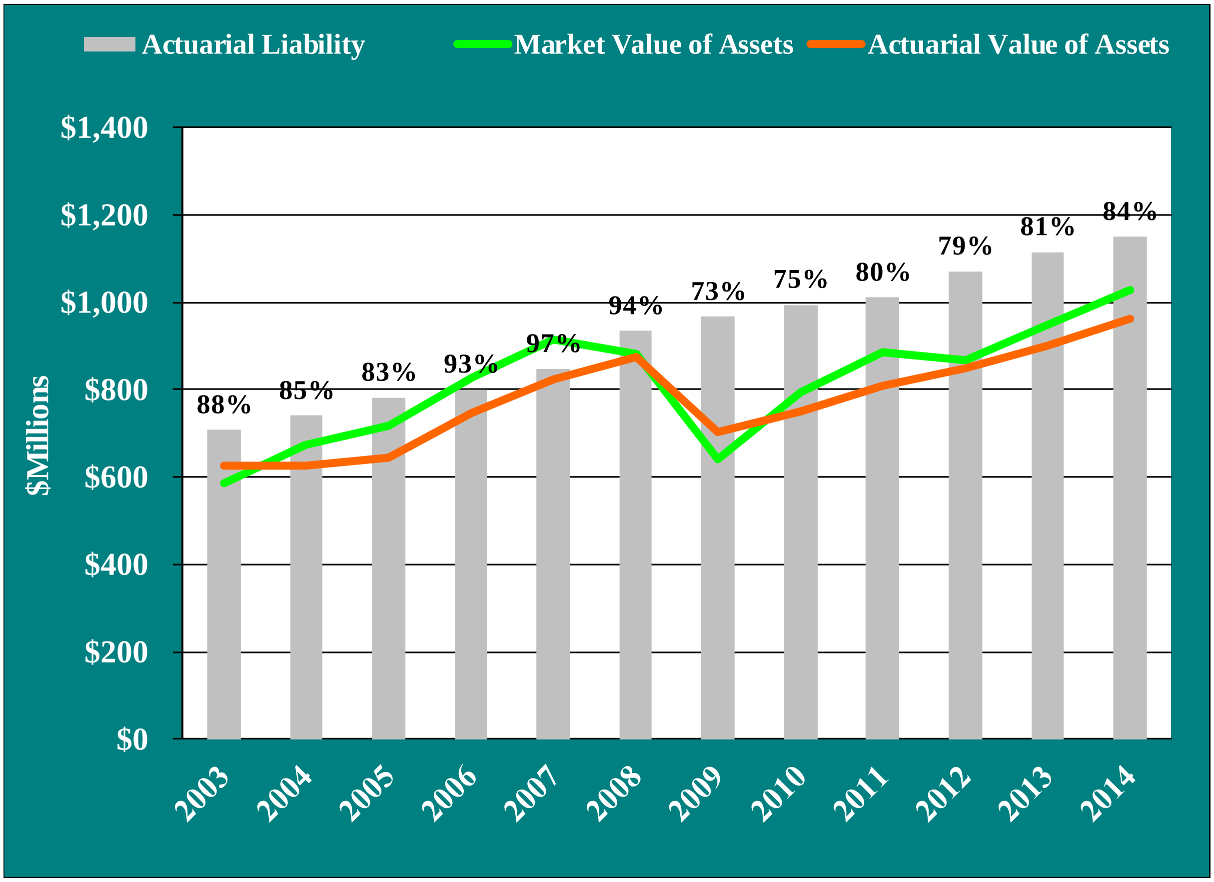
<u>System Assets</u>



There was a market value of assets (MVA) gain on investments in 2014, returning 11.44%, increasing from $947 million to $1,028 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 2013 to 2014 returning 9.96% due to recent market gains.

SECTION I
BOARD SUMMARY

Assets and Liabilities

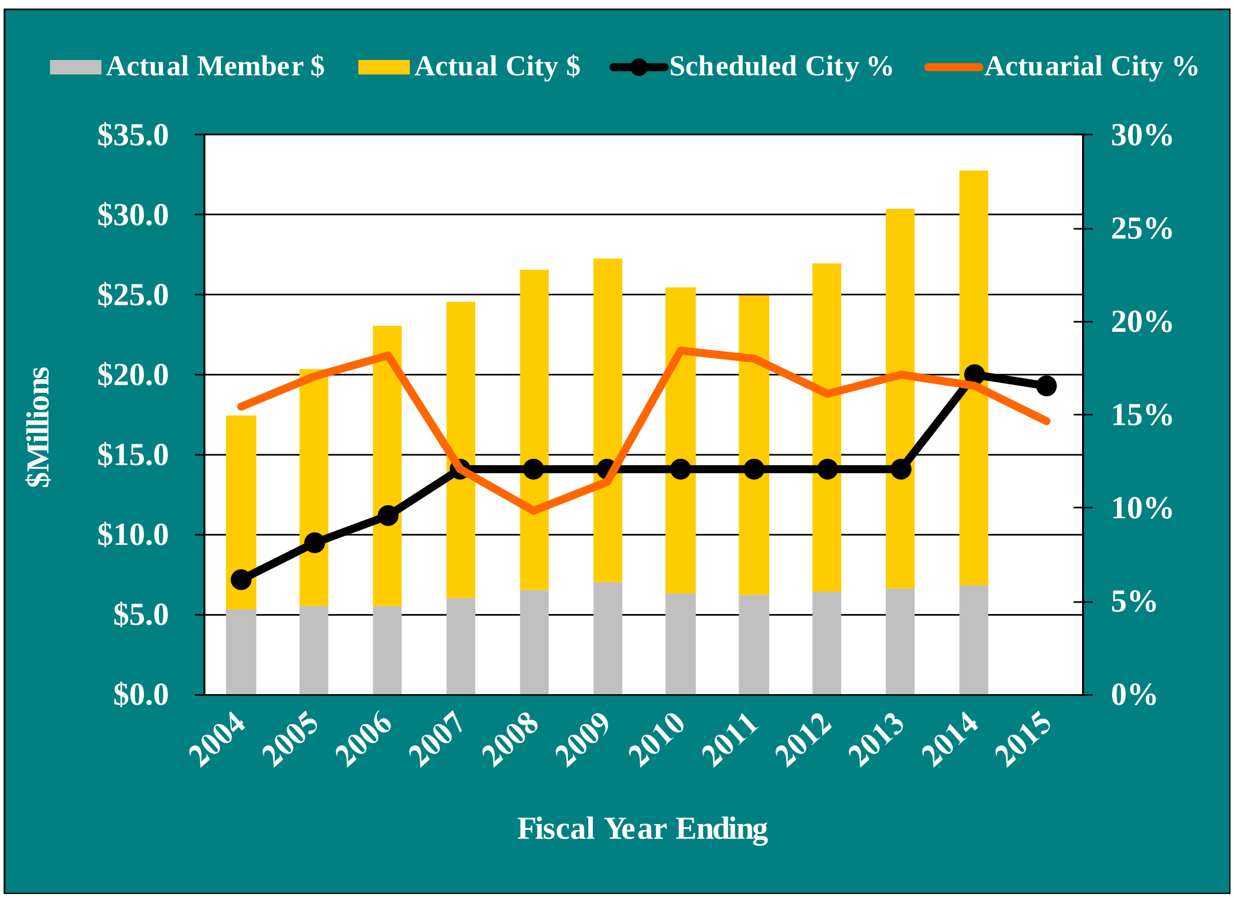


The above chart compares the actuarial value of assets to the actuarial liabilities as well as the funded ratio, sometimes referred to as the benefit security ratio. This chart shows that in 2009, the System had its lowest funded ratio in the past 10 years, but has since increased.

SECTION I
BOARD SUMMARY

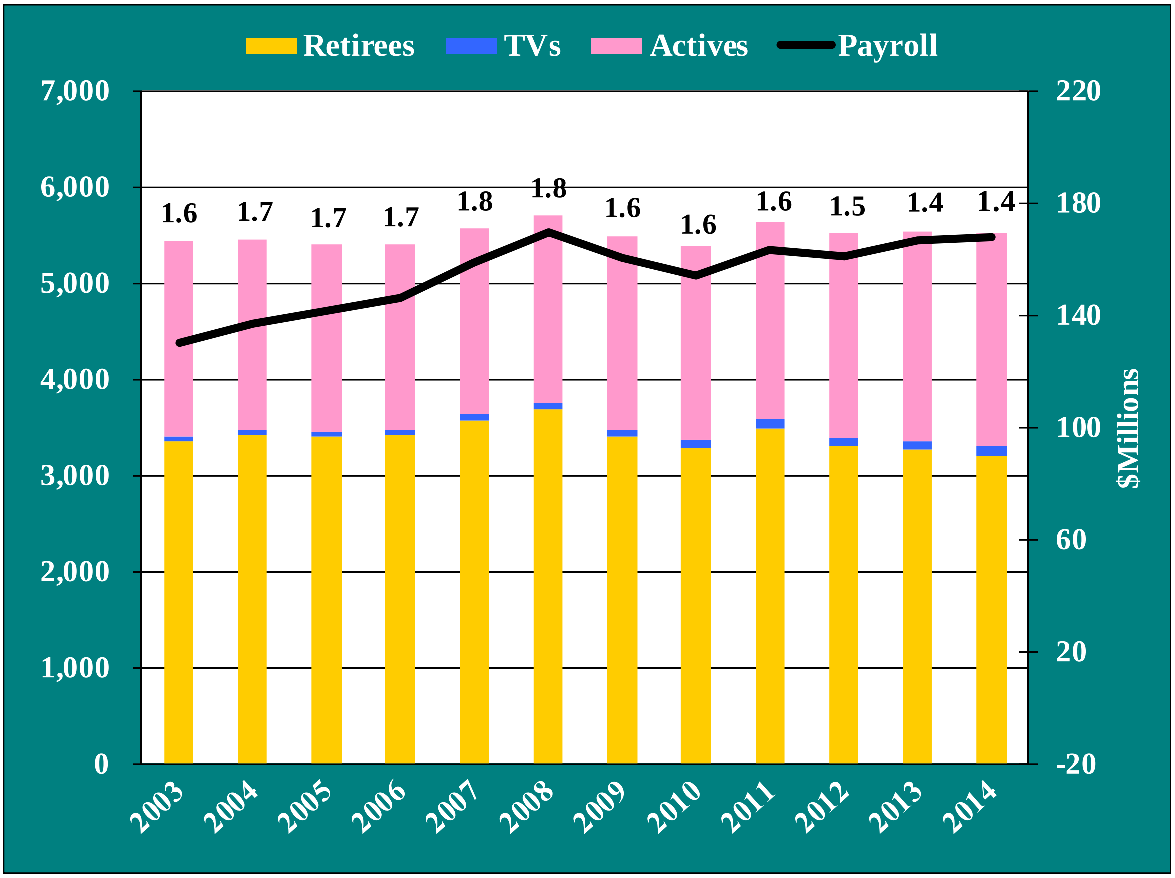
Contribution Rates

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 under the Board's funding policy 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 prior to April 20, 2014, and 5% (more than 5% for certain MAST employees) of payroll effective April 20, 2014. 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 Years Ending 2014 and later, the scheduled City contribution rate is the actuarial contribution rate determined in the prior year's actuarial valuation. The actuarial contribution rate under the Board's funding policy decreased from 16.52% of payroll in 2013 to 14.64% of payroll in 2014 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 1.6 in 2003, but there are 1.4 actives supporting each inactive member today. The black line shows the total active participating payroll for each valuation year.

SECTION I
BOARD SUMMARY

D. Future Expected Financial Trends

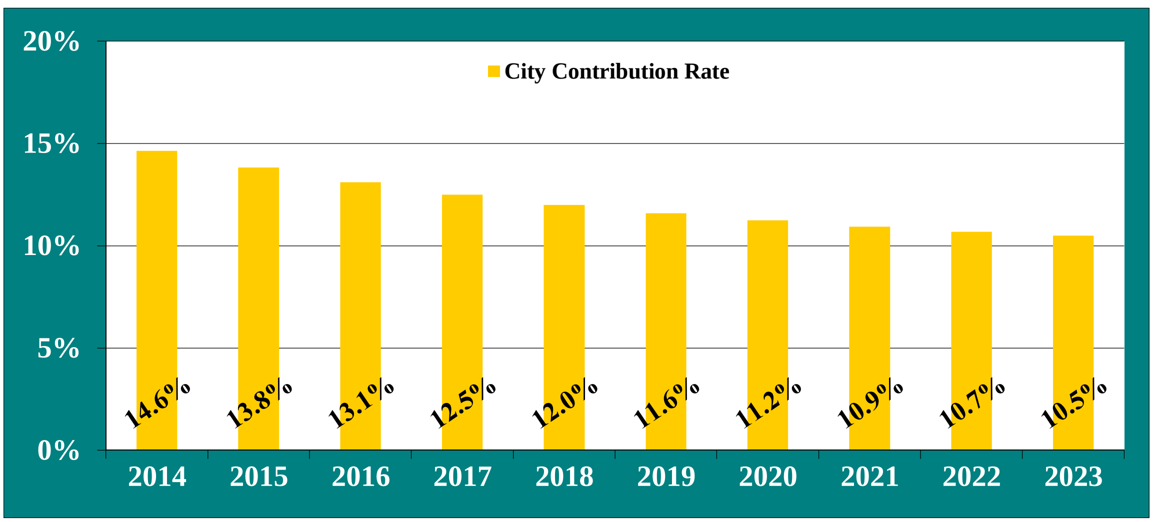
The analysis of projected financial trends is perhaps the most important component of this valuation. In this Section, we present the implications of the May 1, 2014 valuation results in terms of (1) the projected City's contributions and (2) projected System's funded status (ratio of assets over liabilities). 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 makes contributions equal to the prior year's actuarially determined contribution rate under the Board's funding policy.

1. Contribution Rate Projections (Board Funding Policy)

The first set of charts shows the expected City contribution rate. The years shown in the charts are plan years beginning May 1.

Baseline Returns of 7.50%

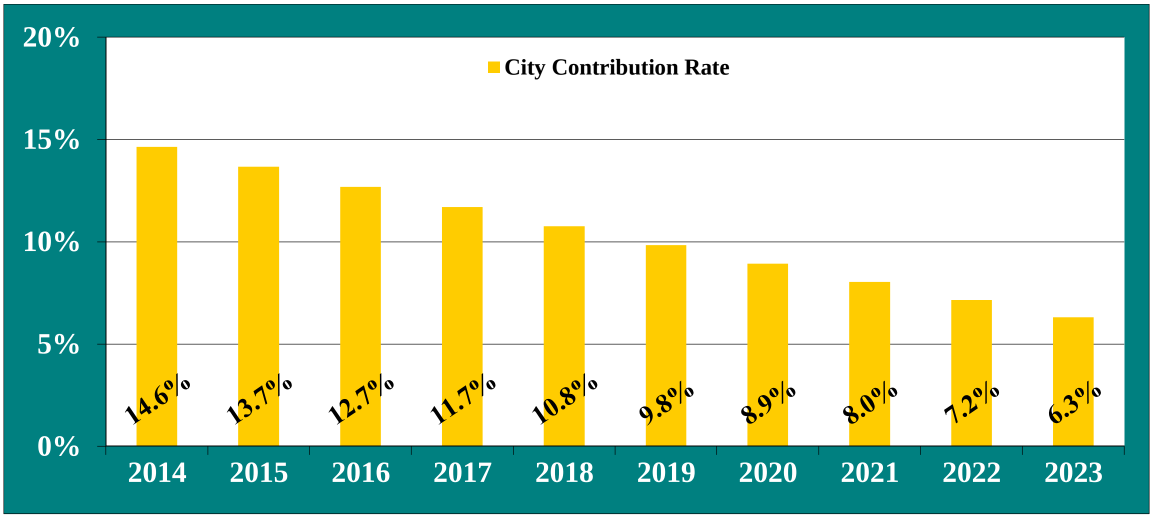
The chart below shows that the contribution rate will decrease over the next 10 years assuming that the fund earns the assumed investment rate of 7.5% on market value.



SECTION I
BOARD SUMMARY

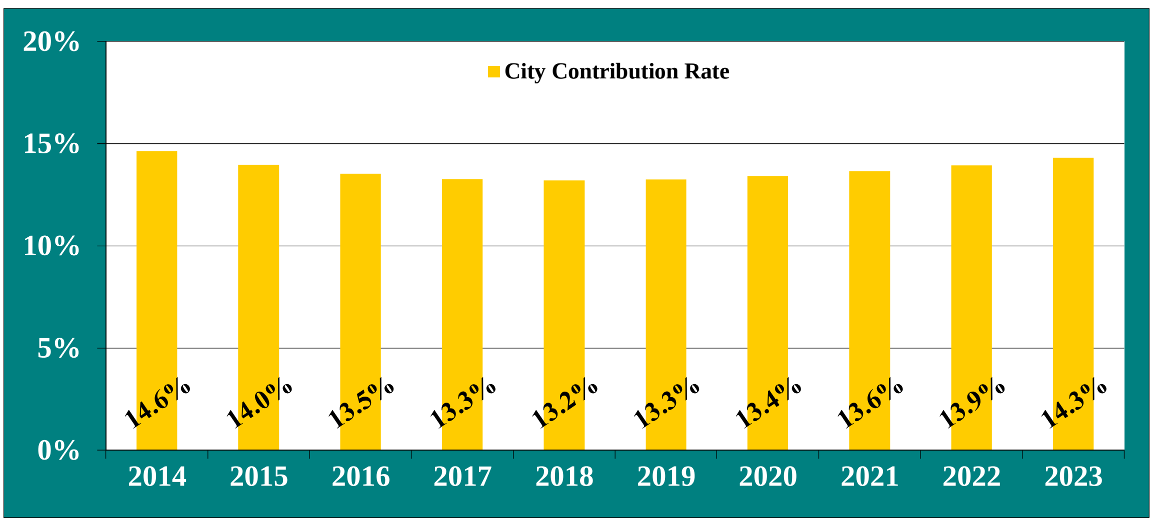
Optimistic Returns of 9.00%

If the fund earns 1.50% greater than the assumed rate, the contribution rate will decrease faster than if the fund earns the assumed rate of 7.5%.



Pessimistic Returns of 6.00%

If the fund earns 1.50% less than the assumed rate, the contribution rate initially decreases, then increases over the last 5 years.



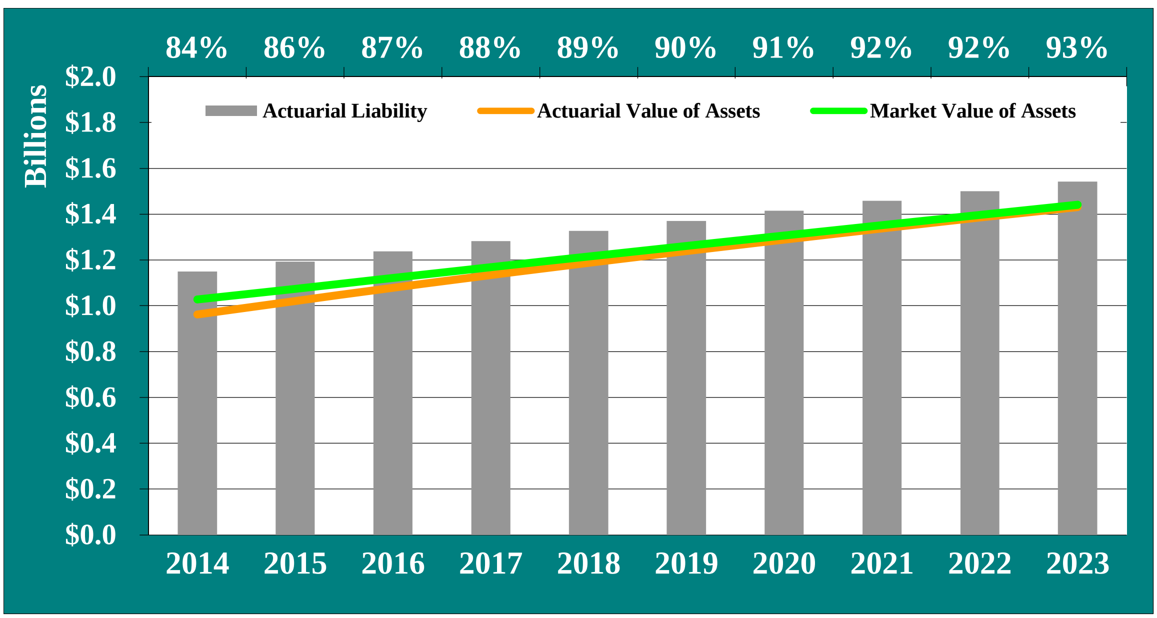
SECTION I
BOARD SUMMARY

2. Asset and Liability Projections (Board Funding Policy)

The next set of projection charts compares 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). The top of each chart also portrays 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 1.

Baseline Returns of 7.50%

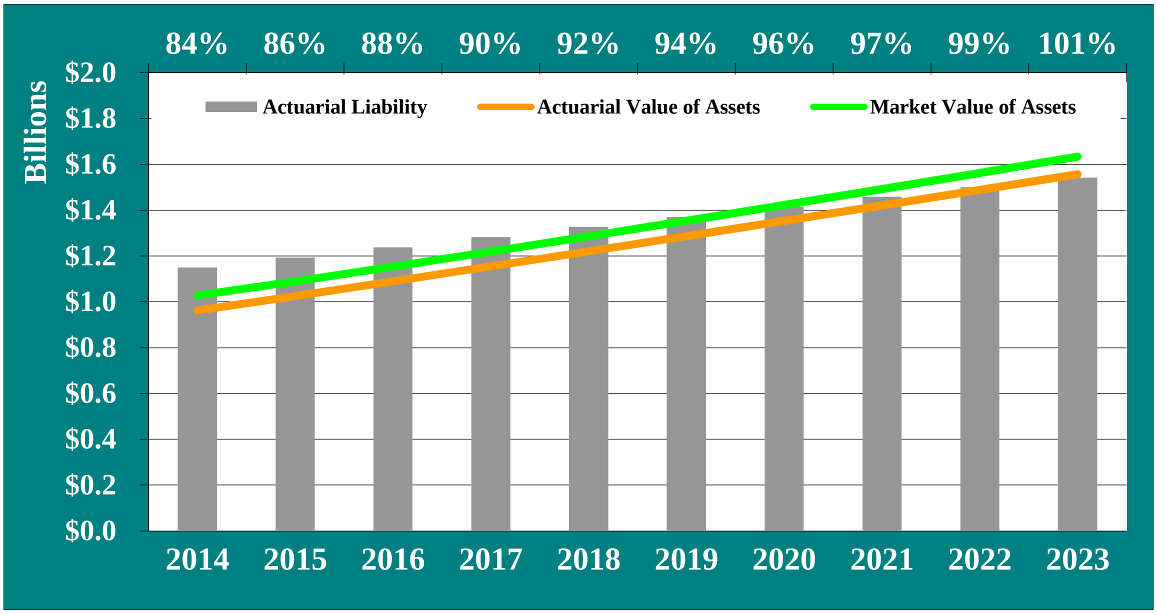
Assuming that the fund earns the assumed investment rate of 7.5% and that the City continues to contribute the current scheduled contribution rate equal to the prior year's actuarially determined contribution rate, the funded ratio will increase gradually to 93% over the next 10 years.



SECTION I
BOARD SUMMARY

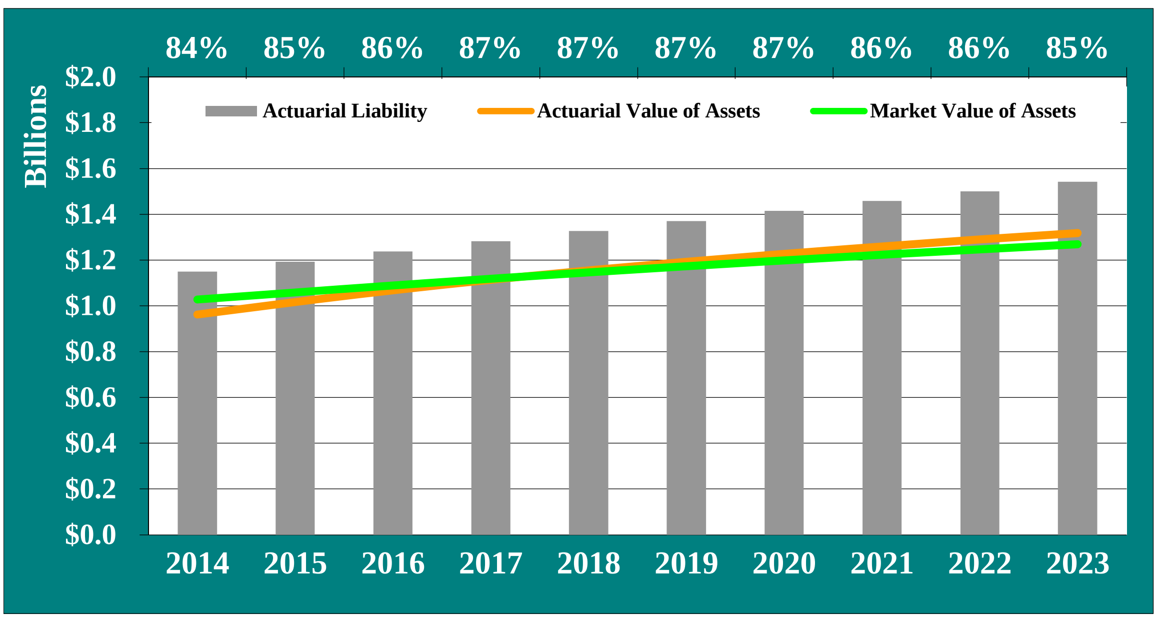
Optimistic Returns of 9.00%

If the fund earns 1.50% greater than the assumed rate of return, the funded ratio will increase to 101% 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 gradually to 87%, then decrease to 85% over the next ten years.



SECTION I
BOARD SUMMARY

3. 30 Year Projections Based on City Contribution Policy:

The following charts show 30 year cost projections under two amortization policies: (1) 30-year open amortization which is the current City contribution policy and (2) 30-year closed amortization for comparison purposes. For the purpose of these projections, it has been assumed that the active population remains constant and the fund earns the assumed return of 7.5% per year on market value.

30 Year Open Amortization Method:

City of Kansas City, Missouri Firefighters' Pension System
Projection Based on April 30, 2014 Actuarial Valuation
30 Year Open Amortization
Interest at 7.50%
Amounts in thousands

Valuation as of April 30, (1)	Employer Contribution Rate (2)	Member Contribution Rate (3)	Compensation at Valuation (4)	Employer Contribution (5)	Actuarial Accrued Liability (AAL) (6)	Actuarial Value of Assets (AVA) (7)	Unfunded AAL (8)	UAL Amortization Payment Rate (9)	Normal Cost Rate (10)	Employer ARC (11)	Dollar Amount of ARC (12)	Funded Ratio Using AVA (13)
2014	16.52%	5.01%	$ 167,629	$ 28,241	$ 1,149,884	$ 962,152	$ 187,732	5.88%	7.79%	13.67%	$ 22,923	83.7%
2015	13.78%	5.01%	$ 174,334	$ 24,499	$ 1,192,915	$ 1,019,333	$ 173,582	5.33%	7.54%	12.87%	$ 22,438	85.4%
2016	12.87%	5.01%	$ 181,308	$ 23,796	$ 1,237,853	$ 1,075,270	$ 162,583	4.80%	7.37%	12.17%	$ 22,069	86.9%
2017	12.17%	5.01%	$ 188,560	$ 23,402	$ 1,282,493	$ 1,128,362	$ 154,131	4.38%	7.18%	11.56%	$ 21,795	88.0%
2018	11.56%	5.01%	$ 196,102	$ 23,118	$ 1,326,927	$ 1,179,186	$ 147,741	4.03%	7.01%	11.05%	$ 21,663	88.9%
2019	11.05%	5.01%	$ 203,946	$ 22,982	$ 1,370,973	$ 1,227,952	$ 143,021	3.75%	6.85%	10.61%	$ 21,635	89.6%
2020	10.61%	5.01%	$ 212,104	$ 22,950	$ 1,414,895	$ 1,275,240	$ 139,655	3.52%	6.70%	10.23%	$ 21,697	90.1%
2021	10.23%	5.00%	$ 220,588	$ 23,013	$ 1,458,281	$ 1,320,892	$ 137,390	3.33%	6.56%	9.89%	$ 21,815	90.6%
2022	9.89%	5.00%	$ 229,412	$ 23,138	$ 1,500,767	$ 1,364,748	$ 136,019	3.17%	6.42%	9.59%	$ 22,000	90.9%
2023	9.59%	5.00%	$ 238,588	$ 23,334	$ 1,542,420	$ 1,407,041	$ 135,379	3.04%	6.32%	9.35%	$ 22,317	91.2%
2024	9.35%	5.00%	$ 248,132	$ 23,660	$ 1,583,468	$ 1,448,132	$ 135,336	2.92%	6.22%	9.14%	$ 22,670	91.5%
2025	9.14%	5.00%	$ 258,057	$ 24,054	$ 1,623,894	$ 1,488,111	$ 135,783	2.82%	6.12%	8.93%	$ 23,054	91.6%
2026	8.93%	5.00%	$ 268,380	$ 24,441	$ 1,663,851	$ 1,527,217	$ 136,634	2.73%	6.03%	8.75%	$ 23,490	91.8%
2027	8.75%	5.00%	$ 279,115	$ 24,906	$ 1,703,614	$ 1,565,794	$ 137,820	2.64%	5.93%	8.57%	$ 23,922	91.9%
2028	8.57%	5.00%	$ 290,279	$ 25,370	$ 1,742,594	$ 1,603,309	$ 139,285	2.57%	5.81%	8.38%	$ 24,315	92.0%
2029	8.38%	5.00%	$ 301,890	$ 25,799	$ 1,781,098	$ 1,640,113	$ 140,984	2.50%	5.71%	8.21%	$ 24,780	92.1%
2030	8.21%	5.00%	$ 313,966	$ 26,287	$ 1,819,430	$ 1,676,548	$ 142,882	2.44%	5.61%	8.04%	$ 25,257	92.1%
2031	8.04%	5.00%	$ 326,525	$ 26,772	$ 1,858,506	$ 1,713,556	$ 144,950	2.38%	5.53%	7.90%	$ 25,812	92.2%
2032	7.90%	5.00%	$ 339,586	$ 27,359	$ 1,897,972	$ 1,750,807	$ 147,165	2.32%	5.44%	7.76%	$ 26,347	92.2%
2033	7.76%	5.00%	$ 353,169	$ 27,949	$ 1,937,789	$ 1,788,281	$ 149,508	2.27%	5.35%	7.62%	$ 26,894	92.3%
2034	7.62%	5.00%	$ 367,296	$ 28,542	$ 1,979,377	$ 1,827,412	$ 151,965	2.21%	5.27%	7.48%	$ 27,488	92.3%
2035	7.48%	5.00%	$ 381,988	$ 29,139	$ 2,023,257	$ 1,868,733	$ 154,524	2.17%	5.21%	7.37%	$ 28,171	92.4%
2036	7.37%	5.00%	$ 397,267	$ 29,858	$ 2,070,436	$ 1,913,260	$ 157,176	2.12%	5.16%	7.28%	$ 28,910	92.4%
2037	7.28%	5.00%	$ 413,158	$ 30,674	$ 2,121,080	$ 1,961,166	$ 159,914	2.07%	5.11%	7.18%	$ 29,670	92.5%
2038	7.18%	5.00%	$ 429,684	$ 31,462	$ 2,174,927	$ 2,012,195	$ 162,732	2.03%	5.06%	7.09%	$ 30,451	92.5%
2039	7.09%	5.00%	$ 446,872	$ 32,311	$ 2,233,016	$ 2,067,390	$ 165,626	1.98%	5.02%	7.00%	$ 31,297	92.6%
2040	7.00%	5.00%	$ 464,746	$ 33,177	$ 2,296,351	$ 2,127,758	$ 168,593	1.94%	4.97%	6.91%	$ 32,121	92.7%
2041	6.91%	5.00%	$ 483,336	$ 34,060	$ 2,365,845	$ 2,194,215	$ 171,630	1.90%	4.93%	6.83%	$ 33,015	92.7%
2042	6.83%	5.00%	$ 502,670	$ 35,012	$ 2,442,185	$ 2,267,449	$ 174,736	1.86%	4.88%	6.74%	$ 33,883	92.8%
2043	6.74%	5.00%	$ 522,777	$ 35,933	$ 2,526,196	$ 2,348,287	$ 177,908	1.82%	4.84%	6.66%	$ 34,825	93.0%
2044	6.66%	5.00%	$ 543,688	$ 36,927	$ 2,618,858	$ 2,437,710	$ 181,148	1.78%	4.80%	6.58%	$ 35,793	93.1%

Projections assume a constant population and no actuarial gains and losses

SECTION I
BOARD SUMMARY

30 Year Closed Amortization Method:

City of Kansas City, Missouri Firefighters' Pension System
Projection Based on April 30, 2014 Actuarial Valuation
30 Year Closed Amortization
Interest at 7.50%
Amounts in thousands

Valuation as of April 30, (1)	Employer Contribution Rate (2)	Member Contribution Rate (3)	Compensation at Valuation (4)	Employer Contribution (5)	Actuarial Accrued Liability (AAL) (6)	Actuarial Value of Assets (AVA) (7)	Unfunded AAL (8)	UAL Amortization Payment Rate (9)	Normal Cost Rate (10)	Employer ARC (11)	Dollar Amount of ARC (12)	Funded Ratio Using AVA (13)
2014	16.52%	5.01%	$ 167,629	$ 28,241	$ 1,149,884	$ 962,152	$ 187,732	5.88%	7.79%	13.67%	$ 22,923	83.7%
2015	13.78%	5.01%	$ 174,334	$ 24,499	$ 1,192,915	$ 1,019,333	$ 173,582	5.44%	7.54%	12.98%	$ 22,626	85.4%
2016	12.98%	5.01%	$ 181,308	$ 24,000	$ 1,237,853	$ 1,075,469	$ 162,384	5.00%	7.37%	12.37%	$ 22,423	86.9%
2017	12.37%	5.01%	$ 188,560	$ 23,787	$ 1,282,493	$ 1,128,950	$ 153,543	4.64%	7.18%	11.83%	$ 22,302	88.0%
2018	11.83%	5.01%	$ 196,102	$ 23,658	$ 1,326,927	$ 1,180,353	$ 146,574	4.36%	7.01%	11.38%	$ 22,313	89.0%
2019	11.38%	5.01%	$ 203,946	$ 23,669	$ 1,370,973	$ 1,229,895	$ 141,078	4.14%	6.85%	11.00%	$ 22,426	89.7%
2020	11.00%	5.01%	$ 212,104	$ 23,794	$ 1,414,895	$ 1,278,164	$ 136,731	3.96%	6.70%	10.67%	$ 22,627	90.3%
2021	10.67%	5.00%	$ 220,588	$ 24,003	$ 1,458,281	$ 1,325,019	$ 133,262	3.82%	6.56%	10.38%	$ 22,887	90.9%
2022	10.38%	5.00%	$ 229,412	$ 24,285	$ 1,500,767	$ 1,370,319	$ 130,449	3.70%	6.42%	10.12%	$ 23,218	91.3%
2023	10.12%	5.00%	$ 238,588	$ 24,623	$ 1,542,420	$ 1,414,317	$ 128,102	3.61%	6.32%	9.93%	$ 23,687	91.7%
2024	9.93%	5.00%	$ 248,132	$ 25,127	$ 1,583,468	$ 1,457,403	$ 126,065	3.54%	6.22%	9.75%	$ 24,200	92.0%
2025	9.75%	5.00%	$ 258,057	$ 25,659	$ 1,623,894	$ 1,499,695	$ 124,199	3.47%	6.12%	9.59%	$ 24,751	92.4%
2026	9.59%	5.00%	$ 268,380	$ 26,247	$ 1,663,851	$ 1,541,464	$ 122,387	3.42%	6.03%	9.45%	$ 25,364	92.6%
2027	9.45%	5.00%	$ 279,115	$ 26,899	$ 1,703,614	$ 1,583,091	$ 120,523	3.38%	5.93%	9.31%	$ 25,983	92.9%
2028	9.31%	5.00%	$ 290,279	$ 27,560	$ 1,742,594	$ 1,624,082	$ 118,512	3.35%	5.81%	9.15%	$ 26,573	93.2%
2029	9.15%	5.00%	$ 301,890	$ 28,170	$ 1,781,098	$ 1,664,831	$ 116,267	3.32%	5.71%	9.02%	$ 27,244	93.5%
2030	9.02%	5.00%	$ 313,966	$ 28,881	$ 1,819,430	$ 1,705,726	$ 113,704	3.29%	5.61%	8.90%	$ 27,941	93.8%
2031	8.90%	5.00%	$ 326,525	$ 29,636	$ 1,858,506	$ 1,747,759	$ 110,746	3.27%	5.53%	8.80%	$ 28,725	94.0%
2032	8.80%	5.00%	$ 339,586	$ 30,475	$ 1,897,972	$ 1,790,656	$ 107,315	3.25%	5.44%	8.69%	$ 29,502	94.3%
2033	8.69%	5.00%	$ 353,169	$ 31,298	$ 1,937,789	$ 1,834,455	$ 103,334	3.23%	5.35%	8.58%	$ 30,302	94.7%
2034	8.58%	5.00%	$ 367,296	$ 32,138	$ 1,979,377	$ 1,880,652	$ 98,725	3.21%	5.27%	8.48%	$ 31,160	95.0%
2035	8.48%	5.00%	$ 381,988	$ 33,034	$ 2,023,257	$ 1,929,848	$ 93,409	3.20%	5.21%	8.41%	$ 32,117	95.4%
2036	8.41%	5.00%	$ 397,267	$ 34,072	$ 2,070,436	$ 1,983,132	$ 87,304	3.18%	5.16%	8.34%	$ 33,143	95.8%
2037	8.34%	5.00%	$ 413,158	$ 35,140	$ 2,121,080	$ 2,040,754	$ 80,326	3.17%	5.11%	8.28%	$ 34,199	96.2%
2038	8.28%	5.00%	$ 429,684	$ 36,282	$ 2,174,927	$ 2,102,540	$ 72,387	3.15%	5.06%	8.21%	$ 35,283	96.7%
2039	8.21%	5.00%	$ 446,872	$ 37,415	$ 2,233,016	$ 2,169,620	$ 63,397	3.13%	5.02%	8.15%	$ 36,438	97.2%
2040	8.15%	5.00%	$ 464,746	$ 38,627	$ 2,296,351	$ 2,243,090	$ 53,261	3.11%	4.97%	8.08%	$ 37,570	97.7%
2041	8.08%	5.00%	$ 483,336	$ 39,827	$ 2,365,845	$ 2,323,958	$ 41,887	3.09%	4.93%	8.02%	$ 38,760	98.2%
2042	8.02%	5.00%	$ 502,670	$ 41,112	$ 2,442,185	$ 2,412,998	$ 29,187	3.05%	4.88%	7.93%	$ 39,884	98.8%
2043	7.93%	5.00%	$ 522,777	$ 42,277	$ 2,526,196	$ 2,511,097	$ 15,098	2.99%	4.84%	7.83%	$ 40,929	99.4%
2044	7.83%	5.00%	$ 543,688	$ 43,414	$ 2,618,858	$ 2,619,185	$ (327)	-0.06%	4.80%	4.74%	$ 25,758	100.0%

Projections assume a constant population and no actuarial gains and losses

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, 2013 and May 1, 2014;
- 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, 2013 and 2014.

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

Assets	**2013**	**2014**	**% Change**
Cash	$ 24,014,783	$ 28,651,926	19.31%
Stock and Collective Trusts	927,843,069	1,006,809,161	8.51%
Accounts Receivable	4,863,237	5,909,218	21.51%
Interest and Dividends	436,595	520,927	19.32%
Contributions Receivable	1,894,009	1,104,566	(41.68%)
Expenses	(997,675)	(1,425,847)	42.92%
Purchase of Investments	(10,984,392)	(13,914,917)	26.68%
Market Value of Assets	**$ 947,069,626**	**$ 1,027,655,034**	8.51%

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, 2013 and April 30, 2014.

Table II-2
Changes in Market Values

Value of Assets – April 30, 2013		**$ 947,069,626**
Additions		
Member Contributions	$ 6,849,988	
Employer Contributions	25,987,662	
Interest and Dividends	12,412,379	
Investment Return	98,356,812	
Total Additions	**$ 143,606,841**	
Deductions		
Benefit Payments	$ (59,118,399)	
Expenses	(3,903,034)	
Total Deductions	**$ (63,021,433)**	
Value of Assets – April 30, 2014		**$ 1,027,655,034**

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, 2013**	**$ 900,061,516**
2.	Contributions	32,837,650
3.	Benefit Payments	(59,118,399)
4.	Expected Return	66,536,902
5.	Expected Actuarial Value at End of Year = (1) + (2) + (3) + (4)	940,317,669
6.	Actual Market Value of Assets at April 30, 2014	1,027,655,034
7.	Excess of (6) over (5)	87,337,365
8.	Adjustment toward market value: 25% of (7)	21,834,341
9.	Adjustment to be within 85%/110% corridor	0
10.	**Actuarial Value of Assets at May 1, 2014 = (5) + (8) + (9)**	**$ 962,152,010**

SECTION II
ASSETS

Investment Performance

The market value of assets (MVA) returned 11.44% during plan year ending April 30, 2014, which is more than the assumed 7.50% return. A return of 9.96% 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%
2014	11.44%	9.96%

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
2014	$ (63,557)	$ 33,822	$ (29,735)
2015	(65,261)	33,481	(31,780)
2016	(69,377)	33,498	(35,879)
2017	(73,356)	33,660	(39,696)
2018	(77,542)	34,012	(43,530)
2019	(81,476)	34,512	(46,964)
2020	(85,832)	35,142	(50,690)
2021	(90,515)	35,867	(54,648)
2022	(95,105)	36,698	(58,407)
2023	(99,526)	37,699	(61,827)

* *Expected contributions include City contributions and Member contributions. City contributions are projected under the Board's funding policy assuming future market value returns of 7.5% as shown in the graph on page 10.*

SECTION III
LIABILITIES

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

- **Disclosure** of the System liabilities as of May 1, 2013 and May 1, 2014, 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 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, 2013	May 1, 2014
Present Value of Future Benefits		
Active Participant Benefits	$ 658,684,915	$ 666,110,511
Retiree and Inactive Benefits	603,734,268	630,055,478
Present Value of Future Benefits (PVB)	**$ 1,262,419,183**	**$ 1,296,165,989**
Actuarial Liability		
Present Value of Future Benefits (PVB)	$ 1,262,419,183	$ 1,296,165,989
Present Value of Future Normal Costs (PVFNC)	147,254,075	146,282,264
Actuarial Liability (AAL = PVB – PVFNC)	**1,115,165,108**	**1,149,883,725**
Actuarial Value of Assets (AVA)	900,061,516	962,152,010
Net (Surplus)/Unfunded (AL – AVA)	**$ 215,103,592**	**$ 187,731,715**
Present Value of Accrued Benefits		
Present Value of Future Benefits (PVB)	$ 1,262,419,183	$ 1,296,165,989
Present Value of Future Benefit Accruals (PVFBA)	294,828,780	285,618,678
Present Value of Accrued Benefits (PVAB = PVB – PVFBA)	**967,590,403**	**1,010,547,311**
Market Value of Assets (MVA)	947,069,626	1,027,655,034
Net Unfunded/(Surplus)	**$ 20,520,777**	**$ (17,107,723)**

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, 2013 and May 1, 2014.

Table III-2

	Actuarial Liability
Liabilities May 1, 2013	$ 1,115,165,108
Liabilities May 1, 2014	1,149,883,725
Liability Increase/(Decrease)	34,718,617
Change Due to:	
Plan Amendments	253,038
Assumption Changes	0
Actuarial (Gain)/Loss	(8,868,211)
Benefits Accumulated and Other Sources	43,333,790

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, 2014

Turnover	$ (6,123,000)
Retirement	1,532,000
Pre-retirement mortality	745,000
Post-retirement mortality	(4,091,000)
Salary increase more/(less) than expected for continuing actives	(5,381,000)
New entrants	1,645,000
Data Composition & Miscellaneous changes	2,805,000
Total (Gain)/Loss	**$ (8,868,000)**

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

Change due to:	**2010**	**2011**	**2012**	**2013**	**2014**
Turnover	$ 0.1	$ 1.6	$ 3.4	$ (1.1)	$ (6.1)
Retirement	(3.1)	(3.3)	(0.1)	(0.5)	1.5
Pre-retirement mortality	0.7	0.7	0.6	0.7	0.8
Post-retirement mortality	(1.8)	(1.1)	0.8	(2.7)	(4.1)
Salary Change	(17.2)	(18.1)	(1.6)	5.7	(5.4)
New entrants	0.5	3.8	0.7	3.0	1.6
Miscellaneous	4.8	22.5	1.7	(4.0)	2.8
Total (Gain)/Loss	**$ (16.0)**	**$ 6.1**	**$ 5.5**	**$ 1.1**	**$ (8.9)**

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.

Contributions are calculated on two bases:

- Under the Board's policy for 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.

- Under the City ordinance, the City's contributions will be based upon a 30-year open amortization of the entire unfunded liability.

Table IV-1 below presents and compares the employer contribution rates for the System for this valuation and the prior one using both the current Board funding policy amortization method and using a 30 year open amortization method.

Table IV-1
Employer Contribution Rate

	Fiscal Year Ending 2014	Fiscal Year Ending 2015
Current Board Funding Policy		
Entry Age Normal Cost Rate	8.72%	7.77%
Amortization Payment	7.80%	6.87%
Actuarially Determined Contribution	16.52%	14.64%
30 Year Open Amortization Method		
Entry Age Normal Cost Rate	N/A	7.77%
Amortization Payment	N/A	5.90%
Actuarially Determined Contribution	N/A	13.67%

SECTION IV
CONTRIBUTIONS

Table IV-2 below presents the May 1, 2014 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 expected City contribution rate for the year ending April 30, 2015 is 16.52% of payroll for all employees.

Table IV -2
Development of Plan Contribution Rate
as of May 1, 2014

	General Employees	Judges and Elected Officials	Total
1. Normal Cost (Monthly):			
a. Total Normal Cost	12.74%	18.18%	12.78%
b. Expected Members Contribution	5.01%	5.00%	5.01%
c. Employer Paid Normal Cost (a) - (b)	7.73%	13.18%	7.77%
2. Amortization of Unfunded Liability			
a. Actuarial Liability	$1,137,315,291	$ 12,568,434	$1,149,883,725
b. Actuarial Value of Assets	951,635,517	10,516,493	962,152,010
c. Unfunded Liability (a) - (b)	185,679,774	2,051,941	187,731,715
d. Amortization of Unfunded Liability	6.87%	7.37%	6.87%
3. Actuarially Determined Employer Contribution Rate (1) + (2d) [1]	14.60%	20.55%	14.64%
4. Scheduled City Contributions[2]	16.52%	16.52%	16.52%

[1] *Total payroll is $167,629,048, and the annual required contribution for plan year ending April 30, 2014 is $24,540,893 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, 2014 is $314,089*

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

SECTION IV
CONTRIBUTIONS

Under Board funding policy, 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, 2014 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	14	$ 58,155,389	$ 5,253,822	11.069
2009 (Gain)/Loss*	5/1/2009	30	$ 201,970,870	25	$ 218,434,480	$ 12,937,829	16.883
2010 (Gain)/Loss*	5/1/2010	20	$ (21,123,472)	16	$ (20,854,236)	$ (1,691,677)	12.328
2011 (Gain)/Loss*	5/1/2011	20	$ (12,149,092)	17	$ (12,092,975)	$ (935,541)	12.926
2011 Assumption Change	5/1/2011	20	$ (32,092,544)	17	$ (31,944,310)	$ (2,471,286)	12.926
2012 (Gain)/Loss*	5/1/2012	20	$ 372,006	18	$ 371,997	$ 27,544	13.505
2012 Plan Amendment	5/1/2012	20	$ 16,284,519	18	$ 16,284,178	$ 1,205,759	13.505
2013 (Gain)/Loss*	5/1/2013	20	$ (11,094,653)	19	$ (11,110,281)	$ (789,888)	14.066
2014 (Gain)/Loss*	5/1/2014	20	$ (29,765,565)	20	$ (29,765,565)	$ (2,037,666)	14.608
2014 Plan Amendment	5/1/2014	20	$ 253,038	20	$ 253,038	$ 17,322	14.608
Total					**$ 187,731,715**	**$ 11,516,218**	

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

Under the City ordinance, Amortization payments are calculated using a 30 year open amortization method. The amortization payment as of May 1, 2014 is shown in the table below.

TABLE IV-4
Unfunded Actuarial Liability Amortization Schedule

UAL	Remaining Years	Amortization Payment	Amortization Factor
$187,731,715	30	$9,884,248	18.993

**30 year open amortization*

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, 2014 are exhibited in Table V-1. Finally, Table V-2 reconciles the Topic 960 liabilities determined as of the prior valuation, May 1, 2013, to the liabilities as of May 1, 2014.

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, 2013	May 1, 2014
A. Topic 960 Basis		
1. Present Value of Benefits Accrued to Date		
a. Members Currently Receiving Payments	$ 591,216,582	$ 617,630,211
b. Former Vested Members	12,517,686	12,425,267
d. Active Members	363,856,135	380,491,833
2. Total Present Value of Accrued Benefits (1a + 1b + 1c)	$ 967,590,403	$ 1,010,547,311
3. Assets at Market Value	947,069,626	1,027,655,034
4. Unfunded Present Value of Accrued Benefits (2 - 3)	$ 20,520,777	$ (17,107,723)
5. Ratio of Assets to Present Value of Benefits (3 / 2)	97.9%	101.7%
B. GASB No. 25 Basis		
1. Actuarial Liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	$ 603,734,268	$ 630,055,478
2. Actuarial Liabilities for current employees	511,430,840	519,828,247
3. Total Actuarial Liability (1 + 2)	$ 1,115,165,108	$ 1,149,883,725
4. Net Actuarial Assets available for benefits	900,061,516	962,152,010
5. Unfunded Actuarial Liability (3 - 4)	$ 215,103,592	$ 187,731,715

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, 2013	$	967,590,403
Increase/(Decrease) During Years Attributable to:		
Passage of Time and (Gains)/Losses	$	70,172,353
Benefit Paid – FY 2014		(59,118,399)
Assumption Change		0
Plan Amendment		0
Benefits Accrued		31,902,954
Net Increase/(Decrease)	$	42,956,908
Actuarial Present Value of Accrued Benefits as of May 1, 2014	$	1,010,547,311

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, 2014
Actuarial cost method	Entry age
Amortization method	20-year layered amortization, level percent of pay*
Remaining amortization period for the UAL	Weighted average of 23.5 years
Asset valuation method	Four year smoothing using Expected Value Method
Actuarial assumptions:	
Investment rate of return	7.50%
Projected salary increases	Ranges from 8.0% to 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	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Investment Income	$ (216,876)	$ 5,151	$ 18,253	$ 880	$ 12,225	$ 20,897
Combined Liability Experience	12,781	15,972	(6,104)	(1,252)	(1,130)	8,868
Gain/(or loss) during Year from Financial Experienc	$ (204,095)	$ 21,123	$ 12,149	$ (372)	$ 11,095	$ 29,765
Non-Recurring Gain/(or Loss) Items	0	0	32,093	(16,285)	0	(253)
Composite Gain/(or Loss) during Year	$ (204,095)	$ 21,123	$ 44,242	$ (16,657)	$ 11,095	$ 29,512

** 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%
2014	92,849	630,055	426,979	962,152	100%	100%	56%

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
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	25,987,662	94.27%
2015	24,540,893	--	--

**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)
5/1/2004	$ 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%	166,877,688	128.90%
5/1/2014	962,152,010	1,149,883,725	187,731,715	83.67%	167,629,048	111.99%

** Not less than zero*

APPENDIX A
MEMBERSHIP INFORMATION

City of Kansas City, Missouri Employees' Retirement System
Active Member Data

	May 1, 2013	May 1, 2014	% Change
Total			
Count	3,266	3,211	-1.68%
Average Current Age	47.13	47.05	-0.17%
Average Service	12.26	12.30	0.33%
Average Valuation Pay	$ 51,095	$ 52,205	2.17%
Annual Compensation	$ 166,877,688	$ 167,629,048	0.45%
General			
Count	3,252	3,197	-1.69%
Average Current Age	47.08	47.00	-0.17%
Average Service	12.27	12.31	0.33%
Average Valuation Pay	$ 50,845	$ 51,955	2.18%
Annual Compensation	$ 165,349,275	$ 166,100,635	0.45%
Judges			
Count	8	8	0.00%
Average Current Age	55.09	56.09	1.82%
Average Service	11.72	14.45	23.29%
Average Valuation Pay	$ 144,875	$ 144,875	0.00%
Annual Compensation	$ 1,159,000	$ 1,159,000	0.00%
Elected Officials			
Count	6	6	0.00%
Average Current Age	60.19	61.19	1.66%
Average Service	7.33	8.33	13.64%
Average Valuation Pay	$ 61,569	$ 61,569	0.00%
Annual Compensation	$ 369,414	$ 369,414	0.00%

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System
Table of Plan Coverage

	5/1/2013	5/1/2014	% change
Active Members in Valuation			
Number	3,266	3,211	-1.68%
Average Age	47.13	47.05	-0.17%
Average Service	12.26	12.30	0.33%
Total Payroll	$ 166,877,688	$ 167,629,048	0.45%
Average Anticipated Payroll	$ 51,095	$ 52,205	2.17%
Account Balance	$ 90,514,262	$ 92,848,669	2.58%
Eligible to Retire on:			
Normal Pension	81	85	4.94%
Optional Pension	392	386	-1.53%
Early Pension	253	257	1.58%
Deferred Pension	1,856	1,735	-6.52%
Total Active Vested Members	2,582	2,463	-4.61%
Vested Terminated Members	96	95	N/A
Deaths During the Plan Year	80	108	N/A
Pensioners:			
Number in Pay Status			
Retirees	1,772	1,825	2.99%
Disabled Retirees	12	10	-16.67%
Total	1,784	1,835	2.86%
Average Age	69.97	70.05	0.12%
Average Monthly Benefit	$ 2,114	$ 2,166	2.47%
Beneficiaries in Pay Status	385	377	-2.08%
Members Due Refunds	108	133	23.15%

APPENDIX A
MEMBERSHIP INFORMATION

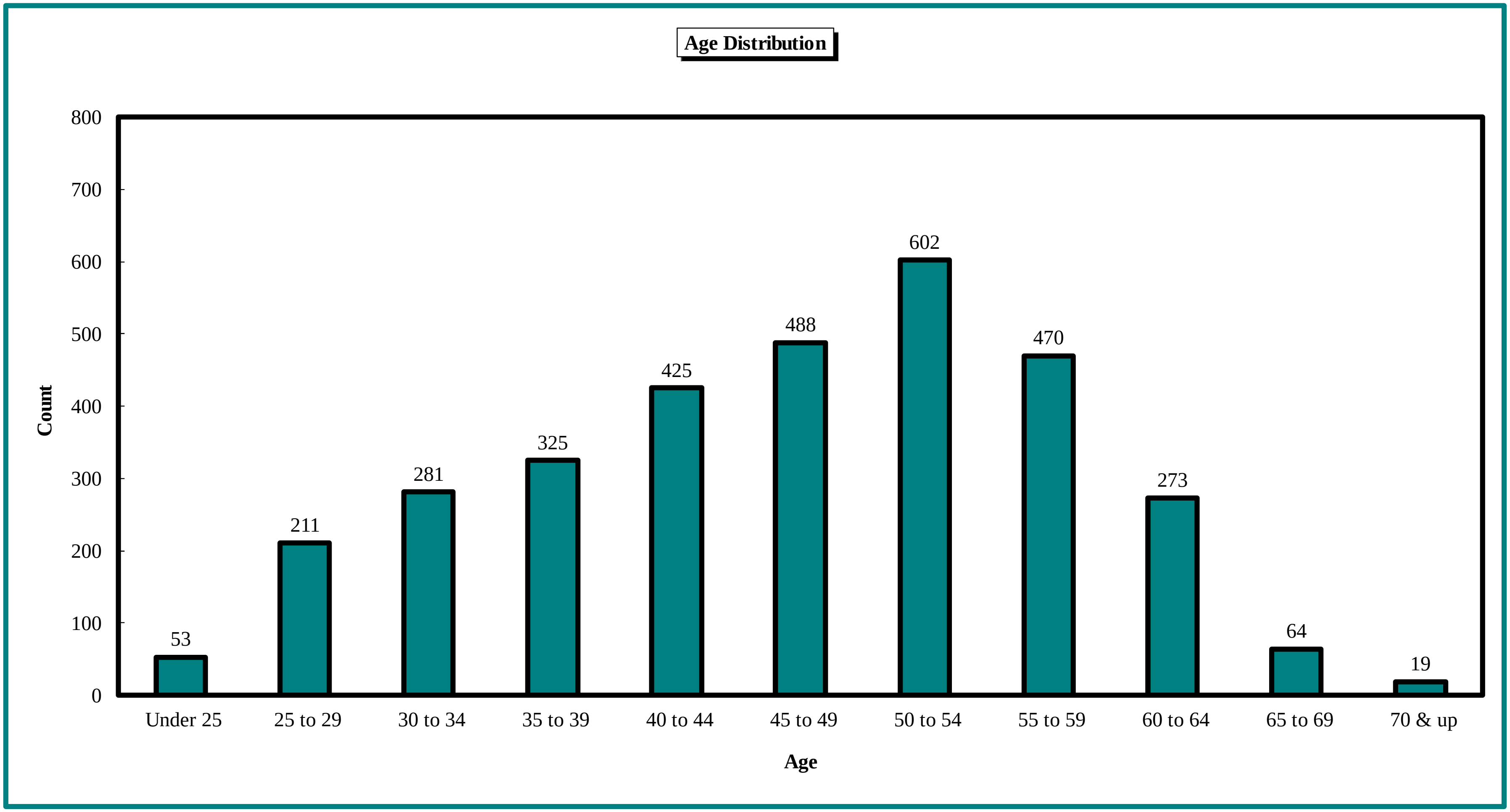
Kansas City Employees' Retirement System Distribution of Active Members by Age and Service as of May 1, 2014

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	29	22	2	0	0	0	0	0	0	0	53
25 to 29	58	95	55	3	0	0	0	0	0	0	211
30 to 34	48	86	112	34	1	0	0	0	0	0	281
35 to 39	38	63	106	89	28	1	0	0	0	0	325
40 to 44	26	68	110	109	90	21	1	0	0	0	425
45 to 49	22	52	82	123	123	70	16	0	0	0	488
50 to 54	15	56	121	103	126	97	63	21	0	0	602
55 to 59	19	28	79	62	112	59	55	39	16	1	470
60 to 64	1	19	48	48	54	38	32	23	7	3	273
65 to 69	0	3	17	14	10	5	5	6	1	3	64
70 & up	0	0	4	2	3	5	1	0	0	4	19
Total	256	492	736	587	547	296	173	89	24	11	3,211

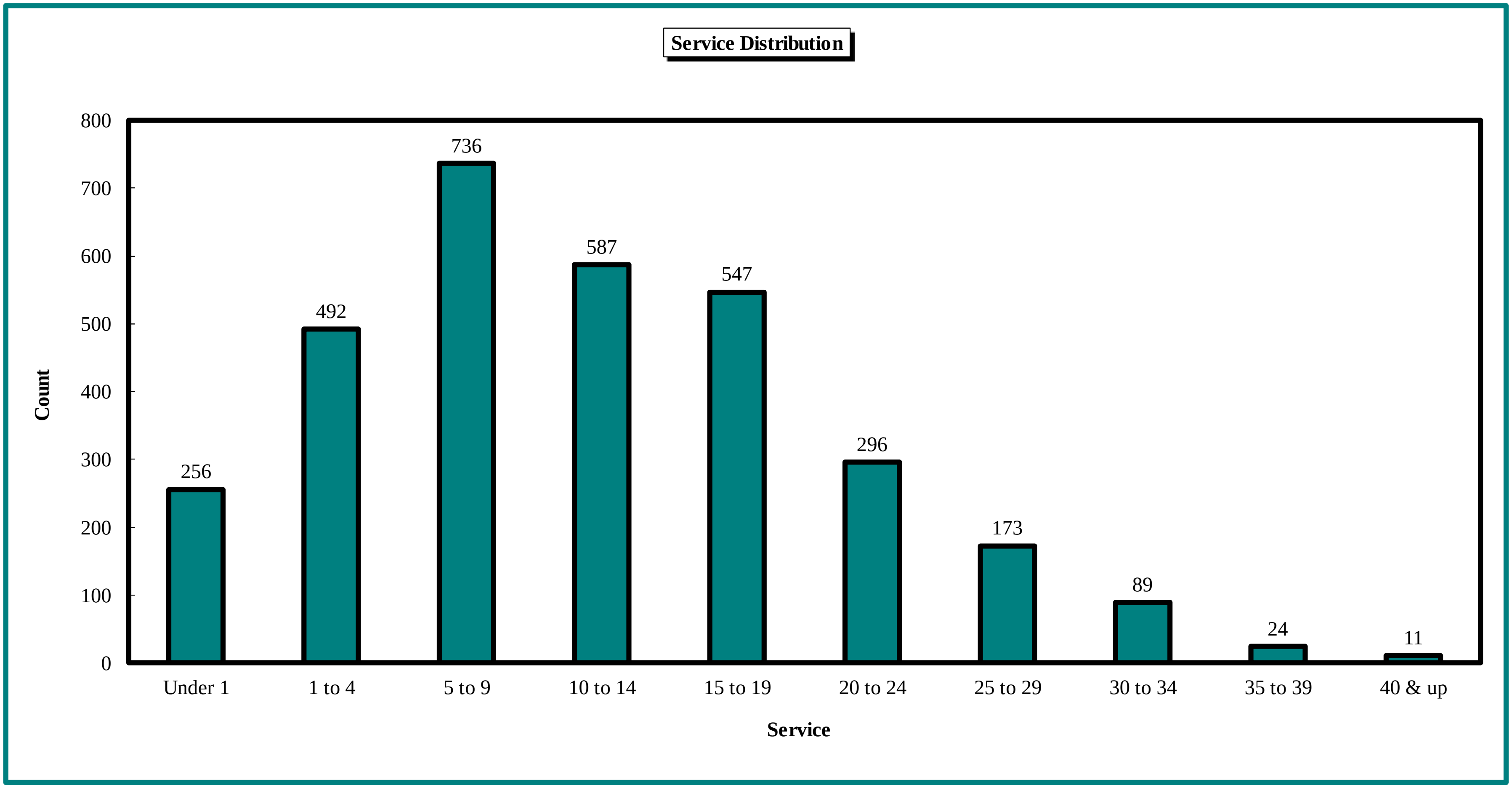
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Age as of May 1, 2014



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Service as of May 1, 2014



APPENDIX A
MEMBERSHIP INFORMATION

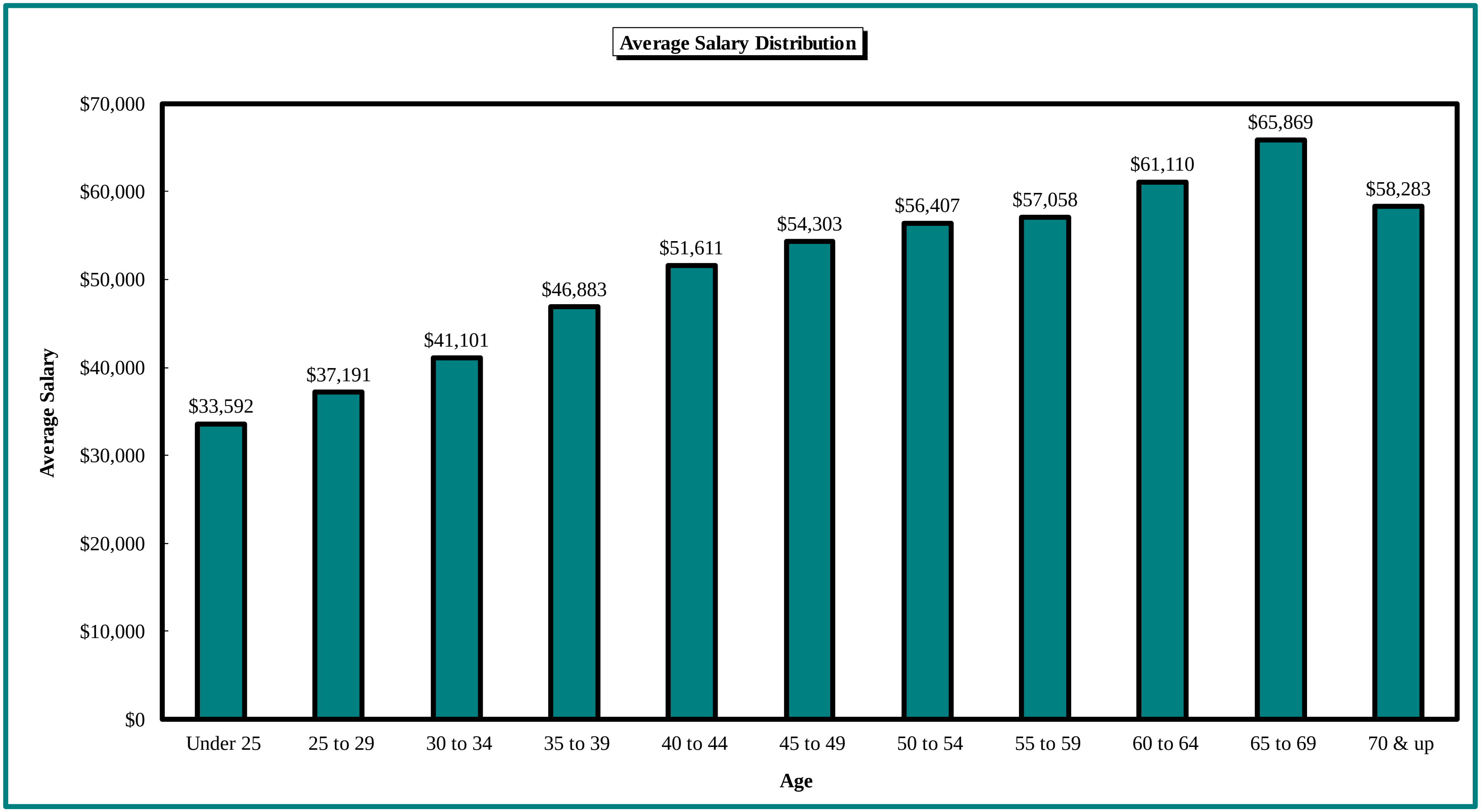
Kansas City Employees' Retirement System Distribution of Active Members by Age and Service as of May 1, 2014

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	$33,038	$34,159	$35,400	$0	$0	$0	$0	$0	$0	$0	$33,592
25 to 29	$37,180	$37,132	$37,417	$35,104	$0	$0	$0	$0	$0	$0	$37,191
30 to 34	$35,148	$43,694	$41,333	$42,099	$43,884	$0	$0	$0	$0	$0	$41,101
35 to 39	$39,090	$44,131	$49,585	$48,433	$48,374	$50,256	$0	$0	$0	$0	$46,883
40 to 44	$37,791	$44,340	$49,240	$52,188	$60,071	$64,341	$74,628	$0	$0	$0	$51,611
45 to 49	$43,595	$46,296	$47,492	$49,780	$61,937	$64,338	$62,150	$0	$0	$0	$54,303
50 to 54	$41,477	$43,995	$47,740	$52,382	$59,889	$65,491	$69,104	$68,916	$0	$0	$56,407
55 to 59	$37,378	$38,792	$48,912	$54,594	$60,604	$62,434	$67,686	$65,280	$59,670	$77,292	$57,058
60 to 64	$135,000	$55,326	$54,069	$51,513	$62,062	$66,999	$65,835	$69,998	$82,898	$78,236	$61,110
65 to 69	$0	$60,536	$58,790	$64,004	$67,777	$71,794	$79,085	$80,182	$52,596	$57,552	$65,869
70 & up	$0	$0	$51,407	$36,168	$58,292	$58,690	$86,028	$0	$0	$68,763	$58,283
Total	$37,875	$42,728	$47,236	$50,903	$60,257	$64,661	$67,824	$68,362	$66,150	$69,064	$52,205

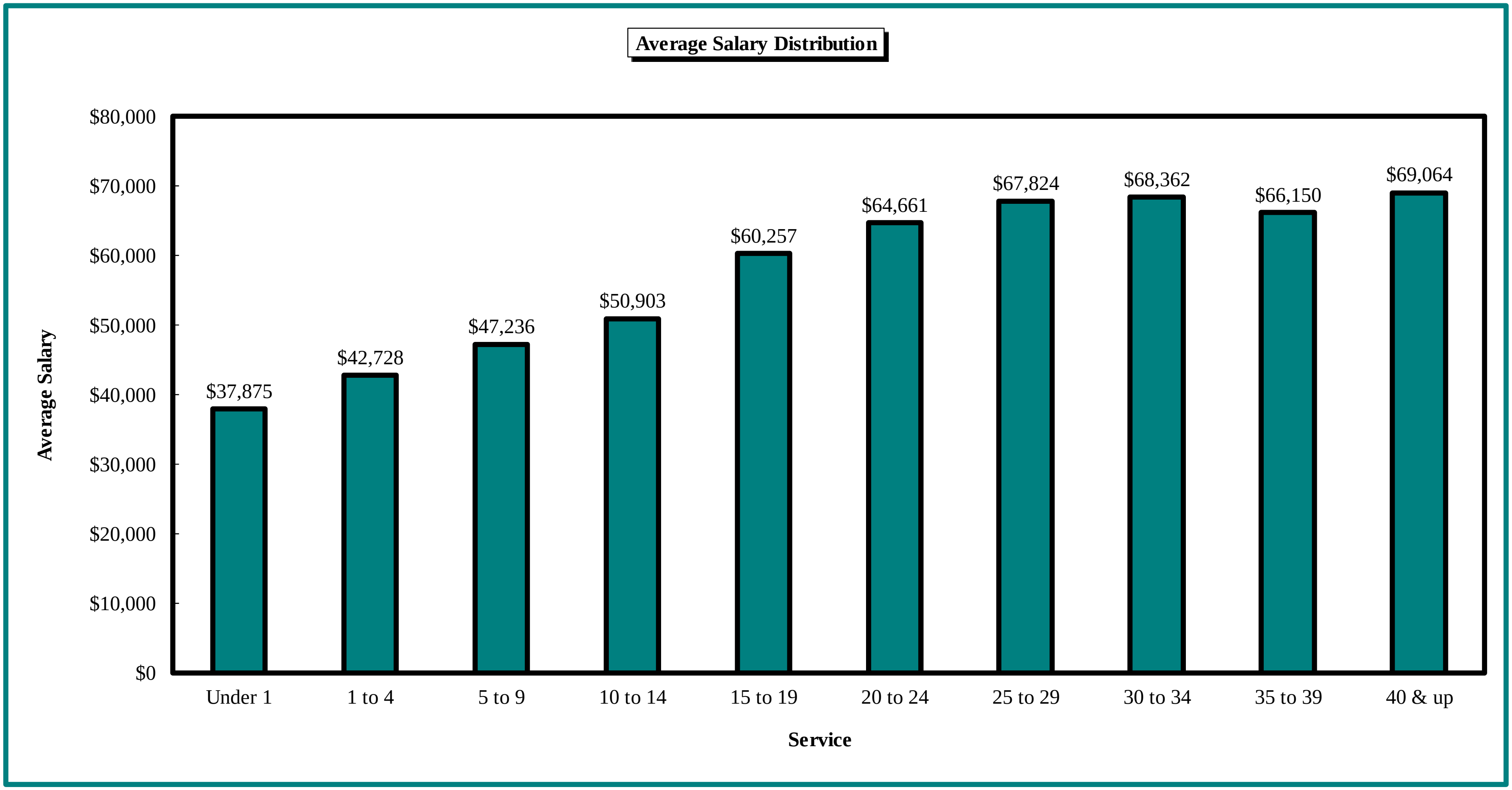
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Age as of May 1, 2014



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Active Members by Service as of May 1, 2014



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	**2,212**	**222**	**214**	**1,230**	**159**	**10**	**377**
Under $500	278	26	65	5	35	0	147
$500-1,000	409	59	82	98	63	3	104
1,000-1,500	325	37	42	150	35	7	54
1,500-2,000	290	34	16	195	15	0	30
2,000-2,500	265	23	4	216	7	0	15
2,500-3,000	209	10	2	185	3	0	9
3,000-3,500	141	9	1	122	0	0	9
3,500-4,000	87	8	1	76	1	0	1
4,000-4,500	71	6	0	62	0	0	3
4,500-5,000	41	3	0	37	0	0	1
5,000 & over	96	7	1	84	0	0	4

During the year ended April 30, 2014 there were 143 new pensions awarded (31 Normal, 15 Early, 62 Optional, 15 Vested, 0 Disability, and 20 Widows and QDROs)

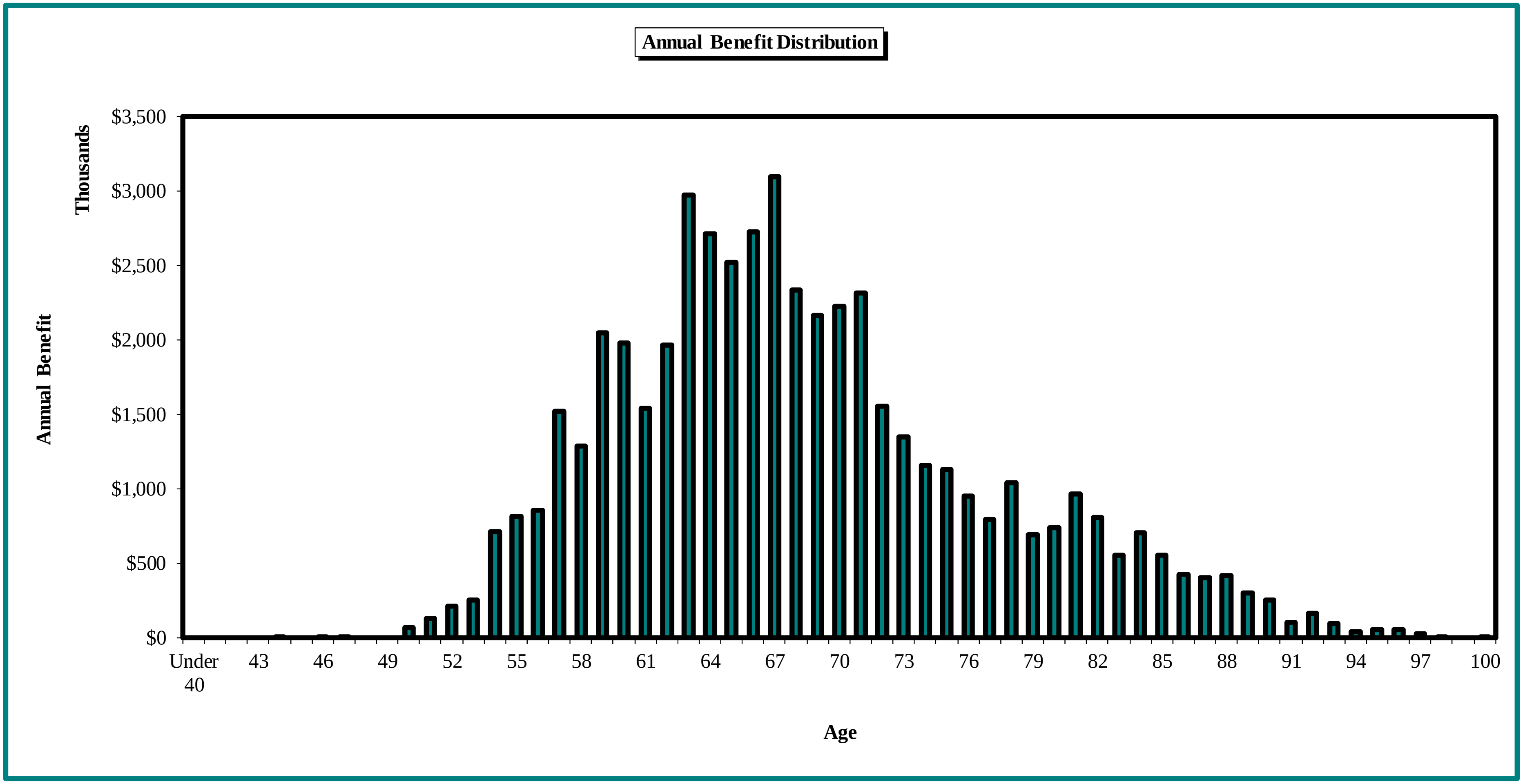
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Retired Members and Survivors as of May 1, 2014

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	0	$0	73	61	$1,350,368
25	0	$0	74	52	$1,161,299
26	0	$0	75	54	$1,134,584
27	0	$0	76	48	$957,715
28	0	$0	77	41	$794,877
29	0	$0	78	49	$1,046,243
30	0	$0	79	38	$695,613
31	0	$0	80	44	$739,780
32	0	$0	81	53	$969,727
33	0	$0	82	42	$807,944
34	0	$0	83	44	$559,163
35	0	$0	84	45	$710,045
36	0	$0	85	35	$556,923
37	0	$0	86	29	$429,817
38	0	$0	87	32	$406,368
39	0	$0	88	36	$421,887
40	0	$0	89	25	$303,054
41	0	$0	90	22	$254,645
42	0	$0	91	11	$102,451
43	0	$0	92	27	$167,524
44	1	$12,207	93	13	$98,415
45	0	$0	94	8	$44,694
46	1	$3,311	95	9	$58,677
47	1	$5,582	96	5	$57,072
48	0	$0	97	1	$32,152
49	0	$0	98	2	$5,754
50	4	$70,720	99	0	$0
51	5	$133,399	100	2	$6,253
52	6	$218,420	101	1	$5,663
53	8	$252,976	102	0	$0
54	23	$712,086	103	0	$0
55	29	$817,494	104	0	$0
56	27	$857,280	105	0	$0
57	49	$1,522,900	106	0	$0
58	43	$1,287,836	107	0	$0
59	69	$2,049,676	108	0	$0
60	65	$1,984,357	109	0	$0
61	58	$1,545,747	110	0	$0
62	78	$1,970,597	111	0	$0
63	104	$2,972,825	112	0	$0
64	96	$2,718,413	113	0	$0
65	95	$2,523,198	114	0	$0
66	99	$2,731,957	115	0	$0
67	109	$3,095,778	116	0	$0
68	77	$2,339,695	117	0	$0
69	85	$2,169,351	118	0	$0
70	86	$2,226,615	119	0	$0
71	89	$2,315,742	120	0	$0
72	66	$1,558,240			
			Totals	2,202	$51,975,109

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Retired Members and Survivors as of May 1, 2014



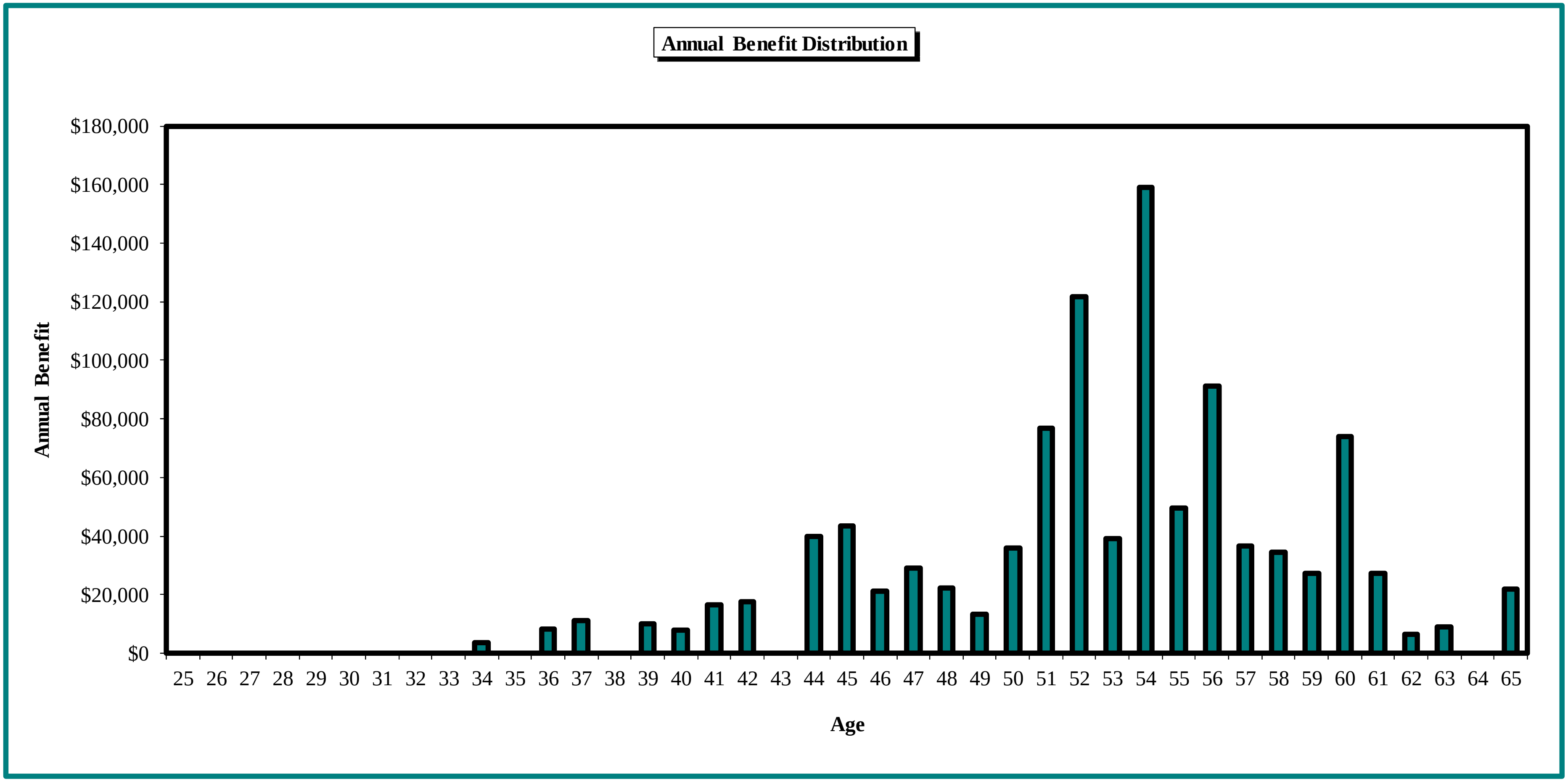
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Vested Members as of May 1, 2014

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	0	$0	82	0	$0
34	1	$3,790	83	0	$0
35	0	$0	84	0	$0
36	1	$8,173	85	0	$0
37	2	$11,036	86	0	$0
38	0	$0	87	0	$0
39	1	$10,093	88	0	$0
40	2	$7,985	89	0	$0
41	2	$16,407	90	0	$0
42	2	$17,625	91	0	$0
43	0	$0	92	0	$0
44	3	$39,861	93	0	$0
45	3	$43,357	94	0	$0
46	2	$21,335	95	0	$0
47	2	$29,157	96	0	$0
48	2	$22,396	97	0	$0
49	2	$13,452	98	0	$0
50	3	$35,927	99	0	$0
51	7	$76,990	100	0	$0
52	10	$121,687	101	0	$0
53	5	$39,340	102	0	$0
54	10	$159,051	103	0	$0
55	5	$49,630	104	0	$0
56	7	$91,192	105	0	$0
57	2	$36,545	106	0	$0
58	3	$34,675	107	0	$0
59	3	$27,311	108	0	$0
60	6	$73,839	109	0	$0
61	4	$27,313	110	0	$0
62	1	$6,425	111	0	$0
63	1	$9,066	112	0	$0
64	0	$0	113	0	$0
65	3	$22,006	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	95	$1,055,664

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Vested Members as of May 1, 2014



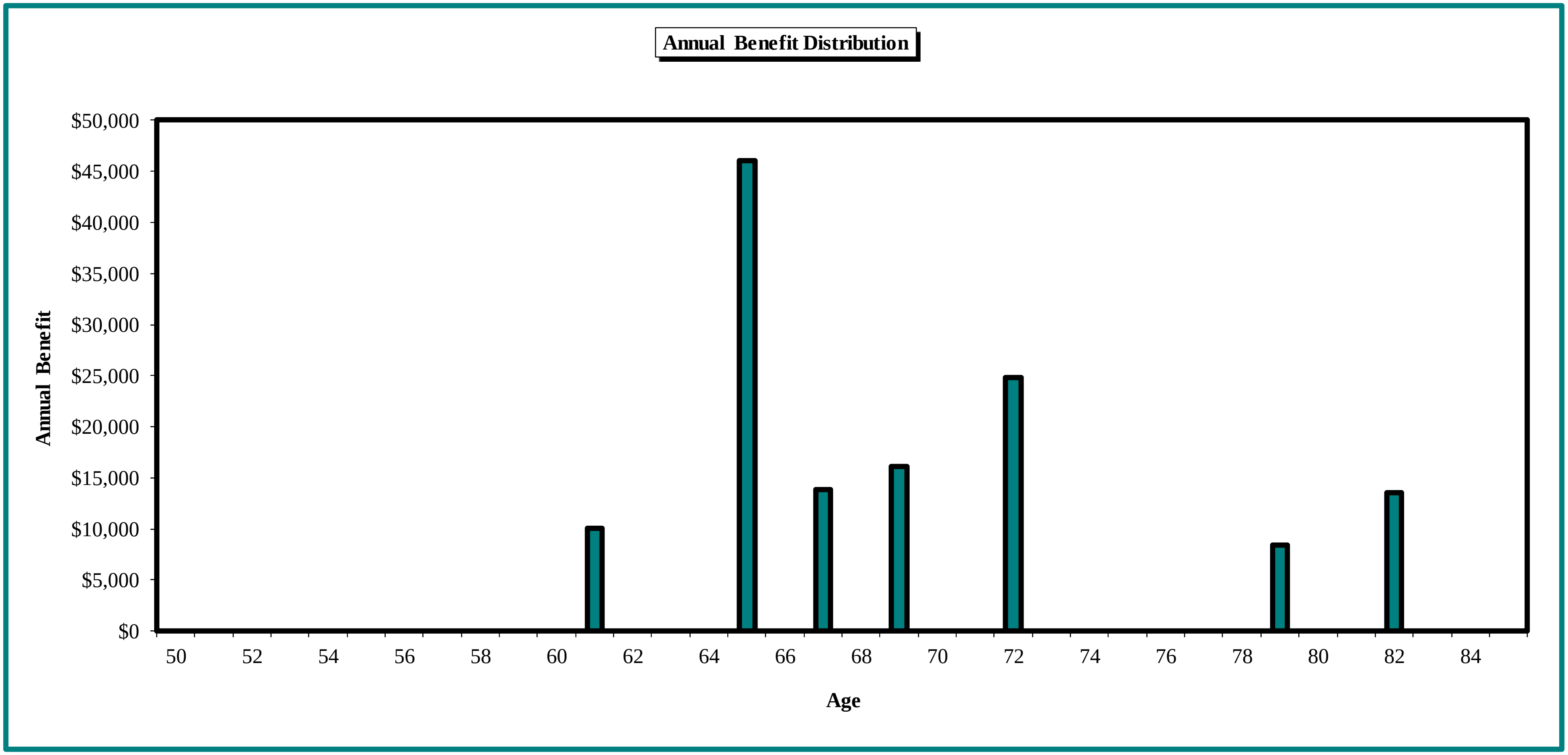
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Disabled Members as of May 1, 2014

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	1	$8,449
31	0	$0	80	0	$0
32	0	$0	81	0	$0
33	0	$0	82	1	$13,536
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	0	$0	109	0	$0
61	1	$10,092	110	0	$0
62	0	$0	111	0	$0
63	0	$0	112	0	$0
64	0	$0	113	0	$0
65	3	$46,061	114	0	$0
66	0	$0	115	0	$0
67	1	$13,911	116	0	$0
68	0	$0	117	0	$0
69	1	$16,147	118	0	$0
70	0	$0	119	0	$0
71	0	$0	120	0	$0
72	2	$24,872			
			Totals	10	$133,068

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System Distribution of Disabled Members as of May 1, 2014



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Employees' Retirement System
Change in Plan Membership

	Actives	Vested Terminations	Refund Due	Disabilities	Retirees	Beneficiaries*	Total
May 1, 2013	**3,266**	**96**	**108**	**12**	**1,772**	**385**	**5,639**
New Entrants	257	0	26	0	0	0	283
Rehires	5	(1)	(1)	0	0	0	3
Vested Terminations	(6)	6	0	0	0	0	0
Terminated with Refund Due	(100)	0	100	0	0	0	0
Return of Contributions	(101)	0	(93)	0	0	0	(194)
Disabilities	0	0	0	0	0	0	0
Retirements	(101)	(7)	(7)	0	115	0	0
Deaths	(1)	0	0	(2)	(65)	(40)	(108)
New Survivor	0	0	0	0	0	31	31
Miscellaneous Adjustments	(8)	1	0	0	3	1	(3)
May 1, 2014	**3,211**	**95**	**133**	**10**	**1,825**	**377**	**5,651**

**Widows, QDROs, and Children*

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.

.

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, including inflation of 3.00% and 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

Board Funding Policy: 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.

City Contribution Policy: Under the Ordinance, the City's contribution will be based on an open 30-year amortization period, level percent of pay.

4. Changes since Last Valuation

None.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 1

1. Plan Year

May 1 through April 30.

2. Membership

All full-time permanent employees hired prior to April 20, 2014 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
TIER 1

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.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 1

Judges and Elected Officials:
2.22% of average monthly compensation received by then serving Judges and Elected Officials of the same office during the 24 months preceding the beginning of the annuity multiplied by years and months of creditable service.

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

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

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

5. Optional Retirement

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.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 1

7. Disability Benefit

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

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.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 1

Amount: The surviving spouse may elect, in lieu of the lump sum settlement above, an annuity equal to 50% of the member's accrued annuity at the time of death. The effective date of this annuity shall be the later of the first day of the month following the member's death or attainment of what would have been the member's early retirement date. The annuity is reduced for early retirement if paid at the member's early retirement date.

Service of 20 or more years of service:

Age Requirement: None.

Service Requirement: 20 or more years of service.

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

11. Post-Retirement Death Benefit

Age Requirement: None.

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.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 1

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.

15. Contributions

a. Member
- 4.00% of salary for non MAST employees. Effective April 20, 2014, the contribution rate increased to 5.00%.
- Between 4.00% and 6.00% for MAST employees based on their age and service as of April 25, 2010 (see following table). Effective April 20, 2014, the contribution rate increased by 1.00%.
- 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	7.0%
74 to 79	6.0%
68 to 73	5.8%
62 to 67	5.6%
56 to 61	5.4%
50 to 55	5.2%
44 to 49	5.1%
38 to 43	5.0%
32 to 37	5.0%
26 to 31	5.0%
20 to 25	5.0%

16. Interest on Employee Contributions

5.0% per year, compounded.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 1

17. Changes since Last Valuation

Effective April 20, 2014, member contribution rates increased by 1.00% and the interest credited to employee account balances decreased to 5.00%.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 2

1. Plan Year

May 1 through April 30.

2. Membership

All full-time permanent employees hired on or after April 20, 2014 in the classified and unclassified services shall become members as a condition of employment.

3. Credited Service

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

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

4. Normal Retirement

Age Requirement:	67
Service Requirement:	10 years of creditable service.
Amount:	1.75% 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. 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 three highest years of compensation in the last ten years. Compensation does not include bonus, overtime, expense allowance or other extraordinary compensation.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 2

5. Optional Retirement

Age/Service Requirement: The earlier of age 62 and 10 years of creditable service, or the sum of age and service equals 85.

Amount: Same as normal retirement.

6. Early Retirement

Age/Service Requirement: 57 and 10 years of creditable service.

Amount: Accrued benefit reduced by ½ of 1% per month of age less than 62.

7. Disability Benefit

Disability benefits are provided through a separate long-term disability program.

8. Vesting

Age Requirement: None.

Service Requirement: Ten years of service.

Amount: Accrued benefit payable at age 62.

9. Withdrawal (Refund) Benefit

Age Requirement: None.

Service Requirement: Less than ten 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.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 2

10. Pre-Retirement Death Benefit

Service less than ten years

Age Requirement:	None.
Service Requirement:	Less than ten 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 ten or more years but less than 20 years:

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

Service of 20 or more years of service:

Age Requirement:	None.
Service Requirement:	20 or more years of service.
Amount:	The surviving spouse may elect, in lieu of the settlements above, an annuity equal to 100% of the member's accrued annuity at the time of death, actuarially reduced for 100% joint and survivor coverage. The effective date of this annuity shall be the first day of the month following the member's death.

11. Post-Retirement Death Benefit

Age Requirement:	None.

APPENDIX C
SUMMARY OF PLAN PROVISIONS
TIER 2

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)

COLA will only be payable if the prior year's funding ratio is greater than or equal to 80% and will be equal to the percentage increase in the consumer price index, up to a maximum of 2.50%, payable at age 62. Members must retire on or before January 1st, in order to receive a COLA in the next year.

15. Contributions

a. Member	-	5.00% of salary.
	-	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.

16. Interest on Employee Contributions

5.00% per year, compounded.

17. Changes since Last Valuation

Tier 2 has been added to the plan since the last valuation.

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)	x	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. Funded Percentage

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

12. Investment Return Assumption

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

13. 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.

14. 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.

15. Projected Benefits

APPENDIX D
GLOSSARY OF TERMS

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.

16. Unfunded Actuarial Liability

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