Gabriel Roeder Smith & Company
Consultants & Actuaries

CITY OF KALAMAZOO EMPLOYEES RETIREMENT SYSTEM

SIXTY-THIRD ANNUAL ACTUARIAL VALUATION
DECEMBER 31, 2014

CONTENTS

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May 11, 2015

The Retirement Investment Committee
The Board of Trustees
City of Kalamazoo Employees Retirement System
Kalamazoo, Michigan

Ladies and Gentlemen:

Submitted in this report are the results of the December 31, 2014 Actuarial Valuation of the City of Kalamazoo Employees Retirement System. This report was prepared at the request of the Retirement System. The purpose of the valuation was to measure the System's funding progress and to determine the employer contribution for the 2015 fiscal year. Determinations of the liability associated with the benefits described in this report for purposes other than mentioned above may produce significantly different results. This report may be provided to parties other than the Retirement System only in its entirety and only with the permission of the System. This report should not be relied on for any other purpose than stated above.

The valuation was based upon information furnished by the City of Kalamazoo concerning Retirement System benefits, financial transactions, and individual active members, terminated members, retirees and beneficiaries. Data was checked for internal and year-to-year consistency, but was not otherwise audited by us. We are not responsible for the accuracy or completeness of the information provided by the City.

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

To the best of our knowledge, this report is complete and accurate and fairly presents the actuarial position of the Retirement System. The valuation was conducted in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with the applicable state statutes. James D. Anderson and Rebecca L. Stouffer are independent of the plan sponsor, Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries (MAAA) to render the actuarial opinions contained herein. It is our opinion that the actuarial assumptions used for the valuation produce results which are reasonable.

Respectfully submitted,

James D. Anderson

James D. Anderson, FSA, EA, MAAA

Rebecca L. Stouffer

Rebecca L. Stouffer, ASA, MAAA

JDA/RLS:bd

SECTION A
EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Computed Employer Contributions - Fiscal Year Beginning January 1, 2015.

As expected, based on last year's results, City contributions will not be required for year 2015.

The pensions provided by the City to its employees through the Retirement System are valuable financial benefits. Every year that City employees earn another year of credit toward their pensions, there is a cost associated with that credit. The City's cost of benefits accruing during the year, the City normal cost, totals $5.6 million for fiscal year beginning January 1, 2015. Refer to page B-2 for additional information. The reason that City contributions are not currently needed to support the Retirement System is that favorable experience over decades has resulted in assets in excess of the accrued liability as of the valuation date. This overfunded liability is currently supporting the pension costs that would otherwise require City contributions. As employees accrue larger pensions by earning additional service each year, the cost of those larger pensions may use up the overfunded liability.

2014 Funding Position

This year valuation assets represent 128.3% of accrued liabilities; last year the ratio was 126.8%. The increase in funding position is primarily the result of higher than anticipated return on assets and recognition of deferred investment gains. In addition, System assets as of December 31, 2013 include an employer contribution of $760,912 to cover the cost of lump sum payments made in relation to the Early Retirement Initiative.

Contribution Requirements Longer Term

The System continues to have an overfunding credit and application of the credit brings the required Employer contribution amount to $0. Contributions are based on a smoothed (actuarial) value of assets that recognize a given year's asset gain or loss over the current and subsequent four years. Looking forward from December 31, 2014, scheduled recognition of prior gains will help strengthen the overfunding credit. Future investment gains could offer additional support to the overfunding. Conversely, future investment losses would reduce the credit. Any significant losses will hasten the emergence of a City contribution requirement. Note that a prudent practice to dampen volatility in contributions when the credit disappears is to lengthen the period for amortizing overfunding credits from the current period of 10 years.

We understand that certain groups have an employee contribution rate tied to the funded status of the plan. For example, if the Plan is less than 120% funded, additional employee contributions are required. The funded percent as of December 31, 2014 is 128.3%. Please note that it is possible that the funded percent could fall below 120% at the next valuation as of December 31, 2015.

Reasons for Changes

There are three general reasons why contribution requirements change from one valuation to the next. The first is a change in the benefits or eligibility conditions of the System. The second is a change in the valuation assumptions used to predict future occurrences and the methods used to finance the benefits. The third is the difference during the year between the System's actual experience and what the assumptions predicted, or the plan experience.

Changes in Plan Provisions

There have been no plan provision changes since the 2013 valuation.

Changes in Cost Methods and Actuarial Assumptions

An experience review was performed based on the five-year period ending December 31, 2013. As a result of the study, the Retirement Investment Committee adopted several recommended assumption changes, effective for the December 31, 2014 valuation as follows:

- Rates of disability were increased for Public Safety, Metro Transit, and AFSCME groups.
- Pre- and post-retirement rates of mortality were updated to use the RP-2000 Mortality Combined Healthy Tables, projected 20 years with U.S. Projection Scale BB. Rates for disabled members were set forward 7 years.
- Changes were made to the merit and longevity portion of pay increases for Public Safety (Sworn and Non-Sworn) and the Transit Union groups.
- Price inflation decreased from 3.0% to 2.75%.
- Wage inflation assumption was decreased from 4.0% to 3.5%.
- Option Factor Basis: Updated to use 7.5% interest rate assumption and an 85%/15% unisex blend of RB-2000 projected 20 years with U.S. Projection Scale BB effective January 1, 2016.
- The 1% reduction factor applied for optional forms of benefit election conversion was removed.
- Administrative expense load assumption was increased from 0.60% to 0.65% of payroll.

2014 Plan Experience

There was an experience gain of $20,567,296 during 2014, primarily due to favorable asset experience. This represents 4.76% of the 2013 accrued liabilities. The effect of this gain is an increase in the overfunding credit.

Causes of the Gain

The market value of assets returned 6.87% in 2014 and the return on the (smoothed) valuation assets was 10.94%. Net investment income on the smoothed basis was greater than the long-term assumption of 7.5%, resulting in a gain of $18,391,501. The remaining gain of $2,175,795 represents demographic experience difference than assumed, primarily resulting from smaller than expected increases in rates of pay.

Investment gain (loss)	$18,391,501
Remaining gain (loss)	2,175,795
Gain (loss) from all causes	$20,567,296

Other Observations

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.5% on the actuarial value of assets for the plan), it is expected that:

(1) total normal cost amounts as a percentage of payroll will remain approximately level year to year;
(2) employer normal cost amount as a percentage of payroll will fluctuate as the population make up and funded ratio of the plan changes (Employee contributions for certain groups are tied to the Plan's funding position.);
(3) the overfunding credit will be used up over a period of years; and
(4) the funded status of the plan will decrease towards a 100% funded ratio.

EXECUTIVE SUMMARY (CONCLUDED)

Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the actuarial value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

(1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
(2) The measurement is inappropriate for assessing the need for or the amount of future employer contributions.
(3) The measurement would produce a different result if the market value of assets were used instead of the actuarial value of assets, unless the market value of assets is used in the measurement.

Conclusion

For years, the overfunded position enjoyed by the System has generated a funding credit which allowed the City to temporarily reduce (and then temporarily eliminate) annual contributions to the System trust. As of December 31, 2014, the market value of assets exceeds the smoothed value by $45,252,049. This means that if the investment return assumption is met, there are net unrecognized gains which will be recognized over the next 4 years that will help improve the funded status of the System. To guard against undue contribution volatility, the Board may consider lengthening the amortization period for unfunded or overfunded accrued liabilities.

SECTION B

VALUATION RESULTS

Computed Contributions to Provide Benefits

The Retirement System is supported by contributions from the City (when required) and active members and by the investment income earned on System assets. Member contribution rates are determined by the benefit provisions of the System and are summarized in Section B of this report. The City provides an actuarially determined contribution, the remainder, if any, needed to meet the financial objective.

Member and City contributions cover both (i) normal cost, and (ii) financing of the unfunded accrued liability over a period of future years. The normal cost is the portion of System costs allocated to the current year by the valuation method described in Section D. The unfunded accrued liability is the portion of System costs not covered by present System assets and future normal costs.

For a plan that is overfunded, contribution income needs to cover the normal cost less an amortization credit on the overfunding. When a plan is extremely overfunded, the amortization credit can completely offset the normal cost, eliminating the need for employer contribution income. This can persist for years as long as investment income is sufficient to maintain the overfunding.

When contributions are once again required, we recommend one of the following procedures for determining City contributions to the Retirement System.

(1) Contribute dollar amounts for a period which are equal to the City's percent-of-payroll contribution requirements on page B-2 multiplied by the covered active member payroll for the period. Adjustments should be made as necessary to exclude items of pay that are not covered compensation for Retirement System benefits and to include non-payroll payments that are covered compensation.

(2) Contribute the dollar amounts on page B-2.

COMPUTED CONTRIBUTIONS TO PROVIDE BENEFITS EXPRESSED AS PERCENTS AND DOLLARS OF ACTIVE MEMBER PAYROLL

Contributions for the Year Beginning January 1,	2015	2014
Normal cost of benefits		
Age & service	14.93 %	15.48 %
Disability	1.27	1.13
Pre-retirement survivor	0.37	0.47
Refunds of member contributions	0.19	0.18
Total normal cost	16.76	17.26
Administrative expense allowance	0.65	0.60
Less: Member contributions*	2.91	2.93
Employer normal cost	14.50	14.93
Unfunded actuarial accrued liabilities^	(40.58)	(36.70)
Employer Contribution Requirement@	**(26.08)**	**(21.77)**

Contributions for the Year Beginning January 1,	2015	2014
Normal cost of benefits		
Age & service	$ 5,748,161	$ 5,849,144
Disability	488,959	426,973
Pre-retirement survivor	142,453	177,590
Refunds of member contributions	73,151	68,013
Total normal cost	6,452,724	6,521,720
Administrative expense allowance	250,255	226,711
Less: Member contributions*	1,120,372	1,107,105
Employer normal cost	5,582,607	5,641,326
Unfunded actuarial accrued liabilities^	(15,623,601)	(13,867,157)
Employer Contribution Requirement@	**$ (10,040,994)**	**$ (8,225,831)**
Payroll	**$ 37,198,788**	**$ 36,331,892**
Recommended Employer Contribution	**$ 0**	**$ 0**

* *Weighted average of various contribution rates.*

@ *As the System cannot contribute back to the employer, no employer contribution is required.*

^ *Page B-4 displays the unfunded accrued liabilities (or overfunding) that are amortized by the contribution rates shown above.*

HISTORY OF CITY'S CONTRIBUTION RATES

Fiscal Year		Valuation Date Dec. 31	Contribution as Percent of Valuation Payroll	Recommended	Actual
1996	*	1995	4.30 %	$1,500,400	$1,500,398
1997	*@	1996	2.35	840,966	841,000
1998	*	1997	0.00	0	0
1999	*	1998	0.00	0	0
2000	*@	1999	0.00	0	0
2001	*	2000	0.00	0	0
2002	*	2001	0.00	0	0
2003	*@	2002	0.00	0	0
2004	*	2003	0.00	0	0
2005	@	2004	0.00	0	0
2006	*@	2005	0.00	0	0
2007	*	2006	0.00	0	0
2008	*	2007	0.00	0	0
2009	*	2008	0.00	0	0
2010	*@	2009	0.00	0	0
2011	*@	2010	0.00	0	0
2012	*	2011	0.00	0	0
2013	*#	2012	0.00	0	1,811,492
2014	@#	2013	0.00	0	760,912
2015		2014	0.00	0	!

* *Retirement System amended.*

@ *Revised actuarial assumptions and/or methods.*

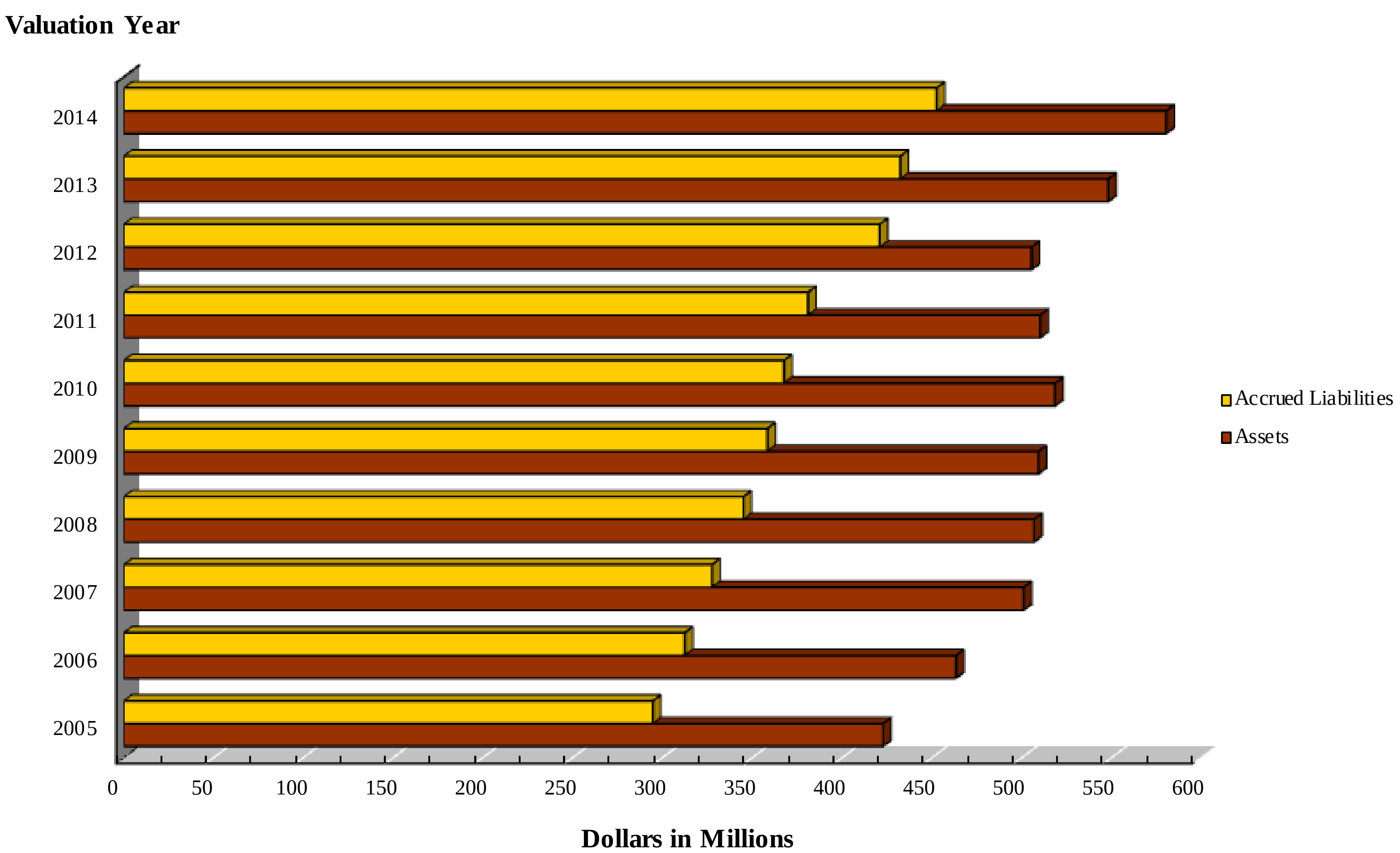
\# *Actual Employer contributions were to cover the cost of lump sum payments in relation to the Early Retirement Initiative.*

! *Not yet available.*

UNFUNDED ACCRUED LIABILITY

	Totals
A. Accrued Liability	
1. For Retirees and Beneficiaries	$334,310,975
2. For Vested Terminated Members	3,312,900
3. For Present Active Members	
a. Value of expected future benefit payments	165,346,243
b. Value of future normal costs	50,588,969
c. Active member liability: (a) - (b)	114,757,274
4. Total	452,381,149
B. Present Assets	
1. Valuation Basis	580,220,033
2. Market Basis	625,472,082
C. Unfunded Accrued Liability (Excess Assets)	
1. Valuation Basis: (A.4) - (B.1)	(127,838,884)
2. Market Basis: (A.4) - (B.2)	(173,090,933)
D. Funded percent	
1. Valuation Basis: (B.1) / (A.4)	128.3%
2. Market Basis: (B.2) / (A.4)	138.3%

ASSETS AND ACCRUED LIABILITIES



2005 assets equaled 144% of accrued liabilities.
2014 assets equaled 128% of accrued liabilities.

DEVELOPMENT OF EXPERIENCE GAIN (LOSS)
YEAR ENDED DECEMBER 31, 2014

Actual experience will never (except by coincidence) exactly match assumed experience. It is hoped that gains and losses will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the development of the experience gain (loss) is shown below.

	Year Ending December 31	
	2014	2013
(1) UAAL* at start of year	$(115,775,103)	$(84,523,588)
(2) Normal cost from prior year	6,643,704	6,557,907
(3) Actual contributions**	1,827,941	2,921,549
(4) Interest accruals on (1), (2), and (3)	(8,504,718)	(6,204,549)
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	(119,464,058)	(87,091,779)
(6) Change from benefit increases	0	0
(7) Early Retirement Initiative	0	0
(8) Change from revised actuarial assumptions and/or methods	12,192,470	0
(9) Expected UAAL after changes: (5) + (6) + (7)	(107,271,588)	(87,091,779)
(10) Actual UAAL at end of year	(127,838,884)	(115,775,103)
(11) Gain (loss): (8) - (9)	20,567,296	28,683,324
(12) Gain (loss) as percent of actuarial accrued liabilities at start of year	4.76%	6.82%

* *Unfunded Actuarial Accrued Liabilities.*

** *The actual contribution includes an employer contribution of $1,811,492 in 2013 and $760,912 in 2014, to cover the cost of lump sum payments related to the Early Retirement Initiative.*

2014 Gain (Loss)		
Totals	**Investment**	**Non-Investment**
$20,567,296	$18,391,501	$2,175,795

DEVELOPMENT OF VALUATION ASSETS

Year Ended December 31:	2012	2013	2014	2015	2016	2017	2018
A. Valuation Assets Beginning of Year	$509,931,421	$505,234,953	$547,923,629				
B. Market Value End of Year	530,333,893	610,613,257	625,472,082				
C. Market Value Beginning of Year	482,881,173	530,333,893	610,613,257				
D. Non-Investment Net Cash Flow	(24,115,992)	(24,506,026)	(26,206,621)				
E. Investment Income							
E1. Market Total: B - C - D	71,568,712	104,785,390	41,065,446				
E2. Amount for Immediate Recognition (7.5%)	37,340,507	36,973,646	40,111,524				
E3. Amount for Phased-In Recognition: E1-E2	34,228,205	67,811,744	953,922				
F. Phased-In Recognition of Investment Income							
F1. Current Year: 0.2 x E3	6,845,641	13,562,349	190,784				
F2. First Prior Year	(9,889,418)	6,845,641	13,562,349	$ 190,784			
F3. Second Prior Year	7,682,144	(9,889,418)	6,845,641	13,562,349	$ 190,784		
F4. Third Prior Year	12,020,338	7,682,144	(9,889,418)	6,845,641	13,562,349	$ 190,784	
F5. Fourth Prior Year	(34,579,688)	12,020,340	7,682,145	(9,889,417)	6,845,641	13,562,348	$ 190,786
F6. Start-up Phase-In	0	0	0	0	0	0	0
F7. Total Phased-In Recognition	(17,920,983)	30,221,056	18,391,501	10,709,357	20,598,774	13,753,132	190,786
G. Valuation Assets End of Year: A + D + E2 + F7	505,234,953	547,923,629	580,220,033				
H. Difference between Market & Valuation Assets: B - G	25,098,940	62,689,628	45,252,049	34,542,692	13,943,918	190,786	0
I. Valuation Asset Recognized Rate of Return	3.90%	13.63%	10.94%				
J. Market Value Recognized Rate of Return	15.20%	20.23%	6.87%				

The Valuation Assets recognizes assumed investment income (line E2) fully each year. Differences between actual and assumed investment income (line E3) are phased-in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, Valuation Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Valuation Assets will tend to be greater than Market Value. The Valuation Assets are unbiased with respect to Market Value. At any time, it may be either greater or less than Market Value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to Market Value.

VALUATION ASSET GROWTH HISTORY

Year	Net Contribution Income		Net Investment Return	Benefit Payments and Refunds		Year End Assets	
1990	$ 4,111,620		$ 7,931,746	$ 4,273,712		$ 98,979,816	
1991	4,091,054		17,554,303	4,580,471		116,044,702	
1992	3,750,367		15,352,600	4,855,017		130,292,652	*
1993	3,913,331		17,204,848	5,137,776		146,273,055	*
1994	3,265,544		16,061,927	6,052,552		159,547,974	*
Five-Year Period	19,131,916		74,105,424	24,899,528			
1995	3,474,935		23,926,130	6,592,176		180,356,863	*
1996	3,230,350		24,892,891	7,838,253		200,641,851	*
1997	2,453,815		47,847,856	8,327,995		242,615,527	*
1998	1,748,664	@	33,752,473	9,115,891		269,000,773	*@
1998	--		--	--		267,200,773	#*
1999	1,474,740		45,017,668	9,993,770		303,699,411	*
Five-Year Period	12,382,504		175,437,018	41,868,085			
2000	1,302,970		36,510,420	10,069,664		331,443,137	*
2001	1,261,691		27,898,652	11,446,161		349,157,319	*
2002	1,313,297		9,341,851	11,157,971		348,654,496	*
2003	1,314,089		23,609,527	12,390,484		361,187,628	*
2004	1,360,815		41,621,866	13,555,032		390,615,277	*
Five-Year Period	6,552,862		138,982,316	58,619,312			
2005	1,232,973		44,444,158	13,726,647		422,565,761	*
2006	1,238,628		53,842,184	14,365,610		463,280,963	*
2007	1,344,408		52,089,141	15,926,268		500,788,244	*
2008	1,445,963		20,324,800	15,966,434		506,592,573	*
2009	1,368,975		17,762,035	16,663,174		509,060,409	*
Five-Year Period	6,630,947		188,462,318	76,648,133			
2010	1,432,395		24,986,635	17,140,417		518,339,022	*
2011	1,268,330		8,714,595	18,390,526		509,931,421	*
2012	951,916		19,419,524	25,067,907	&	505,234,954	*
2013 $	2,652,485		67,194,702	27,158,512	&	547,923,629	*
2014 $	1,595,508		58,503,025	27,802,129	&	580,220,033	*
Five-Year Period	7,900,634		178,818,481	115,559,491			

* *Does not reflect future contributions to purchase service.*

@ *Before transfer to County.*

\# *After transfer of $1,800,000 to County.*

& *Includes special distributions under the ERI.*

$ *Includes an employer contribution of $1,811,492 in 2013, and $760,912 in 2014 to cover the cost of lump sum payments related to the Early Retirement Initiative.*

VALUATION ASSET INVESTMENT EXPERIENCE HISTORY
($000 OMITTED)

Year	Assumed Net Investment Income Amount	Assumed Net Investment Income %	Net Dividends and Interest Amount	Net Dividends and Interest %	Recognized Gains (Losses) * Amount	Recognized Gains (Losses) * %	Net Investment Income Amount	Net Investment Income %	Experience Gain (Loss)
1995	$ 11,849	7.50 %	$6,177	3.91 %	$ 17,749	11.23 %	$ 23,926	15.14 %	$ 12,077
1996	13,354	7.50	6,211	3.49	18,682	10.49	24,893	13.98	11,539
1997	14,828	7.50	6,244	3.16	41,604	21.04	47,848	24.20	33,020
1998	17,920	7.50	6,259	2.62	27,494	11.51	33,752	14.13	15,833
1999	19,721	7.50	7,844	2.98	37,173	14.14	45,018	17.12	25,297
2000	22,449	7.50	8,675	2.90	27,836	9.30	36,510	12.20	14,062
2001	24,477	7.50	5,705	1.75	22,171	6.79	27,876	8.54	3,398
2002	25,818	7.50	5,113	1.49	4,229	1.21	9,342	2.70	(16,476)
2003	25,734	7.50	5,790	1.69	17,819	5.21	23,610	6.90	(2,124)
2004	26,632	7.50	7,356	2.07	34,266	9.65	41,622	11.72	14,989
2005	28,828	7.50	15,466	4.02	28,978	7.54	44,444	11.56	15,617
2006	31,200	7.50	21,321	5.13	32,521	7.82	53,842	12.94	22,642
2007	34,199	7.50	24,659	5.41	27,430	6.02	52,089	11.42	17,890
2008	37,015	7.50	14,940	3.03	5,385	1.09	20,325	4.12	(16,690)
2009	37,421	7.50	7,655	1.53	10,107	2.03	17,762	3.56	(19,659)
2010	37,590	7.50	9,773	1.95	15,214	3.04	24,987	4.99	(12,604)
2011	38,233	7.50	9,511	1.87	(796)	(0.16)	8,715	1.71	(29,519)
2012	37,341	7.50	14,063	2.82	5,357	1.08	19,420	3.90	(17,921)
2013	36,974	7.50	13,899	2.82	53,296	10.81	67,195	13.63	30,221
2014	40,112	7.50	13,406	2.51	45,097	8.43	58,503	10.94	18,392

* *In addition to net interest and dividends.*

DEVELOPMENT OF VALUATION INVESTMENT GAIN (LOSS)
YEAR ENDED DECEMBER 31, 2014

The December 31, 2014 valuation assumed an average 7.5% net return on valuation assets for future years. Net investment return in excess of 7.5% represents a gain. If net investment return falls short of 7.5%, the difference between an income of 7.5% and the net return represents a loss. For the year ended December 31, 2014, the valuation anticipated investment return of $40,111,524 (see item E2 on page B-7). Total phased-in recognition amounted to a gain of $18,391,501 for the year (see item F7 on page B-7), resulting in a return of 10.94% on a valuation basis (see item I on page B-7).

Please note that this analysis uses asset values and investment income as defined for the actuarial valuation (dollar weighted). It is not, therefore, appropriate as a measure of manager performance.

RATES OF RETURN AND CHANGE IN PAYS AND LIABILITIES

	Year Ended December 31					5-Year
	2014	**2013**	**2012**	**2011**	**2010**	**Average***
Increase in average salary#	2.3%	4.6%	4.6%	3.0%	1.0%	3.1%
Return on assets^	10.9	13.6	3.9	1.7	5.0	6.9
Liability growth!	1.9	2.7	10.5	3.7	2.6	4.2

* *Compound rate of increase.*

\# *For members employed throughout the most recent two years.*

^ *The nominal rate of return was computed using the approximate formula i = I divided by 1/2 (A + B - I), where I is actual investment income net of expenses, A is the beginning of year asset value, and B is the end of year asset value.*

! *Before reflecting a change to the assumptions and methods resulting from an experience review dated February 19, 2015.*

SECTION C

SUMMARY OF THE INFORMATION SUBMITTED FOR THE VALUATION

BRIEF SUMMARY OF BENEFIT PROVISIONS*
AS REPORTED FOR DECEMBER 31, 2014 VALUATION

Eligibility	Amount
REGULAR RETIREMENT (no reduction factor for age)	
General: Age 57 with 25 years of service, or age 62 with 10 years of service. AFSCME members only may also retire at age 60 with 20 years of service.	Total service multiplied by: 2.1% of FAC – KMEA – effective 1/1/08 2.1% of FAC – AFSCME – effective 10/2/07 2.1% of FAC – Metro Transit 2.3% of FAC – Exempt members 2.1% of FAC – Other General members–CSO – effective 1/1/08 2.7% of FAC – Public Safety members FAC (final average compensation) – Highest 3 consecutive years out of the last 10.
Public Safety: 25 years of service or age 50 with 10 years of service.	Maximum benefit for Public Safety members is equal to 70.2% of FAC.
EARLY RETIREMENT (age reduction factor used)	
General: Age 55 with 15 years of service.	Computed as a regular retirement but reduced by 4/10 of 1% for each month and fraction of a month by which retirement precedes age 62 if less than 25 years of service or age 57 if 25 or more years of service.
Public Safety: 20 years of service.	2% of final average compensation multiplied by years of credited service.
DEFERRED RETIREMENT	
10 years of service for most members, 5 years for Exempt hired before 9/1/2010, 9 years for AFSCME and 8 years for KMEA hired before 1/1/2009. Benefit begins at age 62 for General employees, and at age 50 for Public Safety employees.	General: Computed as a regular or early retirement but based upon service and final average compensation at termination date. Public Safety: Computed as early retirement.
NON-DUTY DEATH-IN-SERVICE	
10 years of service for most members, 5 years for Exempt hired before 9/1/2010, 9 years for AFSCME and 8 years for KMEA hired before 1/1/2009.	General: Computed as a regular retirement but actuarially reduced in accordance with a 100% joint and survivor election. Public Safety: A benefit of 33-1/3% of final compensation is paid to the surviving spouse. Unmarried children under 18 years of age receive equal shares of 25% of final compensation.
DUTY DEATH-IN-SERVICE	
Payable to the survivors of a member who died in the line of duty.	A benefit of 33-1/3% of final compensation is paid to the surviving spouse. Unmarried children under 18 years of age receive equal shares of 25% of final compensation. Worker's compensation payments are offset.
NON-DUTY DISABILITY	
10 years of service for most members, 5 years for General Exempt hired before 9/1/2010, 9 years for AFSCME and 8 years for KMEA hired before 1/1/2009.	Computed as regular retirement. Reduced on a dollar-for-dollar basis by amount of worker's compensation, if any.

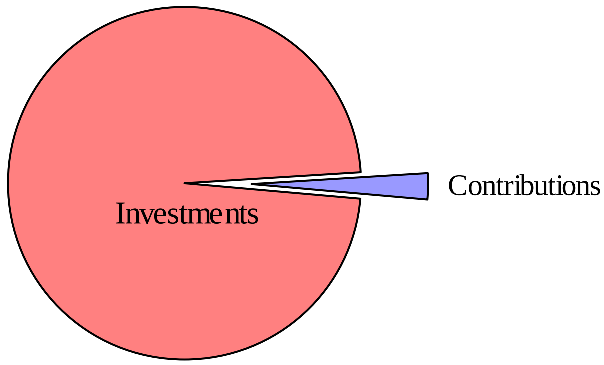
* *This represents a brief summary of Plan provisions. As always official Plan documents, including the Ordinance and any applicable Collective bargaining agreements, will ultimately govern the benefits payable from the Plan.*

BRIEF SUMMARY OF BENEFIT PROVISIONS AS REPORTED FOR DECEMBER 31, 2014 VALUATION (CONCLUDED)

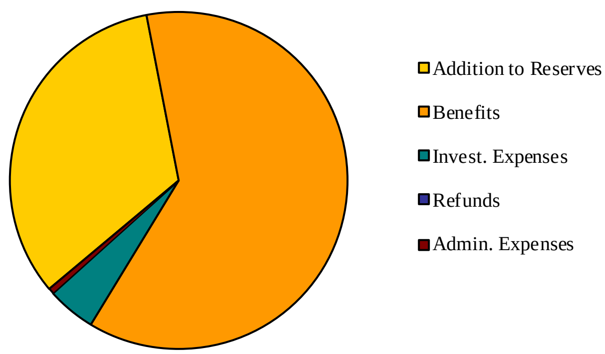
Eligibility	Amount
DUTY DISABILITY	
No age or service requirements.	General: Computed as regular retirement with additional service credit granted from day of actual retirement to date of voluntary retirement eligibility. Public Safety: Computed as regular retirement. During worker's compensation period benefit cannot exceed the difference between final compensation and worker's compensation.
DEATH AFTER RETIREMENT	
Spouse of Public Safety member retired on or after July 1, 1972.	50% of the regular retirement benefit the deceased retiree was receiving.
POST-RETIREMENT BENEFIT INCREASES*	
AFSCME members who retire on and after 10/25/1999.	1% increases compounded annually, beginning 1 year after retirement; 2% compounded annually beginning at age 75.
KMEA members.	1.5% increases compounded annually, beginning the latter of the Retirees 64th birthday and 1 year after retirement; 2% compounded annually beginning at age 75 (effective in 2002).
Transit Union members.	1% increases compounded annually, beginning 1 year after retirement; 2% compounded annually beginning at age 75.
Public Safety members who retired on and after 1/1/95 with 25 or more years of service.	2% increases compounded annually.
Exempt members.	1.5% increases compounded annually one year after retirement for members who elected to contribute by May 2006.
13TH CHECKS	
Retired by 12/31/1999; retired at least 5 years; have attained age 70 prior to June 1 of the year preceding the periodic payment to be made; had at least 25 years of service with the City; ineligible for post-retirement benefit increases; pension less than $20,000. Continuation of this program is conditional as described in the ordinance.	The periodic payment described herein shall be made in June every third year, commencing 2001; however, no payment shall be made in any year in which the fund's actuary projects (based upon a valuation of the fund as of December 31 of the prior year) the need for City contributions to the fund (for one or more actuarial grouping) within 10 years of the projection nor if the actuary recommends a contribution by the City (for one or more actuarial grouping) for that year. In the event a periodic payment is not made in a year in which it would otherwise occur (because of the actuary's projection or recommendation), then the payment shall be made in the next year in which no such actuarial projection or recommendation is made. In the event that a periodic payment is so delayed, future periodic payments shall be made every third year thereafter (so long as not prohibited by an actuarial projection or recommendation).
MEMBER CONTRIBUTIONS	
AFSCME members:	1% - effective 10/2/06. If funding % goes below 120% contribution rate reverts to 2%.
Transit Union and KMEA members:	1% of AC.
Exempt members:	1.5% of AC, 3% of AC for Exempt Members hired after 6/1/2006, 3.5% for Exempt Members who signed up for the PRA by May of 2006.
Non-Sworn Public Safety members:	1% of AC.
Sworn Public Safety members:	4.5% of AC. If funding % goes below 120% contribution rate reverts to 6.5%.
CITY CONTRIBUTIONS	
	Actuarially determined amounts, which, together with member contributions, are sufficient to cover both (i) normal costs of the plan, and (ii) financing of unfunded accrued benefit values over a selected period of future years.

* *Post-Retirement Benefit Increases vary by group retirement eligibility conditions also vary by retirement type.*

INCOME AND DISBURSEMENTS
DURING YEAR ENDED DECEMBER 31, 2014
(MARKET VALUE)



Source of $44,966,498 in Income



Application of $44,966,498 Income

See page C-4 for more information.

Reported Financial Information
Year Ended December 31, 2014
Market Value

Income and Expenses

Revenues:		
a. Member contributions	$ 1,067,029	
b. Employer contributions	760,912	
c. Interest and dividends	15,478,388	
d. Gain on sale of investments	14,572,119	
e. Unrealized gains and losses	13,087,147	
f. Miscellaneous	903	
g. Total		$44,966,498
Expenditures:		
a. Refunds of member contributions	27,036	
b. Benefits paid	27,775,093	
c. Administrative expenses	232,433	
d. Investment expenses	2,073,111	
Total		30,107,673
Reserve Increase:		
Total revenues minus total expenditures		$14,858,825

REPORTED FINANCIAL INFORMATION
YEAR ENDED DECEMBER 31, 2014

Assets and Reserves on Valuation Basis

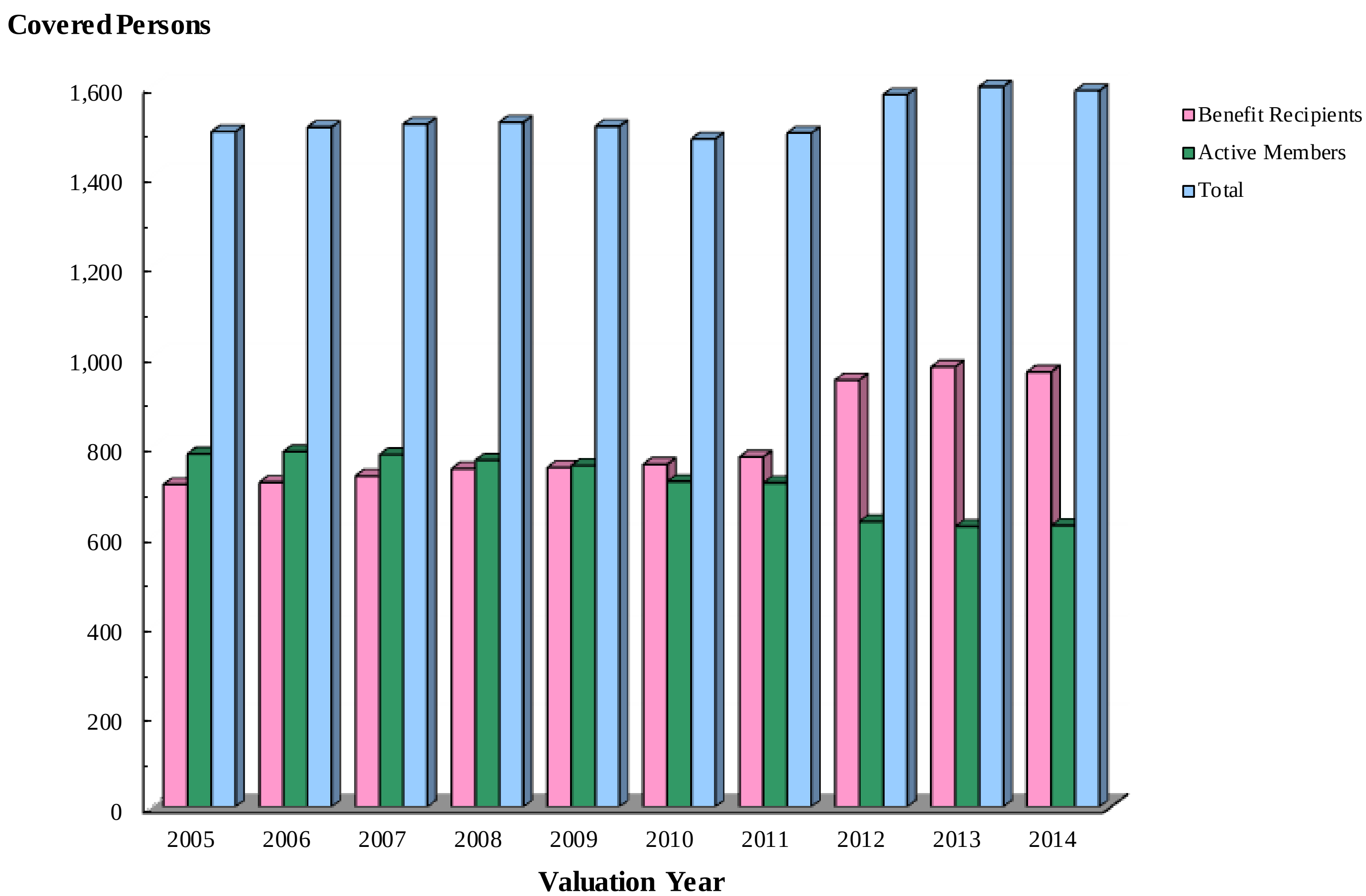
Assets:		Reserve Accounts:	
a. Cash or equivalents	$ 514,294	a. Member contributions	$ 40,373,655
b. Receivables net of payables	(18,134)	b. Employer contributions	274,202,814
c. Stocks	437,039,299	c. Retired benefit payments	265,643,564
d. Fixed income	154,703,230		
e. Real Estate Investment Fund	33,233,393		
f. Funding Value Adjustment	(45,252,049)		
Total	$580,220,033	Total	$580,220,033

The value of future benefit payments to retirees and beneficiaries as of December 31, 2014 is $334,310,975. The value of the Reserve for Retired Benefit Payments was $265,643,564. The figures below compare the retired liabilities to the reported retiree reserve balance.

Accrued Liability	Reported Retiree Reserve	Unfunded Liability (Excess Assets)
$ 334,310,975	$ 265,643,564	$ 68,667,411

Our valuation assumes that amounts equal to the unfunded retiree liabilities for all divisions have been transferred effective January 1, 2015 from the employer reserves to the retiree reserves, to fully fund the retiree accrued liabilities.

ACTIVE MEMBERS & BENEFIT RECIPIENTS



Retirements During 2014
Tabulated by Annual Amount of Benefit

Annual Amount	Age and Service	Disability	Survivors	Totals
$4,000 - $5,999	1			1
6,000 - 7,999		1		1
10,000 - 11,999	1			1
12,000 - 13,999	1			1
16,000 - 17,999	2			2
18,000 - 19,999	1			1
32,000 - 33,999			1	1
52,000 - 53,999		1		1
Totals	**6**	**2**	**1**	**9**

This exhibit does not include new alternate payees due to EDRO or new beneficiaries from retirees.

RETIREMENTS DURING 2014
TABULATED BY AGE NEAREST BIRTHDAY
AND TYPE OF RETIREMENT

	Age and Service		Disability		Survivors		Totals	
Ages	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**
42			1	$ 52,682			1	$ 52,682
50			1	6,704			1	6,704
53					1	$ 32,934	1	32,934
55	1	$ 12,705					1	12,705
62	1	19,398					1	19,398
63	4	47,326					4	47,326
Totals	**6**	**$ 79,429**	**2**	**$ 59,386**	**1**	**$ 32,934**	**9**	**$ 171,749**

This exhibit does not include new alternate payees due to EDRO or new beneficiaries from retirees.

KMEA RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2014
TABULATED BY NEAREST AGE AND TYPE OF RETIREMENT*

	Age and Service		Disability		Survivors		Totals	
Attained Age	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**
45 - 49	4	$ 119,617					4	$ 119,617
50 - 54	4	120,405	1	$ 7,131	1	$ 32,934	6	160,470
55 - 59	19	513,308	2	18,758			21	532,066
60 - 64	26	709,363					26	709,363
65 - 69	24	528,480	1	17,307	2	27,607	27	573,394
70 - 74	14	208,586					14	208,586
75 - 79	5	79,009	2	11,156	1	12,827	8	102,992
80			1	9,854			1	9,854
81	2	13,068					2	13,068
82	1	5,378					1	5,378
86	3	27,404					3	27,404
87	1	3,147					1	3,147
88	1	6,012					1	6,012
89	2	13,941					2	13,941
90 & Over	3	10,472					3	10,472
Totals	**109**	**$2,358,190**	**7**	**$ 64,206**	**4**	**$ 73,368**	**120**	**$ 2,495,764**

* *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

Average Age at Retirement: 57.6 Years.

Average Age Now: 66.3 Years.

AFSCME/CSO Retirees and Beneficiaries as of December 31, 2014
Tabulated by Attained Age and Type of Retirement*

	Age and Service		Disability		Survivors		Totals	
Attained Age	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
45 - 49	2	$ 59,997					2	$ 59,997
50 - 54	15	440,457	3	$ 32,024			18	472,481
55 - 59	24	718,871	5	76,604			29	795,475
60 - 64	38	903,856	5	67,270			43	971,126
65 - 69	21	487,680	5	77,130			26	564,810
70 - 74	18	195,767	3	24,439			21	220,206
75 - 79	13	138,525	2	7,579	2	$ 18,878	17	164,982
80	7	78,164					7	78,164
81	3	33,849					3	33,849
82	4	41,850	1	5,523			5	47,373
83	6	72,025					6	72,025
84	2	11,197					2	11,197
85	3	28,824					3	28,824
86	2	22,015					2	22,015
87	2	11,259	1	6,394			3	17,653
88	2	15,131	1	14,221			3	29,352
90 & Over	3	24,126			1	1,363	4	25,489
Totals	**165**	**$3,283,593**	**26**	**$311,184**	**3**	**$20,241**	**194**	**$ 3,615,018**

* *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

Average Age at Retirement: 56.8 Years.

Average Age Now: 67.6 Years.

EXEMPT RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2014
TABULATED BY ATTAINED AGE AND TYPE OF RETIREMENT*

	Age and Service		Disability		Survivors		Totals	
Attained Age	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**
40 - 44	2	$ 58,539					2	$ 58,539
50 - 54	12	498,172	1	$ 20,230			13	518,402
55 - 59	16	908,749					16	908,749
60 - 64	33	1,021,882	1	45,181	1	$ 21,817	35	1,088,880
65 - 69	39	1,186,814			2	9,503	41	1,196,317
70 - 74	33	728,349	1	8,141			34	736,490
75 - 79	13	205,790	1	10,705			14	216,495
80	2	30,244					2	30,244
81	4	65,226					4	65,226
82	1	5,836					1	5,836
83	1	6,851					1	6,851
84	4	53,641					4	53,641
85	1	3,098					1	3,098
86	5	69,740					5	69,740
87	3	39,031					3	39,031
88	1	1,465					1	1,465
89	7	99,738					7	99,738
90 & Over	8	55,955					8	55,955
Totals	**185**	**$5,039,120**	**4**	**$84,257**	**3**	**$31,320**	**192**	**$ 5,154,697**

* *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

Average Age at Retirement: 57.6 Years.

Average Age Now: 69.5 Years.

TRANSIT RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2014
TABULATED BY ATTAINED AGE AND TYPE OF RETIREMENT*

	Age and Service		Disability		Survivors		Totals	
Attained Age	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
40 - 44			1	$ 13,867			1	$ 13,867
45 - 49			2	25,447			2	25,447
50 - 54	2	$ 68,950					2	68,950
55 - 59	7	211,996	4	69,958			11	281,954
60 - 64	7	177,942	3	40,161			10	218,103
65 - 69	12	226,903	1	10,873			13	237,776
70 - 74	5	97,264	3	25,969			8	123,233
75 - 79	2	10,546	2	11,393			4	21,939
80	1	4,676					1	4,676
82	1	6,883					1	6,883
84			1	4,580			1	4,580
90 & Over	1	4,327			1	$3,537	2	7,864
Totals	**38**	**$809,487**	**17**	**$202,248**	**1**	**$3,537**	**56**	**$ 1,015,272**

* *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

Average Age at Retirement: 58.0 Years.

Average Age Now: 65.4 Years.

PUBLIC SAFETY RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2014 TABULATED BY ATTAINED AGE AND TYPE OF RETIREMENT*

	Age and Service		Disability		Survivors		Totals	
Attained Age	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
0 - 39					1	$ 18,153	1	$ 18,153
40 - 44			2	$ 106,613			2	106,613
45 - 49	24	$ 1,522,833	3	141,435	1	22,429	28	1,686,697
50 - 54	30	1,583,251	5	306,037			35	1,889,288
55 - 59	46	2,356,884	2	99,631	1	1,132	49	2,457,647
60 - 64	55	2,758,505	1	24,017			56	2,782,522
65 - 69	70	2,982,165	2	39,886			72	3,022,051
70 - 74	57	1,799,305	2	26,406			59	1,825,711
75 - 79	46	1,070,935	1	21,526			47	1,092,461
80	10	202,833					10	202,833
81	7	81,088					7	81,088
82	6	63,388	1	5,491			7	68,879
83	3	70,154	1	7,943			4	78,097
84	4	54,641					4	54,641
85	6	66,162					6	66,162
86	1	4,937					1	4,937
87			1	3,338			1	3,338
88	3	34,573					3	34,573
89	2	21,194	1	8,767			3	29,961
90 & Over	8	48,029					8	48,029
Totals	**378**	**$14,720,877**	**22**	**$791,090**	**3**	**$41,714**	**403**	**$ 15,553,681**

* *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

Average Age at Retirement: 49.6 Years.

Average Age Now: 66.4 Years.

RETIREES AND BENEFICIARIES - DECEMBER 31, 2014
TABULATED BY YEARS RETIRED - NEAREST YEAR

Years Retired	Service Retirement	Disability Retirement	Death-in-Service	Beneficiary of Retiree	Totals	Cumulative Percent
42		1			1	0.1%
41		2			2	0.3%
40		1	1	2	4	0.7%
39					0	0.7%
38	1			5	6	1.3%
37		1	1	2	4	1.8%
36	1			2	3	2.1%
35	5	1		2	8	2.9%
34	1			3	4	3.3%
33	4	1	1	2	8	4.1%
32	10			10	20	6.2%
31	7		1	6	14	7.7%
30	8			9	17	9.4%
29	11	1		3	15	11.0%
28	11	1		2	14	12.4%
27	8	1		3	12	13.7%
26	16	1	1	4	22	16.0%
25	11	1		4	16	17.6%
24	14	2			16	19.3%
23	13			2	15	20.8%
22	5	2		3	10	21.9%
21	20	2	1	1	24	24.4%
20	22		1	5	28	27.3%
19	47	3		6	56	33.1%
18	20	4		3	27	35.9%
17	23	2	1	1	27	38.7%
16	12	1		2	15	40.2%
15	16			4	20	42.3%
14	19	6	1	1	27	45.1%
13	12	5			17	46.8%
12	52	3	2	4	61	53.2%
11	15	1			16	54.8%
10	19	1		1	21	57.0%
9	15	4	1	1	21	59.2%
8	16	6			22	61.5%
7	22	2		1	25	64.0%
6	17	6		1	24	66.5%
5	18	2			20	68.6%
4	34	6	1	2	43	73.1%
3	103	3		1	107	84.1%
2	114			1	115	96.1%
1	33	1			34	99.6%
Less than 1	1	2	1		4	100.0%
Totals	776	76	14	99	965	

RETIREE AND BENEFICIARY COMPARATIVE SCHEDULE@

Year Ended Dec. 31	Added to Rolls# No.	Added to Rolls# Annual Allowances*	Removed from Rolls No.	Removed from Rolls Annual Allowances	Rolls End of Year No.	Rolls End of Year Annual Allowances	% Incr. in Annual Allowances	Average Allowances	Discounted Value of Allowances Totals	Discounted Value of Allowances Average
1995	39	$ 789,878	14	$ 103,166	533	$ 6,608,378	11.6 %	$ 12,398	$ 72,796,360	$ 136,579
1996	64	1,108,952	10	53,238	587	7,664,092	16.0	13,056	84,898,479	144,631
1997	41	825,236	23	131,913	605	8,357,415	9.0	13,814	93,826,629	155,085
1998	42	782,825	25	253,483	622	8,886,757	6.3	14,287	100,635,001	161,793
1999	31	800,436	21	110,375	632	9,576,818	7.8	15,153	109,572,407	173,374
2000	33	791,069	19	149,304	646	10,218,583	6.7	15,818	120,319,918	186,254
2001	24	530,225	18	147,375	652	10,601,433	3.7	16,260	124,502,845	190,955
2002	47	1,227,293	20	191,684	679	11,637,042	9.8	17,139	136,218,282	200,616
2003	40	929,269	24	208,928	695	12,357,383	6.2	17,780	145,275,896	209,030
2004	32	841,492	18	191,402	709	13,007,473	5.3	18,346	153,594,898	216,636
2005	31	1,367,707	25	268,275	715	14,106,905	8.5	19,730	168,715,852	235,966
2006	24	697,001	19	54,017	720	14,749,889	4.6	20,486	175,276,935	243,440
2007	31	863,128	17	134,800	734	15,478,217	4.9	21,087	181,074,645	246,696
2008	35	1,051,335	19	185,258	750	16,344,294	5.6	21,792	188,654,437	251,539
2009	25	1,554,246	22	247,330	753	17,651,210	8.0	23,441	191,338,855	254,102
2010	47	458,377	40	364,571	760	17,745,016	0.5	23,349	202,420,395	266,343
2011	46	1,104,498	30	132,052	776	18,717,462	5.5	24,120	212,102,413	273,328
2012	191	7,069,939	20	139,920	947	25,647,481	37.0	27,083	300,896,407	317,736
2013	51	2,374,598	22	345,230	976	27,676,849	7.9	28,357	325,233,541	333,231
2014	21	623,969	32	466,386	965	27,834,432	0.6	28,844	334,310,975	346,436

@ *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

* *Includes post-retirement adjustments.*

Includes survivors of newly deceased retirees and alternate payees under EDRO.

RETIREES AND BENEFICIARIES DECEMBER 31, 2014
TABULATED BY TYPE OF ALLOWANCES BEING PAID*

GENERAL KMEA

Option Elected	Age & Service	Disability Non-Duty	Disability Duty	Death Non-Duty	Death Duty	Totals
Regular	68	4	1			73
B-100% J & S	25					25
C-50% J & S	10					10
D-10 Year Certain	1					1
E-15 Year Certain	1					1
Survivor	4	2		4		10
Totals	**109**	**6**	**1**	**4**		**120**

AFSCME/CSO

Option Elected	Age & Service	Disability Non-Duty	Disability Duty	Death Non-Duty	Death Duty	Totals
Regular	76	1	3			80
B-100% J & S	39	3	12			54
C-50% J & S	26		1			27
D-10 Year Certain	1					1
E-15 Year Certain	2		1			3
Survivor	21	4	1	3		29
Total	**165**	**8**	**18**	**3**		**194**

GENERAL EXEMPT

Option Elected	Age & Service	Disability Non-Duty	Disability Duty	Death Non-Duty	Death Duty	Totals
Regular	77		1			78
A-Cash refund	1					1
B-100% J & S	53					53
C-50% J & S	36	1				37
D-10 Year Certain	1					1
Survivor	17	1	1	3		22
Total	**185**	**2**	**2**	**3**		**192**

* *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

RETIREES AND BENEFICIARIES DECEMBER 31, 2014
TABULATED BY TYPE OF ALLOWANCES BEING PAID*
(CONCLUDED)

METRO TRANSIT

Option Elected	Age & Service	Disability Non-Duty	Disability Duty	Death Non-Duty	Death Duty	Totals
Regular	21	1	2			24
B-100% J & S	9	1	7			17
C-50% J & S	6	1	1			8
E-15 Year Certain			1			1
Survivor	2	2	1	1		6
Total	**38**	**5**	**12**	**1**		**56**

PUBLIC SAFETY

Option Elected	Age & Service	Disability Non-Duty	Disability Duty	Death Non-Duty	Death Duty	Totals
Regular	61		6			67
Regular - 50% J& S	247	1	10			258
B-100% J & S	9	1				10
E-10 Year Certain	1					1
E-15 Year Certain	1		1			2
Survivor	59	2	1		3	65
Total	**378**	**4**	**18**		**3**	**403**

* *The retired members with service in more than one group are displayed as if each person were receiving two pensions.*

TERMINATED MEMBERS WITH A DEFERRED VESTED BENEFIT
DECEMBER 31, 2014
TABULATED BY NEAREST AGE AND ESTIMATED ALLOWANCE

Attained Age	No.	Deferred Allowances
34	1	$ 5,164
37	1	14,621
39	1	13,417
41	1	14,455
42	1	6,840
43	4	61,792
45	2	20,300
46	2	39,183
47	3	25,721
48	2	39,866
49	1	10,483
50	1	7,907
51	3	35,666
52	3	31,701
53	1	16,873
54	4	68,065
55	2	21,050
56	2	20,319
57	2	48,659
58	1	10,663
60	2	14,193
67	1	8,420
Totals	**41**	**$535,358**

COMPARATIVE EMPLOYEE STATISTICS BY DIVISION

Val'n	General KMEA Employees			AFSCME/CSO Employees			General Exempt Employees			Metro Transit Employees			Public Safety Employees		
Date 12/31	Avg. Age	Avg. Service	Avg. Pay	Avg. Age	Avg. Service	Avg. Pay	Avg. Age	Avg. Service	Avg. Pay	Avg. Age	Avg. Service	Avg. Pay	Avg. Age	Avg. Service	Avg. Pay
1995	39.7	10.3	$28,934	42.4	11.5	$35,940	#	#	#	41.4	9.5	$28,586	37.8	12.9	$47,365
1996	40.1	10.9	30,466	41.1	10.1	37,781	#	#	#	42.2	9.4	30,421	37.8	12.9	48,680
1997	41.3	11.5	31,422	41.6	10.6	39,365	#	#	#	42.6	9.8	31,589	37.9	12.7	50,409
1998	42.4	12.3	33,189	42.1	11.0	40,935	#	#	#	42.3	8.8	34,632	37.2	11.7	49,501
1999	42.9	12.8	34,757	42.2	11.3	35,913	44.1	11.9	$52,857	41.5	7.9	33,863	37.2	11.4	53,070
2000	42.5	12.0	34,743	42.6	11.7	38,313	44.4	12.2	54,175	41.5	7.4	34,277	37.5	11.8	55,782
2001	43.3	12.4	35,391	43.6	11.9	39,409	45.6	12.6	56,628	41.8	7.3	35,627	37.9	11.9	57,709
2002	44.4	13.5	36,759	44.5	12.9	40,126	44.5	11.6	56,058	42.9	7.6	37,654	38.4	12.6	59,344
2003	44.0	13.3	37,656	44.8	13.4	41,731	45.6	12.0	57,688	44.4	8.3	39,459	38.8	12.9	62,656
2004	45.1	14.2	39,803	45.6	14.2	43,431	47.0	13.2	59,335	44.7	8.8	39,088	38.4	12.5	64,638
2005	46.2	15.0	40,839	46.3	15.1	44,161	48.0	14.0	60,031	45.6	9.6	40,158	37.8	11.9	65,392
2006	46.7	15.1	41,617	46.7	15.5	45,231	48.6	14.1	61,289	46.3	9.9	38,818	37.5	11.4	68,764
2007	47.4	15.9	42,856	47.0	15.7	46,643	48.6	14.4	62,354	47.2	10.6	38,696	37.4	11.6	68,509
2008	47.9	15.5	43,709	47.0	15.8	48,921	48.7	14.7	64,488	48.2	11.3	40,495	38.0	12.2	73,306
2009	49.1	17.0	45,167	47.6	16.5	49,088	49.1	15.3	65,044	49.1	12.0	41,491	38.8	12.7	74,829
2010	49.8	17.3	46,733	48.3	17.3	48,007	49.6	15.4	65,761	48.1	12.1	43,619	39.4	13.2	76,677
2011	50.4	18.3	47,186	48.3	17.1	46,993	49.8	16.3	65,320	48.1	12.8	41,252	39.5	13.6	75,789
2012	45.2	10.6	43,055	43.9	11.1	44,874	48.1	12.9	63,224	45.5	8.4	41,791	37.4	11.7	74,471
2013	44.8	9.9	43,602	44.2	10.9	45,984	47.1	11.7	65,631	46.4	8.7	43,151	37.2	11.7	75,869
2014	45.8	10.5	41,901	44.9	11.4	49,015	47.6	12.0	64,553	46.6	9.2	43,486	38.1	12.6	78,265

Included with AFSCME/CSO members.

GENERAL KMEA MEMBERS AS OF DECEMBER 31, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	1							1	$ 27,250
25-29	6	1						7	261,810
30-34	6	1						7	238,774
35-39	5		2	2				9	356,008
40-44	5	1	2	1	2			11	468,295
45-49	4	3	4		2	1		14	638,267
50-54		1	5		2	2	1	11	546,524
55-59	4	1	2	1	7	1		16	742,308
60		1		1				2	79,647
63	1							1	9,883
64				1				1	44,704
65	1							1	9,788
66	1							1	9,405
68	1							1	45,105
Totals	**35**	**9**	**15**	**6**	**13**	**4**	**1**	**83**	**$3,477,768**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 45.8 years.

Service: 10.5 years.

Annual Pay: $41,901.

AFSCME/CSO MEMBERS AS OF DECEMBER 31, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	2							2	$ 73,120
25-29	7	3						10	435,419
30-34	11	1	1					13	560,576
35-39	12	1	2	2				17	889,065
40-44	7	2	3	4	4			20	1,024,414
45-49	4	2	3	5	4			18	904,375
50-54	2	1	6	9	7	1		26	1,299,490
55-59	3	1	4	4	10			22	1,076,599
60			1			1		2	87,632
61				1				1	48,742
62	1							1	37,790
63					1			1	81,775
Totals	**49**	**11**	**20**	**25**	**26**	**2**		**133**	**$6,518,997**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 44.9 years.

Service: 11.4 years.

Annual Pay: $49,015.

GENERAL EXEMPT MEMBERS AS OF DECEMBER 31, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

	Years of Service to Valuation Date							Totals	
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 Plus**	**No.**	**Valuation Payroll**
25-29	4							4	$ 188,964
30-34	5	1						6	345,530
35-39	7	3	4	1				15	968,514
40-44	3	5	2	1	6			17	1,020,753
45-49	4	2	2	2	1	1		12	825,703
50-54	2	2	1	4	6	3		18	1,170,367
55-59	5	3	5	6	3		2	24	1,568,167
60					2			2	119,239
61		1						1	112,475
62			2					2	153,340
64			1					1	85,786
66		1			1			2	154,715
Totals	**30**	**18**	**17**	**14**	**19**	**4**	**2**	**104**	**$6,713,553**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 47.6 years.

Service: 12.0 years.

Annual Pay: $64,553.

METRO TRANSIT MEMBERS AS OF DECEMBER 31, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	2							2	$ 77,986
25-29	4	1						5	206,117
30-34	3							3	100,960
35-39	6		6					12	479,389
40-44	8	2	5	3	1			19	737,056
45-49	7	2	2	6	2	1		20	920,503
50-54	3	3		1	1			8	419,532
55-59	6	3	3	3	2			17	797,489
60			1	2				3	117,572
61			1					1	65,453
62	1				1			2	90,329
64		1						1	35,494
68	1							1	39,296
70	1							1	43,981
Totals	**42**	**12**	**18**	**15**	**7**	**1**		**95**	**$4,131,157**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 46.6 years.

Service: 9.2 years.

Annual Pay: $43,486.

PUBLIC SAFETY MEMBERS AS OF DECEMBER 31, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	4							4	$ 208,328
25-29	18	7						25	1,571,129
30-34	11	31	7					49	3,497,584
35-39	4	8	13	5				30	2,374,466
40-44	2	1	6	37	4			50	4,114,688
45-49		2	2	14	25			43	3,908,569
50-54				3	3	1		7	596,518
55-59					1			1	86,031
Totals	**39**	**49**	**28**	**59**	**33**	**1**		**209**	**$16,357,313**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 38.1 years.

Service: 12.6 years.

Annual Pay: $78,265.

SECTION D

ACTUARIAL COST METHODS AND ASSUMPTIONS

VALUATION METHODS AND ASSUMPTIONS

In accordance with Subsection 2-252.2c(10) of the Retirement System Ordinance, the actuarial assumptions are recommended to the City Commission by the Retirement Investment Committee (RIC). The actuarial assumptions used for this report were based upon the results of an Experience Study for the City of Kalamazoo Employees Retirement System covering the period January 1, 2009 through December 31, 2013. A report dated February 19, 2015 presented the results of this experience study. The actuarial assumptions represent estimates of future experience.

The normal cost was computed as follows:

The series of contributions necessary to accumulate the present value at time of retirement of the portion of a member’s pension attributable to service likely to be rendered after the valuation date was computed so that each contribution in the series was a constant percentage of the member’s year-by-year projected covered compensation. This is the individual entry age normal actuarial cost method.

The accrued liability was computed and financed as follows:

Retirees and Beneficiaries: The discounted value of pensions likely to be paid retirees and beneficiaries was computed using the investment return and mortality assumptions. This amount was financed by applicable accrued assets.

Active and Inactive members: The discounted value of benefits likely to be paid active and inactive members on account of service rendered prior to the valuation date was computed using the assumptions outlined on the following pages. The computed amount was reduced by applicable valuation assets and the remainder (or overfunding) was financed as a level percent-of-payroll over a rolling period of 10 years.

Asset valuation method: Last year’s valuation assets are increased by contributions and expected investment income on last year’s valuation assets and non-investment net cash flow and reduced by refunds, benefit payments and expenses. To this amount is added the phased-in recognition of investment income. The phased-in recognition is the sum over the five years ending on the valuation date of 20% of the difference between each year's expected return and actual market return.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

INVESTMENT RETURN. The rate of investment return is compounded annually net of administrative and investment expenses.

Investment Return	7.50%
Wage Inflation	3.50%
Price Inflation	2.75%
Spread Between Investment Return and Wage Inflation	4.00%
Spread Between Investment Return and Price Inflation	4.75%

These assumptions are used to equate the value of payments due at different points in time. They were first used for the December 31, 2014 valuation. Approximate net rates of investment return, for the purpose of comparisons with assumed rates, are shown below. Actual increases in active member pays are also shown for comparative purposes.

	Year Ended December 31					5-Year
	2014	2013	2012	2011	2010	Average*
Rate of Investment Return^	10.9%	13.6%	3.9%	1.7%	5.0%	6.9%
Increase in Average Pay#	2.3	4.6	4.6	3.0	1.0	3.1
Real Rate of Return	8.6	9.0	(0.7)	(1.3)	4.0	3.8

* *Compound rate of increase.*

\# *For members employed throughout the most recent two years.*

^ *The nominal rate of return was computed using the approximate formula i = I divided by 1/2 (A + B - I), where I is actual investment income net of expenses, A is the beginning of year asset value, and B is the end of year asset value.*

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other systems.

INVESTMENT EXPENSES. 0.50% of average valuation assets.

ADMINISTRATIVE EXPENSES. 0.65% of covered member payroll was added to the Normal Cost in anticipation of administrative expenses expected to be paid during the fiscal year.

PAY PROJECTIONS. These assumptions are used to project current pays to those upon which benefits will be based. The assumptions were first used for the December 31, 2014 valuation.

The annual rate of pay increases consists of two parts:

(i) a long-term rate of pay inflation equal to 3.5%.

(ii) merit and longevity increases which vary according to age or length of service. These rates are illustrated below.

Years of Service	KMEA	AFSCME	All Exempt	Non-Sworn Public Safety	Transit Union	Public Safety
1	6.0%	8.0%	6.0%	8.0%	7.0%	12.0%
2	5.0	3.0	6.0	7.0	7.0	12.0
3	4.0	3.0	0.5	6.0	6.0	5.5
4	2.0	2.0	0.5	4.0	5.0	4.5
5	1.0	2.0	0.5	3.0	4.0	4.5
6	1.0	1.0	0.3	1.5	0.0	4.0
7	1.0	0.0	0.3	1.5	0.0	4.0
8	1.0	0.0	0.3	1.5	0.0	4.0
9	0.0	0.0	0.3	1.5	0.0	1.5
10	0.0	0.0	0.3	1.5	0.0	1.3
11	0.0	0.0	0.3	0.5	0.0	1.0
12	0.0	0.0	0.3	0.3	0.0	1.0
13	0.0	0.0	0.3	0.3	0.0	0.5
14	0.0	0.0	0.3	0.3	0.0	0.5
thereafter	0.0	0.0	0.3	0.3	0.0	0.5

Actual average pays for members working both years have increased at the following rates.

	Year Ended December 31					5-Year
	2014	**2013**	**2012**	**2011**	**2010**	**Average***
Average increase	2.3%	4.6%	4.6%	3.0%	1.0%	3.1%

* *Compound rate of increase.*

If the number and distribution of active members remain constant, then the total active member payroll is expected to increase 3.5% annually for the base portion of the salary increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities.

The mortality table used was the RP-2000 Mortality Combined Healthy Tables, projected 20 years with U.S. Projection Scale BB.

	Value at Retirement of $1 Monthly for Life*		Future Life Expectancy (years)	
Ages	**Men**	**Women**	**Men**	**Women**
50	$144.67	$147.85	32.99	35.59
55	137.49	141.58	28.37	30.90
60	128.51	133.44	23.94	26.34
65	117.58	123.33	19.74	21.98
70	104.59	111.45	15.83	17.93
75	89.73	97.95	12.26	14.25
80	73.73	83.02	9.13	10.95

* *Values are before post-retirement increases are reflected.*

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. Rates for disabled members were set forward 7 years. This mortality table was first used for the December 31, 2014 valuation.

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

Retirement Ages	KMEA	AFSCME	All Exempt	Non-Sworn Public Safety	Transit Union
55	2%	6%	10%	10%	10%
56	2	7	10	10	10
57	5	10	25	25	25
58	5	7	25	25	25
59	7	6	20	20	20
60	15	30	25	25	25
61	15	20	30	30	30
62	50	60	30	30	30
63	15	25	15	15	15
64	10	25	15	15	15
65	100	100	100	100	100

Years of Service	Public Safety
20	2%
21	4
22	4
23	2
24	2
25	70
26	30
27	45
28	25
29	25
30	100

Retirement probabilities were applied for General and Transit members after both attaining age 55 and completing 15 years of service, or age 62 with 10 years of service (5 years for Exempt hired before 9/1/2010, 9 years for AFSCME and 8 years for KMEA hired before 1/1/2009). AFSCME members are also considered eligible for retirement at age 60 with 20 or more years of service. Retirement probabilities were applied for Public Safety members upon completion of 20 years of service with 100% retirement probability assumed at age 60 with 10 years of service. The assumptions above were first used for the December 31, 2009 valuation.

Rates of disability were as follows:

	% of Active Members Becoming Disabled Within Next Year	
Sample Ages	**Public Safety Metro Transit AFSCME**	**KMEA Exempt CSO**
20	0.23%	0.04%
25	0.27	0.04
30	0.32	0.04
35	0.40	0.04
40	0.55	0.10
45	0.76	0.13
50	1.45	0.25
55	2.84	0.45
60	0.00	0.71

The assumptions above were first used for the December 31, 2014 valuation.

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

		% of Active Members Separating within Next Year					
Sample Ages	**Years of Service**	**KMEA**	**AFSCME**	**All Exempt**	**Non-Sworn Public Safety**	**Transit Union**	**Public Safety**
	0	15.0%	15.0%	15.0%	15.0%	15.0%	6.0%
	1	14.0	14.0	14.0	14.0	14.0	4.0
	2	9.0	9.0	9.0	9.0	9.0	3.0
	3	8.0	8.0	8.0	8.0	8.0	2.5
	4	7.0	7.0	7.0	7.0	7.0	2.5
25	5 or Over	7.4	7.4	7.4	7.4	7.4	2.2
30		5.8	5.8	5.8	5.8	5.8	2.0
35		5.0	5.0	5.0	5.0	5.0	1.4
40		4.0	4.0	4.0	4.0	4.0	1.1
45		3.3	3.3	3.3	3.3	3.3	0.8
50		2.5	2.5	2.5	2.5	2.5	0.6
55		2.0	2.0	2.0	2.0	2.0	0.4
60		2.0	2.0	2.0	2.0	2.0	0.4

The assumptions above were first used for the December 31, 2009 valuation.

Active member group size. The number of active members was assumed to remain constant. This assumption is unchanged from previous valuations.

Timing of contribution payments. The contribution requirements in this report anticipate regular payments throughout the year. Examples would be at each payroll date or in 12 monthly installments.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing	Was assumed to occur in the middle of the year. This means that the pays reported for the valuation are assumed to be rates of pay on the valuation date.
Decrement Timing	Decrements are assumed to occur at the middle of the fiscal year.
Eligibility Testing	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation	Death-in-service decrement does not operate until member becomes vested. Withdrawal does not operate during retirement eligibility.
Normal Form of Benefit	The assumed normal form of benefit is straight life form. For public safety members, the assumed normal form of benefit is an automatic 50% Joint and Survivor form. 90% of public safety members were assumed to be married for the purposes of this benefit.
Incidence of Contributions	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.
Actuarial Equivalence Basis for Optional Forms of Payment	7.5% interest with an 85%/15% unisex blend of the RP-2000 Mortality Combined Healthy Tables, projected 20 years with U.S. Projection Scale BB, effective January 1, 2016.

GLOSSARY

ACTUARIAL ACCRUED LIABILITY. The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.” Under the actuarial cost method used the “AAL” differs somewhat from the value of future payments based on benefits earned as of the valuation date.

ACCRUED SERVICE. The service credited under the plan which was rendered before the date of the actuarial valuation.

ACTUARIAL ASSUMPTIONS. Estimates of future plan experience with respect to rates of mortality, disability, retirement, investment income and salary increases. Decrement assumptions (rates of mortality, separation, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate appropriate in an inflation-free environment plus a provision for a long-term average rate of inflation.

ACTUARIAL COST METHOD. A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the normal costs to be paid in the future and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”

ACTUARIAL EQUIVALENT. Benefits whose actuarial present values are equal.

ACTUARIAL PRESENT VALUE. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

AMORTIZATION. Payment of an interest-bearing liability by means of periodic contributions of interest and principal, as opposed to a lump sum payment.

EXPERIENCE GAIN (LOSS). A measure of the difference between actual experience and experience anticipated by a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

NORMAL COST. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost.” An amortization payment toward the unfunded actuarial accrued liability is in addition to the normal cost.

GLOSSARY (CONCLUDED)

RESERVE ACCOUNT. An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

UNFUNDED ACTUARIAL ACCRUED LIABILITY. The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

VALUATION ASSETS. The value of current plan assets recognized for valuation purposes.

SECTION E
ACCOUNTING DISCLOSURES

This information is presented in draft for review by the City's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the City's financial statements.

The information on the following pages should be used for Employer Reporting under GASB Statement No. 27. Information to be used for plan reporting is now issued in a separate report in accordance with GASB Statement No. 67.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry-Age (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
12/31/05 @ #	$422,565,761	$294,416,007	$ (128,149,754)	143.5%	$40,944,435	(313.0)%
12/31/06 @	463,280,964	312,101,938	(151,179,026)	148.4	42,164,958	(358.5)
12/31/07 @	500,788,244	327,242,870	(173,545,374)	153.0	42,889,419	(404.6)
12/31/08 @	506,592,573	344,799,153	(161,793,420)	146.9	44,159,590	(366.4)
12/31/09 @	509,060,409	358,160,400	(150,900,009)	142.1	44,435,753	(339.6)
12/31/10 @	518,339,022	367,423,552	(150,915,470)	141.1	43,007,800	(350.9)
12/31/11 @	509,931,421	380,802,126	(129,129,295)	133.9	42,305,663	(305.2)
12/31/12	505,234,953	420,711,365	(84,523,588)	120.1	36,538,969	(231.3)
12/31/13	547,923,629	432,148,526	(115,775,103)	126.8	36,331,892	(318.7)
12/31/14 #	580,220,033	452,381,149	(127,838,884)	128.3	37,198,788	(343.7)

@ *Plan amended.*

\# *Certain assumptions revised.*

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended December 31	Annual Required Contribution	Percentage Contributed
2005	$ 0	100.00%
2006	0	100.00
2007	0	100.00
2008	0	100.00
2009	0	100.00
2010	0	100.00
2011	0	100.00
2012	0	100.00
2013	0	100.00
2014	0	100.00

Actuarial cost method	Individual Entry-Age Normal Cost
Amortization method	Level Percent-of-Payroll, 10-year period (closed until 2002, then open)
Asset valuation method	Market Value with 5-year smoothing of appreciation and depreciation
Principal actuarial assumptions (last revised for the 12/31/2014 valuation):	
– Net Investment Return*	7.5%
– Projected Salary Increases*	3.5% to 15.5%
– Cost-of-Living Adjustments	2% per year – Public Safety members who retired 1995 and after, with 25 or more years of service. 1% per year pre-age 75; 2% per year from age 75 – AFSCME and Transit Union members who retire after 10/24/99. 1.5% per year after attaining age 64 – KMEA members who retire after 1999 (1.5% per year from retirement; 2.0% per year after attaining age 75 if member retired after 2001). 1.5% per year – Exempt members who signed up for the PRA.

* *Includes pay inflation at 3.5%.*

May 13, 2015

Mr. Thomas C. Skrobola
Director of Management Services/CFO
City of Kalamazoo
241 West South Street
Kalamazoo, Michigan 49007-4796

Dear Tom:

Please find enclosed 35 copies of the Sixty-Third Annual Actuarial Valuation of the City of Kalamazoo Employees Retirement System.

Sincerely,

James D. Anderson

James D. Anderson, FSA, EA, MAAA

JDA:bd
Enclosures

cc: Abraham & Gaffney (1 report copy)
Attn: Aaron Stevens