



October 29, 2014

PERSONAL AND CONFIDENTIAL

Board of Trustees Municipal Fire & Police Retirement System of Iowa 7155 Lake Drive, Suite 201 West Des Moines, IA 50266

RE: July 1, 2014 Actuarial Report

Dear Board Members:

We are pleased to submit this actuarial report of the Municipal Fire and Police Retirement System of Iowa. The costs developed and presented in this report are based on asset values as of June 30, 2014, member census data as of July 1, 2014, and current System provisions, all of which were supplied by the Municipal Fire & Police Retirement System of Iowa.

The purposes of the actuarial report are:

- 1. To determine the normal contribution rate which is payable by the Cities under Chapter 411 of the Code of Iowa;
- 2. To determine the funded status of the System; and
- 3. To provide information relating to the disclosure requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67 Financial Reporting for Defined Benefit Pension Plans (an amendment of GASB Statement No. 25).

All costs and liabilities were determined in accordance with generally accepted actuarial principles and procedures and are based on the actuarial assumptions and methods prescribed by the Board of Trustees. To the best of our knowledge, the information supplied in this report is complete and accurate and in my opinion the assumptions are reasonably related to the experience of the System and to reasonable expectations under the System. The amounts presented in the accompanying report have been determined appropriately according to the actuarial assumptions and methods stated herein, and fully and fairly disclose the actuarial position of the System. The undersigned meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained in this report.

Sincerely,

Glen C. Gahan, FSA

Principal

Member of American Academy

of Actuaries

Enrolled Actuary No. 14-4875

GCG/MSE/km

Enclosure

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Michael S. Ehmke, ASA

Principal

of Actuaries

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Report Highlights

This section compares results of the current and prior two actuarial valuations. Additional supporting detail is available in other sections of the report. The Table of Contents on the prior page identifies the location of the supporting detail.

	As of July 1,		
	2012	2013	2014
Cities Recommended Contribution	\$ 77,865,637	\$ 78,587,107	\$ 73,941,905
Normal Contribution Rate	30.12%	30.41%	27.77%
Normal Contribution Hate	00.1270	00.4170	27.7770
Plan Assets			
Market Value	1,785,228,513	1,964,266,618	2,278,456,923
Actuarial Value	1,838,606,699	1,860,947,878	2,054,844,278
Prior Year Investment Return			
Market Value	0.22%	13.04%	18.47%
Actuarial Value	1.06%	4.02%	12.96%
Actuarial Accrued Liability	2,493,849,016		2,640,955,176
Funded Ratio*	73.73%	73.90%	77.81%
Annual Participating Payroll	258,518,051	258,425,211	266,265,413
Annual Normal Cost	47,487,380	48,020,046	49,893,939
Percent of Payroll	18.37%	18.58%	18.74%
Annual Pension Benefits			
Service Retirement	67,211,124	71,753,820	75,127,236
Disabled Retirement	38,934,468	40,798,932	42,097,668
Vested Retirement	4,500,852	4,791,024	5,136,468
Beneficiaries	15,602,352	16,020,192	16,613,052
Total	126,248,796	133,363,968	138,974,424
Number of Members			
Active	3,888	3,866	3,885
Disabled	1,105	1,121	1,121
Retirees & Beneficiaries	2,711	2,741	2,775
Vested Terminated	296	<u>315</u>	321
Total	8,000	8,043	8,102

^{*}Based on the ratio of the Actuarial Value of Assets to Actuarial Accrued Liability.

Comments on the Valuation

Cities Recommended Contribution

The recommended contribution to the System was determined using the Entry Age Normal actuarial cost method as adopted by the Board of Trustees for valuation years beginning July 1, 2011. The Aggregate actuarial cost method had been used for years prior to July 1, 2011 to determine the contribution for the System.

We recommend a contribution of \$73,941,905 be made for the 2014 plan year. This is equal to a contribution rate of 27.77% of payroll. This rate assumes that the State of Iowa will contribute approximately \$0 for the 2014 plan year.

The System's normal contribution rate decreased from 30.41% for 2013 to 27.77% for 2014. The System's contribution rate before any adjustment to the minimum contribution rate changed as follows:

July 1, 2013 normal contribution rate	30.41%
 Increase in contribution rate due to lower State contribution 	0.00%
 Plan experience more favorable than assumed 	(0.68%)
 Investment experience more favorable than assumed 	(3.15%)
Changes in System provisions	0.00%
Change in actuarial cost method	0.00%
Changes in actuarial assumptions	<u>1.19%</u>
Preliminary normal contribution rate	27.77%
 Increase necessary to meet minimum contribution rate 	0.00%
July 1, 2014 normal contribution rate	27.77%

Changes in System Provisions

All System provisions remained unchanged from the prior year valuation.

Changes in Actuarial Assumptions

Based on the results of the recent 10-year experience study and adoption by the Board of Trustees, the following actuarial assumptions were changed:

• Two additional steps to phase in the 1994 Group Annuity Mortality Table for post-retirement mortality. The two additional steps result in a weighing of 2/12 of the 1971 Group Annuity Mortality Table and 10/12 of the 1994 Group Annuity Mortality Table.

All other actuarial assumptions remain unchanged from the prior year valuation.

Change in Actuarial Methods

All actuarial cost methods remain unchanged from the prior year valuation.

Comments on the Valuation

Government Accounting Standards Board Disclosure

Measurements used to evaluate the funded status of the System are based on procedures set forth by GASB (Government Accounting Standards Board). In an effort to enhance the understandability and usefulness of the pension information that is included in the financial reports of pension plans for state and local governments, GASB has issued Statement No. 25—Financial Reporting for Defined Benefit Pension Plans and Statement No. 50 – Pension Disclosures. GASB Statement No. 25 and No. 50 establish a financial reporting framework for defined benefit plans.

GASB has issued two new statements, Statement No. 67 – Financial Reporting for Pension Plans (an amendment of GASB Statement No. 25), and Statement No. 68 – Accounting and Financial Reporting for Pensions (an amendment of GASB Statement No. 27). Statement No. 67 is effective for fiscal years beginning after June 15, 2013, while Statement No. 68 is effective for fiscal years beginning after June 15, 2014. Statement No. 67 applies to financial reporting by pension plans, while Statement No. 68 applies to accounting and financial reporting by state and local governments for pensions. This report includes information relative to reporting requirements of GASB Statement No. 67 while information relative to reporting requirements of GASB Statement No. 68 is prepared in a separate report.

In addition to two required statements regarding System assets, the statement requires four schedules and accompanying notes disclosing information relative to provisions of the System, assumptions used to measure the total pension liability, the funded status of the System and historical contribution patterns.

- The Schedule of Changes in Net Pension Liability provides changes in the total pension liability, the plan's fiduciary net position and the net pension liability.
- The Schedule of Net Pension Liability provides the net pension liability as a percentage of covered payroll.
- The Schedule of Employer Contributions provides historical information about the
 Actuarially Determined Contribution (ADC) and the percentage of the ADC that was
 actually contributed. For the System, the ADC is equal to the normal contribution rate
 multiplied by the covered payroll for the year. This is the total ADC before any adjustment
 for minimum contribution rates or state contributions.
- The Schedule of Investment Returns presents the annual money-weighted rate of return on pension plan investments. This information is prepared in a separate report.

Comments on the Valuation

Covered Members

Ages of Active Members – The average age of the active members has slightly increased. The average age of members included in the valuation was 41.0 for the current year and 40.8 in the prior year.

Service of Active Members – The average service of the active members has slightly increased. The average service of members included in the valuation was 13.7 for the current year and 13.5 in the prior year.

Participating Compensation and Members – Total participating compensation increased from \$258,425,211 to \$266,265,413, a 3.0% increase. The number of active members increased from 3,866 in 2013 to 3,885 in 2014.

Average Annual Compensation – The average compensation of active members is more than the average compensation for the prior year. The average compensation was \$66,846 for 2013 and \$68,537 in 2014.

Ages of New Service Retirement Members – The average age of active members who elected service retirement has increased. The average age of new service retirements was 59.3 for the current year and 57.7 in the prior year.

This section of the report provides information concerning the valuation of System assets and liabilities and determination of recommended contributions. The following is a brief description of the following pages and of how the information is organized.

Assets – System assets are amounts that have accumulated and will be used to meet future benefit obligations. In the Assets exhibit, trust fund transactions reported by the System are traced from the prior valuation date to the current valuation date. In addition, the actuarial value of assets is developed based on the adopted method.

Actuarial Accrued Liability – The actuarial accrued liability is equal to the sum of the individual accrued liabilities for all System members. Each member's accrued liability equals the actuarial present value of all future benefits less the actuarial present value of all future normal costs.

Unfunded Actuarial Accrued Liability – The unfunded actuarial accrued liability on the valuation date is equal to the excess of the System's actuarial accrued liability over the System's actuarial value of assets.

Annual Normal Cost – The annual normal cost is the portion of total System costs assigned to the current plan year by the actuarial cost method.

Annual Contributions – The recommended annual contribution is defined by the rate of contribution and covered payroll. The System's contribution rate by statute may not be less than 17% of covered payroll. As of July 1, 2011 the determination changed from the Aggregate cost method to the Entry Age Normal cost method with a 25 year level dollar amortization of unfunded actuarial accrued liability on an open basis. As of July 1, 2013, the determination changed to the Entry Age Normal Method with a 25-year level dollar amortization of unfunded actuarial accrued liability on a closed, layered basis. The recommended contribution rate consists of the normal cost plus amortization of the unfunded actuarial accrued liability less member contributions less state contributions, divided by the covered payroll.

Unfunded Accrued Liability Payments – One of the components included to determine the recommended annual contribution is the unfunded accrued liability payment. The unfunded accrued liability payment is an annual amount that will amortize the initial unfunded accrued liability and any subsequent annual changes in the unfunded accrued liability due to System amendments, changes in actuarial assumptions and actuarial gains/losses.

Actuarial Gain/(Loss) – Actuarial gains and losses indicate the extent to which actual experience is deviating from that expected on the basis of the actuarial assumptions. Actuarial gains result from experience more favorable than assumed and reduce the unfunded actuarial accrued liability. Actuarial losses result from experience less favorable than assumed and increase the unfunded actuarial accrued liability.

Actuarial Present Value of Accrued Benefits – Another objective of preparing the actuarial valuation is to evaluate the funding status of the System. A comparison of the market value of assets with the actuarial present value of accrued benefits is displayed for the current and prior year.

Assets - Market Value

Year Ending June 30, 2014

Market Value of Assets at June 30, 2013		\$1,964,266,618
Receipts		
Member Contributions	\$ 24,054,541	
Cities Contributions	76,917,460	
State Contributions	0	
Investment Income	375,603,773	
Investment Management Expenses	(16,923,091)	
Other Income	43,859	
Total Receipts		\$ 459,696,542
Disbursements		
Benefit Payments to Members	\$ (142,640,646)	
Termination Withdrawals	(1,192,922)	
Administrative Expenses	(1,553,740)	
Disability Expenses	(105,859)	
Other Expenses	(13,070)	
Total Disbursements		\$ (145,506,237)
Market Value of Assets at June 30, 2014		\$2,278,456,923

Assets - Actuarial Value

Year Ending June 30, 2014

1.	Actuarial Value of Assets at July 1, 2013	\$1,860,947,878
2.	Contributions for 2013 Plan Year (Members, Cities and State)	100,972,001
3.	Benefit distributions and refunds for 2013 plan year	(143,833,568)
4.	Noninvestment Expenses a. Administrative Expenses b. Disability Expenses c. Other Expenses d. Total	(1,553,740) (105,859) (13,070) (1,672,669)
5.	Expected return on Market Value of Assets for year at 7.5%	145,680,154

6. Asset gains/(losses) for prior five plan years*

				(i) Asset gain <u>or (loss)</u>	Years <u>Recognized</u>	Years Remaining	(ii) Recognition <u>Percentage</u>	(i) x (ii) Recognized <u>Amount</u>
	b. c.	2013 2012 2011 2010 2009 Total	\$	213,044,387 97,564,609 (131,368,417) 235,933,207 48,578,626	1 2 3 4 5	4 3 2 1 0	20.000% 20.000 20.000 20.000 20.000	\$ 42,608,877 19,512,922 (26,273,683) 47,186,641 9,715,725 92,750,482
7.	As	set gains	s/(lo	sses) to be reco	ognized = (6f)			92,750,482
8.				e of Assets at Ju) + (4d) + (5) + (•			\$2,054,844,278

^{*}Effective July 1, 2008, the period over which asset gains or losses to be recognized increased from four to five years.

Unfunded Actuarial Accrued Liability

The unfunded actuarial accrued liability is the amount the actuarial accrued liability exceeds the actuarial value of plan assets determined as of the actuarial valuation date. The unfunded actuarial accrued liability is reduced during a year when System funding exceeds the annual normal cost and interest accrued on the prior year unfunded accrued liability. The unfunded actuarial accrued liability is also reduced (increased) when the investment return on System assets exceeds (is less than) the assumed investment return. The actuarial accrued liability is increased if there are amendments that revise benefits payable from the System. The actuarial accrued liability may be increased or decreased as the result of System experience or if there are changes in the actuarial assumptions used to determine annual contributions.

		As of July 1,		
		<u>2013</u>	<u>2014</u>	
1.	Actuarial Accrued Liability before changes			
	a. Active members			
	Service retirements/DROP	\$840,429,105	\$883,537,548	
	Ordinary disability	14,451,905	19,548,505	
	Accidental disability	147,787,360	124,061,238	
	Ordinary death	5,036,729	5,224,878	
	Accidental death	5,353,321	3,360,545	
	Withdrawal	21,862,842	21,279,758	
	Total Active	1,034,921,262	1,057,012,472	
	b. Inactive members			
	Members receiving benefits	1,495,686,601	1,514,329,690	
	Deferred vested terminations	36,563,110	36,871,674	
	Refund of member contributions due	60,316	124,676	
	Total Inactive	1,532,310,027	1,551,326,040	
	Total Astronial Assumed District	0.507.004.000	0.000.000.510	
	c. Total Actuarial Accrued Liability	2,567,231,289	2,608,338,512	
0	Actuarial Value of Plan Assets	1 060 047 070	0.054.044.070	
۷.	Actuarial value of Plan Assets	1,860,947,878	2,054,844,278	
2	Unfunded Actuarial Accrued Liability before changes			
٥.	=[Excess of (1) over (2)]	706,283,411	553,494,234	
	-[Excess of (1) over (2)]	700,200,411	330,737,207	
4	Change in Unfunded Actuarial Accrued Liability			
•••	a. Change in System Provisions	0	0	
	b. Change in Actuarial Assumptions	(49,002,711)	32,616,664	
	5. 5	(10,002,11)	32,3.3,001	
5.	Unfunded Actuarial Accrued Liability after changes	657,280,700	586,110,898	

Annual Normal Cost

The annual normal cost is the portion of the total System costs assigned to the current year by the Actuarial Cost Method.

		As of July 1,	
		<u>2013</u>	<u>2014</u>
1.	Annual Normal Cost		
	Benefit Normal Cost	\$48,020,046	\$49,893,939
	Other	0	0
	Total	48,020,046	49,893,939
2.	Annual Participating Payroll	258,425,211	266,265,413
3.	Annual Normal Cost as a Percentage of		
	Participating Payroll = (1) / (2)	18.58%	18.74%

Annual Contributions

Preliminary Total Contribution	As <u>2013</u>	s of July 1, 2014
Tremmary Total Contribution	<u> 2010</u>	2014
Annual Normal Cost	\$48,020,046	\$49,893,939
2. Estimated Member Contributions	24,291,970	25,028,949
3. Unfunded Actuarial Accrued Liability Amortization Payment	54,851,249	49,082,088
4. Total (Cities plus State) Contribution = (1) - (2) + (3)	78,579,325	73,947,078
Cities' Contribution		
5. Preliminary Total Contribution = (4)	78,579,325	73,947,078
6. Estimated State Contribution	0	0
7. Preliminary Cities' Contribution = $(5) - (6)$	78,579,325	73,947,078
8. Covered Payroll	258,425,211	266,265,413
9. Cities' Contribution as a percent of payroll = (7) / (8)	30.41%	27.77%
10. Minimum required contribution rate for Cities	17.00%	17.00%
11. Cities' Contribution = [Greater of (9) or (10)] x (8)	78,587,107	73,941,905

Unfunded Accrued Liability Payments

One of the components included to determine the recommended contribution is the Unfunded Accrued Liability Payment. The Unfunded Accrued Liability Payment is an annual amount that will amortize over 25 years on a closed, layered level dollar basis:

- The unfunded accrued liability established as of July 1, 2013.
- An increase in unfunded accrued liability if System benefits are improved through amendments.
- An increase or decrease in the unfunded accrued liability associated with a change in actuarial assumptions.
- An increase or decrease in the unfunded accrued liability resulting from actuarial gains or losses due to System experience more or less favorable than expected.

This section of the report documents the amortization bases established for the System and displays other values associated with determining the unfunded accrued liability payment.

Amortization Base	Date Established	Source of Base
\$ 657,280,700	July 1, 2013	Initial Unfunded
(101,748,328)	July 1, 2014	Actuarial Gain
32,616,664	July 1, 2014	Assumption Change

Charge Bases

Initial		Remaining Term	Amortization
Amortization Base	Initial Term-Years	on Valuation Date	Payment
\$ 657,280,700	25	24	\$54,851,249
32,616,664	25	25	2,721,919
		Total	\$57,573,168

Credit Bases

Initial Amortization Base	Initial Term-Years	Remaining Term on Valuation Date	Amortization Payment
101,748,328	25	25	\$8,491,080
		Total	\$8,491,080

Net Amortization Payment \$49,082,088

Actuarial Gain/(Loss)

Expected Unfunded Actuarial Accrued Liability

1.	Expected	Actuarial	Accrued	Liability
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	· ·	
	Actuarial Accrued Liability on July 1, 2013	\$2,518,228,578
	Normal Cost	48,020,046
	Benefit Distributions	(143,833,568)
	Interest on above at 7.50% to June 30, 2014	187,172,397
	Total	2,609,587,453
2.	Expected Assets	
	Actuarial Value of Assets on July 1, 2013	\$1,860,947,878
	Contributions	100,972,001
	Benefit Distributions and Noninvestment Expenses	(145,506,237)
	Interest on above at 7.50% to June 30, 2014	137,931,249
	Total	1,954,344,891
3.	Expected Unfunded Actuarial Accrued Liability on June 30, 2014	655,242,562
Ac	tual Unfunded Actuarial Accrued Liability	
1.	Actuarial Accrued Liability Before Changes	2,608,338,512
2.	Actuarial Value of Assets	2,054,844,278
3.	Actual Unfunded Actuarial Accrued Liability on July 1, 2014 (1) – (2)	553,494,234
Ac	tuarial Gain or (Loss)	
1.	Expected Unfunded Actuarial Accrued Liability	655,242,562
2.	Actual Unfunded Actuarial Accrued Liability	553,494,234
3.	Actuarial Gain or (Loss) for 2014 Fiscal Year (1) – (2)	101,748,328

Actuarial Present Value of Accrued Benefits

			As of July 1,	
			<u>2013</u>	<u>2014</u>
1.	Pres	ent value of vested accrued benefits		
	a.	Present value of vested accrued benefits for active members	\$ 758,838,855	\$ 801,692,387
	b.	Present value of benefits for terminated members	35,983,572	37,334,678
	C.	Present value of benefits being paid to retirees and beneficiaries	1,469,487,548	1,535,499,420
		Total	\$2,264,309,975	\$2,374,526,485
2.	Pres	ent value of accrued nonvested benefits	27,860,956	29,434,334
3.		ent value of all accrued benefits + (2)	\$2,292,170,931	\$2,403,960,819
4.	Mark	ket value of assets	\$1,964,266,618	\$2,278,456,923
5.		o of market value of assets to the present value I accrued benefits = $(4) \div (3)$	85.69%	94.78%
6.		o of market value of assets to the present value ested accrued benefits = $(4) \div (1)$	86.75%	95.95%

Change in Actuarial Present Value of Accrued Benefits

The change in actuarial present value of accrued benefits due to various factors including benefits accumulated, the passage of time, benefits paid, changes in assumptions and changes in System provisions is displayed below.

Actuarial present value of accrued benefits on July 1, 2013 \$2,2		
Change in present value of accrued benefits from July 1, 2013 to July 1, 2014 due to:		
 Additional benefits accumulated Interest due to passage of time Benefits paid Change in assumptions Changes in System provisions 	\$ 58,833,753 166,616,570 (143,833,568) 30,173,133 0	
Actuarial present value of accrued benefits on July 1, 2014	\$2,403,960,819	

System Demographic Experience

During the plan year July 1, 2013 to June 30, 2014, actual demographic experience differed from that expected by the actuarial assumptions, as summarized below.

Decrement Type	Expected	Actual
Actives		
Service Retirement	42	19
Accidental Disability	33	21
Ordinary Disability	7	5
Accidental Death	1	3
Ordinary Death	2	1
Withdrawal	73	77
DROP Participation	62	31
DROP Premature Withdrawal	7	3
DROP Retirement	38	35
Inactives		
Beneficiary Death	44	52
Disabled Death	36	27
Retirement Death	64	44
Vested Termination Death	1	0

Overview of GASB Statement No. 67

This section of the report provides information concerning the reporting of System assets and liabilities under GASB Statement No. 67, "Financial Reporting for Pension Plans (an Amendment of GASB Statement No. 25)," which is effective for fiscal years beginning after June 15, 2013. GASB Statement No. 67 supersedes several previously issued statements.

GASB Statement No. 67 establishes financial reporting standards for state and local government defined benefit pension plans. The statement requires financial statements and accompanying notes to disclose information relative to the funded status of the System and historical contribution patterns.

- The schedule of net pension liability presents System assets, liabilities and funded
 percentages as of the end of the reporting period. Also included are the actuarial
 assumptions used in determining the total pension liability and sensitivity of the net pension
 liability to changes in the discount rate.
- The schedule of changes in net pension liability provides changes in the total pension liability, the System's fiduciary net position and the net pension liability.
- The schedule of contributions provides historical information about the actuarially determined contribution, the contributions actually contributed and the contributions as a percentage of covered payroll.
- Notes to the financial statements should also include description of benefits provided,
 System investment information and significant assumptions used to calculate total pension liability.

Net Pension Liability

The components of the net pension liability of the System at June 30, 2014 were as follows:

 Total Pension Liability
 \$ 2,640,955,176

 Plan Fiduciary Net Position
 (2,278,456,923)

 Net Pension Liability
 362,498,253

Plan Fiduciary Net Position as a percentage of the Total Pension Liability 86.27%

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability, calculated using the current discount rate of 7.50%, as well as the net pension liability calculated using a discount rate that is 1-percentage point lower (6.50%) or 1-percentage point higher (8.50%) than the current rate:

	1%	Current	1%
	Decrease	Discount Rate	Increase
	6.50%	7.50%	8.50%
Total Pension Liability	\$2,973,518,273	\$2,640,955,176	\$2,364,625,165
Plan Fiduciary Net Position	(<u>2,278,456,923</u>)	(<u>2,278,456,923</u>)	(<u>2,278,456,923</u>)
Net Pension Liability	695,061,350	362,498,253	86,168,242

Schedule of Changes in Net Pension Liability

	Fiscal 2014	Year Ending Jui 2013	ne 30 2012
Total Pension Liability			_
Service Cost	48,020,046	47,487,380	45,660,053
Interest	187,172,397	185,532,855	177,678,499
Changes of Benefit Terms	, ,	0	0
Difference between Expected and Actual Experience	(1,248,941)	(22,020,082)	14,628,549
Changes of Assumptions	32,616,664	(49,002,711)	0
Benefit Payments, including refunds	(143,833,568)	(137,617,880)	(132,611,997)
Net Change in Total Pension Liability	122,726,598	24,379,562	105,355,104
Total Pension Liability – Beginning of Year	2,518,228,578	2,493,849,016	2,388,493,912
Total Pension Liability – End of Year	2,640,955,176	2,518,228,578	2,493,849,016
Plan Fiduciary Net Position Contributions – Employer and State	76,917,460	65,327,766	60 661 604
Contributions – Employer and State Contributions – Member	24,054,541	23,358,844	62,661,684
Net Investment Income	358,680,682	23,356,644	23,419,864 4,057,940
Benefit Payments, including refunds	(143,833,568)	(137,617,880)	(132,611,997)
Administrative Expenses	(1,553,740)	(1,523,477)	(1,606,072)
Other	(75,070)	(99,223)	(98,573)
Net Change in Plan Fiduciary Net Position	314,190,305	179,038,105	(44,177,154)
Net Change in Flan Flad thuckary Net Fosition	314,190,303	179,030,103	(44,177,134)
Plan Fiduciary Net Position – Beginning of Year	1,964,266,618	1,785,228,513	1,829,405,667
Plan Fiduciary Net Position – End of Year	2,278,456,923	1,964,266,618	1,785,228,513
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Net Pension Liability – End of Year	362,498,253	553,961,960	708,620,503
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	86.27%	78.00%	71.59%
Covered-Employee Payroll*	255,370,044	250,107,112	250,047,187
Net Pension Liability as a Percentage of the Covered-Employee Payroll	141.95%	221.49%	283.39%

^{*}Actual for noted period as provided by the System.

Schedule of Contributions

	Fiscal Year Ending June 30		
	2014	2013	2012
Actuarially Determined Contribution	\$76,917,460	\$65,327,766	\$61,911,684
Contributions in Relation to the Actuarially Determined Contribution	76,917,460	65,327,766	61,911,684
Contribution Deficiency/ (Excess)	0	0	0
Covered-Employee Payroll*	255,370,044	250,107,112	250,047,187
Contributions as a Percentage of Covered-Employee Payroll	30.12%	26.12%	24.76%

^{*}Actual for noted period as provided by the System.

Methods and Assumptions for Actuarially Determined Contribution

Actuarially determined contribution rates are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported.

Valuation Date July 1, 2014 Entry Age Normal Actuarial Cost Method 5-Year Smoothed Market Asset Valuation Method **Amortization Method** Level Dollar, Closed, Layered **Amortization Period** 25 Years Salary Increases 4.50% to 15.11% Investment Rate of Return 7.50% Mortality Table Weighting equal to 2/12 of the 1971 GAM table and 10/12 of the 1994 GAM table with no projection of future mortality improvement.

Actuarial Assumptions

The total pension liability was determined by the following actuarial assumptions:

Investment Rate of Return 7.50%
Discount Rate 7.50%
Inflation Rate 3.00%

Salary Increases 4.50% to 15.11%

Mortality Table Weighing equal to 2/12 of the 1971 GAM

table and 10/12 of the 1994 GAM table with no projection of future mortality improvement.

Actuarial Cost Method Entry Age Normal

Discount Rate

The discount rate used to measure the total pension liability as of June 30, 2014 was 7.50%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at 9.40% of covered payroll and the City contributions will be made at rates equal to the difference between actuarially determined rates and the member rate. Based on those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on System investments was applied to all periods of projected benefit payments to determine the total pension liability.

Summary of Actuarial Assumptions

7.5%.

Interest Rate

Salary Increase Rates Rates varying based on age. Annual rates at

sample ages are displayed below:

<u>Age</u>	<u>Rate</u>
20	15.11%
25	10.41%
30	7.14%
35	5.35%
40	4.95%
45 or Over	4 50%

Mortality Rates

Pre-retirement Mortality

• Ordinary

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
20	0.02%
25	0.02
30	0.03
35	0.04
40	0.05
45	0.07
50	0.10
55	0.13
60	0.19
65	0.25

Accidental

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
20	0.02%
25	0.01
30	0.01
35	0.01
40	0.01
45	0.02
50	0.05
55	0.09
60	0.15
65	0.28

Summary of Actuarial Assumptions (continued)

Post-retirement Mortality

Ordinary

A weighting equal to 2/12 of the 1971 Group Annuity Mortality Table, Male and Female and 10/12 of the 1994 Group Annuity Mortality Static Table, Male and Female with no projection of future mortality improvement.

Disabled

A weighting equal to 2/12 of the 1971 Group Annuity Mortality Table – Male, set forward three years and 10/12 of the 1994 Group Annuity Mortality Static Table – Male, set forward three years with no projection of future mortality improvement.

Disability Rates

Ordinary

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
20	0.08%
25	0.08
30	0.08
35	0.10
40	0.14
45	0.18
50	0.24
55	0.34
60	0.71
65	1.45

Accidental

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
20	0.10%
25	0.10
30	0.10
35	0.10
40	0.27
45	0.62
50	1.18
55	2.69
60	5.51
65	6.41

Summary of Actuarial Assumptions (continued)

Turnover Rates

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
20	7.11%
25	5.81
30	4.51
35	2.71
40	1.08
45	0.20
50	0.20
55	0.00
60	0.00
65	0.00

Retirement Age

Rates varying by age for those not eligible for DROP – Sample rates:

<u>Age</u>	<u>Rate</u>
55	50%
56	25
57-60	20
61	25
62	30
63	35
64	40
65	100%

DROP

Participation

All members initially eligible for DROP at age 62 or younger elect to participate. No member initially eligible for DROP after age 62 would elect to participate.

Period of Participation

3 years.

Investment Return on Accounts

1.0%.

Benefit Distribution

Lump Sum.

Retirement Age

All members initially eligible for DROP at age 62 or younger enter DROP when first eligible. No change in retirement age for members who initially become eligible for DROP after age 62.

Voluntary Premature Withdrawal

5% per year while participating in DROP.

Summary of Actuarial Assumptions (continued)

Administrative Expenses None explicitly assumed.

Active Members

Percentage Married 85%.

Wives are three years younger than husbands, Spouses' Age

including inactive members whose beneficiary

age is unavailable.

Number of Children 2.5 per couple.

Participating Payroll Actual annualized earnable compensation

reported for prior plan year increased to the current plan year based on the System's

assumed salary increase rate.

Inactive Members Percentage Married

(50% J & S Annuity Form Only)

80%.

Summary of Actuarial Methods

Actuarial Cost Method

The Entry Age Normal Actuarial Cost Method was used to determine recommended contributions. Using this method, the annual contribution consists of a normal cost and an unfunded accrued liability payment.

The normal cost is determined as the sum of the individual normal costs for each active System member. A normal cost accrual rate is determined for each member. The accrual rate is equal to the actuarial present value of future benefits determined as of the member's entry age, divided by the actuarial present value of the assumed salaries paid to the member from entry age to retirement age. The normal cost accrual rate is multiplied by current salary to provide the member's individual normal cost.

The actuarial accrued liability is the sum of the individual actuarial accrued liabilities for all System members. Each member's actuarial accrued liability equals the actuarial present value of future benefits, less the actuarial present value of the member's normal costs payable in the future. These present values are calculated at the member's attained age. The unfunded actuarial accrued liability less the actuarial value of plan assets. The unfunded actuarial accrued liability payment is the amount payable toward the amortization of the unfunded actuarial accrued liability. The unfunded actuarial accrued liability is amortized over 25 years on a level dollar, closed layered basis.

At the end of each year, a determination of actuarial gains and losses is made. Actuarial gains and losses indicate the extent to which actual experience is deviating from that expected on the basis of the actuarial assumptions. Actuarial gains result from experience more favorable than assumed and reduce the unfunded actuarial accrued liability. Actuarial losses result from experience less favorable than assumed and increase the unfunded actuarial accrued liability.

Actuarial Asset Valuation Method

The preliminary actuarial value is equal to the prior year's actuarial value (starting with the market value as of July 1, 1992) adjusted for contributions, disbursements and expected return on investments. The preliminary value is then adjusted by 20% of any investment gains or losses during the five prior plan years.

However, any investment gains or losses prior to 2008 were previously being recognized over four years. Effective July 1, 2008, these remaining unrecognized investment gains or losses are recognized over a total of five years. This results in the preliminary value of assets adjusted by the following percentages of any investment gains or losses prior to the 2008 plan year.

2007	20.000%
2006	18.750
2005	16.667
2004	12.500

Summary of System Provisions

The System was established, effective January 1, 1992, by Chapter 411 of the Code of Iowa by combining each city's fire retirement system and police retirement system into a single statewide retirement system for fire fighters and police officers. Plan amendments through July 1, 2014 are reflected in this summary.

Participation Each person who becomes a permanent full-time

police officer or fire fighter in a participating city.

Membership Service From date of employment to date of separation

from employment.

Earnable Compensation The annual compensation which a member

receives for services rendered as a police officer or fire fighter in the course of employment with a participating City, except for amounts received for overtime, meal or travel expenses, uniform allowances, fringe benefits, severance pay, mandatory deferred compensation, and

accumulated sick leave or vacation pay.

Contributions

Members The following percentages of Earnable

Compensation:

Effective Date	<u>Percentage</u>
October 16, 1992	6.10%
July 1, 1993	7.10
July 1, 1994	8.10
January 1, 1995	8.35
July 1, 1995	9.35
July 1, 2009	9.40

Cities The amount actuarially determined necessary to

fund the benefits in accordance with accepted actuarial principles but not less than 17% of the Earnable Compensation of the active members.

State The annual appropriation expected from the State

of Iowa to fund benefits is \$0.

Average Final Compensation The average Earnable Compensation of the

member during the three years of service the member earned their highest salary as a police

officer or fire fighter.

Service Retirement Benefit

DROP Account

Eligibility After age 55 and completion of 22 years of service.

Benefit Monthly annuity equal to 66.0% of Average Final

Compensation plus 2.0% of Average Final

Compensation for each year of service in excess of 22 years (up to 8 additional years). The maximum benefit is 82.0% of Average Final Compensation.

DROP Benefit

Eligibility After age 55 and completion of 22 years of service.

Participation Date First day of the month following the month in which

a member applies for participation.

Participation Period A three, four or five year participation period except

during the 24 months immediately following April 1, 2007, members between ages 62 and 64 with at least 22 years of service may enroll for a one or two

year participation period.

Chapter 411 Benefit Monthly benefit determined based on the period of

service and Average Final Compensation through the quarter of membership service immediately preceding the DROP participation date elected.

proceding the British participation date elected.

An account established for each member enrolled which will have a portion of the Chapter 411 Benefit

credited to it for the duration of the selected participation period. The portion shall be equal to

the sum of:

(a) A "minimum percentage" of 52% multiplied by

the Chapter 411 Benefit, plus

(b) An "adjustment percentage" of 2% for each month up to 24 months between the date the member elects to participate in DROP and the date the member was initially eligible to participate, multiplied by the Chapter 411

Benefit.

DROP Benefit (continued)

Member Contributions Member's contributions will be contributed to the

general System assets during the member's

participation period.

City Contributions Cities' contributions equal to the normal

contribution rate determined annually but never less than 17% of Earnable Compensation will be contributed to the general System assets during the

member's participation period.

Investment Return Earnings and capital gains or losses on the

investments shall be credited to the general System assets and not to the individual member DROP

Accounts.

Benefit Escalation The applicable escalator provisions apply from the

member's actual date of retirement at the end of the DROP participation period. No escalation will occur during the DROP participation period.

Benefit Distributions At the actual date of retirement, the member's

DROP Account will be payable, upon application by the member, in the form of a lump sum distribution or rollover to an eligible plan. The regular Chapter 411 Benefit will commence on the member's actual

date of retirement.

Premature Withdrawal and

Accrual of Benefit

An amount equal to 75% of the member's DROP benefit shall accrue to the benefit of the member for each month of DROP participation. An amount equal to 25% of the member's accumulated DROP benefit shall accrue to the benefit of the member upon either: (1) completion of the selected participation period, or (2) termination of

participation due to becoming eligible for a disability

benefit, or (3) death prior to completion of the

selected participation period.

Termination Benefit

Eligibility At least 4 years of service upon termination of

membership before age 55, but less than 22 years of service upon termination of membership after

age 55.

Termination Benefit (continued)

Benefit

Monthly annuity payable at age 55 or current age, if later, equal to 66.0% of Average Final Compensation plus 2.0% of Average Final Compensation for each year of service in excess of 22 years (up to 8 additional years), if any, times a ratio equal to service at termination divided by 22 (ratio not to exceed 1.0).

Effective July 1, 1990, members who terminate service, other than by death or disability, can elect to withdraw their accumulated contributions with interest in lieu of any benefits to which the member may be entitled to from the System.

Ordinary Disability Benefit

Eligibility

A member in good standing at any age and any length of service.

Benefit

Monthly annuity payable upon disability equal to either (a) or (b) below, but no less than (c):

- (a) If service at disability is greater than or equal to 5, 50% of Average Final Compensation; or
- (b) If service at disability is less than 5 years, 25% of Average Final Compensation;
- (c) The benefit determined using the Service Retirement formula based on service and Average Final Compensation at the date of disability.

Accidental Disability Benefit

Eligibility

A member in good standing at any age and any length of service.

Benefit

A monthly annuity equal to 60% of Average Final Compensation but no less than the benefit determined using the Service Retirement formula based on service and Average Final Compensation at the date of disability.

Ordinary Death Benefit

Eligibility

Benefit

For members in service: any age and any length of service.

For member not in service: 4 years of service.

Upon death of the member, either (a) or (b) below:

- (a) A lump sum equal to 50% of Earnable Compensation during the last year of employment; or
- (b) A monthly annuity equal to 40% of average final compensation but not less than 20% of the average Earnable Compensation of an active member of the System, as reported by the actuary. For a member not in service, the monthly annuity is payable on the date the member would have reached age 55, except if there is a dependent child, it is paid immediately upon death of the member.

For each dependent child, an additional benefit equal to 6% of the average Earnable Compensation of an active member of the System, as reported by the actuary. This benefit is payable until the child reaches age 18 or 22 (if a full-time student) or payable for life if the child is disabled.

Accidental Death Benefit

Eligibility

Death from causes sustained in the line of duty.

Benefit

A monthly annuity equal to 50% of Average Final Compensation payable to surviving spouse, dependent child or dependent parents. In addition, a lump sum of \$100,000 is payable to the surviving spouse, adult child, dependent child or dependent parents if death is due to a traumatic personal injury incurred in the line of duty.

For each dependent child, an additional benefit equal to 6% of the average Earnable Compensation of an active member of the System, as reported by the actuary.

Death After Retirement

Eligibility Death of member while receiving a service (basic

benefit only), ordinary, accidental or vested (basis

benefit only) retirement.

Benefit To surviving spouse, 50% of the gross monthly

benefit of the retired member but not less than 20% of the average Earnable Compensation of an active member of the System, as reported by the actuary.

For each dependent child, an additional benefit

equal to 6% of the average Earnable

Compensation of an active member of the System,

as reported by the actuary.

Annual Escalator Benefit

Eligibility All retired members, except for vested retirements,

and for beneficiaries, except for beneficiaries of

vested retirements.

Benefit The monthly pension benefit is increased each

July 1 by the sum of (a) plus (b) below:

(a) The previous monthly benefit multiplied by

1.5%, and

(b) An additional dollar amount from the table below based on the number of years the

member has been retired.

<u>Amount</u>	Years of Retirement
\$15	Less than 5
20	5-9
25	10-14
30	15-19
35	20 or More

Normal Form of Benefit

Married Joint and 50% Survivor Annuity.

Single Life Only Annuity.

	July 1,		
	<u>2012</u>	<u>2013</u>	<u>2014</u>
Active Members			
Number	3,888	3,866	3,885
Average Attained Age	40.8	40.8	41.0
Average Past Service	13.5	13.5	13.7
Total Annual Compensation	\$258,518,051	\$258,425,211	\$266,265,413
Average Annual Compensation	66,491	66,846	68,537
Non-Active Members in Pay Status			
Number	3,816	3,862	3,896
Average Age (excluding children)	68.8	68.9	69.2
Total Annual Benefits	\$126,248,796	\$133,363,968	\$138,974,424
Average Annual Benefit	33,084	34,532	35,671
Non-Active Members with Deferred Benefit	S		
Number*	296	315	321
Average Age	45.0	44.6	44.6
Total Annual Benefits	\$ 4,793,904	\$ 5,353,716	\$ 5,458,080
Average Annual Benefit	16,196	16,996	17,003

^{*} Excludes 18,14 and 24 terminated nonvested members who had not yet received a refund of contributions as of 2012, 2013 or 2014 respectively.

Reconciliation of Participant Counts

		Terminated	d In Pay Status			
	Active	Vested	Beneficiaries	Disabled	Retirees	Total
Number as of July 1, 2013	3,866	315	880	1,121	1,861	8,043
Change due to:						
New hires and rehires	192	0	0	0	0	192
Terminations	(57)*	41	0	0	0	(16)
Retirement	(57)	(19)	0	0	76	0
Disability	(26)	0	0	26	0	0
Death without Beneficiary	0	0	(52)	(7)	(15)	(74)
Death with Beneficiary	(4)	0	58	(20)	(29)	5
Refund Paid Out	(29)**	(16)	0	0	0	(45)
Benefit Aged Out	0	0	(3)	0	0	(3)
Other	0	0	0	1	(1)	0
Number as of July 1, 2014	3,885***	321	883	1,121	1,892	8,102

^{*} Four of the Terminations are from new hires during the period July 1, 2013 to June 30, 2014.

^{**} Five of the Refunds Paid Out are from new hires during the period July 1, 2013 to June 30, 2014.

^{***} One hundred-twenty-eight (128) of the Actives have elected to participate in DROP as of July 1, 2014.

Active Members—As of July 1, 2014

Years of Service

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total	Average Annual Salary
Under 25	96	1	0	0	0	0	0	0	97	\$51,122
25-29	343	113	0	0	0	0	0	0	456	\$57,250
30-34	218	338	84	0	0	0	0	0	640	\$62,041
35-39	87	199	292	77	0	0	0	0	655	\$66,532
40-44	24	90	215	297	58	0	0	0	684	\$70,737
45-49	12	45	92	164	200	75	0	0	588	\$73,326
50-54	6	14	32	73	134	154	54	3	470	\$77,570
55-59	3	2	8	22	32	60	63	38	228	\$80,630
60+	0	2	1	5	10	13	15	21	67	\$83,201
Total	789	804	724	638	434	302	132	62	3,885	
Average Annual Salary	\$54,906	\$65,044	\$68,663	\$73,016	\$76,857	\$80,504	\$85,472	\$87,132		\$68,537

Inactive Members—As of July 1, 2014

Service Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	166	\$10,009,044	\$60,295
60-64	355	19,450,068	54,789
65-69	355	18,468,072	52,023
70-74	274	12,081,096	44,092
75-79	185	7,016,820	37,929
80-84	138	4,645,476	33,663
Over 84	<u>116</u>	3,456,660	29,799
Total	1,589	\$75,127,236	\$47,280

Vested Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	84	\$1,723,752	\$20,521
60-64	91	1,676,544	18,424
65-69	61	988,596	16,206
70-74	28	418,092	14,932
75-79	21	194,376	9,256
80-84	12	100,212	8,351
Over 84	6	34,896	<u>5,816</u>
Total	303	\$5,136,468	\$16,952

Inactive Members—As of July 1, 2014

Accidental Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	14	\$ 502,176	\$35,870
40-44	28	985,404	35,193
45-49	37	1,325,196	35,816
50-54	60	2,271,276	37,855
55-59	120	5,214,096	43,451
60-64	194	8,064,096	41,568
65-69	177	7,002,792	39,564
70-74	143	5,269,536	36,850
75-79	88	3,132,420	35,596
80-84	51	1,638,108	32,120
Over 84	<u>31</u>	<u>984,588</u>	<u>31,761</u>
Total	943	\$36,389,688	\$38,589

Ordinary Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	7	\$ 165,000	\$23,571
40-44	9	257,196	28,577
45-49	13	355,260	27,328
50-54	17	541,308	31,842
55-59	22	747,648	33,984
60-64	38	1,368,876	36,023
65-69	31	1,082,100	34,906
70-74	20	614,136	30,707
75-79	16	455,064	28,442
80-84	3	73,020	24,340
Over 84	2	<u>48,372</u>	<u>24,186</u>
Total	178	\$ 5,707,980	\$32,067

Inactive Members—As of July 1, 2014

Beneficiaries (Spouse)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	4	\$ 112,296	\$28,074
40-44	5	101,400	20,280
45-49	14	323,004	23,072
50-54	13	273,540	21,042
55-59	41	927,420	22,620
60-64	72	1,743,492	24,215
65-69	82	1,766,664	21,545
70-74	112	2,286,600	20,416
75-79	136	2,520,804	18,535
80-84	140	2,502,864	17,878
Over 84	<u>222</u>	<u>3,810,372</u>	<u>17,164</u>
Total	841	\$16,368,456	\$19,463

Beneficiaries (Children)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 3	0	\$ 0	\$ 0
3-5	0	0	0
6-8	2	9,552	4,776
9-11	3	17,340	5,780
12-14	6	30,192	5,032
15-17	9	52,128	5,792
18-20	9	48,876	5,431
Over 20	<u>13</u>	86,508	<u>6,654</u>
Total	42	\$244,596	\$5,824

Inactive Members—As of July 1, 2014

Terminated Vested

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	90	\$1,064,016	\$11,822
40-44	53	765,192	14,438
45-49	70	1,334,172	19,060
50-54	107	2,293,476	21,434
Over 54	1	1,224	1,224
Total	321	\$5,458,080	\$17,003