Municipal Fire and Police Retirement System of Iowa

Required GASB 68 Reporting Information as of and for the Year Ended June 30, 2016, and Related Independent Auditor's Report

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Independent Auditor's Report

To the Board of Trustees Municipal Fire and Police Retirement System of Iowa Des Moines, Iowa

Report on Schedule of Allocations and Net Pension Amounts by Employer

We have audited the accompanying schedules of net pension liability (NPL) by city (proportionate share, share of NPL as of June 30, 2016, covered payroll, NPL as a percent of covered payroll) as of June 30, 2016, and the schedules of deferred inflows of resources by city (expected and actual experience, changes in assumptions, projected and actual earnings and total deferred inflows), deferred outflow of resources by city (expected and actual experience, changes in assumptions, projected and actual earnings and total deferred outflows), for the Municipal Fire and Police Retirement System of Iowa (the System) as of June 30, 2016 and the related schedule of pension expense by city (collectively the Schedules) for the year then ended, and the related notes to the Schedules.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of the Schedules in accordance with accounting principles generally accepted in the United States of America; this includes design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the Schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these Schedules based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedules are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedules. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Schedules, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to System's preparation and fair presentation of the Schedules in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedules.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the Schedules referred to above present fairly, in all material respects, the schedules of NPL by city (proportionate share, share of NPL as of June 30, 2016, covered payroll, NPL as a percent of covered payroll), deferred inflows of resources by city (expected and actual experience, changes in assumptions, projected and actual earnings and total deferred inflows), deferred outflow of resources by city (expected and actual experience, changes in assumptions, projected and actual earnings and total deferred outflows), and pension expense by city for the System as of and for the year ended June 30, 2016, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the System as of and for the year ended June 30, 2016, and our report thereon, dated October 10, 2016, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the System's management, the System's Board of Trustees, System employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Sally LLP
Boise, Idaho
March 30, 2017

NET PENSION LIABILITY (NPL) BY CITY AS OF JUNE 30, 2016

	Proportionate		Covered	NPL as % of Covered
City	Share (%)	Share of NPL	Payroll *	Payroll
Ames	2.649945%	\$ 16,569,071	\$ 7,181,004	230.73%
Ankeny	1.871985%	11,704,791	5,072,834	230.73%
Bettendorf	1.870615%	11,696,225	5,069,121	230.73%
Boone	0.587210%	3,671,588	1,591,259	230.73%
Burlington	1.802323%	11,269,222	4,884,059	230.73%
Camanche	0.243648%	1,523,436	660,254	230.73%
Carroll	0.299396%	1,872,006	811,324	230.73%
Cedar Falls	1.727939%	10,804,128	4,682,488	230.73%
Cedar Rapids	9.313457%	58,233,408	25,238,248	230.73%
Centerville	0.246358%	1,540,380	667,598	230.73%
Charles City	0.334988%	2,094,543	907,771	230.73%
Clinton	1.907349%	11,925,902	5,168,663	230.73%
Clive	0.601412%	3,760,394	1,629,748	230.73%
Council Bluffs	5.917475%	36,999,659	16,035,582	230.73%
Creston	0.289606%	1,810,793	784,794	230.73%
Davenport	8.113369%	50,729,727	21,986,166	230.73%
Decorah	0.288992%	1,806,954	783,130	230.73%
Des Moines	18.298304%	114,412,167	49,586,014	230.73%
Dewitt	0.233601%	1,460,616	633,028	230.73%
Dubuque	4.953285%	30,970,956	13,422,753	230.73%
Estherville	0.216914%	1,356,279	587,809	230.73%
Evansdale	0.122988%	768,996	333,281	230.74%
Fairfield	0.342413%	2,140,975	927,894	230.73%
Fort Dodge	1.464630%	9,157,759	3,968,955	230.73%
Fort Madison	0.710751%	4,444,048	1,926,042	230.73%
Grinnell	0.406216%	2,539,910	1,100,792	230.73%
Indianola	0.446484%	2,791,690	1,209,913	230.73%
Iowa City	3.697129%	23,116,697	10,018,732	230.73%
Keokuk	0.810360%	5,066,865	2,195,969	230.73%
Knoxville	0.276902%	1,731,360	750,368	230.73%
Lemars	0.343350%	2,146,833	930,433	230.73%
Maquoketa	0.220171%	1,376,643	596,635	230.73%
Marion	1.899570%	11,877,269	5,147,586	230.73%
Marshalltown	1.560279%	9,755,815	4,228,152	230.73%
Mason City	2.039407%	12,751,615	5,526,526	230.73%
Muscatine	1.721407%	10,763,285	4,664,787	230.73%
Newton	1.064467%	6,655,696	2,884,566	230.73%
Oelwein	0.221144%	1,382,721	599,269	230.73%
Oskaloosa	0.480584%	3,004,904	1,302,320	230.73%
Ottumwa	1.432455%	8,956,582	3,881,765	230.73%
Pella	0.334439%	2,091,116	906,286	230.73%
Sioux City	6.297523%	39,375,951	17,065,462	230.73%
Spencer	0.503138%	3,145,925	1,363,438	230.73%
Storm Lake	0.338812%	2,118,459	918,136	230.73%
Urbandale	1.936615%	12,108,897	5,247,973	230.73%
Waterloo	5.688362%	35,567,105	15,414,715	230.73%
Waverly	0.365764%	2,286,979	991,172	230.73%
Webster City	0.311967%	1,950,608	845,390	230.73%
West Des Moines	3.194504%	19,973,986	8,656,687	230.73%
Total	100.00%	\$ 625,260,934	\$ 270,986,891	

^{*} Represents reported covered payroll. Amount reported is based on pensionable payroll and not total payroll. Please consult your auditor when presenting covered payroll in your reports.

DEFERRED INFLOWS OF RESOURCES BY CITY AS OF JUNE 30, 2016

		Difference Between Expected		Difference Between	Contributions Made After	
	Proportionate	and Actual	Changes in	Projected and	Measurement	Total Deferred
City	Share (%)	Experience	Assumptions	Actual Earnings	Date	Inflows
Ames	2.649945%	\$ (15,366)	\$ (226,951)	\$ (2,257,759)	TBD	\$ (2,500,076)
Ankeny	1.871985%	(10,855)	(160,324)	(1,594,935)	TBD	(1,766,114)
Bettendorf	1.870615%	(10,847)	(160,207)	(1,593,768)	TBD	(1,764,822)
Boone	0.587210%	(3,405)	(50,291)	(500,303)	TBD	(553,999)
Burlington	1.802323%	(10,451)	(154,358)	(1,535,583)	TBD	(1,700,392)
Camanche	0.243648%	(1,413)	(20,867)	(207,589)	TBD	(229,869)
Carroll	0.299396%	(1,736)	(25,641)	(255,086)	TBD	(282,463)
Cedar Falls	1.727939%	(10,020)	(147,987)	(1,472,208)	TBD	(1,630,215)
Cedar Rapids	9.313457%	(54,006)	(797,640)	(7,935,085)	TBD	(8,786,731)
Centerville	0.246358%	(1,429)	(21,099)	(209,898)	TBD	(232,426)
Charles City	0.334988%	(1,942)	(28,690)	(285,410)	TBD	(316,042)
Clinton	1.907349%	(1,060)	(163,353)	(1,625,065)	TBD	(1,799,478)
Clive	0.601412%	` ' '	(51,507)	(512,404)	TBD	
Council Bluffs	5.917475%	(3,487)	` ' '	` ' '		(567,398)
		(34,313)	(506,795)	(5,041,701)	TBD	(5,582,809)
Creston	0.289606%	(1,679)	(24,803)	(246,745)	TBD	(273,227)
Davenport	8.113369%	(47,047)	(694,860)	(6,912,607)	TBD	(7,654,514)
Decorah	0.288992%	(1,676)	(24,750)	(246,222)	TBD	(272,648)
Des Moines	18.298304%	(106,104)	(1,567,136)	(15,590,193)	TBD	(17,263,433)
Dewitt	0.233601%	(1,355)	(20,006)	(199,029)	TBD	(220,390)
Dubuque	4.953285%	(28,722)	(424,218)	(4,220,209)	TBD	(4,673,149)
Estherville	0.216914%	(1,258)	(18,577)	(184,811)	TBD	(204,646)
Evansdale	0.122988%	(713)	(10,533)	(104,786)	TBD	(116,032)
Fairfield	0.342413%	(1,986)	(29,326)	(291,737)	TBD	(323,049)
Fort Dodge	1.464630%	(8,493)	(125,436)	(1,247,868)	TBD	(1,381,797)
Fort Madison	0.710751%	(4,121)	(60,871)	(605,561)	TBD	(670,553)
Grinnell	0.406216%	(2,356)	(34,790)	(346,097)	TBD	(383,243)
Indianola	0.446484%	(2,589)	(38,239)	(380,405)	TBD	(421,233)
Iowa City	3.697129%	(21,438)	(316,636)	(3,149,961)	TBD	(3,488,035)
Keokuk	0.810360%	(4,699)	(69,402)	(690,428)	TBD	(764,529)
Knoxville	0.276902%	(1,606)	(23,715)	(235,921)	TBD	(261,242)
Lemars	0.343350%	(1,991)	(29,406)	(292,535)	TBD	(323,932)
Maquoketa	0.220171%	(1,277)	(18,856)	(187,586)	TBD	(207,719)
Marion	1.899570%	(11,015)	(162,686)	(1,618,438)	TBD	(1,792,139)
Marshalltown	1.560279%	(9,048)	(133,628)	(1,329,361)	TBD	(1,472,037)
Mason City	2.039407%	(11,826)	(174,663)	(1,737,579)	TBD	(1,924,068)
Muscatine	1.721407%	(9,982)	(147,428)	(1,466,642)	TBD	(1,624,052)
Newton	1.064467%	(6,172)	(91,165)	(906,928)	TBD	(1,004,265)
Oelwein	0.221144%	(1,282)	(18,940)	(188,414)	TBD	(208,636)
Oskaloosa	0.480584%	(2,787)	(41,159)	(409,459)	TBD	(453,405)
Ottumwa	1.432455%	(8,306)	(122,681)	(1,220,455)	TBD	(1,351,442)
Pella	0.334439%	(1,939)	(28,643)	(284,943)	TBD	(315,525)
Sioux City	6.297523%	(36,517)	(539,344)	(5,365,503)	TBD	(5,941,364)
Spencer	0.503138%	(2,918)	(43,091)	(428,675)	TBD	(474,684)
Storm Lake	0.338812%	(1,965)	(29,017)	(288,669)	TBD	(319,651)
Urbandale	1.936615%	(11,230)			TBD	
			(165,859)	(1,650,000)		(1,827,089)
Waterloo	5.688362%	(32,985)	(487,173)	(4,846,496)	TBD	(5,366,654)
Waverly	0.365764%	(2,121)	(31,325)	(311,632)	TBD	(345,078)
Webster City West Des Moines	0.311967% 3.194504%	(1,809) (18,524)	(26,718) (273,589)	(265,797) (2,721,724)	TBD TBD	(294,324) (3,013,837)
Total	100.00%	\$ (579,866)	\$ (8,564,379)	\$ (85,200,210)		\$ (94,344,455)

DEFERRED OUTFLOWS OF RESOURCES BY CITY AS OF JUNE 30, 2016

		Difference Between Expected		Difference Between	Contributions Made After	
	Proportionate	and Actual	Changes in	Projected and	Measurement	Total Deferred
City	Share (%)	Experience	Assumptions	Actual Earnings	Date	Outflows
Ames	2.649945%	\$ 427,627	\$ 699,555	\$ 5,187,555	TBD	\$ 6,314,737
Ankeny	1.871985%	302,086	494,183	3,664,613	TBD	4,460,882
Bettendorf	1.870615%	301,865	493,821	3,661,931	TBD	4,457,617
Boone	0.587210%	94,759	155,016	1,149,525	TBD	1,399,300
Burlington	1.802323%	290,844	475,793	3,528,242	TBD	4,294,879
Camanche	0.243648%	39,318	64,320	476,968	TBD	580,606
Carroll	0.299396%	48,314	79,037	586,100	TBD	713,451
Cedar Falls	1.727939%	278,841	456,156	3,382,628	TBD	4,117,625
Cedar Rapids	9.313457%	1,502,930	2,458,646	18,232,100	TBD	22,193,676
Centerville	0.246358%	39,755	65,036	482,272	TBD	587,063
Charles City	0.334988%	54,057	88,433	655,773	TBD	798,263
Clinton	1.907349%	307,792	503,518	3,733,840	TBD	4,545,150
Clive						
	0.601412%	97,051	158,766	1,177,329	TBD	1,433,146
Council Bluffs	5.917475%	954,914	1,562,146	11,584,098	TBD	14,101,158
Creston	0.289606%	46,734	76,453	566,935	TBD	690,122
Davenport	8.113369%	1,309,269	2,141,837	15,882,798	TBD	19,333,904
Decorah	0.288992%	46,635	76,291	565,733	TBD	688,659
Des Moines	18.298304%	2,952,832	4,830,541	35,820,920	TBD	43,604,293
Dewitt	0.233601%	37,697	61,668	457,299	TBD	556,664
Dubuque	4.953285%	799,321	1,307,611	9,696,592	TBD	11,803,524
Estherville	0.216914%	35,004	57,263	424,633	TBD	516,900
Evansdale	0.122988%	19,847	32,467	240,762	TBD	293,076
Fairfield	0.342413%	55,256	90,393	670,311	TBD	815,960
Fort Dodge	1.464630%	236,350	386,646	2,867,172	TBD	3,490,168
Fort Madison	0.710751%	114,695	187,630	1,391,372	TBD	1,693,697
Grinnell	0.406216%	65,552	107,236	795,212	TBD	968,000
Indianola	0.446484%	72,050	117,867	874,041	TBD	1,063,958
Iowa City	3.697129%	596,612	976,000	7,237,528	TBD	8,810,140
Keokuk	0.810360%	130,769	213,926	1,586,367	TBD	1,931,062
Knoxville	0.276902%	44,684	73,099	542,066	TBD	659,849
Lemars	0.343350%	55,407	90,640	672,145	TBD	818,192
Maquoketa	0.220171%	35,529	58,123	431,009	TBD	524,661
Marion	1.899570%	306,537	501,465	3,718,614	TBD	4,526,616
Marshalltown	1.560279%	251,785	411,896	3,054,415	TBD	3,718,096
Mason City	2.039407%	329,103	538,380	3,992,360	TBD	4,859,843
Muscatine	1.721407%	277,787	454,432	3,369,841	TBD	4,102,060
Newton	1.064467%	171,775	281,007	2,083,809	TBD	2,536,591
Oelwein	0.221144%	35,686	58,379	432,911	TBD	526,976
Oskaloosa	0.480584%	77,553	126,869	940,795	TBD	1,145,217
Ottumwa	1.432455%	231,158	378,152	2,804,186	TBD	3,413,496
Pella	0.334439%	53,969	88,288	654,701	TBD	796,958
Sioux City	6.297523%	1,016,243	1,662,474	12,328,083	TBD	15,006,800
Spencer	0.503138%	81,192	132,823	984,947	TBD	1,198,962
Storm Lake	0.338812%	54,675	89,443	663,261	TBD	807,379
Urbandale	1.936615%	312,515	511,244	3,791,134	TBD	4,614,893
Waterloo	5.688362%	917,941	1,501,663	11,135,584	TBD	13,555,188
Waverly	0.365764%	59,024	96,558	716,023	TBD	871,605
Webster City	0.311967%	50,343	82,356	610,709	TBD	743,408
West Des Moines	3.194504%	515,503	843,313	6,253,587	TBD	7,612,403
Total	100.00%	\$ 16,137,185	\$ 26,398,859	\$ 195,760,829		\$ 238,296,873
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PENSION EXPENSE BY CITY FOR THE PERIOD ENDED JUNE 30, 2016

	Proportionate	Share of
City	Share (%)	Pension Expense
Ames	2.649945%	\$ 2,267,445
Ankeny	1.871985%	1,601,778
Bettendorf	1.870615%	1,600,606
Boone	0.587210%	502,450
Burlington	1.802323%	1,542,171
Camanche	0.243648%	208,480
Carroll	0.299396%	256,181
Cedar Falls	1.727939%	1,478,524
Cedar Rapids	9.313457%	7,969,130
Centerville	0.246358%	210,798
Charles City	0.334988%	286,635
Clinton	1.907349%	1,632,037
Clive	0.601412%	514,603
Council Bluffs	5.917475%	5,063,332
Creston	0.289606%	247,803
Davenport	8.113369%	6,942,265
Decorah	0.288992%	247,278
Des Moines	18.298304%	15,657,082
Dewitt	0.233601%	199,883
Dubuque	4.953285%	4,238,315
Estherville	0.216914%	185,604
Evansdale	0.122988%	105,235
Fairfield	0.342413%	292,988
Fort Dodge	1.464630%	1,253,221
Fort Madison	0.710751%	608,160
Grinnell	0.406216%	347,582
Indianola	0.446484%	382,037
Iowa City	3.697129%	3,163,476
Keokuk	0.810360%	
Knoxville	0.276902%	693,390
		236,933
Lemars	0.343350%	293,790
Maquoketa Marion	0.220171%	188,391
	1.899570%	1,625,381
Marshalltown	1.560279%	1,335,065
Mason City	2.039407%	1,745,034
Muscatine	1.721407%	1,472,935
Newton	1.064467%	910,819
Oelwein	0.221144%	189,223
Oskaloosa	0.480584%	411,215
Ottumwa	1.432455%	1,225,691
Pella	0.334439%	286,165
Sioux City	6.297523%	5,388,523
Spencer	0.503138%	430,514
Storm Lake	0.338812%	289,907
Urbandale	1.936615%	1,657,079
Waterloo	5.688362%	4,867,289
Waverly	0.365764%	312,969
Webster City	0.311967%	266,937
West Des Moines	3.194504%	2,733,402
Total	100.00%	\$ 85,565,751

NOTES TO SCHEDULES AS OF AND FOR THE YEAR ENDED JUNE 30, 2016

Plan Administration

The Municipal Fire and Police Retirement System of Iowa (System) was created by the Iowa General Assembly in 1990 to establish a statewide retirement system for fire and police personnel covered by the provisions of Iowa Code Chapter 411. The programs of the System include the payment of pension benefits for service retirement, ordinary disability retirement, accidental disability retirement, survivors of deceased members and the refund of contributions upon withdrawal by a terminated member.

The System is managed by a Board of Trustees established by Iowa Code Chapter 411. The Board of Trustees represents the police officer and firefighter memberships, Cities, and citizens of Iowa, while the Iowa General Assembly provides the System with direction and oversight.

Basis of Accounting

Contributions for employers and net pension liability are recognized on an accrual basis of accounting.

Use of Estimates in the Preparation of the Schedules

The preparation of the Schedules in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain amounts and disclosures. Actual results could differ from those estimates.

Plan Membership

As of July 1, 2016, System membership consisted of the following:

Inactive members (or beneficiaries) currently receiving benefits Inactive members entitled to but not yet receiving benefits	3,986 341
Active members	3,926
Total	8,253

Plan Description

The System's membership is mandatory for firefighters and police officers of the Cities. Members of the System are provided with pensions through a cost-sharing multiple employer defined benefit pension plan administered by the System. The System issues a stand-alone financial report which is available to the public by mail at 7155 Lake Drive Suite 201 West Des Moines, IA 50266 or at www.MFPRSI.org.

System benefits are established under Iowa Code chapter 411 and the administrative rules thereunder. Chapter 411 and the administrative rules are the official plan documents. The following brief description is provided for general informational purposes only. Refer to the plan documents for more information.

Pension Benefits

Participating members are entitled to the benefit provisions in effect on the member's date of termination. The following is a summary of System benefit provisions as of June 30, 2016:

Retirement - Members with four or more years of service are entitled to pension benefits beginning at age 55. Full service retirement benefits are granted to members with 22 years of service, while partial benefits are available to those members with 4 to 22 years of service based on the ratio of years completed to years required (22 years). Members with less than four years of service are entitled to a refund of their contribution only, with interest for the period of employment.

Benefits are calculated based upon the member's highest three years of compensation. The average of these 3 years becomes the member's average final compensation. The base benefit is 66 percent of the member's average final compensation. Additional benefits are available to members who perform more than 22 years of service (2 percent for each additional year of service, up to a maximum of eight years). Survivor benefits are available to the beneficiary of a retired member according to the provisions of the benefit option chosen plus an additional benefit for each child. Survivor benefits are subject to a minimum benefit for those members who chose the basic benefit with a 50 percent surviving spouse benefit.

Disability and Death - Disability coverage is broken down into two types, accidental and ordinary. Accidental disability is defined as permanent disability incurred in the line of duty, with benefits equivalent to the greater of 60 percent of the member's average final compensation or the member's service retirement benefit calculation amount. Ordinary disability occurs outside the call of duty and pays benefits equivalent to the greater of 50 percent of the member's average final compensation, for those with 5 or more years of service, or the member's service retirement benefit calculation amount, and 25 percent of average final compensation for those with less than 5 years of service.

Death benefits are similar to disability benefits. Benefits for accidental death are 50 percent of the average final compensation of the member plus an additional amount for each child, or the provisions for ordinary death. Ordinary death benefits consist of a pension equal to 40 percent of the average final compensation of the member plus an additional amount for each child, or a lump-sum distribution to the designated beneficiary equal to 50 percent of the previous year's earnable compensation of the member or equal to the amount of the member's total contributions plus interest.

Benefits are increased (escalated) annually in accordance with Iowa Code Chapter 411.6 which states a standard formula for the increases.

Traumatic Personal Injury - The surviving spouse or dependents of an active member who dies due to a traumatic personal injury incurred in the line of duty receives a \$100,000 lump-sum payment.

Deferred Retirement Option Program (DROP) - Active members, at least 55 years of age, with 22 or more years of service have the option to participate in the DROP Program. The DROP is an arrangement whereby a member who is otherwise eligible to retire and commence benefits opts to continue to work. A member can elect a 3, 4, or 5 year DROP period. By electing to participate in DROP the member is signing a contract indicating the member will retire at the end of the selected DROP period. During the DROP period the member's retirement benefit is frozen and a DROP benefit is credited to a DROP account established for the member. Assuming the member completes the DROP period, the DROP benefit is equal to 52% of the member's retirement benefit at the member's earliest date eligible and 100% if the member delays enrollment for 24 months. At the member's actual date of retirement, the member's DROP account will be distributed to the member in the form of a lump sum or rollover to an eligible plan.

Contributions

Member - Member contribution rates are set by state statute. In accordance with Iowa Code Chapter 411 as modified by act of the 1994 General Assembly, to establish compliance with the Federal Older Workers Benefit Protections Act, the contribution rate was 9.40% of earnable compensation for the year ended June 30, 2016.

Employer - Employer contribution rates are based upon an actuarially determined normal contribution rate and set by state statute. The required actuarially determined contributions are calculated on the basis of the entry age normal method as adopted by the Board of Trustees as permitted under Chapter 411 of the Code of Iowa. The normal contribution rate is provided by state statute to be the actuarial liabilities of the plan less current plan assets, with such total divided by 1 percent of the actuarially determined present value of prospective future compensation of all members, further reduced by member contributions and state appropriations. Under the Code of Iowa the employer's contribution rate cannot be less than 17.00% of earnable compensation. The contribution rate was 27.77% for the year ended June 30, 2016.

State Appropriations - State appropriations are approved by the state legislature and may further reduce the employer's contribution rate, but not below the minimum statutory contribution rate of 17.00% of earnable compensation. The State therefore is considered to be a nonemployer contributing entity in accordance with the provisions of the Governmental Accounting Standards Board Statement No. 67 – Financial Reporting for Pension Plans, (GASB 67).

The allocation amongst all Cities of the contributions to the System for the period ended June 30, 2016 was as follows:

City	Proportionate Share (%)	Actuarially Determined Contribution (ADC)	Contributions in Relation to the ADC	Contribution Deficiency/ (Excess)	Covered Payroll *	Contributions as a % of Covered Payroll
Ames	2.649945%	\$ 1,994,209	\$ 1,994,209	\$ -	\$ 7,181,004	27.77%
Ankeny	1.871985%	1,408,757	1,408,757	φ - -	5,072,834	27.77%
Bettendorf	1.870615%	1,407,726	1,407,726	_	5,069,121	27.77%
Boone	0.587210%	441,903	441,903	_	1,591,259	27.77%
Burlington	1.802323%	1,356,333	1,356,333	- -	4,884,059	27.77%
Camanche	0.243648%	183,357	183,357	-	660,254	27.77%
Carroll	0.299396%	225,310	225,310		811,324	27.77%
Cedar Falls	1.727939%	1,300,356	1,300,356	- -	4,682,488	27.77%
Cedar Rapids	9.313457%	7,008,817	7,008,817	_	25,238,248	27.77%
Centerville	0.246358%	185,396	185,396	-	667,598	27.77%
Charles City	0.334988%	252,094	252,094	_	907,771	27.77%
Clinton	1.907349%	1,435,370	1,435,370	-	5,168,663	27.77%
Clive	0.601412%	452,591	452,591	- -	1,629,748	27.77%
Council Bluffs	5.917475%	4,453,180	4,453,180	-	16,035,582	27.77%
Creston	0.289606%	217,942	217,942	-	784,794	27.77%
	8.113369%		· · · · · · · · · · · · · · · · · · ·			27.77%
Davenport	0.288992%	6,105,694	6,105,694	-	21,986,166	
Decorah Des Moines		217,480	217,480	-	783,130	27.77% 27.77%
	18.298304%	13,770,339	13,770,339	-	49,586,014	
Dewitt	0.233601%	175,796	175,796	-	633,028	27.77%
Dubuque	4.953285%	3,727,581	3,727,581	-	13,422,753	27.77% 27.77%
Estherville	0.216914%	163,238	163,238	-	587,809	
Evansdale	0.122988%	92,554	92,554	-	333,281	27.77%
Fairfield	0.342413%	257,682	257,682	-	927,894	27.77%
Fort Dodge	1.464630%	1,102,203	1,102,203	=	3,968,955	27.77%
Fort Madison	0.710751%	534,874	534,874	-	1,926,042	27.77%
Grinnell	0.406216%	305,697	305,697	-	1,100,792	27.77%
Indianola	0.446484%	336,000	336,000	-	1,209,913	27.77%
Iowa City	3.697129%	2,782,264	2,782,264	-	10,018,732	27.77%
Keokuk	0.810360%	609,834	609,834	-	2,195,969	27.77%
Knoxville	0.276902%	208,382	208,382	=	750,368	27.77%
Lemars	0.343350%	258,387	258,387	-	930,433	27.77%
Maquoketa	0.220171%	165,689	165,689	-	596,635	27.77%
Marion	1.899570%	1,429,516	1,429,516	-	5,147,586	27.77%
Marshalltown	1.560279%	1,174,184	1,174,184	-	4,228,152	27.77%
Mason City	2.039407%	1,534,750	1,534,750	-	5,526,526	27.77%
Muscatine	1.721407%	1,295,440	1,295,440	-	4,664,787	27.77%
Newton	1.064467%	801,062	801,062	-	2,884,566	27.77%
Oelwein	0.221144%	166,421	166,421	-	599,269	27.77%
Oskaloosa	0.480584%	361,662	361,662	-	1,302,320	27.77%
Ottumwa	1.432455%	1,077,990	1,077,990	-	3,881,765	27.77%
Pella	0.334439%	251,681	251,681	-	906,286	27.77%
Sioux City	6.297523%	4,739,184	4,739,184	-	17,065,462	27.77%
Spencer	0.503138%	378,635	378,635	-	1,363,438	27.77%
Storm Lake	0.338812%	254,972	254,972	-	918,136	27.77%
Urbandale	1.936615%	1,457,394	1,457,394	-	5,247,973	27.77%
Waterloo	5.688362%	4,280,761	4,280,761	-	15,414,715	27.77%
Waverly	0.365764%	275,255	275,255	-	991,172	27.77%
Webster City	0.311967%	234,770	234,770	-	845,390	27.77%
West Des Moines	3.194504%	2,404,015	2,404,015		8,656,687	27.77%
Total	100.00%	\$ 75,254,727	\$ 75,254,727	\$ -	\$ 270,986,891	

^{*} Represents reported covered payroll. Amount reported is based on pensionable payroll and not total payroll. Please consult your auditor when presenting covered payroll in your reports.

Investment Policy

The investment policy and decisions are governed by the Board of Trustees.

Net Pension Liability

The components of the net pension liability of the System at June 30, 2016 were as follows:

Total Pension Liability Plan Fiduciary Net Position	\$ 2,867,807,326 (2,242,546,392)
Net Pension Liability	\$ 625,260,934
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	78.20%
The following schedule presents the changes in net pension liability for fiscal year ended	I June 30, 2016:
Total Pension Liability - Beginning of Year Service Cost Interest Changes of Benefit Terms	\$ 2,769,994,684 51,366,130 205,836,959
Difference between Expected and Actual Experience Changes of Assumptions Benefit Payments, Including Refunds	7,643,609 (10,467,574) (156,566,482)
Total Pension Liability - End of Year	2,867,807,326
Plan Fiduciary Net Position - Beginning of Year Contributions - Employer and State Contributions - Member Net Investment Income Benefit Payments, Including Refunds Administrative Expenses Other	2,300,180,355 75,254,727 25,455,597 160,671 (156,566,482) (1,728,951) (209,525)
Plan Fiduciary Net Position - End of Year	2,242,546,392
Net Pension Liability - End of Year	\$ 625,260,934
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	78.20%
Covered-Employee Payroll*	\$ 270,986,891
Net Pension Liability as a Percentage of the Covered-Employee Payroll	230.73%

^{*}Represents reported covered payroll. Amount reported is based on pensionable payroll and not total payroll. Please consult your auditor when presenting covered payroll in your reports.

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:

	Current Discount		
	1% Decrease 6.50%	Rate 7.50%	1% Increase 8.50%
Total Pension Liability	\$3,223,861,690	\$2,867,807,326	\$2,571,290,010
Plan Fiduciary Net Position	(2,242,546,392)	(2,242,546,392)	(2,242,546,392)
Net Pension Liability	\$ 981,315,298	\$ 625,260,934	\$ 328,743,618

The allocation amongst all Cities of the sensitivity in Net Pension Liability of the System at June 30, 2016 was as follows:

City	Proportionate Share (%)	1% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Ames	2.649945%	\$ 26,004,317	\$ 16,569,072	\$ 8,711,526
	1.871985%	18,370,073	11,704,789	6,154,030
Ankeny Bettendorf		18,356,628		
	1.870615%		11,696,223	6,149,527
Boone	0.587210%	5,762,378	3,671,592	1,930,414
Burlington	1.802323%	17,686,468	11,269,220	5,925,021
Camanche	0.243648%	2,390,960	1,523,439	800,979
Carroll	0.299396%	2,938,023	1,872,009	984,247
Cedar Falls	1.727939%	16,956,533	10,804,129	5,680,490
Cedar Rapids	9.313457%	91,394,383	58,233,411	30,617,397
Centerville	0.246358%	2,417,548	1,540,380	809,886
Charles City	0.334988%	3,287,285	2,094,547	1,101,250
Clinton	1.907349%	18,717,104	11,925,906	6,270,287
Clive	0.601412%	5,901,748	3,760,395	1,977,104
Council Bluffs	5.917475%	58,069,092	36,999,662	19,453,323
Creston	0.289606%	2,841,945	1,810,791	952,060
Davenport	8.113369%	79,617,735	50,729,729	26,672,184
Decorah	0.288992%	2,835,921	1,806,953	950,042
Des Moines	18.298304%	179,564,060	114,412,149	60,154,508
Dewitt	0.233601%	2,292,365	1,460,617	767,949
Dubuque	4.953285%	48,607,342	30,970,955	16,283,608
Estherville	0.216914%	2,128,610	1,356,278	713,091
Evansdale	0.122988%	1,206,896	768,994	404,314
Fairfield	0.342413%	3,360,152	2,140,975	1,125,661
Fort Dodge	1.464630%	14,372,634	9,157,757	4,814,876
Fort Madison	0.710751%	6,974,712	4,444,051	2,336,550
Grinnell	0.406216%	3,986,263	2,539,912	1,335,410
Indianola	0.446484%	4,381,412	2,791,687	1,467,786
Iowa City	3.697129%	36,280,488	23,116,701	12,154,074
Keokuk	0.810360%	7,952,184	5,066,863	2,664,006
Knoxville	0.276902%	2,717,284	1,731,361	910,298
Lemars	0.343350%	3,369,345	2,146,833	1,128,741
Maquoketa	0.220171%	2,160,571	1,376,643	723,798
Marion			11,877,267	
Marshalltown	1.899570%	18,640,768		6,244,714
	1.560279%	15,311,260	9,755,818	5,129,319
Mason City	2.039407%	20,013,011	12,751,614	6,704,420
Muscatine	1.721407%	16,892,428	10,763,284	5,659,015
Newton	1.064467%	10,445,781	6,655,699	3,499,368
Oelwein	0.221144%	2,170,116	1,382,724	726,995
Oskaloosa	0.480584%	4,716,042	3,004,903	1,579,888
Ottumwa	1.432455%	14,056,899	8,956,581	4,709,104
Pella	0.334439%	3,281,899	2,091,115	1,099,446
Sioux City	6.297523%	61,798,560	39,375,953	20,702,706
Spencer	0.503138%	4,937,368	3,145,924	1,654,034
Storm Lake	0.338812%	3,324,813	2,118,459	1,113,823
Urbandale	1.936615%	19,004,295	12,108,894	6,366,497
Waterloo	5.688362%	55,820,763	35,567,103	18,700,126
Waverly	0.365764%	3,589,302	2,286,982	1,202,427
Webster City	0.311967%	3,061,381	1,950,608	1,025,572
West Des Moines	3.194504%	31,348,153	19,973,983	10,501,727
Total	100.00%	\$ 981,315,298	\$ 625,260,934	\$ 328,743,618

Deferred Inflows and Outflows of Resources

As of June 30, 2016 the deferred inflows and outflows of resources are as follows:

	Deferred Inflows of Resources		Deferred Outflows of Resources	
Differences between expected and actual experience Changes of assumptions Net difference between projected and actual earnings Contributions made subsequent to measurement date*	\$	(579,866) (8,564,379) (85,200,210) TBD	\$	16,137,185 26,398,859 195,760,827 TBD
Total	\$	(94,344,455)	\$	238,296,871

^{*}Contributions made subsequent to the measurement date will not be known until after the end of the reporting period.

Other amounts currently reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in future years' pension expense as follows:

Year ending	Annual
June 30,	Recognition
2017	\$ 22,265,001
2018	22,265,001
2019	62,624,555
2020	37,054,583
2021	(256,724)
Thereafter	-

The allocation amongst all Cities of amounts currently reported as Deferred (Inflows)/Outflows of the System to be recognized in Pension Expense was as follows:

	Proportionate		Year Ending June 30,			
City	Share (%)	2017	2018	2019	2020	2021
Ames	2.649945%	\$ 590,010	\$ 590,010	\$ 1,659,516	\$ 981,926	\$ (6,803)
Ankeny	1.871985%	416,797	416,797	1,172,322	693,656	(4,806)
Bettendorf	1.870615%	416,492	416,492	1,171,464	693,149	(4,802)
Boone	0.587210%	130,742	130,742	367,737	217,588	(1,508)
Burlington	1.802323%	401,287	401,287	1,128,697	667,843	(4,627)
Camanche	0.243648%	54,248	54,248	152,583	90,283	(626)
Carroll	0.299396%	66,661	66,661	187,495	110,940	(769)
Cedar Falls	1.727939%	384,726	384,726	1,082,114	640,281	(4,436)
Cedar Rapids	9.313457%	2,073,641	2,073,641	5,832,511	3,451,063	(23,910)
Centerville	0.246358%	54,852	54,852	154,281	91,287	(632)
Charles City	0.334988%	74,585	74,585	209,784	124,128	(860)
Clinton	1.907349%	424,671	424,671	1,194,468	706,760	(4,897)
Clive	0.601412%	133,904	133,904	376,632	222,851	(1,544)
Council Bluffs	5.917475%	1,317,526	1,317,526	3,705,792	2,192,696	(15,192)
Creston	0.289606%	64,481	64,481	181,364	107,312	(743)
Davenport	8.113369%	1,806,442	1,806,442	5,080,961	3,006,375	(20,829)
Decorah	0.288992%	64,344	64,344	180,980	107,085	(742)
Des Moines	18.298304%	4,074,120	4,074,120	11,459,232	6,780,357	(46,974)
Dewitt	0.233601%	52,011	52,011	146,292	86,560	(600)
Dubuque	4.953285%	1,102,849	1,102,849	3,101,973	1,835,419	(12,716)
Estherville	0.216914%	48,296	48,296	135,841	80,377	(557)
Evansdale	0.122988%	27,383	27,383	77,021	45,573	(316)
Fairfield	0.342413%	76,238	76,238	214,435	126,880	(879)
Fort Dodge	1.464630%	326,100	326,100	917,218	542,713	(3,760)
Fort Madison	0.710751%	158,249	158,249	445,105	263,366	(1,825)
Grinnell	0.406216%	90,444	90,444	254,391	150,522	(1,043)
Indianola	0.446484%	99,410	99,410	279,609	165,443	(1,146)
Iowa City	3.697129%	823,166	823,166	2,315,310	1,369,955	(9,491)
Keokuk	0.810360%	180,427	180,427	507,484	300,276	(2,080)
Knoxville	0.276902%	61,652	61,652	173,409	102,605	(711)
Lemars	0.343350%	76,447	76,447	215,021	127,227	(881)
Maquoketa	0.220171%	49,021	49,021	137,881	81,583	(565)
Marion	1.899570%	422,939	422,939	1,189,597	703,878	(4,877)
Marshalltown	1.560279%	347,396	347,396	977,118	578,155	(4,006)
Mason City	2.039407%	454,074	454,074	1,277,170	755,694	(5,236)
Muscatine	1.721407%	383,271	383,271	1,078,023	637,860	(4,419)
Newton	1.064467%	237,004	237,004	666,618	394,434	(2,733)
Oelwein	0.221144%	49,237	49,237	138,490	81,944	(568)
Oskaloosa	0.480584%	107,002	107,002	300,964	178,078	(1,234)
Ottumwa	1.432455%	318,936	318,936	897,069	530,790	(3,677)
Pella	0.334439%	74,463	74,463	209,441	123,925	(859)
Sioux City	6.297523%	1,402,144	1,402,144	3,943,796	2,333,521	(16,167)
Spencer	0.503138%	112,024	112,024	315,088	186,436	(1,292)
Storm Lake	0.338812%	75,436	75,436	212,180	125,545	(870)
Urbandale	1.936615%	431,187	431,187	1,212,797	717,605	(4,972)
Waterloo	5.688362%	1,266,514	1,266,514	3,562,311	2,107,799	(14,603)
Waverly	0.365764%	81,437	81,437	229,058	135,532	(939)
Webster City	0.311967%	69,459	69,459	195,368	115,598	(801)
West Des Moines	3.194504%	711,256	711,256	2,000,544	1,183,710	(8,201)
Total	100.00%	\$ 22,265,001	\$ 22,265,001	\$ 62,624,555	\$ 37,054,583	\$ (256,724)

Expected Remaining Service Lives

Under GASB 68, gains and losses which are amortized over future years are referred to as deferred inflows or gains, and deferred outflows or losses. Investment gains and losses are recognized over a closed five year period. Economic and demographic gains and losses and changes in the total pension liability due to changes in assumptions are recognized over a closed period equal to the average expected remaining service lives of all covered active and inactive members, determined as of the beginning of the measurement period. The amortization period is calculated as the weighted average of expected remaining service lives assuming zero years for all inactive members.

The amortization period for the June 30, 2015 to June 30, 2016 measurement period was determined as follows:

		Expected Remaining
As of June 30, 2015	Members	Service Lives
118 01 Julie 30, 2013	Wiemoers	Lives
Active Members	3,892	11.513
Inactive Members	4,263	0.000
Weighted Average Rounded to the Nearest Tenth		5.500
Pension Expense		June 30, 2016
Service Cost		\$ 51,366,130
Interest on Total Pension Liability		205,836,959
Effect of Plan Changes		-
Administrative Expenses		1,728,951
Other Changes in Fiduciary Net Position		209,525
Member Contributions		(25,455,597)
Expected Investment Return Net of Investment Expenses		(170,385,218)
Recognition of Deferred (Inflows)/Outflows of Resources		
Economic/Demographic (Gains)/Losses		3,912,090
Assumption Changes		7,047,711
Investment (Gains)/Losses		11,305,200
Pension Expense		\$ 85,565,751

Actuarial Assumptions

The total pension liability in the June 30, 2016 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Rate of Inflation

Salary Increases

4.5 to 15.11 percent including inflation

Investment Rate of Return

7.50 percent, net of pension plan investment expense, including inflation

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of an actuarial experience study for the period of July 1, 2002 to June 30, 2012. There were no significant changes of benefit terms.

Mortality rates were based on RP 2000 Blue Collar Combined Healthy table with males set-back two years, females set-forward one year and disableds set-forward one year (male only rates), with no projection of future mortality improvement.

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of October 1, 2013 (see the discussion of the pension plan's investment policy) are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Large Cap	6.0%
Small Cap	5.8%
International Large Cap	7.0%
Emerging Markets	8.8%
Emerging Market Debt	6.5%
Private Non-Core Real Estate	9.3%
Master Limited Partnerships	8.5%
Private Equity	9.8%
Core Plus Fixed Income	3.8%
Private Core Real Estate	6.8%
Treasury Inflation Protected Se	curities 2.8%
Tactical Asset Allocation	6.0%

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