



**MUNICIPAL FIRE AND
POLICE RETIREMENT
SYSTEM OF IOWA**

**Government Accounting Standards
Board Statement No. 68**

**Year End Disclosure
June 30, 2021**

SilverStone
GROUP



HUB

April 7, 2021

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

RE: GASB No. 68 Disclosure Report

Dear Board Members:

We are pleased to submit this actuarial report of the Municipal Fire and Police Retirement System of Iowa. This report will summarize the costs, liabilities and assets based on asset values as of June 30, 2020, member census data as of July 1, 2020 and current System provisions all of which were supplied by the System to be reported in the financial statements of participating employers for the fiscal year ending June 30, 2021. These values have been determined to satisfy the requirements of the Governmental Accounting Standards Board Statement No. 68. We have relied on the accuracy of the information that was supplied to us by the System.

Actuarial computations based on GASB No. 68 included in this report have been prepared to fulfill employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of GASB Statement No. 68. Actuarial determinations prepared for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed to measure benefit security at plan termination or to evaluate adequacy of plan funding on an ongoing basis.

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 in accordance with Iowa State Code Section 411.5.10-11, which results in the assumptions being considered prescribed assumptions by another party under applicable actuarial standards of practice. To the best of our knowledge, the information supplied in this report is complete and accurate and in our opinion the assumptions are reasonably related to the experience of the System and to conform with those prescribed by the Board of Trustees. However, future measures may differ significantly from the current measurement. Due to the limited scope of our assignment, this report does not include an analysis of the potential range of such future measures. 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, EA, MAAA
Principal



Michael S. Ehmke, ASA, EA, MAAA
Principal

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Overview of Statement No. 68

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, the Governmental Accounting Standards Board (GASB) has issued Statement No. 68 - Accounting and Financial Reporting for Pensions (effective for fiscal years beginning after June 15, 2014) which replace the requirements of Statement No. 27.

GASB Statement No. 68 establishes financial reporting standards for state and local governmental employers whose employees are provided with defined benefit pension plans. The statement requires financial statements and accompanying notes disclosing information relative to the funded status of the plan, pension accounting expense, historical contribution patterns and certain other information.

- Notes to the financial statements should include description of benefits provided, plan investment information, and significant assumptions used to calculate the total pension liability.
- The statement of net pension liability presents plan assets, liabilities, and sensitivity to the net pension liability to changes in the discount rate as of the end of the reporting period.
- The statement of changes in net pension liability presents changes in the total pension liability due to service cost, interest and other items and changes in the plan fiduciary net position due to contributions, investment income and deductions such as benefit payments and administrative expenses for the reporting period.
- The schedule of contributions presents the actuarially determined contributions and any contribution deficiency or excess in relation to the covered employee payroll as of the end of the reporting period.
- The pension expense is the change in the net pension liability from the prior year to the current year, with limited smoothing for deferred items.
- The statement of deferred inflows and outflows of resources presents the gains and losses for economic and demographic changes, changes in assumptions and investment performance.

GASB Statement No. 68 requires the net pension liability to be measured as the present value of projected benefit payments to current active and inactive employees that is attributed to past periods of employee service, or total pension liability, less the plan's fiduciary net position. All assumptions underlying the determination of the total pension liability are required to be made in conformity with Actuarial Standards of Practice.

This statement requires most changes in the net pension liability be included in pension expense in the period of the change. Changes of economic and demographic assumptions and differences between expected and actual experience are to be included in pension expense over a closed period equal to the average remaining service of all active and inactive employees. Differences between projected investment earnings and actual investment earnings are to be included in pension expense over a closed 5 year period.

Notes to Financial Statements

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.

Plan Membership

As of July 1, 2020 System membership consisted of the following:

Inactive members (or beneficiaries) currently receiving benefits	4,190
Inactive members entitled to but not yet receiving benefits	375
Active members	<u>4,084</u>
Total	8,649

Benefits Provided

Retirement benefits for members are based on a formula using a member's years of service, the average of a member's highest three years of earned wages, and a multiplier. Members are vested upon attaining four years of membership service. Disability retirement benefits are determined in the same manner as retirement benefits but reflect an additional minimum percentage of the member's highest three years of earned wages. Death benefits are also provided based on a specified percentage of the member's highest three years of earned wages.

An annual cost-of-living adjustment is provided to each member receiving a monthly retirement benefit except for those who terminated due to reasons other than a service retirement, disability retirement or death. The annual adjustment is equal to 1.5% of the prior year benefit plus a fixed dollar amount depending on the number of years since the benefit commenced. See the July 1, 2020 actuarial valuation report for a complete summary of System provisions.

Contributions

The Board of Trustees had adopted a funding policy that provides reasonable assurance the cost of benefits provided to the System's members will be funded in an equitable and sustainable manner. As part of the Board of Trustees' funding policy, the unfunded accrued liability is amortized as a level dollar, closed, layered methodology. Changes in the unfunded accrued liability as measured on each valuation date following July 1, 2013 are amortized as a level dollar amount over a 25-year closed period following each valuation date.

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, 2020 were as follows:

Total Pension Liability	\$3,390,348,728
Plan Fiduciary Net Position	<u>(2,592,748,429)</u>
Net Pension Liability	797,600,299
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	76.47%

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% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Total Pension Liability	\$3,816,112,066	\$3,390,348,728	\$3,037,681,358
Plan Fiduciary Net Position	<u>(2,592,748,429)</u>	<u>(2,592,748,429)</u>	<u>(2,592,748,429)</u>
Net Pension Liability	1,223,363,637	797,600,299	444,932,929

Schedule of Changes in Net Pension Liability

	Fiscal Year Ending June 30, 2020
Total Pension Liability - Beginning of Year	\$3,269,051,818
Service Cost	55,133,707
Interest	242,467,141
Changes of Benefit Terms	0
Difference between Expected and Actual Experience	9,638,175
Changes of Assumptions	0
Benefit Payments, including refunds	(185,942,113)
Net Change in Total Pension Liability	121,296,910
 Total Pension Liability - End of Year	 3,390,348,728
 Plan Fiduciary Net Position - Beginning of Year	 2,613,125,249
Contributions - Employer and State	77,551,461
Contributions - Member	29,808,835
Net Investment Income	60,250,246
Benefit Payments, including refunds	(185,942,113)
Administrative Expenses	(1,887,579)
Other	(157,670)
Net Change in Plan Fiduciary Net Position	(20,376,820)
 Plan Fiduciary Net Position - End of Year	 2,592,748,429
 Net Pension Liability - End of Year	 797,600,299
 Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	 76.47%
 Covered-Employee Payroll*	 317,709,825
 Net Pension Liability as a Percentage of the Covered- Employee Payroll	 251.05%

*Actual for noted period as provided by the System.

Schedule of Contributions

	Fiscal Year Ending June 30, 2020
Actuarially Determined Contribution	\$77,551,461
Contributions in Relation to the Actuarially Determined	<u>77,551,461</u>
Contribution Deficiency/(Excess)	0
Covered-Employee Payroll*	317,709,825
Contributions as a Percentage of Covered-Employee Payroll	24.41%

*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, 2020
Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Five-Year Smoothed Market
Amortization Method	Level Dollar, Closed, Layered
Amortization Period	25 Years
Salary Increases	3.75% to 15.11%
Investment Rate of Return	7.50%
Mortality Table	RP 2014 Blue Collar Healthy Annuitant table with males set-forward zero years, females set-forward two years and disableds set-forward three years (male only rates), with generational projection of future mortality improvement with 50% of Scale BB beginning in 2017.

The actuarial methods and assumptions were adopted by the Board of Trustees in accordance with Iowa State Code Section 411.5.10-11, which results in the methods and assumptions being considered prescribed assumptions by another party under applicable actuarial standards of practice. The Board of Trustees adopts the actuarial assumptions based on the actuarial investigation completed every five years. The most recently completed investigation was for the 10-year period ending June 30, 2017.

Pension Expense

Pension Expense	Fiscal Year Ending June 30, 2020
Service Cost	\$55,133,707
Interest on Total Pension Liability	242,467,141
Effect of Plan Changes	0
Administrative Expenses	1,887,579
Other Changes in Fiduciary Net Position	157,670
Member Contributions	(29,808,835)
Expected Investment Return Net of Investment Expenses	(193,015,505)
Recognition of Deferred (Inflows)/Outflows of Resources	
Economic/Demographic (Gains)/Losses	8,489,918
Assumption Changes	11,272,204
Investment (Gains)/Losses	51,567,869
Pension Expense	148,151,748

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, 2019 to June 30, 2020 measurement period was determined as follows:

	Number of Members	Expected Remaining Service Lives
As of June 30, 2019		
Active Members	4,086	11.266
Inactive Members	4,522	0.000
 Weighted Average Rounded to Nearest Tenth		 5.3

Deferred Inflows and Outflows of Resources

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. As of June 30, 2020 the deferred inflows and outflows of resources are as follows:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	(4,332,616)	21,929,665
Changes of assumptions	(951,599)	19,757,480
Net difference between projected and actual earnings	(20,010,094)	137,346,538
Contributions made subsequent to measurement date	TBD	TBD
Total	(25,294,309)	179,033,683

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
2021	34,018,683
2022	47,232,575
2023	42,655,269
2024	29,287,292
2025	545,555
Thereafter	0

Schedule of Deferred Inflows and Outflows of Resources

	Original Amount	Date Established	Original Recognition Period*	Amount Recognized in Expense June 30, 2020	Balance of Deferred Inflows June 30, 2020	Balance of Deferred Outflows June 30, 2020
Economic/Demographic (Gains)/Losses	9,638,175	6/30/2020	5.3	1,818,524	0	7,819,651
	16,177,781	6/30/2019	5.3	3,052,412	0	10,072,957
	(9,748,387)	6/30/2018	5.4	(1,805,257)	(4,332,616)	0
	12,891,275	6/30/2017	5.4	2,387,273	0	3,342,183
	7,643,609	6/30/2016	5.5	1,389,747	0	694,874
	15,374,059	6/30/2015	5.6	1,647,219	0	0
				8,489,918	(4,332,616)	21,929,665
Assumption Changes	0	6/30/2020	5.3	0	0	0
	0	6/30/2019	5.3	0	0	0
	21,266,192	6/30/2018	5.4	3,938,184	0	9,451,640
	39,751,096	6/30/2017	5.4	7,361,314	0	10,305,840
	(10,467,574)	6/30/2016	5.5	(1,903,195)	(951,599)	0
	17,508,411	6/30/2015	5.6	1,875,901	0	0
				11,272,204	(951,599)	19,757,480
Investment (Gains)/Losses	132,765,259	6/30/2020	5.0	26,553,052	0	106,212,207
	51,890,553	6/30/2019	5.0	10,378,111	0	31,134,331
	(3,009,437)	6/30/2018	5.0	(601,887)	(1,203,776)	0
	(94,031,590)	6/30/2017	5.0	(18,806,318)	(18,806,318)	0
	170,224,547	6/30/2016	5.0	34,044,911	0	0
				51,567,869	(20,010,094)	137,346,538

*Investment (gains) and losses are recognized in pension expense over a closed period of five years while economic/demographic (gains) and losses along with assumption changes are recognized over a closed period equal to the weighted average of expected remaining service lives for all active and inactive members.

Actuarial Assumptions

The costs and total pension liability were determined by the following actuarial assumptions:

Measurement Date	June 30, 2020
Valuation Date	June 30, 2020
Reporting Date for Employers	June 30, 2021
Measurement Period	June 30, 2019 to June 30, 2020
Investment Rate of Return	7.50%
Discount Rate	7.50%
Inflation Rate	3.00%
Salary Increases	3.75% to 15.11%
Mortality Table	RP 2014 Blue Collar Healthy Annuitant table with males set-forward zero years, females set-forward two years and disableds set-forward three years (male only rates), with generational projection of future mortality improvement with 50% of Scale BB beginning in 2017.
Actuarial Cost Method	Entry Age Normal, Level % of Pay

The actuarial assumptions used in the valuation were adopted by the Board of Trustees in accordance with Iowa Code Section 411.5.10-11, which results in the assumptions being considered prescribed assumptions by another party under applicable actuarial standards of practice. See the July 1, 2020 actuarial valuation report for a complete description of all actuarial assumptions and methods.

Per Iowa Code Section 411, the System's actuary conducts a formal investigation, or experience study, of the primary assumptions every five years. The most recent investigation was completed for the 10-year period ending June 30, 2017.

Actuarial Assumptions

Discount Rate

GASB 68 generally requires a blended discount rate be used to measure the total pension liability. The long-term expected return on plan investments may be used as the discount rate to the extent the System's fiduciary net position is projected to cover future benefit payments and administrative expenses. Determining the discount rate under GASB 68 will often require the actuary to perform complex projections of future benefit payments and asset values to determine solvency. However, GASB 68 does allow for alternative evaluations of projected solvency, if such evaluation can reliably be made. GASB 68 does not contemplate a specific method for making an alternative evaluation of sufficiency but rather it is left to professional judgement.

The System determines an Actuarially Determined Contribution (ADC) which is the basis for the annual City contributions. City contributions will be made at a rate equal to the difference between an actuarially determined rate and the member rate of 9.40% of covered payroll, based on Iowa Code Section 411. The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will result in the System at a 100% funded position by the end of the amortization period if future experience follows assumptions. GASB 68 specifies the projections regarding future solvency assume plan assets earn the assumed investment return and there are no future changes in plan provisions, actuarial methods or assumptions, which results in the projections not reflecting any adverse future experience which might impact the System's funded position. Based on these considerations, it is our professional opinion the detailed depletion date projections outlined in GASB 68 would clearly indicate the System's fiduciary net position is always projected to be sufficient to satisfy future benefit payments and administrative expenses.

The discount rate used to measure the total pension liability as of June 30, 2020 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. 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.

Allocation Basis of Certain Measures Amongst Cities

The System is a cost-sharing multiple employer plan as defined under GASB 68. Each employer's proportionate share of certain measures such as the net pension liability, pension expense and deferred inflows and outflows of resources is to be based on the proportionate share of the individual employer's projected long-term contributions to the System as compared to the total projected long-term contributions of all employers participating in the System. Since the same contribution rate of covered payroll will apply to all participating Cities in the System for future contributions, each Cities' proportionate share was based on the most recent contribution amount as compared to the total of all Cities' contributions.

Net Pension Liability by City

The allocation amongst all Cities of the Net Pension Liability of the System at June 30, 2020 was as follows:

City	Proportionate Share (%)	Share of NPL	Covered Payroll	NPL as % of Covered Payroll
Ames	2.68%	21,356,506	8,506,982	251.05%
Ankeny	2.56%	20,443,126	8,143,154	251.05%
Bettendorf	1.87%	14,944,413	5,952,840	251.05%
Boone	0.54%	4,316,964	1,719,585	251.05%
Burlington	1.83%	14,592,361	5,812,606	251.05%
Camanche	0.25%	2,015,967	803,024	251.05%
Carroll	0.29%	2,332,526	929,120	251.05%
Cedar Falls	1.86%	14,834,799	5,909,177	251.05%
Cedar Rapids	9.15%	72,996,443	29,076,829	251.05%
Centerville	0.24%	1,900,586	757,064	251.05%
Charles City	0.31%	2,507,927	998,988	251.05%
Clinton	1.91%	15,222,273	6,063,521	251.05%
Clive	0.62%	4,928,492	1,963,177	251.05%
Council Bluffs	5.84%	46,560,029	18,546,356	251.05%
Creston	0.29%	2,277,276	907,112	251.05%
Davenport	7.73%	61,670,200	24,565,222	251.05%
Decorah	0.29%	2,279,167	907,865	251.05%
Des Moines	18.22%	145,346,816	57,896,306	251.05%
Dewitt	0.21%	1,684,036	670,806	251.05%
Dubuque	4.73%	37,736,544	15,031,678	251.05%
Estherville	0.23%	1,798,150	716,261	251.05%
Evansdale	0.13%	1,023,656	407,755	251.05%
Fairfield	0.28%	2,195,140	874,395	251.05%
Fort Dodge	1.62%	12,901,528	5,139,093	251.05%
Fort Madison	0.67%	5,381,202	2,143,506	251.05%
Grinnell	0.38%	3,040,867	1,211,275	251.05%
Indianola	0.48%	3,833,211	1,526,891	251.05%
Iowa City	3.62%	28,881,737	11,504,524	251.05%
Keokuk	0.74%	5,910,266	2,354,249	251.05%
Knoxville	0.25%	1,965,510	782,926	251.05%
Lemars	0.34%	2,673,468	1,064,928	251.05%
Maquoketa	0.21%	1,651,990	658,041	251.05%
Marion	1.99%	15,865,905	6,319,900	251.05%
Marshalltown	1.43%	11,374,139	4,530,685	251.05%
Mason City	1.88%	15,030,937	5,987,305	251.05%
Muscatine	1.73%	13,762,928	5,482,216	251.05%
Newton	1.03%	8,244,770	3,284,157	251.05%
Oelwein	0.21%	1,649,421	657,018	251.05%
Oskaloosa	0.46%	3,701,432	1,474,399	251.05%
Ottumwa	1.51%	12,064,055	4,805,501	251.05%
Pella	0.36%	2,875,150	1,145,264	251.05%
Sioux City	6.06%	48,346,997	19,258,162	251.05%
Spencer	0.50%	3,980,520	1,585,569	251.05%
Storm Lake	0.38%	3,007,440	1,197,960	251.05%
Urbandale	2.32%	18,498,002	7,368,349	251.05%
Waterloo	5.47%	43,638,986	17,382,810	251.05%
Waverly	0.35%	2,783,633	1,108,810	251.05%
Webster City	0.28%	2,221,811	885,019	251.05%
West Des Moines	3.68%	29,350,997	11,691,445	251.05%
Total	100.00%	797,600,299	317,709,825	251.05%

Sensitivity Analysis of Net Pension Liability by City

The allocation amongst all Cities of the sensitivity in Net Pension Liability of the System at June 30, 2020 was as follows:

City	Proportionate Share (%)	Current Discount Rate		
		1% Decrease 6.50%	7.50%	1% Increase 8.50%
Ames	2.68%	32,756,724	21,356,506	11,913,502
Ankeny	2.56%	31,355,776	20,443,126	11,403,982
Bettendorf	1.87%	22,921,822	14,944,413	8,336,584
Boone	0.54%	6,621,382	4,316,964	2,408,173
Burlington	1.83%	22,381,841	14,592,361	8,140,195
Camanche	0.25%	3,092,101	2,015,967	1,124,586
Carroll	0.29%	3,577,641	2,332,526	1,301,175
Cedar Falls	1.86%	22,753,695	14,834,799	8,275,437
Cedar Rapids	9.15%	111,962,338	72,996,443	40,720,297
Centerville	0.24%	2,915,129	1,900,586	1,060,222
Charles City	0.31%	3,846,671	2,507,927	1,399,020
Clinton	1.91%	23,348,005	15,222,273	8,491,585
Clive	0.62%	7,559,347	4,928,492	2,749,307
Council Bluffs	5.84%	71,414,024	46,560,029	25,973,022
Creston	0.29%	3,492,899	2,277,276	1,270,355
Davenport	7.73%	94,590,085	61,670,200	34,402,072
Decorah	0.29%	3,495,798	2,279,167	1,271,409
Des Moines	18.22%	222,933,729	145,346,816	81,080,188
Dewitt	0.21%	2,582,986	1,684,036	939,422
Dubuque	4.73%	57,880,514	37,736,544	21,050,934
Estherville	0.23%	2,758,012	1,798,150	1,003,079
Evansdale	0.13%	1,570,089	1,023,656	571,036
Fairfield	0.28%	3,366,917	2,195,140	1,224,536
Fort Dodge	1.62%	19,788,433	12,901,528	7,196,981
Fort Madison	0.67%	8,253,716	5,381,202	3,001,847
Grinnell	0.38%	4,664,098	3,040,867	1,696,316
Indianola	0.48%	5,879,400	3,833,211	2,138,317
Iowa City	3.62%	44,298,964	28,881,737	16,111,373
Keokuk	0.74%	9,065,198	5,910,266	3,296,980
Knoxville	0.25%	3,014,711	1,965,510	1,096,439
Lemars	0.34%	4,100,580	2,673,468	1,491,366
Maquoketa	0.21%	2,533,831	1,651,990	921,545
Marion	1.99%	24,335,211	15,865,905	8,850,628
Marshalltown	1.43%	17,445,716	11,374,139	6,344,944
Mason City	1.88%	23,054,532	15,030,937	8,384,850
Muscatine	1.73%	21,109,653	13,762,928	7,677,505
Newton	1.03%	12,645,873	8,244,770	4,599,258
Oelwein	0.21%	2,529,892	1,649,421	920,112
Oskaloosa	0.46%	5,677,276	3,701,432	2,064,805
Ottumwa	1.51%	18,503,913	12,064,055	6,729,806
Pella	0.36%	4,409,920	2,875,150	1,603,872
Sioux City	6.06%	74,154,884	48,346,997	26,969,863
Spencer	0.50%	6,105,343	3,980,520	2,220,491
Storm Lake	0.38%	4,612,827	3,007,440	1,677,669
Urbandale	2.32%	28,372,335	18,498,002	10,318,916
Waterloo	5.47%	66,933,711	43,638,986	24,343,549
Waverly	0.35%	4,269,551	2,783,633	1,552,820
Webster City	0.28%	3,407,826	2,221,811	1,239,414
West Des Moines	3.68%	45,018,718	29,350,997	16,373,145
Total	100.00%	1,223,363,637	797,600,299	444,932,929

Schedule of Contributions by City

The allocation amongst all Cities of the contributions to the System for the period ended June 30, 2020 was as follows:

City	Proportionate Share (%)	Actuarially Determined Contribution	Contributions in Relation to the ADC	Contribution Deficiency/ (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
Ames	2.68%	2,076,514	2,076,514	0	8,506,982	24.41%
Ankeny	2.56%	1,987,705	1,987,705	0	8,143,154	24.41%
Bettendorf	1.87%	1,453,060	1,453,060	0	5,952,840	24.41%
Boone	0.54%	419,742	419,742	0	1,719,585	24.41%
Burlington	1.83%	1,418,830	1,418,830	0	5,812,606	24.41%
Camanche	0.25%	196,015	196,015	0	803,024	24.41%
Carroll	0.29%	226,793	226,793	0	929,120	24.41%
Cedar Falls	1.86%	1,442,402	1,442,402	0	5,909,177	24.41%
Cedar Rapids	9.15%	7,097,516	7,097,516	0	29,076,829	24.41%
Centerville	0.24%	184,796	184,796	0	757,064	24.41%
Charles City	0.31%	243,848	243,848	0	998,988	24.41%
Clinton	1.91%	1,480,077	1,480,077	0	6,063,521	24.41%
Clive	0.62%	479,202	479,202	0	1,963,177	24.41%
Council Bluffs	5.84%	4,527,078	4,527,078	0	18,546,356	24.41%
Creston	0.29%	221,422	221,422	0	907,112	24.41%
Davenport	7.73%	5,996,254	5,996,254	0	24,565,222	24.41%
Decorah	0.29%	221,606	221,606	0	907,865	24.41%
Des Moines	18.22%	14,132,212	14,132,212	0	57,896,306	24.41%
Dewitt	0.21%	163,741	163,741	0	670,806	24.41%
Dubuque	4.73%	3,669,161	3,669,161	0	15,031,678	24.41%
Estherville	0.23%	174,836	174,836	0	716,261	24.41%
Evansdale	0.13%	99,531	99,531	0	407,755	24.41%
Fairfield	0.28%	213,435	213,435	0	874,395	24.41%
Fort Dodge	1.62%	1,254,428	1,254,428	0	5,139,093	24.41%
Fort Madison	0.67%	523,219	523,219	0	2,143,506	24.41%
Grinnell	0.38%	295,667	295,667	0	1,211,275	24.41%
Indianola	0.48%	372,707	372,707	0	1,526,891	24.41%
Iowa City	3.62%	2,808,200	2,808,200	0	11,504,524	24.41%
Keokuk	0.74%	574,661	574,661	0	2,354,249	24.41%
Knoxville	0.25%	191,108	191,108	0	782,926	24.41%
Lemars	0.34%	259,944	259,944	0	1,064,928	24.41%
Maquoketa	0.21%	160,625	160,625	0	658,041	24.41%
Marion	1.99%	1,542,658	1,542,658	0	6,319,900	24.41%
Marshalltown	1.43%	1,105,918	1,105,918	0	4,530,685	24.41%
Mason City	1.88%	1,461,473	1,461,473	0	5,987,305	24.41%
Muscatine	1.73%	1,338,183	1,338,183	0	5,482,216	24.41%
Newton	1.03%	801,647	801,647	0	3,284,157	24.41%
Oelwein	0.21%	160,375	160,375	0	657,018	24.41%
Oskaloosa	0.46%	359,894	359,894	0	1,474,399	24.41%
Ottumwa	1.51%	1,173,000	1,173,000	0	4,805,501	24.41%
Pella	0.36%	279,554	279,554	0	1,145,264	24.41%
Sioux City	6.06%	4,700,826	4,700,826	0	19,258,162	24.41%
Spencer	0.50%	387,030	387,030	0	1,585,569	24.41%
Storm Lake	0.38%	292,417	292,417	0	1,197,960	24.41%
Urbandale	2.32%	1,798,579	1,798,579	0	7,368,349	24.41%
Waterloo	5.47%	4,243,061	4,243,061	0	17,382,810	24.41%
Waverly	0.35%	270,655	270,655	0	1,108,810	24.41%
Webster City	0.28%	216,029	216,029	0	885,019	24.41%
West Des Moines	3.68%	2,853,827	2,853,827	0	11,691,445	24.41%
Total	100.00%	77,551,461	77,551,461	0	317,709,825	24.41%

Pension Expense by City

The allocation amongst all Cities of Pension Expense of the System for the period ended June 30, 2020 was as follows:

City	Proportionate Share (%)	Share of Pension Expense
Ames	2.68%	3,966,904
Ankeny	2.56%	3,797,246
Bettendorf	1.87%	2,775,878
Boone	0.54%	801,862
Burlington	1.83%	2,710,485
Camanche	0.25%	374,459
Carroll	0.29%	433,259
Cedar Falls	1.86%	2,755,517
Cedar Rapids	9.15%	13,558,860
Centerville	0.24%	353,028
Charles City	0.31%	465,839
Clinton	1.91%	2,827,489
Clive	0.62%	915,452
Council Bluffs	5.84%	8,648,379
Creston	0.29%	422,997
Davenport	7.73%	11,455,046
Decorah	0.29%	423,348
Des Moines	18.22%	26,997,718
Dewitt	0.21%	312,805
Dubuque	4.73%	7,009,444
Estherville	0.23%	334,001
Evansdale	0.13%	190,141
Fairfield	0.28%	407,740
Fort Dodge	1.62%	2,396,418
Fort Madison	0.67%	999,541
Grinnell	0.38%	564,832
Indianola	0.48%	712,007
Iowa City	3.62%	5,364,692
Keokuk	0.74%	1,097,813
Knoxville	0.25%	365,087
Lemars	0.34%	496,588
Maquoketa	0.21%	306,852
Marion	1.99%	2,947,042
Marshalltown	1.43%	2,112,711
Mason City	1.88%	2,791,949
Muscatine	1.73%	2,556,421
Newton	1.03%	1,531,440
Oelwein	0.21%	306,375
Oskaloosa	0.46%	687,529
Ottumwa	1.51%	2,240,860
Pella	0.36%	534,050
Sioux City	6.06%	8,980,303
Spencer	0.50%	739,369
Storm Lake	0.38%	558,622
Urbandale	2.32%	3,435,946
Waterloo	5.47%	8,105,804
Waverly	0.35%	517,051
Webster City	0.28%	412,694
West Des Moines	3.68%	5,451,855
Total	100.00%	148,151,748

Deferred Inflows and Outflows of Resources by City

The allocation amongst all Cities of Deferred (Inflows) of the System as of June 30, 2020 was as follows:

City	Proportionate Share (%)	Expected and Actual Experience	Changes in Assumptions	Projected and Actual Earnings	Contributions Made After Measurement Date	Total
Ames	2.68%	(116,010)	(25,480)	(535,789)	TBD	(677,279)
Ankeny	2.56%	(111,048)	(24,390)	(512,875)	TBD	(648,313)
Bettendorf	1.87%	(81,179)	(17,830)	(374,924)	TBD	(473,933)
Boone	0.54%	(23,450)	(5,150)	(108,303)	TBD	(136,903)
Burlington	1.83%	(79,267)	(17,410)	(366,091)	TBD	(462,768)
Camanche	0.25%	(10,951)	(2,405)	(50,576)	TBD	(63,932)
Carroll	0.29%	(12,670)	(2,783)	(58,518)	TBD	(73,971)
Cedar Falls	1.86%	(80,584)	(17,699)	(372,174)	TBD	(470,457)
Cedar Rapids	9.15%	(396,521)	(87,090)	(1,831,325)	TBD	(2,314,936)
Centerville	0.24%	(10,324)	(2,268)	(47,682)	TBD	(60,274)
Charles City	0.31%	(13,623)	(2,992)	(62,919)	TBD	(79,534)
Clinton	1.91%	(82,688)	(18,161)	(381,894)	TBD	(482,743)
Clive	0.62%	(26,772)	(5,880)	(123,645)	TBD	(156,297)
Council Bluffs	5.84%	(252,917)	(55,550)	(1,168,092)	TBD	(1,476,559)
Creston	0.29%	(12,370)	(2,717)	(57,132)	TBD	(72,219)
Davenport	7.73%	(334,996)	(73,577)	(1,547,174)	TBD	(1,955,747)
Decorah	0.29%	(12,381)	(2,719)	(57,179)	TBD	(72,279)
Des Moines	18.22%	(789,535)	(173,412)	(3,646,444)	TBD	(4,609,391)
Dewitt	0.21%	(9,148)	(2,009)	(42,249)	TBD	(53,406)
Dubuque	4.73%	(204,987)	(45,023)	(946,730)	TBD	(1,196,740)
Estherville	0.23%	(9,768)	(2,145)	(45,112)	TBD	(57,025)
Evansdale	0.13%	(5,561)	(1,221)	(25,681)	TBD	(32,463)
Fairfield	0.28%	(11,924)	(2,619)	(55,071)	TBD	(69,614)
Fort Dodge	1.62%	(70,082)	(15,393)	(323,672)	TBD	(409,147)
Fort Madison	0.67%	(29,231)	(6,420)	(135,003)	TBD	(170,654)
Grinnell	0.38%	(16,518)	(3,628)	(76,289)	TBD	(96,435)
Indianola	0.48%	(20,822)	(4,573)	(96,167)	TBD	(121,562)
Iowa City	3.62%	(156,887)	(34,458)	(724,581)	TBD	(915,926)
Keokuk	0.74%	(32,105)	(7,051)	(148,276)	TBD	(187,432)
Knoxville	0.25%	(10,677)	(2,345)	(49,310)	TBD	(62,332)
Lemars	0.34%	(14,522)	(3,190)	(67,072)	TBD	(84,784)
Maquoketa	0.21%	(8,974)	(1,971)	(41,445)	TBD	(52,390)
Marion	1.99%	(86,185)	(18,929)	(398,042)	TBD	(503,156)
Marshalltown	1.43%	(61,785)	(13,570)	(285,353)	TBD	(360,708)
Mason City	1.88%	(81,649)	(17,933)	(377,094)	TBD	(476,676)
Muscatine	1.73%	(74,761)	(16,420)	(345,283)	TBD	(436,464)
Newton	1.03%	(44,786)	(9,837)	(206,844)	TBD	(261,467)
Oelwein	0.21%	(8,960)	(1,968)	(41,380)	TBD	(52,308)
Oskaloosa	0.46%	(20,106)	(4,416)	(92,861)	TBD	(117,383)
Ottumwa	1.51%	(65,533)	(14,393)	(302,661)	TBD	(382,587)
Pella	0.36%	(15,618)	(3,430)	(72,131)	TBD	(91,179)
Sioux City	6.06%	(262,624)	(57,682)	(1,212,923)	TBD	(1,533,229)
Spencer	0.50%	(21,622)	(4,749)	(99,863)	TBD	(126,234)
Storm Lake	0.38%	(16,337)	(3,588)	(75,450)	TBD	(95,375)
Urbandale	2.32%	(100,482)	(22,070)	(464,076)	TBD	(586,628)
Waterloo	5.47%	(237,050)	(52,065)	(1,094,809)	TBD	(1,383,924)
Waverly	0.35%	(15,121)	(3,321)	(69,835)	TBD	(88,277)
Webster City	0.28%	(12,069)	(2,651)	(55,741)	TBD	(70,461)
West Des Moines	3.68%	(159,436)	(35,018)	(736,354)	TBD	(930,808)
Total	100.00%	(4,332,616)	(951,599)	(20,010,094)	TBD	(25,294,309)

Deferred Inflows and Outflows of Resources by City

The allocation amongst all Cities of Deferred Outflows of the System as of June 30, 2020 was as follows:

City	Proportionate Share (%)	Expected and Actual Experience	Changes in Assumptions	Projected and Actual Earnings	Contributions Made After Measurement Date	Total
Ames	2.68%	587,188	529,025	3,677,584	TBD	4,793,797
Ankeny	2.56%	562,075	506,400	3,520,300	TBD	4,588,775
Bettendorf	1.87%	410,890	370,190	2,573,424	TBD	3,354,504
Boone	0.54%	118,693	106,936	743,380	TBD	969,009
Burlington	1.83%	401,210	361,470	2,512,800	TBD	3,275,480
Camanche	0.25%	55,428	49,938	347,149	TBD	452,515
Carroll	0.29%	64,132	57,779	401,660	TBD	523,571
Cedar Falls	1.86%	407,876	367,475	2,554,548	TBD	3,329,899
Cedar Rapids	9.15%	2,007,005	1,808,206	12,569,966	TBD	16,385,177
Centerville	0.24%	52,256	47,080	327,280	TBD	426,616
Charles City	0.31%	68,954	62,124	431,864	TBD	562,942
Clinton	1.91%	418,530	377,073	2,621,271	TBD	3,416,874
Clive	0.62%	135,507	122,084	848,685	TBD	1,106,276
Council Bluffs	5.84%	1,280,147	1,153,346	8,017,623	TBD	10,451,116
Creston	0.29%	62,613	56,411	392,146	TBD	511,170
Davenport	7.73%	1,695,595	1,527,642	10,619,590	TBD	13,842,827
Decorah	0.29%	62,665	56,458	392,472	TBD	511,595
Des Moines	18.22%	3,996,245	3,600,405	25,028,683	TBD	32,625,333
Dewitt	0.21%	46,302	41,716	289,991	TBD	378,009
Dubuque	4.73%	1,037,549	934,778	6,498,222	TBD	8,470,549
Estherville	0.23%	49,439	44,542	309,641	TBD	403,622
Evansdale	0.13%	28,145	25,357	176,273	TBD	229,775
Fairfield	0.28%	60,354	54,376	378,002	TBD	492,732
Fort Dodge	1.62%	354,722	319,586	2,221,639	TBD	2,895,947
Fort Madison	0.67%	147,954	133,299	926,641	TBD	1,207,894
Grinnell	0.38%	83,607	75,326	523,636	TBD	682,569
Indianola	0.48%	105,392	94,953	660,078	TBD	860,423
Iowa City	3.62%	794,090	715,434	4,973,427	TBD	6,482,951
Keokuk	0.74%	162,500	146,404	1,017,746	TBD	1,326,650
Knoxville	0.25%	54,041	48,688	338,460	TBD	441,189
Lemars	0.34%	73,506	66,225	460,370	TBD	600,101
Maquoketa	0.21%	45,421	40,922	284,472	TBD	370,815
Marion	1.99%	436,226	393,017	2,732,104	TBD	3,561,347
Marshalltown	1.43%	312,727	281,751	1,958,623	TBD	2,553,101
Mason City	1.88%	413,269	372,334	2,588,323	TBD	3,373,926
Muscatine	1.73%	378,406	340,924	2,369,972	TBD	3,089,302
Newton	1.03%	226,686	204,232	1,419,747	TBD	1,850,665
Oelwein	0.21%	45,350	40,858	284,030	TBD	370,238
Oskaloosa	0.46%	101,769	91,689	637,385	TBD	830,843
Ottumwa	1.51%	331,696	298,841	2,077,427	TBD	2,707,964
Pella	0.36%	79,051	71,221	495,100	TBD	645,372
Sioux City	6.06%	1,329,279	1,197,611	8,325,339	TBD	10,852,229
Spencer	0.50%	109,443	98,602	685,444	TBD	893,489
Storm Lake	0.38%	82,688	74,498	517,880	TBD	675,066
Urbandale	2.32%	508,594	458,217	3,185,351	TBD	4,152,162
Waterloo	5.47%	1,199,834	1,080,988	7,514,621	TBD	9,795,443
Waverly	0.35%	76,535	68,954	479,341	TBD	624,830
Webster City	0.28%	61,088	55,037	382,595	TBD	498,720
West Des Moines	3.68%	806,993	727,058	5,054,233	TBD	6,588,284
Total	100.00%	21,929,665	19,757,480	137,346,538	TBD	179,033,683

Future Deferred Inflows and Outflows of Resources to be Recognized by City

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:

City	Proportionate Share (%)	Year Ending June 30,					
		2021	2022	2023	2024	2025	Thereafter
Ames	2.68%	910,883	1,264,697	1,142,135	784,195	14,608	0
Ankeny	2.56%	871,926	1,210,608	1,093,288	750,656	13,983	0
Bettendorf	1.87%	637,399	884,984	799,220	548,748	10,222	0
Boone	0.54%	184,124	255,643	230,869	158,516	2,953	0
Burlington	1.83%	622,383	864,136	780,392	535,821	9,981	0
Camanche	0.25%	85,984	119,382	107,813	74,025	1,379	0
Carroll	0.29%	99,485	138,128	124,742	85,649	1,595	0
Cedar Falls	1.86%	632,723	878,492	793,358	544,723	10,147	0
Cedar Rapids	9.15%	3,113,393	4,322,729	3,903,814	2,680,375	49,929	0
Centerville	0.24%	81,062	112,550	101,642	69,788	1,300	0
Charles City	0.31%	106,966	148,515	134,123	92,089	1,715	0
Clinton	1.91%	649,250	901,438	814,080	558,951	10,412	0
Clive	0.62%	210,207	291,857	263,573	180,971	3,371	0
Council Bluffs	5.84%	1,985,845	2,757,208	2,490,007	1,709,650	31,847	0
Creston	0.29%	97,129	134,857	121,788	83,620	1,558	0
Davenport	7.73%	2,630,314	3,652,008	3,298,092	2,264,484	42,182	0
Decorah	0.29%	97,209	134,969	121,889	83,689	1,559	0
Des Moines	18.22%	6,199,229	8,607,199	7,773,076	5,337,023	99,414	0
Dewitt	0.21%	71,826	99,726	90,061	61,837	1,152	0
Dubuque	4.73%	1,609,512	2,234,696	2,018,132	1,385,658	25,812	0
Estherville	0.23%	76,693	106,483	96,164	66,027	1,230	0
Evansdale	0.13%	43,660	60,619	54,745	37,588	700	0
Fairfield	0.28%	93,626	129,993	117,395	80,604	1,501	0
Fort Dodge	1.62%	550,267	764,007	689,967	473,735	8,825	0
Fort Madison	0.67%	229,515	318,666	287,784	197,594	3,681	0
Grinnell	0.38%	129,697	180,075	162,624	111,658	2,080	0
Indianola	0.48%	163,491	226,996	204,998	140,753	2,622	0
Iowa City	3.62%	1,231,843	1,710,329	1,544,581	1,060,516	19,755	0
Keokuk	0.74%	252,080	349,996	316,078	217,021	4,043	0
Knoxville	0.25%	83,832	116,394	105,115	72,172	1,344	0
Lemars	0.34%	114,027	158,318	142,976	98,168	1,829	0
Maquoketa	0.21%	70,459	97,828	88,348	60,660	1,130	0
Marion	1.99%	676,701	939,553	848,501	582,584	10,852	0
Marshalltown	1.43%	485,122	673,558	608,283	417,650	7,780	0
Mason City	1.88%	641,089	890,107	803,847	551,925	10,281	0
Muscatine	1.73%	587,007	815,018	736,035	505,365	9,414	0
Newton	1.03%	351,650	488,242	440,926	302,742	5,639	0
Oelwein	0.21%	70,350	97,676	88,210	60,566	1,128	0
Oskaloosa	0.46%	157,871	219,193	197,951	135,914	2,532	0
Ottumwa	1.51%	514,548	714,413	645,180	442,983	8,252	0
Pella	0.36%	122,629	170,262	153,762	105,573	1,967	0
Sioux City	6.06%	2,062,062	2,863,029	2,585,573	1,775,266	33,069	0
Spencer	0.50%	169,774	235,720	212,876	146,162	2,723	0
Storm Lake	0.38%	128,271	178,096	160,836	110,431	2,057	0
Urbandale	2.32%	788,964	1,095,421	989,264	679,233	12,653	0
Waterloo	5.47%	1,861,259	2,584,229	2,333,791	1,602,391	29,849	0
Waverly	0.35%	118,726	164,842	148,867	102,213	1,904	0
Webster City	0.28%	94,763	131,572	118,821	81,583	1,520	0
West Des Moines	3.68%	1,251,858	1,738,118	1,569,677	1,077,747	20,076	0
Total	100.00%	34,018,683	47,232,575	42,655,269	29,287,292	545,555	0