Municipal Fire and Police Retirement System of Iowa

Required GASB 68 Reporting Information as of and for
the Year Ended June 30, 2022, and
Related Independent Auditor's Report

Independent Auditor's Report

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

Report on Audit of Schedule of Allocations and Net Pension Amounts by Employer

Opinions

We have audited the accompanying schedules of net pension liability (NPL) by city (proportionate share, share of NPL) as of June 30, 2022, and the schedules of deferred outflow of resources by city (differences between expected and actual experience, changes in assumptions, difference between projected and actual earnings and total deferred outflows), deferred inflows of resources by city (differences between expected and actual experience, difference between projected and actual earnings and total deferred inflows) for the Municipal Fire and Police Retirement System of Iowa (the System) as of June 30, 2022, and the related schedule of pension expense by city (collectively the Schedules) for the year then ended, and the related notes to the Schedules.

In our opinion, the Schedules referred to above present fairly, in all material respects, the schedules of net pension liability (NPL) by city (proportionate share, share of NPL) as of June 30, 2022, and the schedules of deferred outflow of resources by city (differences between expected and actual experience, changes in assumptions, difference between projected and actual earnings and total deferred outflows), deferred inflows of resources by city (differences between expected and actual experience, difference between projected and actual earnings and total deferred inflows) and pension expense by city for the System as of and for the year ended June 30, 2022, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

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, 2022, and our report thereon, dated October 14, 2022, expressed an unmodified opinion on those financial statements.

Responsibilities of Management 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; and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the Schedules that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the Schedules as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the Schedules.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the Schedules, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the Schedules.
- Obtain an understanding of internal control relevant to the audit 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 the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the Schedules.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control–related matters that we identified during the audit.

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.

Eide Bailly LLP

Boise, Idaho
April 5, 2023

City	Proportionate Share (%)	Share of NPL	Covered Payroll *	NPL as % of Covered Payroll
Ames	2.57%	$ 14,408,725	$ 8,665,729	166.27%
Ankeny	2.90%	16,262,699	9,780,751	166.27%
Bettendorf	1.93%	10,824,271	6,509,959	166.27%
Boone	0.56%	3,164,702	1,903,323	166.27%
Burlington	1.83%	10,292,907	6,190,385	166.27%
Camanche	0.29%	1,611,668	969,293	166.27%
Carroll	0.31%	1,732,782	1,042,134	166.27%
Cedar Falls	1.75%	9,824,664	5,908,773	166.27%
Cedar Rapids	9.25%	51,917,752	31,224,497	166.27%
Centerville	0.22%	1,249,208	751,302	166.27%
Charles City	0.32%	1,776,124	1,068,201	166.27%
Clinton	1.83%	10,304,257	6,197,210	166.27%
Clive	0.62%	3,499,185	2,104,488	166.27%
Council Bluffs	5.73%	32,201,833	19,366,902	166.27%
Creston	0.28%	1,565,103	941,288	166.27%
Davenport	7.23%	40,620,633	24,430,157	166.27%
Decorah	0.29%	1,609,629	968,067	166.27%
Des Moines	18.54%	104,100,910	62,608,615	166.27%
Dewitt	0.20%	1,096,068	659,200	166.27%
Dubuque	4.32%	24,280,533	14,602,855	166.27%
Estherville	0.22%	1,229,789	739,622	166.27%
Evansdale	0.13%	730,160	439,134	166.27%
Fairfield	0.27%	1,498,702	901,353	166.27%
Fort Dodge	1.58%	8,887,027	5,344,857	166.27%
Fort Madison	0.65%	3,629,250	2,182,712	166.27%
Grinnell	0.39%	2,187,087	1,315,363	166.27%
Indianola	0.52%	2,899,972	1,744,108	166.27%
Iowa City	3.38%	18,975,938	11,412,553	166.27%
Keokuk	0.78%	4,357,613	2,620,766	166.27%
Knoxville	0.25%	1,431,567	860,976	166.27%
Lemars	0.34%	1,890,533	1,137,009	166.27%
Maquoketa	0.20%	1,101,987	662,759	166.27%
Marion	2.10%	11,817,610	7,107,375	166.27%
Marshalltown	1.40%	7,856,742	4,725,220	166.27%
Mason City	1.86%	10,457,970	6,289,657	166.27%
Muscatine	1.80%	10,118,944	6,085,759	166.27%
Newton	1.08%	6,073,166	3,652,538	166.27%
Oelwein	0.20%	1,133,165	681,511	166.27%
Oskaloosa	0.40%	2,263,224	1,361,154	166.27%
Ottumwa	1.39%	7,818,325	4,702,115	166.27%
Pella	0.38%	2,149,877	1,292,984	166.27%
Sioux City	6.19%	34,759,674	20,905,245	166.27%
Spencer	0.52%	2,909,031	1,749,556	166.27%
Storm Lake	0.43%	2,390,156	1,437,493	166.27%
Urbandale	2.47%	13,895,764	8,357,223	166.27%
Waterloo	5.48%	30,785,035	18,514,808	166.27%
Waverly	0.37%	2,055,135	1,236,004	166.27%
Webster City	0.32%	1,821,510	1,095,497	166.27%
West Des Moines	3.94%	22,101,870	13,292,559	
Total	100.00%	$ 561,570,476	$ 337,741,039	166.27%

* Represents unaudited 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.

Municipal Fire and Police Retirement System of Iowa
Deferred Outflows of Resources by City
As of June 30, 2022

City	Proportionate Share (%)	Difference Between Expected and Actual Experience	Changes in Assumptions	Difference Between Projected and Actual Earnings	Contributions Made After Measurement Date	Total
Ames	2.57%	$ 894,748	$ 40,418	$ 8,970,863	TBD	$ 9,906,029
Ankeny	2.90%	1,009,876	45,619	10,125,146	TBD	11,180,641
Bettendorf	1.93%	672,162	30,363	6,739,184	TBD	7,441,709
Boone	0.56%	196,521	8,877	1,970,342	TBD	2,175,740
Burlington	1.83%	639,166	28,873	6,408,358	TBD	7,076,397
Camanche	0.29%	100,081	4,521	1,003,423	TBD	1,108,025
Carroll	0.31%	107,602	4,861	1,078,829	TBD	1,191,292
Cedar Falls	1.75%	610,089	27,559	6,116,830	TBD	6,754,478
Cedar Rapids	9.25%	3,223,972	145,635	32,323,960	TBD	35,693,567
Centerville	0.22%	77,573	3,504	777,756	TBD	858,833
Charles City	0.32%	110,293	4,982	1,105,814	TBD	1,221,089
Clinton	1.83%	639,870	28,905	6,415,424	TBD	7,084,199
Clive	0.62%	217,291	9,816	2,178,590	TBD	2,405,697
Council Bluffs	5.73%	1,999,659	90,330	20,048,841	TBD	22,138,830
Creston	0.28%	97,189	4,390	974,432	TBD	1,076,011
Davenport	7.23%	2,522,447	113,946	25,290,381	TBD	27,926,774
Decorah	0.29%	99,954	4,515	1,002,154	TBD	1,106,623
Des Moines	18.54%	6,464,423	292,014	64,813,168	TBD	71,569,605
Dewitt	0.20%	68,063	3,075	682,411	TBD	753,549
Dubuque	4.32%	1,507,765	68,110	15,117,045	TBD	16,692,920
Estherville	0.22%	76,367	3,450	765,666	TBD	845,483
Evansdale	0.13%	45,341	2,048	454,597	TBD	501,986
Fairfield	0.27%	93,066	4,204	933,091	TBD	1,030,361
Fort Dodge	1.58%	551,864	24,929	5,533,057	TBD	6,109,850
Fort Madison	0.65%	225,368	10,180	2,259,569	TBD	2,495,117
Grinnell	0.39%	135,813	6,135	1,361,679	TBD	1,503,627
Indianola	0.52%	180,082	8,135	1,805,521	TBD	1,993,738
Iowa City	3.38%	1,178,362	53,230	11,814,407	TBD	13,045,999
Keokuk	0.78%	270,598	12,224	2,713,047	TBD	2,995,869
Knoxville	0.25%	88,897	4,016	891,293	TBD	984,206
Lemars	0.34%	117,398	5,303	1,177,044	TBD	1,299,745
Maquoketa	0.20%	68,431	3,091	686,096	TBD	757,618
Marion	2.10%	733,846	33,150	7,357,637	TBD	8,124,633
Marshalltown	1.40%	487,885	22,039	4,891,602	TBD	5,401,526
Mason City	1.86%	649,416	29,336	6,511,125	TBD	7,189,877
Muscatine	1.80%	628,363	28,385	6,300,048	TBD	6,956,796
Newton	1.08%	377,129	17,036	3,781,149	TBD	4,175,314
Oelwein	0.20%	70,367	3,179	705,508	TBD	779,054
Oskaloosa	0.40%	140,541	6,349	1,409,082	TBD	1,555,972
Ottumwa	1.39%	485,500	21,931	4,867,684	TBD	5,375,115
Pella	0.38%	133,502	6,031	1,338,512	TBD	1,478,045
Sioux City	6.19%	2,158,495	97,505	21,641,351	TBD	23,897,351
Spencer	0.52%	180,644	8,160	1,811,161	TBD	1,999,965
Storm Lake	0.43%	148,423	6,705	1,488,110	TBD	1,643,238
Urbandale	2.47%	862,895	38,979	8,651,494	TBD	9,553,368
Waterloo	5.48%	1,911,679	86,356	19,166,744	TBD	21,164,779
Waverly	0.37%	127,619	5,765	1,279,525	TBD	1,412,909
Webster City	0.32%	113,112	5,110	1,134,071	TBD	1,252,293
West Des Moines	3.94%	1,372,475	61,998	13,760,610	TBD	15,195,083
Total	100.00%	$ 34,872,222	$ 1,575,272	$ 349,633,431	TBD	$ 386,080,925

Municipal Fire and Police Retirement System of Iowa
Deferred Inflows of Resources by City
As of June 30, 2022

City	Proportionate Share (%)	Difference Between Expected and Actual Experience	Difference Between Projected and Actual Earnings	Total
Ames	2.57%	$ (18,528)	$ (9,141,581)	$ (9,160,109)
Ankeny	2.90%	(20,912)	(10,317,831)	(10,338,743)
Bettendorf	1.93%	(13,919)	(6,867,433)	(6,881,352)
Boone	0.56%	(4,069)	(2,007,838)	(2,011,907)
Burlington	1.83%	(13,235)	(6,530,311)	(6,543,546)
Camanche	0.29%	(2,072)	(1,022,519)	(1,024,591)
Carroll	0.31%	(2,228)	(1,099,359)	(1,101,587)
Cedar Falls	1.75%	(12,633)	(6,233,235)	(6,245,868)
Cedar Rapids	9.25%	(66,759)	(32,939,095)	(33,005,854)
Centerville	0.22%	(1,606)	(792,557)	(794,163)
Charles City	0.32%	(2,284)	(1,126,858)	(1,129,142)
Clinton	1.83%	(13,250)	(6,537,511)	(6,550,761)
Clive	0.62%	(4,499)	(2,220,050)	(2,224,549)
Council Bluffs	5.73%	(41,407)	(20,430,377)	(20,471,784)
Creston	0.28%	(2,013)	(992,976)	(994,989)
Davenport	7.23%	(52,233)	(25,771,665)	(25,823,898)
Decorah	0.29%	(2,070)	(1,021,226)	(1,023,296)
Des Moines	18.54%	(133,861)	(66,046,576)	(66,180,437)
Dewitt	0.20%	(1,409)	(695,398)	(696,807)
Dubuque	4.32%	(31,221)	(15,404,727)	(15,435,948)
Estherville	0.22%	(1,581)	(780,237)	(781,818)
Evansdale	0.13%	(939)	(463,248)	(464,187)
Fairfield	0.27%	(1,927)	(950,848)	(952,775)
Fort Dodge	1.58%	(11,427)	(5,638,353)	(5,649,780)
Fort Madison	0.65%	(4,667)	(2,302,569)	(2,307,236)
Grinnell	0.39%	(2,812)	(1,387,592)	(1,390,404)
Indianola	0.52%	(3,729)	(1,839,881)	(1,843,610)
Iowa City	3.38%	(24,400)	(12,039,239)	(12,063,639)
Keokuk	0.78%	(5,603)	(2,764,677)	(2,770,280)
Knoxville	0.25%	(1,841)	(908,254)	(910,095)
Lemars	0.34%	(2,431)	(1,199,444)	(1,201,875)
Maquoketa	0.20%	(1,417)	(699,153)	(700,570)
Marion	2.10%	(15,196)	(7,497,655)	(7,512,851)
Marshalltown	1.40%	(10,103)	(4,984,691)	(4,994,794)
Mason City	1.86%	(13,448)	(6,635,034)	(6,648,482)
Muscatine	1.80%	(13,012)	(6,419,940)	(6,432,952)
Newton	1.08%	(7,809)	(3,853,106)	(3,860,915)
Oelwein	0.20%	(1,457)	(718,934)	(720,391)
Oskaloosa	0.40%	(2,910)	(1,435,897)	(1,438,807)
Ottumwa	1.39%	(10,053)	(4,960,318)	(4,970,371)
Pella	0.38%	(2,764)	(1,363,984)	(1,366,748)
Sioux City	6.19%	(44,696)	(22,053,193)	(22,097,889)
Spencer	0.52%	(3,741)	(1,845,628)	(1,849,369)
Storm Lake	0.43%	(3,073)	(1,516,429)	(1,519,502)
Urbandale	2.47%	(17,868)	(8,816,135)	(8,834,003)
Waterloo	5.48%	(39,585)	(19,531,493)	(19,571,078)
Waverly	0.37%	(2,643)	(1,303,875)	(1,306,518)
Webster City	0.32%	(2,342)	(1,155,653)	(1,157,995)
West Des Moines	3.94%	(28,420)	(14,022,479)	(14,050,899)
Total	100.00%	$ (722,102)	$ (356,287,062)	$ (357,009,164)

City	Proportionate Share (%)	Share of Pension Expense
Ames	2.57%	$ 1,362,210
Ankeny	2.90%	1,537,486
Bettendorf	1.93%	1,023,334
Boone	0.56%	299,193
Burlington	1.83%	973,098
Camanche	0.29%	152,368
Carroll	0.31%	163,818
Cedar Falls	1.75%	928,830
Cedar Rapids	9.25%	4,908,338
Centerville	0.22%	118,101
Charles City	0.32%	167,916
Clinton	1.83%	974,171
Clive	0.62%	330,815
Council Bluffs	5.73%	3,044,382
Creston	0.28%	147,966
Davenport	7.23%	3,840,301
Decorah	0.29%	152,175
Des Moines	18.54%	9,841,769
Dewitt	0.20%	103,623
Dubuque	4.32%	2,295,497
Estherville	0.22%	116,265
Evansdale	0.13%	69,030
Fairfield	0.27%	141,688
Fort Dodge	1.58%	840,185
Fort Madison	0.65%	343,112
Grinnell	0.39%	206,769
Indianola	0.52%	274,165
Iowa City	3.38%	1,793,998
Keokuk	0.78%	411,972
Knoxville	0.25%	135,341
Lemars	0.34%	178,732
Maquoketa	0.20%	104,183
Marion	2.10%	1,117,245
Marshalltown	1.40%	742,781
Mason City	1.86%	988,703
Muscatine	1.80%	956,652
Newton	1.08%	574,161
Oelwein	0.20%	107,130
Oskaloosa	0.40%	213,967
Ottumwa	1.39%	739,150
Pella	0.38%	203,251
Sioux City	6.19%	3,286,202
Spencer	0.52%	275,022
Storm Lake	0.43%	225,967
Urbandale	2.47%	1,313,715
Waterloo	5.48%	2,910,437
Waverly	0.37%	194,294
Webster City	0.32%	172,207
West Des Moines	3.94%	2,089,525
Total	100.00%	$ 53,091,240

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, deferred outflow and inflows of resources, 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, 2022, System membership consisted of the following:

Inactive members (or beneficiaries) currently receiving benefits	4,353
Inactive members entitled to but not yet receiving benefits	453
Active members	4,155
Total	8,961

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, 2022:

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, 2022.

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 26.18% for the year ended June 30, 2022.

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. There were no state appropriations approve by the state legislature for fiscal year ended June 30, 2022.

The allocation amongst all Cities of the contributions to the System for the period ended June 30, 2022 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	2.57%	$ 2,268,721	$ 2,268,721	$ -	$ 8,665,729	26.18%
Ankeny	2.90%	2,560,639	2,560,639	-	9,780,751	26.18%
Bettendorf	1.93%	1,704,332	1,704,332	-	6,509,959	26.18%
Boone	0.56%	498,297	498,297	-	1,903,323	26.18%
Burlington	1.83%	1,620,667	1,620,667	-	6,190,385	26.18%
Camanche	0.29%	253,764	253,764	-	969,293	26.18%
Carroll	0.31%	272,834	272,834	-	1,042,134	26.18%
Cedar Falls	1.75%	1,546,940	1,546,940	-	5,908,773	26.18%
Cedar Rapids	9.25%	8,174,694	8,174,694	-	31,224,497	26.18%
Centerville	0.22%	196,694	196,694	-	751,302	26.18%
Charles City	0.32%	279,659	279,659	-	1,068,201	26.18%
Clinton	1.83%	1,622,454	1,622,454	-	6,197,210	26.18%
Clive	0.62%	550,963	550,963	-	2,104,488	26.18%
Council Bluffs	5.73%	5,070,330	5,070,330	-	19,366,902	26.18%
Creston	0.28%	246,433	246,433	-	941,288	26.18%
Davenport	7.23%	6,395,910	6,395,910	-	24,430,157	26.18%
Decorah	0.29%	253,444	253,444	-	968,067	26.18%
Des Moines	18.54%	16,391,180	16,391,180	-	62,608,615	26.18%
Dewitt	0.20%	172,581	172,581	-	659,200	26.18%
Dubuque	4.32%	3,823,084	3,823,084	-	14,602,855	26.18%
Estherville	0.22%	193,636	193,636	-	739,622	26.18%
Evansdale	0.13%	114,967	114,967	-	439,134	26.18%
Fairfield	0.27%	235,977	235,977	-	901,353	26.18%
Fort Dodge	1.58%	1,399,304	1,399,304	-	5,344,857	26.18%
Fort Madison	0.65%	571,442	571,442	-	2,182,712	26.18%
Grinnell	0.39%	344,367	344,367	-	1,315,363	26.18%
Indianola	0.52%	456,614	456,614	-	1,744,108	26.18%
Iowa City	3.38%	2,987,851	2,987,851	-	11,412,553	26.18%
Keokuk	0.78%	686,127	686,127	-	2,620,766	26.18%
Knoxville	0.25%	225,407	225,407	-	860,976	26.18%
Lemars	0.34%	297,673	297,673	-	1,137,009	26.18%
Maquoketa	0.20%	173,513	173,513	-	662,759	26.18%
Marion	2.10%	1,860,739	1,860,739	-	7,107,375	26.18%
Marshalltown	1.40%	1,237,081	1,237,081	-	4,725,220	26.18%
Mason City	1.86%	1,646,657	1,646,657	-	6,289,657	26.18%
Muscatine	1.80%	1,593,275	1,593,275	-	6,085,759	26.18%
Newton	1.08%	956,249	956,249	-	3,652,538	26.18%
Oelwein	0.20%	178,422	178,422	-	681,511	26.18%
Oskaloosa	0.40%	356,355	356,355	-	1,361,154	26.18%

City	Proportionate Share (%)	Actuarially Determined Contribution	Contributions in Relation to the ADC	Contribution Deficiency/ (Excess)	Covered Payroll *	Contributions as a % of Covered Payroll
Ottumwa	1.39%	1,231,032	1,231,032	-	4,702,115	26.18%
Pella	0.38%	338,508	338,508	-	1,292,984	26.18%
Sioux City	6.19%	5,473,074	5,473,074	-	20,905,245	26.18%
Spencer	0.52%	458,040	458,040	-	1,749,556	26.18%
Storm Lake	0.43%	376,341	376,341	-	1,437,493	26.18%
Urbandale	2.47%	2,187,953	2,187,953	-	8,357,223	26.18%
Waterloo	5.48%	4,847,248	4,847,248	-	18,514,808	26.18%
Waverly	0.37%	323,590	323,590	-	1,236,004	26.18%
Webster City	0.32%	286,805	286,805	-	1,095,497	26.18%
West Des Moines	3.94%	3,480,043	3,480,043	-	13,292,559	26.18%
Total	100.00%	$ 88,421,910	$ 88,421,910	$ -	$ 337,741,039	

* Represents unaudited 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.

Net Pension Liability

The components of the net pension liability of the System at June 30, 2022, were as follows:

Total Pension Liability	$ 3,651,617,338
Plan Fiduciary Net Position	(3,090,046,862)
	$ 561,570,476
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	84.62%

The following schedule presents the changes in net pension liability for fiscal year ended June 30, 2022.

Total Pension Liability - Beginning of Year	$ 3,518,184,403
Service cost	58,814,108
Interest	260,633,217
Difference between expected and actual experience	21,515,283
Benefit payments, including refunds	(207,529,673)
Total Pension Liability - End of Year	3,651,617,338
Plan Fiduciary net Position - Beginning of Year	3,293,610,268
Contributions - Employer and State	88,421,910
Contributions - Member	31,631,033
Net investment income	(113,965,317)
Benefit payments, including refunds	(207,529,673)
Administrative expenses	(1,902,581)
Other	(218,778)
Plan Fiduciary Net Position - End of Year	3,090,046,862
Net Pension Liability - End of Year	$ 561,570,476
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	84.62%
Covered Payroll	$337,741,039*
Net Pension Liability as a Percentage of the Covered Payroll	166.27%

*Represents unaudited 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:

	1% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Total Pension Liability	$ 4,106,384,739	$ 3,651,617,338	$ 3,274,836,348
Plan Fiduciary Net Position	(3,090,046,862)	(3,090,046,862)	(3,090,046,862)
Net Pension Liability	$ 1,016,337,877	$ 561,570,476	$ 184,789,486

The allocation amongst all Cities of the sensitivity in Net Pension Liability of the System at June 30, 2022, was as follows:

City	Proportionate Share (%)	1% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Ames	2.57%	$ 26,077,106	$ 14,408,725	$ 4,741,312
Ankeny	2.90%	29,432,454	16,262,699	5,351,378
Bettendorf	1.93%	19,589,913	10,824,271	3,561,817
Boone	0.56%	5,727,521	3,164,702	1,041,372
Burlington	1.83%	18,628,244	10,292,907	3,386,968
Camanche	0.29%	2,916,819	1,611,668	530,333
Carroll	0.31%	3,136,012	1,732,782	570,186
Cedar Falls	1.75%	17,780,811	9,824,664	3,232,888
Cedar Rapids	9.25%	93,961,453	51,917,752	17,083,973
Centerville	0.22%	2,260,833	1,249,208	411,062
Charles City	0.32%	3,214,453	1,776,124	584,448
Clinton	1.83%	18,648,784	10,304,257	3,390,702
Clive	0.62%	6,332,872	3,499,185	1,151,436
Council Bluffs	5.73%	58,279,314	32,201,833	10,596,284
Creston	0.28%	2,832,544	1,565,103	515,010
Davenport	7.23%	73,515,774	40,620,633	13,366,561
Decorah	0.29%	2,913,129	1,609,629	529,662
Des Moines	18.54%	188,403,248	104,100,910	34,255,284
Dewitt	0.20%	1,983,678	1,096,068	360,670
Dubuque	4.32%	43,943,238	24,280,533	7,989,713
Estherville	0.22%	2,225,688	1,229,789	404,672
Evansdale	0.13%	1,321,453	730,160	240,265
Fairfield	0.27%	2,712,372	1,498,702	493,161
Fort Dodge	1.58%	16,083,862	8,887,027	2,924,351
Fort Madison	0.65%	6,568,266	3,629,250	1,194,235
Grinnell	0.39%	3,958,219	2,187,087	719,679
Indianola	0.52%	5,248,409	2,899,972	954,260
Iowa City	3.38%	34,342,911	18,975,938	6,244,192
Keokuk	0.78%	7,886,467	4,357,613	1,433,909
Knoxville	0.25%	2,590,869	1,431,567	471,069
Lemars	0.34%	3,421,512	1,890,533	622,096
Maquoketa	0.20%	1,994,390	1,101,987	362,618
Marion	2.10%	21,387,672	11,817,610	3,888,684
Marshalltown	1.40%	14,219,238	7,856,742	2,585,327
Mason City	1.86%	18,926,976	10,457,970	3,441,283
Muscatine	1.80%	18,313,402	10,118,944	3,329,724
Newton	1.08%	10,991,298	6,073,166	1,998,426
Oelwein	0.20%	2,050,817	1,133,165	372,877
Oskaloosa	0.40%	4,096,014	2,263,224	744,733
Ottumwa	1.39%	14,149,710	7,818,325	2,572,685
Pella	0.38%	3,890,877	2,149,877	707,435
Sioux City	6.19%	62,908,530	34,759,674	11,437,963
Spencer	0.52%	5,264,803	2,909,031	957,241

City	Proportionate Share (%)	1% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Storm Lake	0.43%	4,325,737	2,390,156	786,501
Urbandale	2.47%	25,148,742	13,895,764	4,572,518
Waterloo	5.48%	55,715,175	30,785,035	10,130,075
Waverly	0.37%	3,719,410	2,055,135	676,259
Webster City	0.32%	3,296,594	1,821,510	599,383
West Des Moines	3.94%	40,000,264	22,101,870	7,272,806
Total	100.00%	$ 1,016,337,877	$ 561,570,476	$ 184,789,486

Deferred Inflows and Outflows of Resources

As of June 30, 2022, the deferred inflows and outflows of resources are as follows:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	$ (722,102)	$ 34,872,222
Chanes of assumptions	-	1,575,272
Net difference between projected and actual earnings	(356,287,062)	349,633,431
Contributions made subsequent to measurement date*	TBD	TBD
Total	$ (357,009,164)	$ 386,080,925

*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:

Years Ending June 30,	Annual Recognition
2023	$ 2,297,490
2024	(11,070,481)
2025	(39,812,222)
2026	76,439,126
2027	1,217,848

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,				
		2023	2024	2025	2026	2027
Ames	2.57%	$ 58,949	$ (284,045)	$ (1,021,498)	$ 1,961,268	$ 31,247
Ankeny	2.90%	66,534	(320,594)	(1,152,935)	2,213,625	35,268
Bettendorf	1.93%	44,284	(213,384)	(767,381)	1,473,364	23,474
Boone	0.56%	12,947	(62,387)	(224,360)	430,769	6,863
Burlington	1.83%	42,110	(202,909)	(729,710)	1,401,037	22,322
Camanche	0.29%	6,594	(31,772)	(114,258)	219,375	3,495
Carroll	0.31%	7,089	(34,159)	(122,845)	235,861	3,758
Cedar Falls	1.75%	40,195	(193,678)	(696,514)	1,337,301	21,306
Cedar Rapids	9.25%	212,405	(1,023,477)	(3,680,680)	7,066,874	112,591
Centerville	0.22%	5,111	(24,626)	(88,562)	170,038	2,709
Charles City	0.32%	7,266	(35,013)	(125,917)	241,760	3,852
Clinton	1.83%	42,157	(203,132)	(730,514)	1,402,582	22,346
Clive	0.62%	14,316	(68,981)	(248,073)	476,298	7,588
Council Bluffs	5.73%	131,744	(634,809)	(2,282,931)	4,383,208	69,834
Creston	0.28%	6,403	(30,854)	(110,957)	213,037	3,394
Davenport	7.23%	166,187	(800,772)	(2,879,777)	5,529,147	88,092
Decorah	0.29%	6,585	(31,731)	(114,114)	219,097	3,491
Des Moines	18.54%	425,899	(2,052,185)	(7,380,173)	14,169,872	225,761
Dewitt	0.20%	4,484	(21,607)	(77,705)	149,193	2,377
Dubuque	4.32%	99,336	(478,653)	(1,721,355)	3,304,986	52,656
Estherville	0.22%	5,031	(24,243)	(87,185)	167,395	2,667
Evansdale	0.13%	2,987	(14,394)	(51,764)	99,387	1,583
Fairfield	0.27%	6,131	(29,545)	(106,250)	203,998	3,250
Fort Dodge	1.58%	36,358	(175,194)	(630,041)	1,209,673	19,273
Fort Madison	0.65%	14,848	(71,545)	(257,294)	494,002	7,871
Grinnell	0.39%	8,948	(43,115)	(155,052)	297,699	4,743
Indianola	0.52%	11,864	(57,168)	(205,592)	394,735	6,289
Iowa City	3.38%	77,634	(374,081)	(1,345,288)	2,582,942	41,152
Keokuk	0.78%	17,828	(85,904)	(308,931)	593,144	9,450
Knoxville	0.25%	5,857	(28,221)	(101,490)	194,860	3,105
Lemars	0.34%	7,735	(37,269)	(134,028)	257,333	4,100
Maquoketa	0.20%	4,508	(21,724)	(78,125)	149,999	2,390
Marion	2.10%	48,348	(232,966)	(837,803)	1,608,574	25,628
Marshalltown	1.40%	32,143	(154,883)	(556,999)	1,069,434	17,038
Mason City	1.86%	42,786	(206,162)	(741,412)	1,423,504	22,680
Muscatine	1.80%	41,398	(199,479)	(717,377)	1,377,357	21,944
Newton	1.08%	24,846	(119,723)	(430,554)	826,659	13,171
Oelwein	0.20%	4,636	(22,339)	(80,335)	154,243	2,457
Oskaloosa	0.40%	9,259	(44,616)	(160,450)	308,063	4,908
Ottumwa	1.39%	31,986	(154,126)	(554,276)	1,064,205	16,955
Pella	0.38%	8,796	(42,381)	(152,414)	292,634	4,662
Sioux City	6.19%	142,208	(685,232)	(2,464,267)	4,731,372	75,381

City	Proportionate Share (%)	Year Ending June 30,				
		2023	2024	2025	2026	2027
Spencer	0.52%	11,901	(57,347)	(206,234)	395,968	6,309
Storm Lake	0.43%	9,779	(47,118)	(169,449)	325,340	5,183
Urbandale	2.47%	56,850	(273,933)	(985,132)	1,891,446	30,135
Waterloo	5.48%	125,947	(606,879)	(2,182,488)	4,190,358	66,762
Waverly	0.37%	8,408	(40,514)	(145,698)	279,738	4,457
Webster City	0.32%	7,452	(35,908)	(129,135)	247,938	3,950
West Des Moines	3.94%	90,423	(435,704)	(1,566,900)	3,008,434	47,931
Total	100.00%	$ 2,297,490	$ (11,070,481)	$ (39,812,222)	$ 76,439,126	$ 1,217,848

Expected Remaining Service Lives

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, 2021 to June 30, 2022, measurement period was determined as follows:

As of June 30, 2021	Members	Expected Remaining Service Lives
Active Members	4107	11.302
Inactive Members	4700	0.000
Weighted Average rounded to the Nearest Tenth	N/A	5.300

17

Pension Expense   June 30, 2022

Service Cost $ 58,814,108
Interest on Total Pension Liability   260,633,217
Administravite Expenses   1,902,581
Other Changes in Fiduciary Net Position   218,778
Member contributions   (31,631,033)
Expected Investment Return Net of Investment Expenses   (243,721,207)
Recognition of Deferred (Inflows)/Outflows of Resources
    Economic/Demographic (Gains)/Losses   10,887,861
    Assumption Changes   6,882,710
    Investment (Gains)/Losses   (10,895,775)

Pension Expense $ 53,091,240

Actuarial Assumptions

The total pension liability in the July 1, 2022, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation   3.00 Percent
Salary Increases   3.75 to 15.11 percent including inflation
Investment Rate of Return   7.50 percent, net of pension plan investment expense

The actuarial assumptions used in the July 1, 2022, valuation were based on the results of an actuarial experience study for the 10-year period ending June 30, 2020. There were no significant changes of benefit terms.

Mortality rates as of July 1, 2022, were based on RP 2014 Blue Collar Healthy Annuitant table with males set-forward zero years, females set forward two years and disabled set-forward three years (male only rates), with generational projection of future mortality improvement with 50% of Scale BB beginning in 2017.

The investment policy and decisions are governed by the Board of Trustees. 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 June 30, 2022 (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
Broad Fixed Income	3.5%
Broad U.S. Equity	6.7%
Global Equity	6.8%

Broad Non-US Equity	7.0%
Managed Futures	5.1%
Emerging Market	7.2%
Real Estate-Core	6.4%
Opportunistic Real Estate	11.0%
Global Infrastructure	6.8%
Private Credit	8.6%
Private Equity	12.0%

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.