

**Legislative Interim Report
Public Retirement Systems Committee
December 11, 2019**

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



Mission Statement

MFPRSI provides a comprehensive set of retirement and disability benefits to eligible local police officers and firefighters in a sound, sustainable, and efficient manner in accordance with the requirements of the program's governing statute.

Table of Contents

Establishment and Governance	4
System Creation	5
Responsibilities & Major Activities of MFPRSI	7
Program Description & Statistics	9
Challenges Facing MFPRSI	13
Legislative Activities	15
July 1, 2019, Actuarial Report	16
Funded Ratio	19
Attachment 1: Contribution Rate 25-Year Forecast	20
Attachment 2: Alternative Statutory Actuarial Reporting	23
Attachment 3: Vision Statement	25

Establishment and Governance

Established

MFPRSI was created on January 1, 1992, by an act of the 1990 Iowa General Assembly, Iowa Code Chapter 411.

Governance

The Board of Trustees is comprised of the following:

Two firefighter representatives and two police representatives:

- Marty Pottebaum, retired police officer, Sioux City (Chairperson)
- June Anne Gaeta, active firefighter, Muscatine
- Frank Guihan, retired firefighter, Burlington
- Eric Hartman, active police officer, Des Moines

Four representatives of the participating cities:

- Bob Fagen, Des Moines
- Duane Pitcher, Ames
- Michelle Weidner, Waterloo
- Laura Schaefer– Carroll

One private citizen selected by the Board of Trustees:

- Mary Bilden, CPA, Boone (Vice Chairperson)

Two Senators from the Iowa Senate and two Representatives from the Iowa House of Representatives. All four legislative members are non-voting participants.

- Senator Jackie Smith, Sioux City
- Senator Waylon Brown, St. Ansgar
- Representative Scott Ourth, Ackworth
- Representative Mary Ann Hanusa, Council Bluffs

System Creation

In May of 1990 the Iowa General Assembly enacted legislation, House File 2543, to consolidate 87 local (municipal) police and fire retirement plans. House File 2543 provided the following requirements for participating cities in the newly created retirement system:

- Cities whose population was under 8,000 prior to the federal census in 1990 were not required to join. If a city surpasses 8,000 citizens after 1990, they are also not required to join.
- Cities that did not have a paid fire and/or police department at the time of the legislation were not required to enlist in the retirement system.
- Cities whose police and fire departments were under the State of Iowa's civil service law at the time of the legislation's adoption were required to enroll in the retirement system.

These criteria grouped the 49 participating cities that are still associated with MFPRSI today.

- Additionally, the legislation conceived a “statewide” system rather than a “state” system. The implication was that the 49 participating cities act in a coordinated fashion rather than the retirement system exist as a state entity separate and distinct from the cities.

House File 2543 stated that a 13-member Board of Trustees (9 voting members, 4 nonvoting legislative members) oversee the retirement system.

System Creation

- The retirement system's name, "Municipal Fire and Police Retirement System of Iowa" was adopted by its Board of Trustees in November 1990.
- Actuarial experience studies were conducted on June 30 of both 1990 and 1991. An additional experience study as of January 1, 1992, determining the final liability for each participating city.
- A master custodian bank was selected in July, 1991, to provide guardianship over the retirement system's investment assets.
- In August, 1991, the Board adopted 7.5% for its targeted rate of return for both the transition of assets from cities to the retirement system and for its ongoing investments. The 7.5% target rate has been reviewed periodically since, but has remained as the retirement system's target rate.
- Also in August 1991 the Board elected to mail benefit checks on the final working day of each month. Today, over 98% of benefit payments are transferred via ACH on the final business day of each month.
- MFPRSI opened its office on January 1, 1992, at 950 Office Park Road, Suite 321, in West Des Moines. The retirement system currently has over 8,000 members.
- Approximately \$575 million in investment assets were transferred from the cities to the retirement system in 1992. As of June 30, 2019, MFPRSI manages over \$2.6 billion in assets.

Responsibilities & Major Activities of MFPRSI

Program Responsibilities

- Collection of member and employer contributions.
- Pre-retirement and refund counseling.
- Administration of a permanent disability program.
- Execution of regular benefit and refund payrolls.
- Compliance with federal legal/tax requirements.
- Implementation of a diversified investment policy.
- Application of statutory provisions (including marital and dependent provisions).
- Extensive member communications.

Responsibilities & Major Activities of MFPRSI

Major Program Activities

- Systematic investment policy revisions (asset – liability forecasting).
- Annual investment policy implementation and oversight (scheduled meetings, quarterly updates).
- Review and evaluation of goals.
- Examination of actuarial experience and adjustment of assumptions (conducted by retirement system’s actuary, SilverStone Group) every five years.
- Legislative changes (i.e., technical advice and implementation).
- Escalator program (annual retiree adjustment – July 2019, 3,686 individuals, \$82.82 per individual per month, 2.3% increase).
- Federal legislative interest in public funds (i.e., monitor and comment as warranted).
- Litigation representation (e.g., District, Appeals, and Iowa Supreme Court).
- DROP implementation in 2007 – 46% of those eligible have participated.
- Federal PPA of 2006 (i.e., retiree income tax exclusion, up to \$3000, for health insurance).
- Annual comprehensive review of audit controls and safeguards for the retirement system’s portfolios.
- Conduct annual actuarial valuation of benefit program and establish contribution rates.
- Keep members and stakeholders informed of the retirement system’s activities through a comprehensive communications program.

Program Description & Statistics

As of July 1, 2019

Active Members

Number	4,086
Average Attained Age	40.8
Average Past Service	13.5
Total Annual Compensation	\$315,937,395
Average Annual Compensation	\$77,322

Non-Active Members in Pay Status

Number	4,148
Average Age (excluding children)	70.0
Total Annual Benefits	\$174,611,652
Average Annual Benefit	\$42,095
Average Age of New Service Retirements	58.0

Non-Active Members with Deferred Benefits

Number*	374
Average Age	43.8
Total Annual Benefits	\$6,820,968
Average Annual Benefit	\$18,238

*Excludes 60 members who had not yet received a refund of contributions as of 2019.

Program Description & Statistics

Benefit Program Description – Retirement Benefit Percentages

Basic Service Retirement Formula (22 years of service)	66%
Additional credit (up to 8 years beyond 22 years – 2% per year)	16%
Maximum retirement formula with 30 or more years of service	82%
Basic Accidental Disability Retirement Formula (work-related)*	60%
Basic Ordinary Disability Retirement Formula*	50%

*An individual retiring on disability is entitled to the greater of the disability formula or the percentage payable corresponding to the number of years of service that the individual has earned.

Membership Cities

Ames	Ankeny	Bettendorf	Boone	Burlington
Camanche	<i>Carroll</i>	Cedar Falls	Cedar Rapids	Centerville
Charles City	Clinton	<i>Clive</i>	Council Bluffs	Creston
Davenport	Decorah	Des Moines	<i>DeWitt</i>	Dubuque
<i>Estherville</i>	<i>Evansdale</i>	Fairfield	Ft. Dodge	Ft. Madison
Grinnell	<i>Indianola</i>	Iowa City	Keokuk	<i>Knoxville</i>
<i>Le Mars</i>	<i>Maquoketa</i>	Marion	Marshalltown	Mason City
Muscatine	Newton	Oelwein	Oskaloosa	Ottumwa
<i>Pella</i>	Sioux City	Spencer	Storm Lake	Urbandale
Waterloo	<i>Waverly</i>	Webster City	West Des Moines	

Italics denote police department participation only.

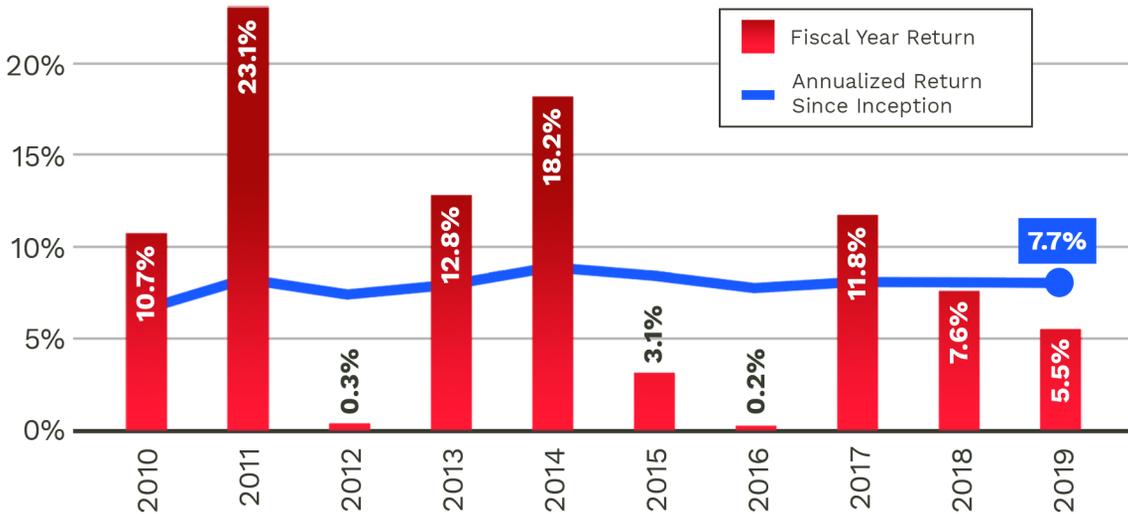
Program Description & Statistics

Assets and Investments

- Initial transfer liability January 1, 1992: \$574,500,000
- Market value of MFPRSI's assets, June 30, 2019: \$2.6 billion, a positive change of \$65 million year over year according to Marquette Associates.

Investment Returns

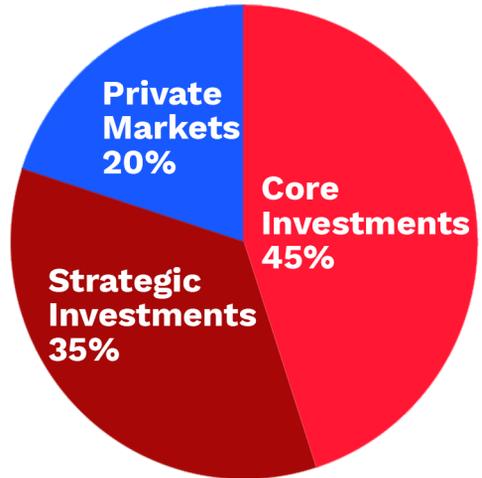
July 1, 2010 - June 30, 2019



Program Description & Statistics

Current Investment Allocation Policy

Core Investments	45%
Strategic Investments	35%
Private Markets	20%
Total Allocation	100%



Performance and Risk Expectation

Average annualized 10-year return	8.12%
Average annualized 10-year volatility	10.07%
Rate of Inflation %	2.25%
Actuarial Return Assumption %	7.5%

Performance expectation and risk projection based upon Marquette Associates' April 2019 assumptions.

Challenges Facing MFPRSI

Investment Return Expectations

The Board of Trustees completed an asset/liability study in 2019. Led by our investment consultant, the goal of the exercise was to determine whether the expected risk/return scenario of the overall portfolio could be improved through exposure to additional asset classes and reductions to existing positions. As a result, investments in Master Limited Partnerships (MLPs) were replaced with open-ended infrastructure funds in order to further diversify the retirement system's asset allocation.

Additionally, the Board redistributed core real estate into its "core investments" allocation, reduced its allocation to real estate in illiquid, closed-end funds, and slightly reduced its non-US equity allocation in favor of US equity. Based on these modifications, the investment consultant forecasts the expected average annualized 10-year return will be 8.1% and the expected average annualized 10-year volatility will be 10.1%.

Post Traumatic Stress Disorder (PTSD)

MFPRSI has experienced an increase in the number of disability applications received over recent years relating to PTSD symptoms. The Board has discussed this issue at length with doctors from the University of Iowa Hospitals & Clinics and are searching to educate themselves to make more-informed disability decisions.

Data Security

MFPRSI's Board and administration realize how important it is to keep our member data secure and we are focusing efforts to maintain state-of-the-art defenses to protect our data and systems from outside attacks.

Challenges Facing MFPRSI

Implementation of Complex Programs

A number of complex programs have been implemented, including:

1. Adoption of national standards for the pre-employment medical protocols and review of activities of the medical examination network.
2. Evaluation of the investment activities of the firms currently managing MFPRSI's portfolios and review of asset allocation.
3. Development of legislative reports in response to the requests of committees or individual legislators.
4. Administration of the DROP program and of the PPA of 2006.
5. Review of the operational controls and audit processes of the investment managers.
6. Use of document imaging system to electronically maintain member records and data, thus eliminating dependence on paper records. The system also enhances the staff's efficiency of processing and long-term security of data.
7. The Board of Trustees oversight of the provisions in the Mission Statement and Vision Statement establishing the future direction of MFPRSI.
8. The administration is currently in the process of implementing online access for its membership, allowing members to obtain and review forms and basic information.

Legislative Activities

Funding Change

As required by statute, the Board of Trustees provided the General Assembly with MFPRSI's *Financial Evaluation Report* in January 2019. The report included the Board's recommendation that the State resume its contribution to the retirement system at a rate of 3.79% of earnable compensation. This recommendation would reinstate the funding agreement between the State and participating cities dating back to 1976.

A bill introduced reflecting this recommendation, Senate File 145, was introduced and did not pass during the 2019 legislative session.

July 1, 2019, Actuarial Report

Contribution Rate Requirement

The contribution rate derived from this formula and approved by the Board will be implemented effective July 1, 2020.

Contribution Rate

Estimated Earnable Compensation	\$315,937,395
Estimated State's Contribution	\$0
Member's Contribution Rate	9.4%
Actuarial Calculated Rate for Cities	25.31%

Valuation of Assets and Liabilities

Market Value vs. Actuarial Value of Investment Assets

Market Value of Total Assets (Net)	\$2,613,125,249
Actuarial Value of Assets*	2,649,186,492
Actuarial Accrued Liability	3,269,051,818
Interest Rate Assumption	7.5%

*MFPRSI utilizes 5-year rolling average to value assets for actuarial calculation.

July 1, 2019, Actuarial Report

MFPRSI Liabilities

The unfunded actuarial accrued liability is the amount the actuarial accrued liability exceeds the actuarial value of plan assets determined as of the actuarial valuation date.

Unfunded Actuarial Accrued Liability

	2019	2018
1. Actuarial Accrued Liability		
Active members	\$1,294,889,603	\$1,263,894,470
Inactive members	1,974,162,215	1,859,870,812
Total	3,269,051,818	3,123,765,282
2. Actuarial Value of Plan Assets	2,649,186,492	2,578,863,993
3. Unfunded Actuarial Accrued Liability before changes (Excess of #1 over #2)	619,865,326	544,901,289
4. Change in Actuarial Assumptions	0	21,266,192
5. Unfunded Actuarial Accrued Liability after changes (#3 plus #4)	619,865,326	566,167,481

July 1, 2019, Actuarial Report

MFPRSI Contributions

Annual Contributions

	2019	2018
<u>Preliminary Total Contribution</u>		
1. Annual Normal Cost	\$55,133,707	\$53,017,674
2. Estimated Member Contributions	29,698,115	28,427,509
3. Unfunded Actuarial Accrued Liability	54,519,817	49,233,288
4. Total (Cities plus State) Contribution = #1 - #2 + #3	79,955,409	73,823,453
<u>Cities' Contribution</u>		
5. Preliminary Total Contribution = #4	79,955,409	73,823,453
6. Estimated State Contribution	0	0
7. Preliminary Cities' Contribution = #5 - #6	79,955,409	73,823,453
8. Covered Payroll	315,937,395	302,420,313
9. Cities' Contribution as a percent of payroll = #7 / #8	25.31	24.41%
10. Minimum required contribution rate for Cities	17.00%	17.00%
11. Cities' Contribution = Greater of #9 x #8 or #10 x #8	79,963,755	73,820,798

Funded Ratio

Current and Projected Funded Ratio of the Plan

The following information is provided to assist the Public Retirement Systems Committee in its deliberation concerning MFPRSI. Information provided is as of the July 1, 2019, actuarial valuation study. Responses are shown using the Entry Age Normal actuarial methodology, as adopted by the Board of Trustees beginning July 1, 2011.

Funded Ratio and Contribution Rates

	2019	2018
Current Funded Ratio		
Entry Age Normal	81.04%	82.00%
Contribution Rates		
Employee	9.4%	9.4%
Employer - Actuarially determined each year. Minimum of 17%		
Fiscal Year 2020		24.41%
Fiscal Year 2021	25.31%	
State Contribution	\$0	\$0

Contribution projection over 25 years, using an interest rate assumption of 7.5%

See following slides

Attachment 1:

Contribution Rate 25-Year Forecast

Municipal Fire & Police Retirement System of Iowa Forecast of Contribution Rates and Funded Status (Amounts in Thousands)

Valuation Date	7/1/2019	7/1/2020	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025	7/1/2026
Actual Prior Year								
Investment Return on Assets								
- Market Value	N/A	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
- Actuarial Value	N/A	6.44%	7.81%	7.10%	7.12%	7.50%	7.50%	7.50%
Covered Payroll	315,937	328,575	341,061	354,021	367,474	381,438	395,932	410,978

Current Entry Age Normal Method 25-Year Amortization Period of UAL Level Dollar, Closed Layered Amortization

Actuarial Accrued Liability	3,269,052	3,395,988	3,515,800	3,637,618	3,761,233	3,886,406	4,012,859	4,140,274
Asset Values								
- Market Value	2,613,125	2,723,439	2,840,326	2,962,686	3,088,475	3,220,713	3,356,378	3,494,290
- Actuarial Value	2,649,186	2,734,506	2,860,444	2,973,047	3,088,475	3,220,713	3,356,378	3,494,290
Funded Ratio (Actuarial Value Assets)	81.04%	80.52%	81.36%	81.73%	82.11%	82.87%	83.64%	84.40%
Contribution Rates (% of Payroll)								
- Cities	25.31%	25.83%	25.72%	26.42%	26.26%	25.84%	25.42%	25.02%
- Members	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%
- State	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
- Total	34.71%	35.23%	35.12%	35.82%	35.66%	35.24%	34.82%	34.42%
Actual Cities Contribution Rate	24.41%	25.31%	25.83%	25.72%	26.42%	26.26%	25.84%	25.42%

Assumptions and Data

Interest Rate	7.5%	Non-Investment Expense Growth	3.0%
Active Members		Census Data	
- Population Growth	0.2%	- As of July 1, 2019	
- Average Age	40.8	Asset Data	
- Average Service	13.5	- As of July 1, 2019	

Attachment 1:

Contribution Rate 25-Year Forecast

Municipal Fire & Police Retirement System of Iowa Forecast of Contribution Rates and Funded Status (Amounts in Thousands)

Valuation Date	7/1/2027	7/1/2028	7/1/2029	7/1/2030	7/1/2031	7/1/2032	7/1/2033	7/1/2034	7/1/2035
Actual Prior Year									
Investment Return on Assets									
- Market Value	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
- Actuarial Value	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
Covered Payroll	426,595	442,806	459,632	477,098	495,228	514,047	533,581	553,857	574,903

Current Entry Age Normal Method 25-Year Amortization Period of UAL Level Dollar, Closed Layered Amortization

Actuarial Accrued Liability	4,268,286	4,387,708	4,505,933	4,622,368	4,736,348	4,847,134	4,953,904	5,055,747	5,151,650
Asset Values									
- Market Value	3,634,147	3,775,690	3,918,623	4,061,656	4,204,317	4,345,979	4,486,045	4,623,746	4,758,280
- Actuarial Value	3,634,147	3,775,690	3,918,623	4,061,656	4,204,317	4,345,979	4,486,045	4,623,746	4,758,280
Funded Ratio (Actuarial Value Assets)	85.14%	86.05%	86.97%	87.87%	88.77%	89.66%	90.56%	91.46%	92.36%
Contribution Rates (% of Payroll)									
- Cities	24.64%	24.08%	23.55%	23.03%	22.54%	22.06%	21.60%	21.15%	20.72%
- Members	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%
- State	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
- Total	34.04%	33.48%	32.95%	32.43%	31.94%	31.46%	31.00%	30.55%	30.12%
Actual Cities Contribution Rate	25.02%	24.64%	24.08%	23.55%	23.03%	22.54%	22.06%	21.60%	21.15%

Assumptions and Data

Interest Rate	7.5%	Non-Investment Expense Growth	3.0%
Active Members		Census Data	
- Population Growth	0.2%	- As of July 1, 2019	
- Average Age	40.8	Asset Data	
- Average Service	13.5	- As of July 1, 2019	

Attachment 1:

Contribution Rate 25-Year Forecast

Municipal Fire & Police Retirement System of Iowa Forecast of Contribution Rates and Funded Status (Amounts in Thousands)

Valuation Date	7/1/2036	7/1/2037	7/1/2038	7/1/2039	7/1/2040	7/1/2041	7/1/2042	7/1/2043	7/1/2044
Actual Prior Year									
Investment Return on Assets									
- Market Value	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
- Actuarial Value	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
Covered Payroll	596,749	619,426	642,964	667,397	692,758	719,083	746,408	774,771	804,213

Current Entry Age Normal Method 25-Year Amortization Period of UAL Level Dollar, Closed Layered Amortizat

Actuarial Accrued Liability	5,240,498	5,321,054	5,391,959	5,451,710	5,498,660	5,530,993	5,546,719	5,549,195	5,552,984
Asset Values									
- Market Value	4,888,700	5,014,018	5,133,142	5,244,803	5,330,162	5,405,867	5,470,382	5,522,009	5,558,885
- Actuarial Value	4,888,700	5,014,018	5,133,142	5,244,803	5,330,162	5,405,867	5,470,382	5,522,009	5,558,885
Funded Ratio (Actuarial Value Assets)	93.29%	94.23%	95.20%	96.20%	96.94%	97.74%	98.62%	99.51%	100.11%
Contribution Rates (% of Payroll)									
- Cities	20.31%	19.91%	17.00%	17.00%	17.00%	17.00%	17.00%	17.00%	17.00%
- Members	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%
- State	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
- Total	29.71%	29.31%	26.40%	26.40%	26.40%	26.40%	26.40%	26.40%	26.40%
Actual Cities Contribution Rate	20.72%	20.31%	19.91%	17.00%	17.00%	17.00%	17.00%	17.00%	17.00%

Assumptions and Data

Interest Rate	7.5%	Non-Investment Expense Growth	3.0%
Active Members		Census Data	
- Population Growth	0.2%	- As of July 1, 2019	
- Average Age	40.8	Asset Data	
- Average Service	13.5	- As of July 1, 2019	

Attachment 2: Alternative Statutory Actuarial Reporting

BUSINESS AND PERSONAL RESOURCE MANAGEMENT



September 20, 2019

Mr. Terry Slattery
Executive Director
Municipal Fire & Police Retirement System of Iowa
7155 Lake Drive, Suite 201
West Des Moines, IA 50266

RE: July 1, 2019 Alternative Actuarial Reporting to General Assembly

Dear Terry:

Enclosed are the results of the alternative actuarial valuation for the Municipal Fire & Police Retirement System of Iowa under common standards for General Assembly reporting. This reporting is based on the Entry Age Normal Cost Method as required for reporting to the General Assembly reflecting a level percent of pay amortization of the Unfunded Accrued Liability. We present below a summary of the July 1, 2019 actuarial valuation results under the current and alternative reporting and have also attached details of the calculation.

	Current Reporting	Alternative Reporting
Cities Contribution Rate		
- Prior to 17% Minimum	25.31%	17.14%
- After 17% Minimum	25.31%	17.14%
Cost Method	Entry Age Normal	Entry Age Normal
Amortization Period	25 Years	30 Years
Amortization Method	Level Dollar Closed	Level Percent of Pay Open
Asset Valuation Method	5-Year Smoothing	5-Year Smoothing
Interest Rate	7.5%	7.5%
Inflation Growth*	N/A	N/A
Funded Ratio	81.04%	81.04%

Please note the funded ratio is determined by comparing the actuarial value of assets to the actuarial accrued liability for this reporting purpose. All other assumptions and methods are consistent with those used for the July 1, 2019 actuarial valuation.

* For current reporting purposes, there is no explicit inflation growth assumption. Inflation growth is implicitly part of the valuation interest rate and salary growth assumptions, but is not explicitly defined. Further, currently the annual escalator benefit for retirees and beneficiaries is a fixed percentage plus a fixed dollar amount per year, not based on inflation growth.

Please do not hesitate to call me if you have any questions or if we can be of additional assistance.

Sincerely,

Michael S. Ehmke, ASA, EA, MAAA
Principal

MSE/lsa

Enclosure

11516 MIRACLE HILLS DRIVE, SUITE 100
OMAHA, NEBRASKA 68154

PHONE 402.964.5400
TOLL FREE 800.288.5501

FAX 402.964.5454

SILVERSTONEGROUP.COM

Attachment 2:

Alternative Statutory Actuarial Reporting

MUNICIPAL FIRE AND POLICE RETIREMENT SYSTEM OF IOWA

Current and Alternative Reporting As of July 1, 2019

Current Reporting*	Entry Age Normal (25 Yr Level \$)
1. Plan Liability- Actuarial Accrued Liability	3,269,051,818
2. Actuarial Value of Assets	2,649,186,492
3. Funded Ratio = (2)/(1)	81.04%
4. Unfunded Accrued Liability = (1)-(2)	619,865,326
5. 25-year Level Dollar Closed Layered Amortization of (4)	54,519,817
6. Normal Cost	55,133,707
7. Total (Cities plus State plus Members) Contribution = (5)+(6)	109,653,524
8. Estimated Member Contributions	29,698,115
9. Estimated State Contribution	0
10. Cities Contribution = (7)-(8)-(9)	79,955,409
11. Cities' Contribution Rate Prior to 17% Statutory Minimum = (10)/(Covered Payroll of \$315,937,395)	25.31%
Alternative Reporting**	Entry Age Normal (30 Yr Level %)
1. Plan Liability- Actuarial Accrued Liability	3,269,051,818
2. Actuarial Value of Assets	2,649,186,492
3. Funded Ratio = (2)/(1)	81.04%
4. Unfunded Accrued Liability = (1)-(2)	619,865,326
5. 30-year Level Percent of Pay Amortization of (4)	28,715,909
6. Normal Cost	55,133,707
7. Total (Cities plus State plus Members) Contribution = (5)+(6)	83,849,616
8. Estimated Member Contributions	29,698,115
9. Estimated State Contribution	0
10. Cities Contribution = (7)-(8)-(9)	54,151,501
11. Cities' Contribution Rate Prior to 17% Statutory Minimum = (10)/(Covered Payroll of \$315,937,395)	17.14%

*Current Reporting: Entry Age Normal Cost Method, 25 Year Level Dollar Closed Layered Amortization of UAL, 7.5% interest rate, RP 2014 Blue Collar Healthy Annuitant Mortality with 50% of Scale BB Improvement Projection and Graded Salary Growth

**Alternative Reporting: Entry Age Normal Cost Method, 30 Year Level Percent of Pay Amortization of UAL, 7.5% interest rate, RP 2014 Blue Collar Healthy Annuitant Mortality with 50% of Scale BB Improvement Projection and Graded Salary Growth

September 20, 2019

SilverStone Group

Attachment 3:

Vision Statement

Comprehensive

Adequacy of retirement and disability benefits to attract and retain top quality police officers and firefighters and provide for them and their families when they are no longer working or able to do so. Retirement and disability benefits should be competitive with comparable police and fire systems.

- In 2018, MFPRSI compared the benefits to 8 similarly-sized public safety retirement plans and concluded that MFPRSI's benefits remain competitive. The minimum retirement age was slightly higher than the survey average for public safety plans, but still competitive. A final average salary based on three years of earnable compensation was consistent with the survey average. The Plan's 3% multiplier for the first 22 years was above the survey average of 2.29% for public safety plans not covered by social security. The member's contribution rate of 9.4% was slightly above the survey average of 9.18% for public safety employees not covered by social security.

Attachment 3:

Vision Statement

Efficient

Managing the system and the investment portfolio in a timely, professional, cost effective and customer-oriented manner. Obtaining top quality management services for a cost that is mid-range for comparable systems. The investment portfolio should provide net returns in the top quartile for similarly-sized plans. On a risk-adjusted basis the portfolio's returns should be no less than the median for public plans.

- MFPRSI annually compares its administrative costs to 8 similarly-sized public safety retirement plans using data from the plans' financial reports. The most recent study compared 2018 data where MFPRSI's average administrative cost per member was \$216, higher than the group median of \$202 per member.
- In order to define the retirement system's peer universe, Marquette used InvestorForce public DB plans with net returns between \$1 billion - \$5 billion. As of December 31, 2018, MFPRSI's 1- and 5-year net returns were in the top quartile at -3.2% and 5.1%, respectively, while the 3-year net return was at the median of 5.9%. MFPRSI's 10-year net return was slightly below the median at 7.9%.
- MFPRSI annually uses a rolling trend analysis to compare its 5-year returns and standard deviation against all public funds between \$1 billion to \$5 billion.
- MFPRSI's 5-year return as of December 31, 2018, was in the top quartile with a standard deviation below the median.

Attachment 3:

Vision Statement

Sound

Stable and secure retirement benefits and funding policy based upon fiduciary principles, appropriate risk management policies and independent governance. Funding should be based upon actuarially determined contribution rates and intergenerational equity, and a disciplined, accountable and transparent funding policy. Investment practices should be cognizant of unexpected volatility.

- In May 2018, the Board reviewed and adopted the following alternative assumptions: salary increases, withdrawal rates, retirement rates, ordinary/accidental mortality rates, ordinary/accidental disability rates, DROP participation rates, and post-retirement mortality [RP 2014 Blue Collar Healthy Annuitant Mortality Table with females set-forward two years, and disabled participants set forward three years (male only rates), and generational projection of future mortality improvement with 50% of Scale BB] (May 17, 2018).
- Funding Policy was reviewed and adopted in 2018.
- Most recent five-year study of all assumptions completed in March 2018.
- The Board has received education sessions from its investment advisor, Marquette Associates, and legal counsel, BrownWinick, covering investment themes and fiduciary standards.

Attachment 3:

Vision Statement

Sustainable

The system shall be economically and politically durable. Economically, the system should sustain progress toward 100% funded status while maintaining employer contributions on a consistent basis at 30% or less of covered payroll. Significant year-to-year variability in funding requirements should be avoided for both members and cities. Once full funded status is achieved, benefit or contribution changes should take into consideration necessary buffers against inevitable financial market downturns.

- The Board committed to an asset/liability study with its investment consultant, Marquette Associates. The study lead to adopting the following modifications to the asset allocation: replacing its Master Limited Partnerships (MLP) positions with core infrastructure; redistributing core real estate into its “core investments” allocation; reducing illiquid real estate in favor of new private market opportunities; and slightly reducing non-US equity vs. US equity.
- It is expected these moves will slightly reduce the investment portfolio’s 10-year annualized volatility from 10.56% to 10.07%.