MFPRSI 2022 ANNUAL REPORT

A report for the pension trust for municipal firefighters and police officers in the State of Iowa





MFPRSI's MISSION 8 VISION STATEMENTS

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.

Comprehensive

Retirement and disability benefits will be adequate in order 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.

Efficient

The retirement system and the investment portfolio will be managed in a timely, professional, cost effective, and customer-oriented manner. Top quality management services will be obtained 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.

Sound

Retirement benefits will be stable and secure and the funding policy will be 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.

Sustainable

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



MFPRSI Fiscal Year 2022 Highlights

Membership

4,155 active members¹ 4,806 inactive members¹

Funding

84% funded ratio* ¹
*Based on the ratio of the actuarial value of assets to the actuarial accrued liability

Distributions

\$205.6 million in benefits paid² \$1.9 million in refund of contributions paid²

Investing

\$3.1 billion, market value of portfolio³ -3.5% fiscal year return³

Contributions

\$31.6 million from members² \$88.4 million from employers² \$0 from the State of Iowa²

Actuarial

\$3.1 billion in actuarial value of plan assets¹ \$568 million of unfunded actuarial accrued liability¹ \$3.7 billion of total actuarial accrued liability¹

Information provided by:

1 - SilverStone Group 2 - Eide Bailly LLP 3 - Marquette Associates



Table of Contents

Chairperson's Letter	8
A Challenging Beginning Leads to a Stable, Long-Term 411 System	10
Brief Timeline of Fire & Police Retirement Systems in Iowa	18
Introduction	21
Retirement System Overview	22
Accomplishments	
Board of Trustees as of June 30, 2022	
Staff	28
Financial Statements	29
Independent Auditor's Report	
Management's Discussion and Analysis	
Statement of Fiduciary Net Position as of June 30, 2022 and 2021	
Statement of Changes in Fiduciary Net Position for the Years Ended June 30, 2022 and 2021	39
Notes to Financial Statements as of and for the Years Ended June 30, 2022 and 2021	40
Actuary	69
Actuarial Valuation's Purpose	
Cities' Recommended Contribution Rate	71
Contribution Rate History	75
Actuarial Report Highlights	76
Investments	83
Investment Consultant's Report	84
Performance	
Overview	87
Benefits	93
Description of Benefit Plan	
Optional Forms of Retirement	
DROP - Deferred Retirement Option Plan	
Membership Data	97

Chairperson's Letter



Marty Pottebaum Board Chair

To our Members, City Representatives, and Stakeholders,

It is my pleasure to present the Municipal Fire & Police Retirement System of Iowa's annual report for fiscal year 2022, the retirement system's 30th year of operation. This report summarizes our financial status and highlights our achievements during the past fiscal year, from July 1, 2021, to June 30, 2022.

As a retired police officer, current chair of the Board of Trustees, and a board member since 1995, I am honored to belong to an organization whose top priority is to provide a solid retirement for those who put their lives on the line to protect us every day. As MFPRSI celebrates 30 years, I have enjoyed looking back at how the retirement system began and its progress since. I hope you will do the same by reading the story highlighting our first 30 years on pages 10 - 16.

Since MFPRSI's beginning in 1992, our staff and portfolio managers have worked diligently to ensure assets are prudently managed, evidenced by their growth

from \$560 million in 1992 to over \$3 billion as of the end of this fiscal year. In the late 1990s, five managers worked on nine portfolios. As of the end of the fiscal year, there are 28 managers and 52 portfolios, all focused on getting the best possible returns for members.

MFPRSI was built to weather significant market fluctuations, from the dot-com bubble to the 2008 financial crisis to the COVID-19 pandemic to higher inflation today. For 30 years, the portfolio has consistently provided returns no matter the storm – and the retirement system has never missed a benefit payment.

This year's investment return of negative 3.5 percent mirrors the trend in the pension universe this past year, yet MFPRSI continues to rank near the top of investment returns among our peers. This fiscal year's return comes on the heels of an atypical all-time high return last year of 30.7 percent. In addition, the employer contribution rate for fiscal year 2024 will decrease to 22.98 percent, which is thanks to years of diligent and fiscally responsible asset management by our Board of Trustees.

It is important to see the big picture: One of the most important indicators of MFPRSI's health is our return performance over the plan's 30-year lifespan, 7.8 percent, which exceeds our long-term actuarial target rate of 7.5 percent. Additionally, for perspective, our one-year, three-year, five-year, and 10-year net investment returns were all in the top 5th percentile for defined benefit retirement systems with investment portfolios between \$1 billion and \$5 billion. Building on our milestone achievement of crossing the \$3 billion mark in assets last year, we continue to be committed to growing that number with financially prudent decisions.

I am proud to belong to a system of brave public servants who continue to provide their municipalities with outstanding service every year. MFPRSI is poised for ongoing stability in the years ahead and I look forward to the next 30 years and beyond for MFPRSI, our members, cities, and stakeholders.

Yours truly,

Marty Pottebaum

Pottelnam

Board

A Challenging Beginning Leads to a Stable, Long-Term 411 System

MFPRSI celebrates 30 years of successful service to firefighters, police officers, and their families.

When firefighters or police officers retire, become disabled, or lose their life in the line of duty, they know they can count on the Municipal Fire and Police Retirement System of Iowa (MFPRSI) to provide them and their beneficiaries with pension payments. The organization has been doing this consistently for 30 years and takes that responsibility to its public servants very seriously.

MFPRSI, often referred to as the 411 system, was created by the Iowa legislature in 1990. Those put in charge of developing the retirement system were

MERSI

The marquee atop MFPRSI's office building in West Des Moines

given 20 months to construct a comprehensive and consistent system, from the ground up, that would guarantee reliable pension payments for its membership.

This was no small task, as those involved from the beginning can attest. There were no rules in place and no processes to provide guidance on how to create the retirement system.

"The very first meeting after the law was passed was overwhelming," said Judy Bradshaw, retired Des Moines chief of police and first MFPRSI Board chair. "I was a young police sergeant working the midnight shift, not giving any thought to my pension, when I agreed to be on the Board. They told me it would be a few hours a month in the beginning then quarterly meetings."

She quickly discovered the magnitude of what was taking place and the responsibility they were given.

"There were bankers, investment managers, legislators, and others all lobbying to be the ones to manage the \$560 million in assets the system brought together. There were a lot of competing interests and tension in the room," she said.

There was also a lot of work to do in a short period of time. The challenge was made exponentially more difficult because there were 87 independent systems from 49 participating cities (those with a population over 8,000 as of the 1990 census). All were in a different position from an actuarial standpoint and trying to consolidate and reconcile each of them was a huge challenge.

"Some cities had pre-funded their system, resulting in excess assets, while other cities had a funding liability," said Doug Gross, attorney with BrownWinick and general counsel to MFPRSI since its inception. "We had to figure out a system that would work fairly for each of them."

An actuary was hired to identify the financial obligation from each local system and work with the cities to forward their contributions to MFPRSI. To avoid cross subsidization from one city to another, underfunded cities were also put on an amortization schedule, effectively paying money back into the retirement system while funded cities retained their contributions.

As contributions were based on the number of members in their systems, it was critical to make sure no one missed a month of their pension payments. All of this took months to unravel. During the consolidation, there were normal changes occurring. Members retire or quit; or a new member is hired. All that had to be added to the records MFPRSI was carrying forward so everyone was covered.

Finding a Leader

After MFPRSI was formed, an interim director was hired while the Board began a nationwide search

for a permanent executive director. The first person hired was not the right fit, so they started again and hired a second candidate. However, when they went to pick him up at the airport the day he was to begin the job, he never showed up. At this point, many months had gone by, and the interim director could not continue in the role.

Bradshaw had to step in.

"Since I was still working the midnight shift and trying to sleep in the day, I had to get a special assignment from my Chief so I could keep the system moving forward."

As the retirement system's launch date was moving ever closer, they reached out to Dennis Jacobs, who was experienced with the Iowa Public Employees Retirement System (IPERS), to be executive director. Jacobs was joined by Larry Thompson from IPERS to serve as deputy director.

Judy Bradshaw, Board Chair,

1990-2014.

Jacobs and Thompson arrived in December 1991, only one month before the retirement system was to be up and running. Together Jacobs and Thompson worked as a team to address the comprehensive needs of a new retirement system. The team, working in conjunction with the Board, implemented a benefit tracking system, comprehensive investment program, functioning Board of Trustees, relationships with 49 participating cities and membership groups, legislative interaction and reporting, third party relationships including an auditor, and staffing needs.

"The first few months, we literally were issuing handwritten checks and keeping track of the activity on an Excel spreadsheet," said Jacobs, executive director from 1991 - 2012. "I'm proud to say we never missed anyone's payment during that time."

"Not only did we finally find a director in Dennis, we found half of our staff as well," said Marty Pottebaum, retired police officer, current Board chair, and Board member since 1995. "Those folks, along with Doug Gross, really moved things forward."

Unique Board Makeup

Even though the legislature created this consolidated system, the members of the Board are independently chosen rather than being appointed by the governor. This is an important distinction because it allows the Board to operate without political pressure or influence.

It was so unique, they had to invent a designation for the 411 system – an instrumentality of political subdivisions of the State of Iowa. It is not a state agency nor is it a local agency. It is an instrumentality of local governments created by the state to manage the retirement system.



Doug Gross, counsel to MFPRSI since inception.

"It's the only independent pension board in the state," Gross said. "Because of that, its track record has been stellar."

The Iowa Professional Firefighters Association and the Iowa State Police Association each appoint two members, one active and one retired. Four city representatives involved with the management of the financial matters of their respective city are appointed by the Iowa League of Cities. There is also one citizen member appointed by the other eight Board members.

In addition, there are four non-voting members comprised of two Iowa senators and two Iowa representatives. They are nominated by House and Senate leaders.

At the outset, the Board had to create a complete new set of administrative rules to govern appeals, make policy determinations, determine how the board manages itself, and how to treat members and cities fairly.

"All of those things were established back when it first started and, while they've been tweaked a bit every now and then, remarkably they generally remained intact," Gross said. "That's a real testament to how thoughtful and forward-thinking everyone was."

As a new Board member in 1994, current citizen member Mary Bilden discovered she had a learning curve and found good mentors to help her.

"Marty Pottebaum came on the Board right after I did and he, along with Judy Bradshaw, helped me get up to speed on what the member issues were," Bilden said. "Ordinary citizens don't know the inner workings of firefighting and policing, but they introduced me to those and having that first-hand perspective was a great help."

Consistency Was a Key Focus

A big challenge when setting up the retirement system was the lack of standardization from city to city.

"One of the most important things for us was to make sure we had a fair and consistent process that everyone had to follow and that was a big change," Pottebaum said.

The legislature wanted things handled in a consistent, uniform, and fair way so that members would receive the benefits they

earned. The types of changes this new system created to achieve that consistency was met with some skepticism by members and cities.

"We're providing a service to those who serve us. Their jobs are physically and mentally demanding and being able to provide them with the security of knowing they will be taken care of after their years of service is very rewarding."

- Mary Bilden



Marty Pottebaum, Board member since 1995 and Chair since 2014.

Over time, though, everyone realized that being a Board member required them to leave their work hat at the door, set aside their own agendas, and focus on the fiduciary responsibility they have to the members of the retirement system.

"It's the number one thing that guides all the decisions we make," Bilden said. "Knowing what we do has a real impact on our members and keeps us focused on always doing what's best for the plan rather than bringing our personal feelings into the boardroom."

Dan Cassady, a 23-year employee and current executive director of MFPRSI, said he learned how to be an effective leader by watching others in the organization live by the guidelines they set for themselves.

"If you are fair and apply things consistently, you earn respect," Cassady said. "When you are responsible for providing benefits for the members and taking care of their assets, trust is very important and that is something we have to earn every day."

System Accomplishments

At 30 years, MFPRSI is a young retirement system compared to others across the country. Having the ability to research how other systems had been structured was an advantage. Some notable accomplishments include the following:

Adjustable-Rate Contribution

The Iowa Legislature chose to adjust the city's contribution rate each year depending on the actuarial report rather than employing a fixed rate. With an adjustable rate, there will be minor fluctuations but not the significant increases cities may be required to contribute if they fell behind over time.

Escalation of Benefits Formula

How retirees were receiving annual cost of living increases was addressed in 1996 to once

"Now that I'm retired, I get to enjoy the fruits of the labors of so many people to get the system started and in place. I've been able to see the impact it's had on real people and their lives and that has been very rewarding."

- Judy Bradshaw

again bring consistency and continuity to all members. Prior to this standardization, retired members received a cost-of-living increase based on what cities gave to the department from which they retired. Sometimes that was a significant amount and other times it may be zero because the department negotiated better health benefits in lieu of a wage increase, for example.

MFPRSI implemented a simplified annual escalation of benefits formula that provided a yearly adjustment of one and one-half percent, plus a flat dollar amount depending on how long members have been retired.

"Not only did the action standardize a cost-of-living increase for everyone, it has also kept up and often overperformed the CPI for that year," Cassady said.

DROP Program

The Deferred Retirement Option Plan (DROP) was implemented in 2007 and is another system success story. The DROP program is designed to be actuarially cost neutral and was created as a way for members to defer their retirement in order to bridge the insurance gap until they are eligible for Medicare.

"Firefighters and police officers can't go on Medicare until they're



Mary Bilden, board member since 1995.

65 but, if they retire at 60 or 62, they're faced with how to pay for health insurance," Pottebaum said. "It's been an extremely successful program and has done exactly what we designed it to do."

Mental Health

Recognition of the mental health challenges associated with firefighting and policing has evolved dramatically since MFPRSI was founded.

"When we first started, in order to get a mental injury disability, you had to literally take a blow to the head," Gross said. "We've come a long way toward legitimizing mental disabilities and that has helped elevate the level of awareness and understanding."

"I can tell you that having that peace of mind makes a big difference. Our members know that promises made will be promises kept."

- Marty Pottebaum

This included utilizing scientific research to better understand the long-term impact of the physical and mental stress members face in the line of duty. With greater recognition and acceptance of these types of injuries, seeking help is encouraged rather than "toughing it out," or ignoring it all together. That type of acknowledgment, along with additional mental health resources offered by individual cities, has made a great deal of difference for members.

Digital Upgrades

Positive internal advances include making all forms and documents available in digital formats in 2016, and the roll out of My411, the online member access portal. Launched in 2020, members can now see their contributions and retirees have instant access to their statements by using My411. The timing and turnaround of access to member information has been shortened significantly.

Location

Prior to moving into the current West Des Moines location, system operations were renting space in another building and eventually outgrew that space. The decision was made to construct a new building for operations and rent out additional space to other businesses. MFPRSI took occupancy in July of 2007.

"Not only did it give us a permanent home, it also became one of the system's investments," Cassady said. "The income we receive helps pay for the overhead."



Dan Cassady, became Executive Director in 2021.

Investment Portfolio

At the heart of any retirement system is its investment portfolio. The funds in the portfolio are invested on the member's behalf to generate earnings that will provide income and benefits when they retire. These assets have been prudently managed by MFPRSI and its portfolio managers, growing from \$560 million in 1992 to over \$3 billion today.

"We need to earn the respect of our members by taking care of their assets and ensuring their benefits are available. Knowing people are relying on us for their future, to take care of them and their families, is something I think about every day and I'm proud to play a role in."

- Dan Cassady

The complexity of investments has also increased. In the late 90s, the retirement system worked with five managers on nine portfolios. Currently, there are 28 managers and 52 portfolios, all focused on getting the best possible returns for members.

Investment strategies were built to stand the test of time and weather market fluctuations. Over the past 30 years, the portfolio has consistently provided returns during significant market events such as the dot-com bubble, the financial crisis, COVID-19 pandemic, and now, higher inflation. And during this entire time, the retirement system has never missed a benefit payment.

Being able to adapt and adjust will be key as the retirement system embarks on its next 30 years.

"You always have to be open to new ways to make sure assets will be available for our members," Cassady said. "The plan was constructed very well, but it's important to be adaptable to make sure the system remains healthy."

A Lasting Legacy

Everyone involved with MFPRSI, past and present, realizes the importance of the work they do and the decisions they make. From the founding members who designed a plan capable of withstanding market fluctuations, to those administering the retirement system today, the shared responsibility to those individuals who put their lives on the line to protect us every day is paramount.

The sense of satisfaction of providing something of value for firefighters and police officers inspires many to devote the bulk of their careers to ensuring the retirement system succeeds.

"For me, it's an honor to do this work," Gross said. "Being a part of a safe and secure retirement and disability system that treats everyone fairly is something I am proud of."

"When I look back, I am pleased to say we were able to build this together," Jacobs said. "We built it so it can withstand transitions in management, Board members, market conditions, and other significant changes. It has kept going through it all. The system works."

Intentionally Blank

Brief Timeline of Fire & Police Retirement Systems in Iowa

Since 1992, MFPRSI has proudly served as the retirement benefits administrator for firefighters and police officers in the 49 participating cities. The timeline below highlights key moments in the history of pensions for firefighters and police officers in Iowa. The green line represents the growth of MFPRSI's investment portfolio from 1992 to 2022.

1934 - Iowa legislature creates a pension plan for municipal firefighters and police officers in Iowa.

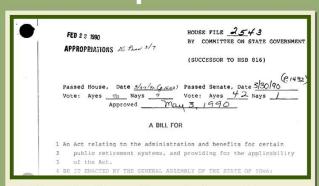


1992 - MFPRSI officially commences and pension payments begin. Over 6,000 total members are counted in the fiscal year 1992 actuary report. The initial investment net asset valuation is approximately \$560 million.

the service retirement allowance to 66% of the member's final compensation. Additionally, members with more than 22 years of service will receive an additional 2% of the member's average final compensation for up to 8 years of additional service. These changes place the maximum formula at 82%.

\$1 Billion

1998 - The retirement system's investment portfolio surpasses \$1 billion in net asset value.



1990 - The Iowa General Assembly passes HF 2543 creating MFPRSI. The bill consolidates the retirement plans of the fire and police departments from the 49 largest cities in the state at the time of passage.

1996 - Benefit escalation provisions are amended by the Iowa General Assembly to be determined by a formula to help match year-to-year economic cost of living changes.

7,000

2000 - The retirement system surpasses 7,000 total members.

\$2 Billion

\$3 Billion

2014 - The investment portfolio surpasses \$2 billion in net asset value.

2021 - The investment portfolio surpasses \$3 billion in net asset value.

2006 - The Iowa legislature creates the Deferred Retirement Option Plan (DROP). The new provision allows active members at least 55 years of age with 22 or more years of service to electively delay their retirement and save additional money for retirement. From 2007 to 2022, approximately 700 members participate in DROP.

2020 - MFPRSI launches online account access to its members through My411, its online portal. Members can view a variety of documents, including annual statements, monthly pay stubs, and contributions. From 2021 to 2022, over 2,000 members register for My411.

8,000

2008 - The retirement system exceeds 8.000 total members.

2015 - The Board of Trustees initiates its Strategic Plan in order to provide a long-term course of action for MFPRSI. The plan helps visualize what is needed to continue to best serve the retirement system's members



2007 - MFPRSI completes construction and opens its 19,194 square foot office building in West Des Moines.

2022 - MFPRSI celebrates its 30th anniversary as the retirement system for municipal firefighters and police officers in Iowa. We serve almost 9,000 members and are proud to help those who dedicate their lives to protecting Iowa citizens.



Intentionally Blank

Introduction

Retirement System Overview Accomplishments Board of Trustees Staff



Retirement System Overview

MFPRSI 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. Upon its establishment, MFPRSI consolidated 87 local fire and police retirement systems formerly administered by 49 of Iowa's largest cities. The retirement system initiated its formal operations on January 1, 1992, to administer the retirement benefits for fire and police personnel in Iowa's participating cities.

The mission of MFPRSI is to provide 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. The programs of the retirement system include the payment of pension benefits for service retirement, ordinary disability retirement, accidental disability retirement, survivors of deceased members (e.g., spouse and dependent benefits), and the refund of contributions upon withdrawal by a terminated member.

In its effort to accomplish its goals, MFPRSI administers a contributory defined benefit plan for firefighters and police officers as established in Iowa Code Chapter 411. The benefits available through the retirement system are based on a formula using the average of the highest three years of earned wages as a member and a multiplier based on years of membership service.

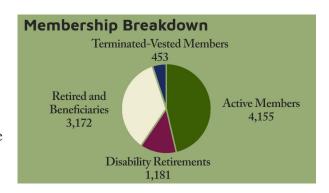
In addition to service retirement benefits, MFPRSI offers a comprehensive disability program that includes establishing standards for entrance physical examinations, guidelines for ongoing fitness and wellness, and post-disability retirement compliance requirements.

Firefighters and police officers in the participating cities are granted membership by Iowa Code Chapter 411. Participants are vested upon attaining four years of membership service. Vested status may also be achieved by actively earning service credit at age 55 or older.

The Board of Trustees ("Board") represents the firefighter and police officer memberships, cities, and citizens of Iowa, while the Iowa General Assembly provides the retirement system with direction and oversight. Iowa Code also includes specific authorization to administer each of the following: actuarial services, medical board, legal services, and organization and staff. The individuals comprising the administrative staff are available to assist members, city officials, and interested parties with any questions or concerns about the retirement program.

Membership

MFPRSI had 8,961 members at the end of fiscal year 2022, with 4,155 active members employed by the 49 participating cities. Of the remainder, 1,181 receive benefits due to disability, 3,172 are either retired or a beneficiary, and 453 are terminated-vested members. MFPRSI made over 52,000 accurate and timely benefit payments over the course of the fiscal year. Approximately 99 percent of those payments were made via electronic funds transfer.



During the year members received annual statements summarizing their contributions as well as two newsletters highlighting news, statistics, and announcements.

Investments

Member benefits are made available through employee contributions, employer contributions, and investment earnings. Of those three sources, the investment portfolio provides the greatest percentage of income. MFPRSI manages an investment portfolio that is well diversified with a long-term investment horizon. The portfolio is designed to capture positive investment returns in public equity, fixed income, real assets, and private markets when the markets are up while minimizing losses during negative investment periods.



The fund is monitored by a staff of investment officers at MFPRSI under the direction of the Executive Director and the Chief Investment Officer. Investment recommendations are made by the Executive Director; Chief Investment Officer; Marquette Associates ("Marquette"), MFPRSI's investment consultant; and, investment officers. In turn, the Board uses the information provided by those parties to make final decisions on asset

allocation. On an annual basis, and more frequently as necessary, the Board reviews and revises the investment policy.

MFPRSI's investment portfolio returned -3.5 percent in fiscal year 2022. The ten-year annualized return for the period ending June 30, 2022, was 8.5 percent. The long-term target rate of return, as determined by the Board, is 7.5 percent. The target rate is adopted by the Board as the assumed rate of return the investment portfolio can return while taking an acceptable amount of risk. The investment portfolio's annualized performance since inception in 1992 is 7.8 percent.

Accomplishments

Over the course of fiscal year 2022 (July 1, 2021 to June 30, 2022), MFPRSI engaged in several activities pertaining to both the retirement system's active and retired memberships as well as to the financial management of its investment assets. The projects described below were intended to enhance the services provided to the membership and cities or to augment the investment portfolio.

Administration

The administration presented its Interim Report to the Iowa General Assembly. This report is presented to the legislature once every two years and it provides a high-level overview of the retirement system and its components.

The trustees and administration began updating the retirement system's Strategic Plan.

The Board and administration conducted surveys of the membership and city representatives as part of its strategic planning. The surveys focused on each group's level of satisfaction concerning MFPRSI's communication and accessibility. City representatives were also asked about the utility MFPRSI plays in the hiring process while members were asked about the importance of the retirement system's benefits when deciding to pursue and maintain a career as a firefighter and police officer. The conclusion of the surveys indicated both groups are satisfied with the communication ability, the accessibility of information provided, and the usefulness of the retirement system in staffing (cities) and pursuing and maintaining a career (members).

The Board pursued legislation that updated what was considered personal information of members for the purposes of open records requests. The update mirrored language used in IPERS' legislation. HF 2154 was passed by the Iowa General Assembly. Following the passage of HF 2154, the following information <u>is not</u> considered public record:

• Social security numbers; amounts accumulated in members' accounts and supplemental accounts; the names or addresses of members or their beneficiaries; payment amounts to members or their beneficiaries; and, financial or commercial information relating to the investment of retirement system funds if the disclosure of such information could result in a loss to the retirement system or to the provider of the information.

MFPRSI's actuary, SilverStone Group, completed a mid-term review of actuarial assumptions. The study included data used for actuarial evaluations as of July 1 annually for the years 2010 through 2020. The purpose of this study was to compare the actual experience of the retirement system and future expectations with the current actuarial assumptions used in the annual actuarial valuation of expected future experience. The assumptions were reviewed for reasonableness and the Board did not make any changes to the assumptions.

The contract with the University of Iowa Hospitals and Clinics (UIHC) medical board was renewed for an additional three-year term. UIHC provides the retirement system with medical services relating to disability retirement applications.

Enrollment in My411, the retirement system's online portal for members, continued to climb. As of the end of the fiscal year, approximately 2,200 members had registered. The administration continued to work with its online account vendor to assure safe and secure access for its membership.

The Board analyzed its relationship with its actuarial services provider, SilverStone Group, and retained the firm for an additional three-year term.

The Board approved promoting BriAnna Nystrom from Assistant Director/Chief Operating Officer to Deputy Director and Carlton Chin from Deputy Chief Investment Officer to Chief Investment Officer.

Financial and Investments

The Board committed \$115 million to Siguler Guff Hawkeye Small Buyout Fund V and \$30 million to Siguler Guff Hawkeye Small Buyout Co-Invest. Both funds are part of a separate account strategy, Hawkeye, and managed by Siguler Guff. The Hawkeye fund was already in place within the overall investment portfolio.

A \$10 million investment was made to Golub Capital Partners' Rollover Fund 2, a private credit fund.

An investment of an additional \$20 million was approved to the IFM Global Infrastructure Fund, a portfolio consisting of private infrastructure assets.

As part of the annual review of its overall governance of the investment portfolio, the Board adopted its investment policy for the fiscal year.

The Board reviewed and studied adding an investment portfolio to be managed internally by the administration. Each of the eight meetings of the Board of Trustees included discussion of the topic. This exercise was part of a goal established by the Board to reduce the performance volatility while maintaining its investment return goal of the investment portfolio. Marquette assisted with the reviews. As a result of the process, the Board approved a 2.5% allocation to an internally managed, non-levered Absolute Return Strategy.

Benefit Plan

The Board approved the city contribution rate at 23.90 percent, effective July 1, 2022.

Board Re-Elections

Frank Guihan, retired firefighter representative from Burlington, IA, stepped down from the Board and was replaced by June Anne Gaeta from Muscatine, IA. Gaeta's seat as the active firefighter representative was assumed by Jason Zilk of Des Moines, IA. The Iowa Professional Fire Fighters appointed both Gaeta and Zilk. Guihan had been on the Board since 2012.

Mallory Merritt was appointed by the Iowa League of Cities as a city representative for a four-year term. Merritt is the Assistant City Administrator/Chief Financial Officer for the City of Davenport, IA. Merritt replaced Duane Pitcher upon his retirement, who had been on the Board since 2003.

Mary Bilden, from Boone, IA, was reappointed as the citizen representative for an additional four-year term.

Board of Trustees as of June 30, 2022

The activities of MFPRSI are under the direction of its Board which has nine voting members and four non-voting, legislative representatives. The voting coalition of the Board is comprised of four representatives of the active and retired fire and police memberships, four representatives of the cities, and one private citizen. Individuals are appointed to four-year terms by the fire and police associations and by the Iowa League of Cities. The eight voting members select a private citizen to serve as the ninth voting member. Non-voting members are chosen by the leadership of the Iowa Senate and Iowa House of Representatives and serve two-year terms.

Voting Members



Marty Pottebaum Chair

Retired Police Officer

Sioux City



Mary Bilden Citizen Boone



June Anne Gaeta Retired Firefighter Muscatine



David McFarland Active Police Officer Waterloo



Mallory Merritt City Representative Davenport



Laura Schaefer City Representative Carroll



Nickolas Schaul City Representative Des Moines



Michelle Weidner City Representative Waterloo



Jason Zilk Active Firefighter Des Moines

Non-Voting Members



Jackie Smith Senator Senate District 7



Roby Smith Senator Senate District 47



Eric Gjerde Representative House District 67



Bobby Kaufmann Representative House District 73

Staff

The day-to-day management of MFPRSI is delegated to an Executive Director who is appointed by the Board and serves at its discretion. The Executive Director, Deputy Director, Chief Investment Officer, and administrative staff are responsible for the administration of the retirement system.

Staff Responsibilities

The Executive Director, Deputy Director, and Chief Investment Officer act as advisors to the Board on all issues relevant to MFPRSI, establish contracts for professional services, and employ the remaining staff needed to maintain the retirement system.

The Senior Pension Officers administer payrolls, and establish and maintain the membership records of the retirement system. Additionally, they communicate with members regarding benefit and membership status.

The Accountant/Investment Officers perform accounting, auditing, and control functions of the retirement system. They also provide analysis for the investment portfolio. The Investment/Communications Officer creates visual/print materials and provides analysis for the investment portfolio.



Financial Statements

Independent Auditor's Report
Management's Discussion and Analysis
Statement of Fiduciary Net Position
as of June 30, 2022 and 2021
Statement of Changes in Fiduciary Net Position
for the Years Ended June 30, 2022 and 2021
Notes to the Financial Statements
as of and for the Years Ended June 30, 2022 and 2021



Independent Auditor's Report



Report on the Financial Statements

Opinion

We have audited the accompanying financial statements of the Municipal Fire and Police Retirement System of Iowa (MFPRSI), which comprise the statements of fiduciary net position as of

June 30, 2022 and 2021, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, which collectively comprise MFPRSI's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective statements of fiduciary net position of the Municipal Fire and Police Retirement System of Iowa, as of June 30, 2022 and 2021, and the respective changes in fiduciary net position thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*), issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of MFPRSI 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 opinion.

Emphasis of Matter

As discussed in Notes 2 and 4 to the financial statements, total system investments include investments valued at \$1,322.3 million (41.4% of total assets), as of June 30, 2022, whose fair values have been estimated by management in the absence of readily determinable values. Management's estimates are based on information provided by the fund managers or the general partners. Our opinion is not modified with respect to that matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements 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 financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the MFPRSI's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. 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 and Government Auditing Standards 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 financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, 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 financial statements.
- 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 MFPRSI'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 financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about MFPRSI's ability to continue as a going concern for a reasonable period of time.

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.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management' discussion and analysis and the required supplementary information on pages 33 - 37 and 60 - 67 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated November 17, 2022 on our consideration of the MFPRSI's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of MFPRSI's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering MFPRSI's internal control over financial reporting and compliance.

Boise, Idaho

November 17, 2022

Esde Sailly LLP

Management's Discussion and Analysis

The following discussion and analysis of the Municipal Fire and Police Retirement System of Iowa's (MFPRSI or retirement system) financial performance provides an overview of the retirement system's financial activities for the fiscal years ended June 30, 2022 and 2021. Please read in conjunction with the basic financial statements, which follow this discussion. These statements represent the current condition from an accounting perspective, but do not reflect MFPRSI's actuarial status. Refer to MFPRSI's actuarial valuation for its funding status regarding long-term benefit obligations.

Financial Highlights

- Retirement system assets exceeded its financial liabilities at the close of the fiscal years 2022 and 2021 by \$3,090,046,862 and \$3,293,610,268 (reported as plan net position restricted for pension benefits), respectively. Net position restricted for pension benefits is held in trust to meet future benefit payments.
- Additions for the year ended June 30, 2022, were \$6,097,853, which is comprised of contributions of \$120,052,943, net investment loss of \$113,965,317, and other income of \$10,227. Additions for the year ended June 30, 2021, were \$898,199,048, which is comprised of contributions of \$112,833,332, net investment income of \$785,156,295, and other income of \$209,421.
- Benefit payments were \$205,621,966 and \$194,400,282, for the years ended June 30, 2022, and 2021, respectively, a 5.8% increase from year to year.

The Statement of Fiduciary Net Position and the Statement Of Changes in Fiduciary Net Position

This annual financial report consists of two financial statements, the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position. These financial statements report information about the financial condition of the retirement system, as a whole, and should help answer the question: Is MFPRSI, as a whole, better off or worse off as a result of this fiscal year's experience? These financial statements include all assets and liabilities using the accrual basis of accounting. Under the accrual basis of accounting, all revenues and expenses are taken into account regardless of when cash is received or paid.

The Statement of Fiduciary Net Position presents all of MFPRSI's assets and liabilities, with the difference between assets and liabilities reported as plan net position restricted for pension benefits. Over time, increases and decreases in plan net position restricted for pension benefits is one method of measuring whether the retirement system's financial position is improving or deteriorating. The Statement of Changes in Fiduciary Net Position presents the changes in plan net assets during the respective fiscal year.

Financial Analysis

MFPRSI's assets as of June 30, 2022, and 2021, were approximately \$3.19 billion and \$3.35 billion, respectively, and were primarily comprised of investments, cash, receivables from brokers, and contributions due from employers. The \$155,708,883, or 4.6%, decrease in assets from June 30, 2021, to June 30, 2022, was primarily due to the unrealized losses experienced in invested assets.

As discussed in Notes 2 and 4 to the financial statements, total retirement system investments include investments valued at \$1,322.3 million (41.4% of total assets) and \$1,118.9 million (33.4% of total assets), as of June 30, 2022, and 2021, respectively, whose fair values have been estimated by management in the absence of readily determinable fair values. Management's estimates are based on information provided by the fund managers or the general partners.

Condensed Statement of Fiduciary Net Position (In Thousands of \$)

			2022/2021		2021/2020
Assets:	2022	2021	% Change	2020	% Change
Cash	\$7,535	\$7,957	-5.3%	\$17,274	-53.9%
Investments	3,123,603	3,313,612	-5.7%	2,584,510	28.2%
Receivables	63,381	28,697	120.9%	25,848	11.0%
Other Assets	142	104	36.5%	72	44.4%
Total Assets	\$3,194,661	\$3,350,370	-4.6%	\$2,627,704	27.5%
Pension related deferred outflows	135	191	-29.3%	172	11.0%
Liabilities:					
Benefits and refunds payable	18,710	16,675	12.2%	17,407	-4.2%
Investment management expense payable	1,931	2,560	-24.6%	2,143	19.5%
Administrative expenses payable	427	354	20.6%	441	-19.7%
Net Pension Liability attributed to IPERS	17	840	-98.0%	699	20.2%
Payable to brokers for unsettled trades	83,022	36,485	127.6%	14,308	155.0%
Total Liabilities	\$104,107	\$56,914	82.9%	\$34,998	62.6%
Pension related deferred inflows	642	37	1,635.1%	130	-71.5%
Plan net position restricted for pension benefits	\$3,090,047	\$3,293,610	-6.2%	\$2,592,748	27.0%

Total liabilities as of June 30, 2022, and 2021, were \$104,107,255 and \$56,914,410, respectively, and were primarily comprised of obligations under benefits and refunds payable, as well as payable to brokers for unsettled trades. The \$47,192,845, or 82.9%, increase in liabilities from June 30, 2021, to June 30, 2022, was due to an increase in payables to brokers for unsettled trades and benefits payable.

During the year ended June 30, 2022, plan net position restricted for pension benefits decreased \$203,563,406, or 6.2%, from the previous fiscal year, primarily due to the unrealized losses experienced in invested assets. This is in comparison to the previous fiscal year, when net position increased by \$700,861,839, or 27%, from the prior year.

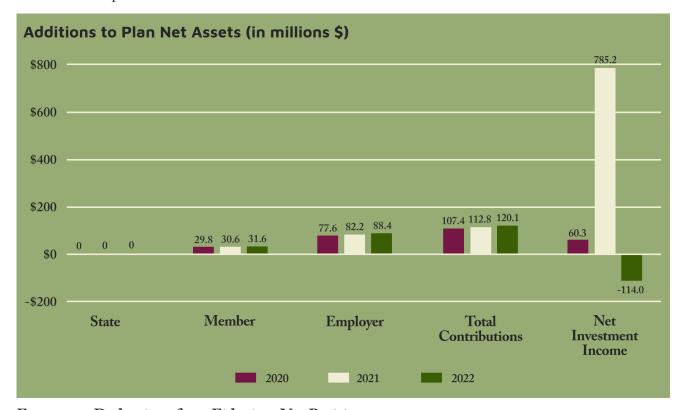
Condensed Statement of Changes in Fiduciary Net Position (In Thousands of \$)

			2022/2021		2021/2020
	2022	2021	% Change	2020	% Change
Additions:					
Contributions	\$120,053	\$112,833	6.4%	\$107,360	5.1%
Net investment income	(113,965)	785,156	-114.5%	60,250	1,203.2%
Other income	10	210	-95.2%	1	20,900.0%
Total additions	6,098	898,199	-99.3%	167,611	435.9%
Deductions:					
Benefits and refund payments	207,530	195,202	6.3%	185,942	5.0%
Administrative expenses	2,131	2,135	-0.2%	2,046	4.3%
Total deductions	209,661	197,337	6.2%	187,988	5.0%
Net increase (decrease)	(203,563)	700,862	-129.0%	(20,377)	-3,539.5%
Plan net position restricted for pension benefits:					
Beginning of year	3,293,610	2,592,748	27.0%	2,613,125	-0.8%
End of year	\$3,090,047	\$3,293,610	-6.2%	\$2,592,748	27.0%

Revenues - Additions to Fiduciary Net Position

Reserves needed to finance retirement benefits are accumulated through the collection of contributions and earnings on investments. Contributions and net investment income for the fiscal year 2022 totaled \$6,097,853.

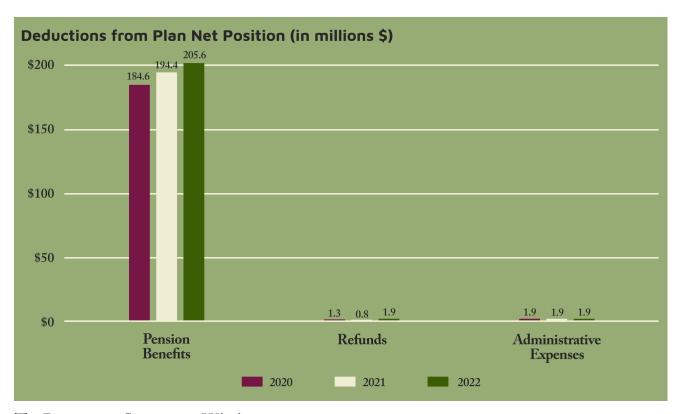
Contributions increased from the previous year by \$7,219,611. This increase is primarily due to an increase in the earnable compensation of members and an increase in the employer contribution rate. Net investment income decreased from the previous year by \$899,121,612. This change is primarily due to a net depreciation in the fair value of assets.



Expenses – Deductions from Fiduciary Net Position

MFPRSI's principal expenses include the payment of pension benefits to retired members and beneficiaries, refund of contributions to former members, and the cost of administering the retirement system. Total deductions for the fiscal year 2022 were \$209,661,259, an increase of 6.2% over fiscal year 2021 deductions.

Pension benefit payments increased by \$11,221,684, or 5.8%, from the previous year. Refund of contributions increased by \$1,105,746, or 137.9%. These changes are primarily due to member transfers to the Peace Officers' Retirement System and an increase in the number of refund applications in 2022.



The Retirement System as a Whole

It is important to note the financial obligations established by the Iowa legislature in Iowa Code Chapter 411 are committed benefits, which are to be funded through the contributions made by the employers and the membership, in concert with the long-term return on investments. The "public policy" within Iowa has always been to meet the benefit commitments of the pension plans. The history of the plan benefits under Chapter 411 traces to 1934. The funding methods established by the legislature in the Iowa Code, whereby contributions are made from the individual employers and members, coupled with the "prudent person" concept for investment policy, provides the financial foundation for this public policy.

Contacting MFPRSI

This financial report is designed to provide MFPRSI's Board of Trustees, membership, and cities a general overview of the retirement system's finances and to demonstrate accountability for assets. Questions and additional financial information can be found by contacting MFPRSI's office in writing at 7155 Lake Drive, Suite 201, West Des Moines, IA 50266.

Statement of Fiduciary Net Position as of June 30, 2022 and 2021

·	2022	2021
Assets:		
Cash	\$7,535,154	\$7,957,216
Investments, at fair value:		
U.S. government obligations	152,851,994	153,263,070
U.S. corporate fixed income	131,293,740	124,838,512
U.S. equity securities	390,852,228	551,922,246
Foreign equity securities	370,042,806	487,932,767
Commingled fixed income	37,719,616	50,683,978
Short-term investments and currency positions	46,987,969	38,415,914
Infrastructure	85,852,789	-
Real estate	337,760,970	291,872,892
Private equity	799,421,035	750,183,992
Private credit	49,368,374	21,000,000
Multi-strategy commingled fund	49,871,274	55,782,571
Fund of funds commingled investment	671,580,460	787,715,979
Total investments - at fair value	3,123,603,255	3,313,611,921
Receivables:		
Contributions	3,526,670	3,784,340
Investment income	32,831	27,746
Receivable from brokers for unsettled trades, net	59,821,426	24,885,189
Total receivables	63,380,927	28,697,275
Other assets	141,935	103,742
Total assets	3,194,661,271	3,350,370,154
Pension related deferred outflows	134,546	191,539
Liabilities:		
Benefits and refunds payable	18,710,398	16,674,935
Investment management expenses payable	1,930,704	2,559,884
Administrative expenses payable	427,211	354,716
Net pension liability attributed to IPERS	17,123	839,724
Payable to brokers for unsettled trades, net	83,021,819	36,485,151
Total liabilities	104,107,255	56,914,410
Pension related deferred inflows	641,700	37,015
Plan net position restricted for pension benefits		

See notes to financial statements.

Statement of Changes in Fiduciary Net Position for the Years Ended June 30, 2022 and 2021

	2022	2021
Additions:		
Contributions:		
Member	\$31,631,033	\$30,587,481
Employer	88,421,910	82,245,851
State appropriations		
Total contributions	120,052,943	112,833,332
Investment Income:		
Interest	11,306,522	8,321,735
Dividends	39,308,614	15,707,876
Net (depreciation) appreciation in fair value of		
investments	(139,434,366)	791,585,262
Net investment income from investment activity	(88,819,230)	815,614,873
Less investment expenses:		
Management fees and other	25,146,087	30,458,578
Net investment income	(113,965,317)	785,156,295
Other income	10,227	209,421
Total additions	6,097,853	898,199,048
Deductions:		
Benefit payments	205,621,966	194,400,282
Refund payments	1,907,707	801,961
Administrative expenses	1,910,869	1,899,280
Disability expenses	220,717	235,686
Total deductions	209,661,259	197,337,209
Net (decrease) increase in net position	(203,563,406)	700,861,839
Plan net position restricted for pension benefits:		
Net Position - Beginning	3,293,610,268	2,592,748,429
Net Position - Ending	\$3,090,046,862	\$3,293,610,268

See notes to financial statements.

Notes to Financial Statements as of and for the Years Ended June 30, 2022 and 2021

1. Plan Description

General

MFPRSI was created under Chapter 411.35 of the Code of Iowa to replace 87 separate fire and police retirement systems from 49 cities and one county in Iowa (a collection of "separate systems"). Effective January 1, 1992, the separate systems were terminated, and the respective entities were required to transfer assets to MFPRSI equal to their respective accrued liabilities (as measured by MFPRSI's actuary). Upon transfer of the assets, MFPRSI assumed all membership, benefits rights, and financial obligations of the separate systems.

MFPRSI is the administrator of a multi-employer, cost sharing, defined-benefit pension plan for the exclusive benefit of eligible employees of participating cities (substantially all full-time employees of the respective cities' fire and police departments). It is governed by a nine-member Board of Trustees (Board) who are appointed by police and fire associations and by the Iowa League of Cities. The eight voting members select a private citizen to serve as the ninth voting member. The Board is authorized by the state legislature to make investments, pay benefits, set contributions rates, hire staff and consultants, and perform all necessary functions to carry out the provisions of the Code of Iowa. MFPRSI is separate and apart from state government and is not included in the state's financial statements.

At June 30, 2022, MFPRSI was comprised of 49 cities covering 4,155 active members; 453 terminated members entitled to benefits; and 4,353 retired firefighters, police officers, bailiffs, and eligible beneficiaries across Iowa.

Funding

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 years ended June 30, 2022, and 2021.

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 one 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% and 25.31%, for the years ended June 30, 2022, and 2021, respectively.

State Appropriations - State appropriations are approved by the state legislature and may further reduce the employer's contribution rate, but not below the minimum statutory contribution rate of 17.00% of earnable compensation. The State therefore is considered to be a nonemployer contributing entity in accordance with the provisions of the Governmental Accounting Standards Board Statement No. 67 – Financial Reporting for Pension Plans, (GASB 67). There were no State appropriations for the years ended June 30, 2022, and 2021.

Benefits Provided

Participating members are entitled to the benefit provisions in effect on the member's date of termination. The following is a summary of MFPRSI's benefit provisions for the years ended June 30, 2022, and 2021:

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 four 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 three 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 (two 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 five 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 five 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 Plan (DROP) - Active members, at least 55 years of age, with 22 or more years of service have the option to participate in the Deferred Retirement Option Plan (DROP). DROP is an arrangement whereby a member who is otherwise eligible to retire and commence benefits opts to continue working. A member can elect a three-, four-, or five-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. The balance of the amounts held by the retirement system pursuant to the DROP is \$18,526,000 as of June 30, 2022, and \$16,525,000 as of June 30, 2021.

Net Pension Liability of the Retirement System – The components of MFPRSI's net pension liability at June 30, 2022 and 2021 were as follows:

	2022	2021
Total pension liability	\$3,651,617,338	\$3,518,184,403
Plan fiduciary net position	(3,090,046,862)	(3,293,610,268)
Retirement system's net pension liability	\$561,570,476	\$224,574,135
Plan fiduciary net position as a percentage of the total pension liability	84.62%	93.62%

Actuarial Assumptions – The total pension liability was determined by an actuarial valuation as of June 30, 2022 and 2021, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation 3.0%

Salary increases 3.75% to 15.11% including inflation Investment rate of return 7.5%, net of investment expense

Mortality rates as of June 30, 2022 and 2021, 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 actuarial assumptions used in the June 30, 2022 and 2021, valuations were based on the results of an actuarial experience study for the period of July 1, 2010, to June 30, 2020.

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-U.S. 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 employer 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.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate – The following presents MFPRSI's net pension liability calculated using the discount rate of 7.5 percent, as well as what the retirement system's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.5%) or one percentage point higher (8.5%) than the current rate:

	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
MFPRSI's net			
pension liability (asset)	\$1,016,337,877	\$561,570,476	\$184,789,486

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

MFPRSI prepared its financial statements using the accrual basis of accounting. It recognizes member and employer contributions as revenues in the month member earnings are paid. Benefits and refunds are recognized as expenses when payable. Expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts in the financial statements. MFPRSI's estimates are primarily related to the valuation of various investment instruments, including real estate, private equity, and the multi-strategy commingled fund, as well as the total pension liability. Actual results could differ from those estimates.

Investments

MFPRSI's securities are reported at fair value. Where appropriate, the fair value includes estimated disposition costs. Certificates of deposit are recorded at amortized cost which approximates fair value. Interest income is recognized when earned. Dividend income is recognized on the ex-dividend date. Gains or losses on stocks and bonds are recognized on an average cost basis calculated separately for each investment manager. Other gains and losses are recognized on an identified cost basis. Gains and losses on sales and exchanges are recognized on the trade date. The fair values of marketable securities held at June 30 are determined by using the closing price listed on national securities exchanges and quoted market prices are provided by independent pricing services. For commingled funds, the net asset value is determined and certified by the commingled fund manager. Investments in real estate, private equities, and the multi-strategy commingled fund which invest in both publicly and privately owned securities are valued based on estimates and assumptions of general partners, partnership valuation committees, or third party appraisal firms in the absence of readily determined market values. Such valuations generally reflect cash flows, discounts for illiquidity and consider variables such as financial performance of investments, recent sales prices of investments, and other pertinent information.

Investment Policy

44

The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the Board by a majority vote of its members. It is the policy of the Board to pursue an investment strategy that reduces risk through prudent diversification of the portfolio across a broad selection of distinct asset classes. The pension plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following was the Board's adopted asset allocation policy as of June 30, 2022:

Asset Class	Target Allocation
Core investments	43%
Strategic investments	35%
Private markets	22%
Total	100%

Rate of Return

For the years ended June 30, 2022, and 2021, the annual money-weighted rate of return on pension plan investments net of pension plan investment expense was -3.80% and 29.90%, respectively. The money-weighted rate of return, calculated arithmetically, expresses investment performance net of investment expense adjusted for the changing amounts actually invested.

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of fiduciary net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period and therefore will not be recognized as an outflow of resources (expense/expenditure) until then. MFPRSI has only one item related to pensions which qualifies for reporting in this category. See note 6 for additional details.

In addition to liabilities, the statement of fiduciary net position will sometimes report a separate section for deferred inflow of resources. This separate financial statement element, deferred inflow of resources, represents an acquisition of net position that applies to future periods, so will not be recognized as an inflow of resources (revenue) until that time. MFPRSI has only one item related to pensions which qualifies for reporting in this category. See note 6 for additional details.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Iowa Public Employees' Retirement System (IPERS) and additions to / deductions from IPERS' fiduciary net position have been determined on the same basis as they are reported by IPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

3. Cash

For cash deposits, custodial credit risk is the risk that in the event of a bank failure, MFPRSI's deposits may not be returned. The table below presents a summary of cash balances of the retirement system at June 30, 2022 and 2021:

	2022	2021
Insured	\$250,000	\$250,000
Uninsured and uncollateralized	8,291,061	8,604,424
Bank balance - June 30 Less:	\$8,541,061	\$8,854,424
Pending bank transactions	1,005,907	897,208
Cash - Statement of Fiduciary Net Position	\$7,535,154	\$7,957,216

4. Investments

Investment Policy

The investment authority, as prescribed by the Code of Iowa, is governed by the "prudent person rule." This rule requires that an investment be made with the care, skill, prudence, and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an entity of a like character with like aims. Within the prudent person framework the Board has adopted investment guidelines for the retirement system's investment program.

Due to state statute, MFPRSI is prohibited from holding direct investments in the Sudan, Iran, and companies that boycott Israel.

The following investment vehicles are permitted by MFPRSI's investment policy and may be considered for the retirement system's funds:

Stocks and Bonds (Domestic, International & Emerging Markets):

- Securities issued by and the obligations of or guaranteed by the United States of America or U.S. government sponsored enterprises or by the Dominion of Canada or any province thereof, financial futures and options;
- Bonds issued by the State of Iowa or its political subdivisions;
- Common stock, American depository receipts, corporate bonds or other evidences of indebtedness issued under the laws of the Dominion of Canada or any province thereof;
- Common stock, bonds or other evidences of indebtedness issued under the laws of selected foreign countries or their political subdivisions;
- Debt instruments issued by multinational organizations, on behalf of selected nations or groups of nations, such as Brady bonds, whether in U.S. dollars or foreign currencies;
- Mutual funds, commingled funds, or private equity which are, comprised of stocks, equity and
 or debt instruments, including those which hold positions in emerging markets, whether in
 U.S. dollars or foreign currencies;

• Derivative instruments, such as futures and options, can be utilized as an alternative to a stock or bond position, as specified.

Other Asset Classes

MFPRSI's currency positions include the currency of a group of selected nations, which have well established and stable economic and political structures. Currency positions are only taken in countries or in multinational currencies (for example, euros) in which MFPRSI has determined to invest its assets. MFPRSI's currency assets are represented within the individual portfolios of the investment managers, which have mandates, and may include international bonds or stocks. The benchmark against which these managers compare their portfolios includes a zero percent hedged position to the U.S. dollar for the international portions of the mandate.

Derivative Instruments

Derivative instruments, such as futures and options, may be utilized in selected portfolios for the following purposes:

- 1. As an alternative to maintaining a selected asset position,
- 2. To maintain the duration of securities in a portfolio,
- 3. To gain exposure in a time of dollar strength to a foreign bond market with minimal exposure to the currency of the country,
- 4. To hedge or otherwise protect existing or anticipated portfolio positions,
- 5. To establish and maintain the currency positions for the currency overlay portfolio and for the individual currency activities of the individual portfolios, and
- 6. Not to speculate or leverage (i.e., "gear-up") the portfolio.

Derivative instruments are generally defined as contracts whose value depends on ("derives" from) the value of an underlying asset, reference rate, or index. Derivative instruments include both of the following:

a. "Over the counter" (OTC) derivatives: privately negotiated contracts provided directly by dealers to end-users. This includes swaps, futures and options based upon interest rates, currencies, equities, and commodities;

and,

b. Standardized contracts sold on exchanges: futures and options.

Real Estate

The real estate positions of the retirement system may include domestic or international real estate investments in individual properties or groups of properties, through one or more of the following: direct purchase or mortgage of individual properties, participation in a commingled fund (open-ended or closed- ended) or in a trust or a partnership, which has positions in one or more properties.

MFPRSI's real estate positions may include investment in securitized real estate via publicly-traded or privately-held real estate investment trusts (REITs).

Fund of Funds Commingled Investments

As of June 30, 2022 and 2021, MFPRSI was invested in fund of funds commingled investments, which can be broken down into the following asset classes:

	2022	2021
Investments - At fair value:		
U.S. equity securities	\$225,990,281	\$328,758,277
Foreign equity securities	150,511,065	221,629,822
Fixed income	141,505,266	138,689,606
Alternative investments	41,476,573	21,612,398
Short-term investments and currency positions	112,097,275	77,025,876
Total fund of funds commingled investments	\$671,580,460	\$787,715,979

Investment Risk Disclosure: Credit Risk

2022

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations as of June 30, 2022 and 2021 are as follows:

2022		
Quality Rating	Fair Value	Percentage of Portfolio
AAA	\$2,461,777	0.76%
AA	168,077,429	52.22%
A	22,147,763	6.88%
BBB	88,513,355	27.50%
BB	37,068,214	11.52%
В	3,596,812	1.12%
Total fixed income securities	\$321,865,350	100%
2021		
Quality Rating	Fair Value	Percentage of Portfolio
	I all value	1 01001101180 01 1 01010110
AAA	\$3,128,106	0.95%
AAA AA		O
	\$3,128,106	0.95%
AA	\$3,128,106 169,793,047	0.95% 51.64%
AA A	\$3,128,106 169,793,047 49,795,137	0.95% 51.64% 15.15%
AA A BBB	\$3,128,106 169,793,047 49,795,137 71,313,289	0.95% 51.64% 15.15% 21.69%
AA A BBB BB	\$3,128,106 169,793,047 49,795,137 71,313,289 34,546,891	0.95% 51.64% 15.15% 21.69% 10.51%
AA A BBB BB	\$3,128,106 169,793,047 49,795,137 71,313,289 34,546,891	0.95% 51.64% 15.15% 21.69% 10.51%

MFPRSI does not have a formal policy that limits the quality grade in which it may invest.

Custodial Credit Risk

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, MFPRSI will not be able to recover the value or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either the counterparty or the counterparty's trust department or agent but not in MFPRSI's name.

Iowa Code 411.7 establishes the secretary of the Board as the custodian of the fund and provides for MFPRSI to select master custodian banks to provide custody of its assets. MFPRSI has arranged for Principal Bank to act as the master custodian bank. The master custodian bank may hold MFPRSI's property in the name of its nominee, bearer form, or in book entry form so long as the custodian's records clearly indicate that such property is held as part of the retirement system's account.

Concentration of Credit Risk

MFPRSI is guided by statute and policy in the selection of security investments. No investments in any one organization represent five percent or more of plan assets.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. The following table discloses the fair value and average duration of fixed income investments as of June 30, 2022.

	Fair Value	Duration
Investment type:		
Short-term	\$29,238,529	0.0019
Fixed income	284,145,735	5.2837
Commingled	37,719,616	5.6275
Total fair value	\$351,103,880	
Portfolio modified duration	_	4.8808

Duration is a measure of interest rate risk. The greater the duration of a bond, or portfolio of bonds, the greater its price volatility will be in response to a change in interest rates and vice-versa. Duration is the measure of a bond price's sensitivity to a 100-basis point (or, one percent) change in interest rates. A duration of eight would mean that, given a 100-basis point change up/down in rates, a bond's price would move up/down by 8%.

Commitments

MFPRSI is committed, as of June 30, 2022, to invest approximately \$521,000,000 in certain private equity, private credit, real estate partnerships, real estate commingled funds, and infrastructure funds.

Fair Value Measurements

MFPRSI categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy below.

Investments Measured at Fair Value on a Recurring Basis

Fair Value Measurement Using*

		I dili V	mae ivieusareme	5111 0 51115
Investments by	Balance at	T 14*	T 1.0*	T 10*
fair value level:	June 30, 2022	Level 1*	Level 2*	Level 3*
Debt securities:	*27 000 774	*25 000 5(4	44	**
U.S. Treasury securities	\$35,099,761	\$35,099,761	\$-	\$-
Mortgage-related securities	112,876,310	-	112,876,310	-
Government-related securities	4,875,924	-	4,875,924	-
Corporate securities	131,293,740		131,293,740	
Total debt securities	284,145,735	35,099,761	249,045,974	
Equity securities:				
Preferred stock	2,335,486	2,335,486		
Total equity securities	2,335,486	2,335,486		
Total investments by fair				
value level	286,481,221	\$37,435,247	\$249,045,974	<u>\$-</u>
Investments measured at the N	VAV:			
Domestic equity funds	385,347,928			
International equity funds	368,218,892		*Key:	
Global equity funds	4,992,727			
Global bond funds	37,719,616		Level 1 - C	Quoted Prices
Private credit funds	49,368,374		Identical A	
Infrastructure funds	85,852,789			
Real estate funds	332,376,924			Significant Other
Private equity funds	799,421,035		Observable	e Inputs
Multi-strategy commingled			Level 3 - S	Significant
fund	49,871,274		Unobserva	_
Fund of funds commingled				
investments	671,580,460			
Real estate held as investment	5,384,046			
Total investments measured at the NAV	2,790,134,065			
Total investments measured				
at fair value	\$3,076,615,286			

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. MFPRSI's assessment of the significance of particular inputs to these fair value measurements requires judgement and considers factors specific to each asset or liability.

Debt and equity securities classified as Level 1 are valued using prices quoted in active markets for those securities.

The fair value of mortgage-related securities, corporate securities and government-related securities at June 30, 2022, was determined primarily based on Level 2 inputs. Wells Fargo estimates the fair value of these investments using other inputs such as interest rates and yield curves that are observable at commonly quoted intervals.

Investments in Entities that Calculate Net Asset Value per Share

MFPRSI holds shares or interest in investment companies where the fair value of the investments are measured on a recurring basis using net asset value per share (or its equivalent) of the investment companies as a practical expedient.

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Domestic equity funds	\$385	_	Daily	1-5 days
International equity funds	368		Daily, Monthly	1 week/15th
Global equity funds	5		Daily	2 days
Global bond funds	38		Daily	1 day
Private credit funds	49	\$16	Monthly	3 days
Infrastructure funds	86	\$20	Quarterly	90 days
Real estate funds	332	\$31	N/A	N/A
Private equity funds	800	\$454	N/A	N/A
Multi-strategy hedge funds	50		Monthly	2 weeks
Fund of funds commingled				
investments	672		Daily	1 day
Real estate held as investment	5		N/A	N/A
Total investments				
measured at the NAV	\$2,790			

At year end, the fair value, unfunded commitments, and redemption rules of those investments is as follows:

Investments measured at the NAV (\$ in millions)

MFPRSI does not anticipate restrictions, other than those outlined in the table, on the ability to sell individual investments at the measurement date. Additionally, MFPRSI does not anticipate that NAV driven investments will become redeemable at valuations materially different from the corresponding NAV listed above. On average, distributions received through the liquidation of

underlying investments/assets can occur over the span of 8-15 years. MFPRSI has no prescribed time frame to liquidate the investments.

The multi-strategy hedge funds class invests in hedge funds that pursue multiple strategies to diversify risks and reduce volatility. The underlying portfolios hold both long and short positions in various asset classes and may also employ leverage. The investments of the underlying portfolios will likely include, but will not be limited to, common stocks, depository receipts, bank loans, bonds (including sovereign debt of emerging market countries), notes, commodities, currencies, forwards, futures, options and swap agreements.

5. Derivatives

MFPRSI's investment managers may invest in derivative securities as permitted by their contracts. A derivative security is an investment whose payoff depends upon the value of an underlying asset such as bond and stock prices or a market index. All derivatives are considered investments. The fair values of all derivative financial instruments are reported in the Statement of Fiduciary Net Position as 'Short-term investments and currency positions.' Changes in the values of derivative financial instruments are reported in the Statement of Changes in Fiduciary Net Position as 'Net appreciation in fair value of investments.' Derivative financial instruments involve, to varying degrees, credit risk and market risk. At June 30, 2022 and 2021, the retirement system had no derivative financial instruments.

Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to terms. To limit credit risk, each investment manager screens potential counter-parties and establishes and maintains an approved list of acceptable firms which meet a high level of credit-worthiness.

Market risk is the possibility that a change in interest or currency rates will cause the value of a financial instrument to decrease or become more costly to settle. The market risk associated with derivatives, the prices of which are constantly fluctuating, is managed by imposing contractual requirements on the investment managers as to the types, amounts and degree of risk they may undertake. Investment managers' derivative activities are reviewed on a periodic basis by MFPRSI as well as the Board to monitor compliance with the contracts. The retirement system does not purchase derivatives with borrowed funds and does not allow the leveraging of the portfolios.

MFPRSI's derivative investments may include foreign currency forward contracts, options, futures, and collateralized mortgage obligations. Derivative securities may also be used to improve yield, adjust the duration of the fixed income portfolio, or to hedge changes in interest rates.

6. Iowa Public Employees Pension System (IPERS)

IPERS Plan Description

IPERS membership is mandatory for employees of MFPRSI. Pensions are provided to employees of MFPRSI through a cost-sharing, multiple employer defined benefit pension plan administered by IPERS. IPERS issues a stand-alone financial report which is available to the public by mail at 7401 Register Drive, P.O. Box 9117, Des Moines, Iowa 50306-9117 and at www.ipers.org.

IPERS benefits are established under Iowa Code chapter 97B and the administrative rules thereunder. Chapter 97B and the administrative rules are the official plan documents. The following brief description is provided for general informational purposes only. The plan documents contain more information.

IPERS Pension Benefits

A Regular member may retire at normal retirement age and receive monthly benefits without an early-retirement reduction. Normal retirement age is age 65, anytime after reaching age 62 with 20 or more years of covered employment, or when the member's years of service plus the member's age at the last birthday equals or exceeds 88, whichever comes first (these qualifications must be met on the member's first month of entitlement to benefits). Members cannot begin receiving retirement benefits before age 55.

The formula used to calculate a Regular member's monthly IPERS benefit includes:

- A multiplier (based on years of service).
- The member's highest five-year average salary (For members with service before June 30, 2012, the highest three-year average salary as of that date will be used if it is greater than the highest five-year average salary.)

If a member retires before normal retirement age, the member's monthly retirement benefit will be permanently reduced by an early-retirement reduction. The early-retirement reduction is calculated differently for service earned before and after July 1, 2012. For service earned before July 1, 2012, the reduction is 0.25 percent for each month that the member receives benefits before the member's earliest normal retirement age. For service earned starting July 1, 2012, the reduction is 0.50 percent for each month that the member receives benefits before age 65.

Generally, once a member selects a benefit option, a monthly benefit is calculated and remains the same for the rest of the member's lifetime. However, to combat the effects of inflation, retirees who began receiving benefits prior to July 1990 receive a guaranteed dividend with their regular November benefit payments.

IPERS Disability and Death Benefits

A vested member who is awarded federal Social Security disability or Railroad Retirement disability benefits is eligible to claim IPERS benefits regardless of age. Disability benefits are not reduced for early retirement. If a member dies before retirement, the member's beneficiary will receive a lifetime annuity or a lump-sum payment equal to the present actuarial value of the member's accrued benefit or calculated with a set formula, whichever is greater. When a member dies after retirement, death benefits depend on the benefit option the member selected at retirement.

IPERS Contributions

As a result of a 2010 law change effective July 1, 2012, the contribution rates are established by IPERS following the annual actuarial valuation, which applies IPERS' Contribution Rate Funding

Policy and Actuarial Amortization Method. Statute limits the amount rates can increase or decrease each year to one percentage point.

IPERS Contribution Rate Funding Policy requires that the actuarial contribution rate be determined using the "entry age normal" actuarial cost method and the actuarial assumptions and methods approved by the IPERS Investment Board. The actuarial contribution rate covers normal cost plus the unfunded actuarial liability payment based on a 30-year amortization period. The payment to amortize the unfunded actuarial liability is determined as a level percentage of payroll, based on the Actuarial Amortization Method adopted by IPERS' Investment Board.

In fiscal year 2022, pursuant to the required rate, Regular members contributed 6.29 percent of pay and MFPRSI contributed 9.44 percent for a total rate of 15.73 percent.

MFPRSI's total contributions to IPERS for the years ended June 30, 2022 and 2021, were \$96,332 and \$93,581, respectively.

IPERS Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2022, MFPRSI reported a liability of \$17,123 for its proportionate share of the IPERS net pension liability. The IPERS net pension liability was measured as of June 30, 2021, and the IPERS total pension liability used to calculate the IPERS net pension liability was determined by an actuarial valuation as of that date. The MFPRSI's proportion of the IPERS net pension liability was based on the MFPRSI's share of contributions to the pension plan relative to the contributions of all IPERS participating employers. At June 30, 2021, the MFPRSI's proportion was 0.012214 percent, which was an increase from 0.012038, its proportion measured as of June 30, 2020.

	Deferred	Deferred
	Outflows of	Inflows of
	Resources	Resources
Differences between expected and actual experience	\$13,028	\$13,081
Changes of assumptions	11,200	-
Net difference between projected and actual earnings on		
pension plan investments	-	620,401
Changes in proportion and differences between MFPRSI		
contributions and proportionate share of contributions	13,986	8,218
MFPRSI contributions subsequent to the measurement date of		
June 30, 2021	96,332	
Total	\$134,546	\$641,700

For the year ended June 30, 2022, MFPRSI recognized pension expense of (\$64,591). At June 30, 2022, MFPRSI reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

2023	\$(153,402)	2026	\$(165,688)
2024	(149,219)	2027	1,895
2025	(137,072)	Thereafter	_

Deferred outflows of resources related to pensions resulting from MFPRSI contributions of \$96,332 reported subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2022. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Rate of inflation	2.60% per annum.
(effective June 30, 2017)	-
Rates of salary increase	3.25% to 16.25%, average, including inflation. Rates
(effective June 30, 2017)	vary by membership group.
Long-term investment rate of return	7.00%, compounded annually, net of investment
(effective June 30, 2017)	expense, including inflation.

There were no non-employer contributing entities at IPERS.

IPERS Actuarial assumptions – The total pension liability in the June 30, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

The IPERS actuarial assumptions used in the June 30, 2021 valuation were based on the results of actuarial experience studies with dates corresponding to those listed above.

Mortality rates were based on the RP-2014 Employee and Healthy Annuitant Tables adjusted to 2006 and 2017 with MP-2017 generational adjustments.

The actuarial assumptions used in the June 30, 2021 valuation are based on the results of the most recent actuarial experience studies. An experience study of the System's demographic assumptions was presented to the Investment Board in June 2018. This study included information on mortality, retirement, disability and termination rates, as well as salary trends, for the period of July 1, 2013 – June 30, 2017. At the Investments Board's direction, the experience study of the System's economic assumptions, including the long-term rate of return, was accelerated a year resulting in a full review of the economic assumptions in early 2017. The findings of the experience study on economic assumptions, along with the resulting recommendations, are included in the report dated March 24, 2017.

Several factors are considered in evaluating the actuarial assumed investment return including long-term historical data, estimates inherent in current market data, along with estimates of variability and correlations for each asset class, and in analysis in which best-estimate ranges of

expected future real rates of return (expected returns, net of investment expense and inflation) were developed by IPERS's investment consultant. These ranges were combined to develop the actuarial assumed investment return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The actuarial assumed investment return reflects the anticipated returns on current and future plan assets, and provides a discount rate to determine the present value of future benefit payments.

Asset Class	IPERS Target Allocation	IPERS Long-Term Expected Real Rate of Return
Domestic equity	22%	4.43%
International equity	17.5	6.01
Global smart beta equity	6	5.1
Core-plus fixed income	26	0.29
Public credit	4	2.08
Cash	1	-0.25
Private equity	13	9.51
Private real assets	7.5	4.63
Private credit	3	2.87
Total	100%	

Best estimates of geometric real rates of return for each major asset class included in IPERS' target asset allocation as of June 30, 2021 are shown in the following table.

IPERS - *Discount Rate*. The discount rate used to measure the total pension liability was 7.0 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that contributions from MFPRSI will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. 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.

Sensitivity of MFPRSI's proportionate share of the IPERS net pension liability to changes in the discount rate. The following presents MFPRSI's proportionate share of the IPERS net pension liability calculated using the discount rate of 7.0 percent, as well as what MFPRSI's proportionate share of the IPERS net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.0%) or one percentage point higher (8.0%) than the current rate.

	1% Decrease	Current Discount Rate	1% Increase
	6.0%	7.0%	8.0%
MFPRSI's proportionate share of			
the IPERS net pension liability	\$606,045	\$17,123	\$(476,431)

Pension plan fiduciary net position. Detailed information about the pension plan's fiduciary net position is available in the separately issued IPERS financial report which is available on IPERS' website at www.ipers.org.

Payables to IPERS

At June 30, 2022, MFPRSI reported payables to the defined benefit pension plan of \$0 for legally required employer contributions and \$0 for legally required employee contributions which had been withheld from employee wages but not yet remitted to IPERS.

At June 30, 2021, MFPRSI reported payables to the defined benefit pension plan of \$0 for legally required employer contributions and \$0 for legally required employee contributions which had been withheld from employee wages but not yet remitted to IPERS.

 $\label{lem:red} \textbf{Required Supplementary Information}$

Schedule of Changes in MFPRSI's Net Pension Liability Last 10 Fiscal Years

	2022	2021	2020	2019	2018
Total pension liability					
Service cost	\$58,814,108	\$56,807,678	\$55,133,707	\$53,017,674	\$56,128,110
Interest	260,633,217	251,348,980	242,467,141	233,282,508	224,678,250
Difference between expected and actual experience	21,515,283	14,881,260	9,638,175	16,177,781	(9,748,387)
Changes of assumptions	-	_	-	-	21,266,192
Benefit payments, including refunds	(207,529,673)	(195,202,243)	(185,942,113)	(178,457,619)	(170,663,862)
Net change in total pension liability	133,432,935	127,835,675	121,296,910	124,020,344	121,660,303
Total pension liability - beginning	3,518,184,403	3,390,348,728	3,269,051,818	3,145,031,474	3,023,371,171
Total pension liability - ending	3,651,617,338	3,518,184,403	3,390,348,728	3,269,051,818	3,145,031,474
Plan fiduciary net position					
Contributions - employer	88,421,910	82,245,851	77,551,461	78,766,019	74,641,639
Contributions - member	31,631,033	30,587,481	29,808,835	28,472,627	27,493,680
Net investment income	(113,965,317)	785,156,295	60,250,246	136,635,233	183,182,098
Benefit payments, including refunds	(207,529,673)	(195,202,243)	(185,942,113)	(178,457,619)	(170,663,862)
Administrative expense	(1,902,581)	(1,894,969)	(1,887,579)	(1,797,284)	(1,781,886)
Other	(218,778)	(30,576)	(157,670)	(121,714)	(139,793)
Net change in plan fiduciary net position	(203,563,406)	700,861,839	(20,376,820)	63,497,262	112,731,876
Plan fiduciary net position - beginning	3,293,610,268	2,592,748,429	2,613,125,249	2,549,627,987	2,436,896,111
Plan fiduciary net position - ending	\$3,090,046,862	\$3,293,610,268	\$2,592,748,429	\$2,613,125,249	\$2,549,627,987
MFPRSI's net pension liability - ending	\$561,570,476	\$224,574,135	\$797,600,299	\$655,926,569	\$595,403,487

Schedule of Changes in MFPRSI's Net Pension Liability Last 10 Fiscal Years (continuation from previous page)

	2017	2016	2015	2014	2013
Total pension liability					
Service cost	\$53,423,772	\$51,366,130	\$49,893,939	\$48,020,046	\$47,487,380
Interest	213,069,288	205,836,959	196,289,405	187,172,397	185,532,855
Difference between expected and actual				(4.2.42.2.44)	(22.020.022)
experience	12,891,275	7,643,609	15,374,059	(1,248,941)	(22,020,082)
Changes of assumptions	39,751,096	(10,467,574)	17,508,411	32,616,664	(49,002,711)
Benefit payments, including refunds	(163,571,586)	(156,566,482)	(150,026,306)	(143,833,568)	(137,617,880)
Net change in total pension liability	155,563,845	97,812,642	129,039,508	122,726,598	24,379,562
Total pension liability - beginning	2,867,807,326	2,769,994,684	2,640,955,176	2,518,228,578	2,493,849,016
Total pension liability - ending	3,023,371,171	2,867,807,326	2,769,994,684	2,640,955,176	2,518,228,578
Plan fiduciary net position					
Contributions - employer	73,411,163	75,254,727	79,748,943	76,917,460	65,327,766
Contributions - member	26,625,022	25,455,597	24,622,310	24,054,541	23,358,844
Net investment income	259,812,040	164,100	69,833,569	358,680,682	229,592,075
Benefit payments, including refunds	(163,571,586)	(156,566,482)	(150,026,306)	(143,833,568)	(137,617,880)
Administrative expense	(1,767,657)	(1,728,951)	(1,680,944)	(1,553,740)	(1,523,477)
Other	(159,263)	(212,954)	(774,140)	(75,070)	(99,223)
Net change in plan fiduciary net position	194,349,719	(57,633,963)	21,723,432	314,190,305	179,038,105
Plan fiduciary net position - beginning	2,242,546,392	2,300,180,355	2,278,456,923	1,964,266,618	1,785,228,513
Plan fiduciary net position - ending	\$2,436,896,111	\$2,242,546,392	\$2,300,180,355	\$2,278,456,923	\$1,964,266,618
MFPRSI's net pension liability - ending	\$586,475,060	\$625,260,934	\$469,814,329	\$362,498,253	\$553,961,960

Schedule of MFPRSI's Net Pension Liability Last 10 Fiscal Years

	2022	2021	2020	2019	2018
Total pension liability Plan fiduciary net position MFPRSI's net pension liability	\$3,651,617,338	\$3,518,184,403	\$3,390,348,728	\$3,269,051,818	\$3,145,031,474
	3,090,046,862	3,293,610,268	2,592,748,429	2,613,125,249	2,549,627,987
	\$561,570,476	\$224,574,135	\$797,600,299	\$655,926,569	\$595,403,487
Plan fiduciary net position as a percentage of the total pension liability Actuarial projected covered payroll	84.62%	93.62%	76.47%	79.94%	81.07%
	\$337,741,039	\$324,953,814	\$317,709,825	\$302,713,506	\$290,660,576
MFPRSI's net pension liability as a percentage of covered payroll	166.27%	69.11%	251.05%	216.68%	204.84%

GASB Statement No. 68 requires ten years of information to be presented in this table.

Schedule of MFPRSI's Net Pension Liability Last 10 Fiscal Years (continuation of table above)

Last 10 Fiscai Teals (Continuation	Last 10 Piscar rears (continuation of table above)				
	2017	2016	2015	2014	2013
Total pension liability	\$3,023,371,171	\$2,867,807,326	\$2,769,994,684	\$2,640,955,176	\$2,518,228,578
Plan fiduciary net position	2,436,896,111	2,242,546,392	2,300,180,355	2,278,456,923	1,964,266,618
MFPRSI's net pension liability	\$586,475,060	\$625,260,934	\$469,814,329	\$362,498,253	\$553,961,960
Plan fiduciary net position as a percentage of the total pension liability Actuarial projected covered payroll	80.60% \$283,222,057	78.20% \$270,986,891	83.04% \$262,260,060	86.27% \$255,370,044	78.00% \$250,107,112
MFPRSI's net pension liability as a percentage of covered payroll	207.07%	230.73%	179.14%	141.95%	221.49%

Schedule of MFPRSI's Contributions **Last 10 Fiscal Years**

	2022	2021	2020	2019	2018
Actuarially determined contribution	\$88,421,910	\$82,245,851	\$77,551,461	\$78,766,019	\$74,641,639
Contributions in relation to the actuarially determined contribution	88,421,910	82,245,851	77,551,461	78,766,019	74,641,639
Contribution deficiency (excess)	\$-	\$-	<u>\$-</u>	\$-	\$-
Reported covered payroll	\$337,741,039	\$324,953,814	\$317,709,825	\$302,713,506	\$290,660,576
Contributions as a percentage of covered payroll	26.18%	25.31%	24.41%	26.02%	25.68%

GASB Statement No. 68 requires ten years of information to be presented in this table.

Schedule of MFPRSI's Contributions Last 10 Fiscal Years (continuation of table above)

= mot 10 1 100m1 10m10 (001101110m11	011 01 111010 1100 1	-)			
	2017	2016	2015	2014	2013
Actuarially determined contribution	\$73,411,163	\$75,254,727	\$79,748,943	\$76,917,460	\$65,327,766
Contributions in relation to the actuarially determined contribution	73,411,163	75,254,727	79,748,943	76,917,460	65,327,766
Contribution deficiency (excess)	\$-	\$-	<u>\$-</u>	\$-	\$-
Reported covered payroll	\$283,222,057	\$270,986,891	\$262,260,060	\$255,370,044	\$250,107,112
Contributions as a percentage of covered payroll	25.92%	27.77%	30.41%	30.12%	26.12%

Schedule of Investment Returns Last 10 Fiscal Years

Annual money-weighted			Annual money-weighted
Fiscal	rate of return,	Fiscal	rate of return,
Year	net of investment expenses	Year	net of investment expenses
2022	-3.80%	2017	11.72%
2021	29.90%	2016	0.02%
2020	2.35%	2015	3.02%
2019	5.32%	2014	17.97%
2018	7.59%	2013	13.10%

$Schedule\ of\ MFPRSI\ Proportion ate\ Share\ of\ the\ Net\ Pension\ Liability$

Iowa Public Employees' Retirement System Last 8 Fiscal Years

	2021	2020	2019	2018
MFPRSI's proportion of the net pension liability (asset)	0.012214%	0.012038%	0.011991%	0.011874%
MFPRSI's proportionate share of the net pension liability (asset)	\$17,123	\$839,724	\$699,044	\$751,182
MFPRSI's covered payroll	\$1,020,466	\$991,326	\$948,686	\$892,161
MFPRSI's proportionate share of the net pension liability (asset) as a percentage of its covered payroll	1.68%	84.71%	73.69%	84.20%
Plan fiduciary net position as a percentage of the total net pension liability	99.60%	82.90%	85.45%	83.62%

The amounts presented for each fiscal year were determined as of June 30.

GASB Statement No. 68 requires ten years of information to be presented in this table. However, until a full 10-year trend is compiled, MFPRSI will present information for those years for which information is available.

Schedule of MFPRSI Proportionate Share of the Net Pension Liability

Iowa Public Employees' Retirement System

Last 8 Fiscal Years (continuation of table on the previous page)

	2017	2016	2015	2014
MFPRSI's proportion of the net pension liability (asset)	0.012415%	0.012738%	0.012726%	0.012759%
MFPRSI's proportionate share of the net pension liability (asset)	\$819,626	\$794,389	\$632,688	\$516,371
MFPRSI's covered payroll	\$988,443	\$902,363	\$877,346	\$851,989
MFPRSI's proportionate share of the net pension liability (asset) as a percentage of its covered payroll	82.92%	88.03%	72.11%	60.61%
Plan fiduciary net position as a percentage of the total net pension liability	82.21%	81.82%	84.19%	56.84%

The amounts presented for each fiscal year were determined as of June 30.

GASB Statement No. 68 requires ten years of information to be presented in this table. However, until a full 10-year trend is compiled, MFPRSI will present information for those years for which information is available.

Schedule of MFPRSI's Contributions

Iowa Public Employees' Retirement System Last 9 Fiscal Years

	2022	2021	2020	2019	2018
Actuarially determined contribution	\$96,332	\$93,581	\$89,556	\$86,727	\$79,670
Contributions in relation to the actuarially determined contribution	(96,332)	(93,581)	(89,556)	(86,727)	(79,670)
Contribution deficiency (excess)	<u>\$-</u>	\$-	\$-	<u>\$-</u>	\$-
Reported covered payroll	\$1,020,466	\$991,326	\$948,686	\$918,718	\$892,161
Contributions as a percentage of covered payroll	9.44%	9.44%	9.44%	9.44%	8.93%

GASB Statement No. 68 requires to present 10 years of information. However, until a 10-year trend is compiled, MFPRSI will present information for those years in which information is available.

Schedule of MFPRSI's Contributions

Iowa Public Employees' Retirement System Last 9 Fiscal Years (continuation of table above)

	2017	2016	2015	2014
Actuarially determined contribution	\$88,268	\$80,581	\$78,347	\$76,083
Contributions in relation to the actuarially determined contribution	(88,268)	(80,581)	(78,347)	(76,083)
Contribution deficiency (excess)	\$-	\$	\$-	\$-
Reported covered payroll	\$988,443	\$902,363	\$877,346	\$851,989
Contributions as a percentage of covered payroll	8.93%	8.93%	8.93%	8.93%

GASB Statement No. 68 requires to present 10 years of information. However, until a 10-year trend is compiled, MFPRSI will present information for those years in which information is available.

Notes to Required Supplementary Information

Methods and Assumptions used in Calculations of Actuarially Determined Contributions. The actuarially determined contribution rates in the schedule of MFPRSI's contributions are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Valuation date July 1, 2022

Actuarial cost method Entry age normal

Amortization method Level Dollar, Closed, Layered

Remaining amortization period 25 Years

Asset valuation method 5 year smoothed market

Actuarial assumptions:

Investment rate of return 7.50%

Projected salary increases 3.75% to 15.11%

Post-retirement mortality table:

Ordinary RP 2014 Blue Collar Healthy Annuitant table with males

set-forward zero years, females set-forward two years, with generational projection of future mortality improvement

with 50% of Scale BB beginning in 2017.

Disabled RP 2014 Blue Collar Healthy Annuitant Mortality

Table - Male, set-forward three years, with generational projection of future mortality improvement with 50% of

Scale BB beginning in 2017.

Intentionally Blank

Actuary

Actuarial Valuation's Purpose Cities' Recommended Contribution Rate Contribution Rate History Actuarial Report Highlights



Actuarial Valuation's Purpose

Provided by SilverStone Group

The actuarial data in this section was determined by MFPRSI's actuarial services provider, SilverStone Group ("SilverStone"). The information in this section presents a portion of the annual actuarial valuation, which was determined in accordance with Iowa Code Chapter 411. The complete actuarial valuation report as of July 1, 2022, can be accessed on the retirement system's website, www.mfprsi.org.

The costs developed and presented in this section are based on asset values as of June 30, 2022, member census data as of July 1, 2022, and current retirement system provisions, all of which were supplied by MFPRSI.

The purposes of the actuarial valuation are the following:

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

All costs and liabilities were determined in accordance with generally accepted actuarial principles and procedures and are based on the actuarial assumptions and methods prescribed by the Board in accordance with Iowa Code Section 411.5.10-11. The information supplied in this section is accurate and the assumptions are reasonably related to both MFPRSI's experience and its reasonable expectations under the retirement system in the opinion of SilverStone.

Cities' Recommended Contribution Rate

The cities' contribution rate is established by Iowa Code Chapter 411. The rate specified for employees is set by the statute, currently at 9.40 percent of earnable compensation. The rate for employers is adopted each year by the Board following the completion of the annual actuarial valuation. The required contribution rate as reported by MFPRSI's actuary is developed in the chart below and is effective July 1, 2023.

Annual Contributions and Contribution Rate Formula

Data as of July 1, 2022 Effective July 1, 2023

	J	
1.	Annual normal cost	\$61,347,565
2.	Estimated member contributions	32,876,731
3.	Unfunded actuarial accrued liability amortization payment	51,904,632
4.	Total (cities + state) contribution = (1) - (2) + (3)	80,375,466
Cities'	contribution	
5.	Preliminary total contribution = (4)	80,375,466
6.	Estimated state contribution	0
7.	Preliminary cities' contribution = (5) - (6)	80,375,466
8.	Covered payroll	349,752,458
9.	Cities' contribution as a percent of payroll = (7) / (8)	22.98%
10.	Minimum required contribution rate for cities	17.00%
11.	Cities' contribution = [Greater of (9) or (10)] x (8)	80,373,115

Starting with the normal contribution rate approved in 2021 of 23.90 percent and ending with the normal contribution rate approved in 2022 of 22.98 percent, explanations for the year-over-year changes are discussed below.

Year-over-year changes to the participating cities' contribution rate

July 1, 2021, normal contribution rate effective July 1, 2022		23.90%
Effect of different State of Iowa contribution		0.00%
Effect of cities' contribution different than actuarially determined		(0.20%)
MFPRSI experience:		
Salary increases more than assumed	0.18%	
Investment experience more favorable than assumed	(0.93%)	
Effect of new members	(0.64%)	
Effect of DROP experience	(0.01%)	
Other population changes	0.68%	
		(0.72%)
Changes in MFPRSI's provisions		0.00%
Changes in actuarial assumptions		0.00%
Changes in actuarial methods	-	0.00%
Preliminary normal contribution rate		22.98%
Increase to meet minimum required contribution rate of 17.00%	-	0.00%
July 1, 2022, normal contribution rate effective July 1, 2023	=	22.98%

Effect of Different State of Iowa Contribution 0.00%

The contribution provided by the State of Iowa remained unchanged at \$0 for 2021 and \$0 for 2022.

Effect of Cities' Contribution Different than Actuarially Determined (0.20%)

The cities' actual contribution rate as a percent of covered payroll was 26.18 percent for the period ended June 30, 2022. The actuarially determined rate for the same period was 23.90 percent of covered payroll. This had the effect of producing larger contributions than expected and decreased the cities' contribution rate by 0.20 percent.

Salary Increases More than Assumed 0.18%

The actual weighted average salary increase for active members included in the valuation was 6.39 percent compared to an expected weighted average increase of 5.04 percent. Actual salaries paid in the prior plan year ended June 30, 2022 were reported for the July 1, 2022 valuation. This had the effect of increasing the cities' contribution rate by 0.18 percent.

Investment Experience More Favorable than Assumed (0.93%)

The actuarial value of assets realized a return of 8.86 percent compared to the assumed investment return of 7.50 percent. This had the effect of decreasing the cities' contribution rate by 0.93 percent.

Effect of New Members (0.64%)

New members are generally younger and lower-paid than the ongoing members. Thus, these new members require a lower contribution rate from the cities due to the longer period of time over which to fund their benefits. This had the effect of decreasing the cities' contribution rate by 0.64 percent.

Effect of DROP Experience (0.01%)

The expected number of active members who choose to participate, the age at which the members chose to participate, the duration of the Deferred Retirement Option Plan (DROP) period selected and the number of members who prematurely withdraw from DROP do not exactly match the actual incidences. In addition, the investment earnings on the DROP accounts differ from that assumed. These variances in participation rates, age at participation, duration of participation, premature withdrawals and investment earnings caused a slight decrease in the cities' contribution rate.

Other Population Changes 0.68%

The expected rates of disability, death, retirement and withdrawal do not exactly match the actual incidences. These variances will cause a gain or loss each year. For example, there were fewer active members' deaths (2) than assumed (3) during the period ended June 30, 2022. In addition, there were more service retirements (45) than assumed (44) and more withdrawals (168) than assumed (96) during the period ended June 30, 2022. Finally, there were more disability retirements (49) than assumed (34) and fewer inactive member deaths (143) than assumed (151) during the period ended June 30, 2022. These variances in active member deaths, service retirements, disability retirements and inactive member deaths caused an actuarial loss which increased the cities' contribution rate by 0.68 percent.

Changes in MFPRSI's Provisions 0.00%

There were no changes in MFPRSI's benefit provisions from the prior year valuation.

Changes in Actuarial Assumptions 0.00%

There were no changes in actuarial assumptions from the prior year valuation. In accordance with Iowa State Code Section 411.5.10-11, the Board prescribes the actuarial assumptions used in the actuarial valuation. Per the Code Section, the retirement system's actuary conducts a formal investigation, or experience study, of the primary assumptions every five years. The most recent comprehensive investigation was completed in the winter of 2020 for the 10-year period ending June 30, 2020. Next scheduled formal investigation will be for the period ending June 30, 2022.

Changes in Actuarial Methods 0.00%

There were no changes in actuarial methods from the prior year valuation.

Contribution Rate History

Contribution Rate 1993* - 2024

Rate	Fiscal year	Rate
17.00%	2009	18.75%
19.66%	2010#	17.00%
18.71%	2011	19.90%
17.66%	2012	24.76%
17.00%	2013	26.12%
17.00%	2014	30.12%
17.00%	2015	30.41%
17.00%	2016	27.77%
17.00%	2017	25.92%
17.00%	2018	25.68%
17.00%	2019	26.02%
20.48%	2020	24.41%
24.92%	2021	25.31%
28.21%	2022	26.18%
27.75%	2023	23.90%
25.48%	2024	22.98%
	17.00% 19.66% 18.71% 17.66% 17.00% 17.00% 17.00% 17.00% 17.00% 17.00% 20.48% 24.92% 28.21% 27.75%	17.00% 2009 19.66% 2010# 18.71% 2011 17.66% 2012 17.00% 2013 17.00% 2014 17.00% 2015 17.00% 2016 17.00% 2018 17.00% 2019 20.48% 2020 24.92% 2021 28.21% 2022 27.75% 2023

^{*}MFPRSI's first fiscal year operated January 1, 1992, to June 30, 1993. In all subsequent years the fiscal year began July 1. MFPRSI's fiscal year runs July 1 to June 30. The fiscal year name coincides with the year as of June 30 (i.e., "fiscal year 2024" covers July 1, 2023, to June 30, 2024).

Contribution Rate History Graph



^{*}Rate certified at 17.00%, the minimum as required by statute.

Actuarial Report Highlights

	As of July 1,	2022	2021	2020
Cities' recommended cont	ribution	\$80,373,115	\$80,528,971	\$85,836,388
Normal contribution rate		22.98%	23.90%	26.18%
Plan assets				
Market value		3,090,046,862	3,293,610,268	2,592,748,429
Actuarial value		3,083,242,438	2,918,169,854	2,710,027,554
Prior year investment retu	rn			
Market value		(3.51%)	30.78%	2.34%
Actuarial value		8.86%	10.97%	5.42%
Actuarial accrued liability		3,651,617,338	3,518,184,403	3,390,348,728
Funded ratio*		84.43%	82.95%	79.93%
Annual participating payro	oll	349,752,458	336,941,302	327,870,085
Annual normal cost		61,347,565	58,814,108	56,807,678
Percent of payroll		17.54%	17.46%	17.33%
Annual pension benefits				
Service retirement		110,489,748	105,137,988	99,536,112
Disabled retirement		58,285,284	55,264,320	52,745,112
Vested retirement		9,865,500	9,127,704	8,418,288
Beneficiaries	_	23,986,512	23,239,020	21,803,760
Total		202,627,044	192,769,032	182,503,272
Number of members				
Active		4,155	4,107	4,084
Disabled		1,181	1,159	1,141
Retirees and beneficiar	ries	3,172	3,126	3,049
Vested terminated	_	453	415	375
Total		8,961	8,807	8,649

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

Actuarial Value of Assets - Year Ending June 30, 2022

1.	. Actuarial value of assets at July 1, 2021				\$2,918,169,854	
2.	2. Contributions for 2021 plan year (members, cities, and state)				120,052,943	
3.	3. Benefit distributions and refunds for 2021 plan year			(207,529,673)		
4.	Non-investm	ent expenses				
	a. Adminis	strative expenses				(1,902,581)
	b. Disabili	ty expenses				(220,717)
	c. Other ex	xpenses				(8,288)
	d. Total					(2,131,586)
5.	Expected retu	ırn on market value	of assets for year	ar at 7.5%		243,721,207
6.	Asset gains/(losses) for prior five	plan years			
		(I)	Vocamo	Vaara	(II)	(I) x (II)
		Asset gain or	Years recognized	Years remaining	Recognition	Recognized
	a. 2021	Asset gain or (loss)	Years recognized 1	Years remaining 4	Recognition percentage	Recognized amount
	a. 2021 b. 2020	Asset gain or (loss) \$(357,676,297)	recognized	remaining	Recognition	Recognized amount (71,535,259)
		Asset gain or (loss)	recognized 1	remaining 4	Recognition percentage 20.000%	Recognized amount (71,535,259) 118,804,238
	b. 2020	Asset gain or (loss) \$(357,676,297) 594,021,191	recognized 1 2	remaining 4 3	Recognition percentage 20.000% 20.000	Recognized amount (71,535,259)
	b. 2020 c. 2019	Asset gain or (loss) \$(357,676,297) 594,021,191 (132,764,343)	recognized 1 2 3	remaining 4 3 2	Recognition percentage 20.000% 20.000 20.000	Recognized amount (71,535,259) 118,804,238 (26,552,869)
	b. 2020 c. 2019 d. 2018	Asset gain or (loss) \$(357,676,297) 594,021,191 (132,764,343) (51,803,055)	recognized 1 2 3 4	remaining 4 3 2 1	Recognition percentage 20.000% 20.000 20.000 20.000	Recognized amount (71,535,259) 118,804,238 (26,552,869) (10,360,611)
7.	b. 2020c. 2019d. 2018e. 2017f. Total	Asset gain or (loss) \$(357,676,297) 594,021,191 (132,764,343) (51,803,055)	recognized 1 2 3 4 5	remaining 4 3 2 1	Recognition percentage 20.000% 20.000 20.000 20.000	Recognized amount (71,535,259) 118,804,238 (26,552,869) (10,360,611) 604,194
	b. 2020 c. 2019 d. 2018 e. 2017 f. Total	Asset gain or (loss) \$(357,676,297) 594,021,191 (132,764,343) (51,803,055) 3,020,970	recognized 1 2 3 4 5 zed = (6f)	remaining 4 3 2 1 0	Recognition percentage 20.000% 20.000 20.000 20.000	Recognized amount (71,535,259) 118,804,238 (26,552,869) (10,360,611) 604,194 10,959,693
8.	b. 2020 c. 2019 d. 2018 e. 2017 f. Total Asset gains/(I	Asset gain or (loss) \$(357,676,297) 594,021,191 (132,764,343) (51,803,055) 3,020,970 losses) to be recognicated	recognized 1 2 3 4 5 zed = (6f)	remaining 4 3 2 1 0	Recognition percentage 20.000% 20.000 20.000 20.000	Recognized amount (71,535,259) 118,804,238 (26,552,869) (10,360,611) 604,194 10,959,693

Unfunded Actuarial Accrued Liability

	As of July 1,	2022	2021
1. Actuarial accrued liability before changes			
a. Active members			
Service retirements/DROP		\$1,176,241,273	\$1,153,345,797
Ordinary disability		23,419,759	23,054,353
Accidental disability		120,154,197	117,919,811
Ordinary death		3,243,816	3,191,011
Accidental death		6,233,366	6,142,185
Withdrawal	_	39,571,838	38,682,142
Total active	_	1,368,864,249	1,342,335,299
b. Inactive members			
Members receiving benefits		2,219,736,188	2,119,198,841
Deferred vested terminations		62,021,916	55,989,100
Refund of member contributions du	ie	994,985	661,163
Total inactive		2,282,753,089	2,175,849,104
c. Total actuarial accrued liability		3,651,617,338	3,518,184,403
2. Actuarial value of plan assets		3,083,242,438	2,918,169,854
3. Unfunded actuarial accrued liability before changes = [Excess of (1) over (2)]		568,374,900	600,014,549
4. Change in unfunded actuarial accrued liab	ility		
a. Change in MFPRSI's provisions		0	0
b. Change in actuarial assumptions		0	0
5. Unfunded actuarial accrued liability after c	hanges	568,374,900	600,014,549

The unfunded actuarial accrued liability is the amount the actuarial accrued liability exceeds the actuarial value of plan assets determined as of the actuarial valuation date. The unfunded actuarial accrued liability is reduced during a year when retirement system funding exceeds the annual normal cost and interest accrued on the prior year unfunded accrued liability.

The unfunded actuarial accrued liability is also reduced (increased) when the investment return on MFPRSI's assets exceeds (is less than) the assumed investment return.

The actuarial accrued liability is increased if there are amendments that revise benefits payable from MFPRSI. The actuarial accrued liability may be increased or decreased as the result of retirement system experience or if there are changes in the actuarial assumptions used to determine annual contributions

Unfunded Accrued Liability Payments

Amortization base	Date established	Source of base
\$657,280,700	July 1, 2013	Initial unfunded
(101,748,328)	July 1, 2014	Actuarial gain
32,616,664	July 1, 2014	Assumption change
(64,447,420)	July 1, 2015	Actuarial gain
17,508,411	July 1, 2015	Assumption change
21,275,521	July 1, 2016	Actuarial loss
(10,467,574)	July 1, 2016	Assumption change
(7,154,241)	July 1, 2017	Actuarial gain
39,751,096	July 1, 2017	Assumption change
(15,920,159)	July 1, 2018	Actuarial gain
21,266,192	July 1, 2018	Assumption change
63,348,299	July 1, 2019	Actuarial loss
63,889,229	July 1, 2020	Actuarial loss
(77,624,458)	July 1, 2021	Actuarial gain
(17,602,441)	July 1, 2022	Actuarial gain

Charge Bases

Initial amortization base	Initial term - years	Remaining term on valuation date	Amortization paymen	t
\$657,280,700	25	16	\$54,851,250	
32,616,664	25	17	2,721,919	
17,508,411	25	18	1,461,108	
21,275,521	25	19	1,775,480	
39,751,096	25	20	3,317,300	
21,266,192	25	21	1,774,702	
63,348,299	25	22	5,286,529	
63,889,229	25	23	5,331,670	_
		Т	Total 76,519,958	

Credit Bases

Initial amortization base	Initial term - years	Remaining term on valuation date	A	Amortization payment
\$101,748,328	25	17		\$8,491,080
64,447,420	25	18		5,378,253
10,467,574	25	19		873,538
7,154,241	25	20		597,034
15,920,159	25	21		1,328,566
77,624,458	25	24		6,477,900
17,602,441	25	25	_	1,468,955
		٦	Total	24,615,326

Net Amortization Payment

\$51,904,632

One of the components included to determine the recommended contribution is the unfunded accrued liability payment. The unfunded accrued liability payment is an annual amount that will amortize over 25 years on a closed, layered level dollar basis:

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

Actuarial Gain / (Loss)

Expected unfunded actuarial accrued liability

1. Expected actuarial accrued liability	
Actuarial accrued liability on July 1, 2021	\$3,518,184,403
Normal cost	58,814,108
Benefit distributions	(207,529,673)
Interest on above at 7.50% to June 30, 2022	260,633,217
Total	3,630,102,055
2. Expected assets	
Actuarial value of assets on July 1, 2021	2,918,169,854
Contributions	120,052,943
Benefit distributions and non-investment expenses	(209,661,259)
Interest on above at 7.50% to June 30, 2022	215,563,176
Total	3,044,124,714
3. Expected unfunded actuarial accrued liability on June 30, 2022 = (1) - (2)	585,977,341
Actual unfunded actuarial accrued liability	
1. Actuarial accrued liability before changes	3,651,617,338
2. Actuarial value of assets	3,083,242,438
3. Actual unfunded actuarial accrued liability on July 1, 2022 = (1) - (2)	568,374,900
Actuarial gain or (loss)	
1. Expected unfunded actuarial accrued liability	585,977,341
2. Actual unfunded actuarial accrued liability	568,374,900
3. Actuarial gain or (loss) for 2022 fiscal year = (1) - (2)	17,602,441

Actuarial Present Value of Accrued Benefits

	As of July 1,	2022	2021
1.	Present value of vested accrued benefits		
	a. Present value of vested accrued benefits for active		
	members	\$1,057,376,381	\$1,037,719,399
	b. Present value of benefits for terminated members	63,016,901	56,650,263
	c. Present value of benefits for service retirees,		
	beneficiaries, and disabled retirees	2,219,736,188	2,119,198,841
	Total	\$3,340,129,470	\$3,213,568,503
2.	Present value of accrued non-vested benefits	38,821,836	38,100,125
3.	Present value of all accrued benefits = (1) + (2)	\$3,378,951,306	\$3,251,668,628
4.	Market value of assets	\$3,090,046,862	\$3,293,610,268
5.	Ratio of market value of assets to the present value of all accrued benefits = $(4) / (3)$	91.45%	101.29%
6.	Ratio of market value of assets to the present value of vested accrued benefits = $(4) / (1)$	92.51%	102.49%

Change in Actuarial Present Value of Accrued Benefits

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

Actuarial present value of accrued benefits on July 1, 2021	\$3,251,668,628
Change in present value of accrued benefits from July 1, 2021, to July 1, 2022,	
due to:	
Additional benefits accumulated	\$98,578,876
Interest due to passage of time	236,233,475
Benefits paid	(207,529,673)
Change in assumptions	0
Change in MFPRSI's provisions	0
Actuarial present value of accrued benefits on July 1, 2022	\$3,378,951,306

Intentionally Blank

Investments

Investment Consultant's Report Performance Overview



Investment Consultant's Report

Provided by Doug Oest, CAIA, Managing Partner and David H. Smith, CFA, Managing Director Marquette Associates

In fiscal year 2022, the Federal Reserve raised policy rates three times to 1.5% - 1.75% to mitigate the highest inflation levels in over forty years. As a result, financial assets repriced, and global equities re-entered a bear market for the first time since the COVID crisis. The MFPRSI portfolio is well-diversified across equity, fixed income, private equity, private credit, and real assets, which has protected plan assets from the recent market downturn. Over the years, the MFPRSI portfolio has demonstrated resiliency during periods of macroeconomic turbulence.

In 2021, the MFPRSI portfolio surpassed \$3 billion in total assets for the first time ever and has maintained that level despite this challenging market environment. As of June 30, 2022, MFPRSI's portfolio totaled \$3.1 billion. For the fiscal year, MFPRSI's portfolio earned a negative 3.5% investment return, net of fees, and has returned 8.5% annualized over the trailing ten years, net of fees. The MFPRSI portfolio is benchmarked against a portfolio of 60% global stocks and 40% domestic bonds (a "60/40" allocation) which earned negative 12.5% for the 2022 fiscal year and 6.5%, annualized, over the trailing ten-year period.

Inflation and higher interest rates have combined to push the U.S. into a technical recession as defined by two consecutive quarters of negative GDP growth. Predictably, consumer and business sentiment has suffered, with potential implications for subsequent quarters in terms of growth and profitability. From a pricing perspective, multiple compression has brought equity valuations back towards historical averages, with small-cap and value indices the most attractive. While growth sectors have seen full-year earnings estimates revised lower in recent months, projections for value-oriented segments of the market have held steady.



David H. Smith, CFA Managing Director Marquette Associates



Doug Oest, CAIA Managing Partner Marquette Associates

On the international front, recession odds are higher in the Eurozone than the U.S., which is expected to challenge returns for developed countries, particularly large-cap stocks. Additionally, further rate hikes from the Fed will be an obstacle for developed large-cap stocks, consistent with the

first half of 2022. Prices for non-U.S. stocks have also corrected in a manner like U.S. equities, with valuations back to March 2020 levels, supported by a parallel story: poor returns this year, but better upside potential for the remainder of the year.

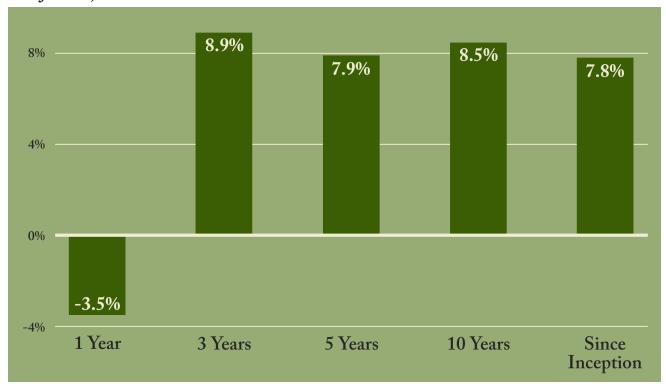
The massive rate increases this year have led to the worst start in history of the bellwether bond index, with similarly poor returns for the plus sectors as spreads have also widened. However, since rates have moved so much, the MFPRSI portfolio is receiving a positive real rate of return for most maturities after accounting for inflation. Going forward, bond returns are expected to stabilize for the remainder of 2022, with the higher yields and subsequent income helping to offset any further price losses.

Real assets, which exhibit low correlation to traditional asset classes, have helped buoy the MFPRSI portfolio as equity markets retreated. Both real estate and infrastructure offer diversification, compelling income, and protection against rising inflation levels. Private credit, introduced to the MFPRSI portfolio in 2020, offers a higher yield as interest rates increase, which helped to offset duration risk from the marketable fixed income portfolio. Finally, a well-seasoned, cash-flowing private equity portfolio continues to offer an attractive illiquidity premium to the MFPRSI portfolio. While private equity valuations may be marked lower over the next several quarters, private equity has exhibited lower drawdowns and quicker recoveries than public market equivalents during other recent economic downturns.

Longer-term inflation expectations are leveling off, with the possibility of rate decreases at some point in 2023. The ultimate trajectory of rates and their subsequent impact on markets is still exposed to inflation and GDP growth. While volatility should remain elevated through the end of the calendar year, MFPRSI's investment discipline and diversification should help soften the impact of a disappointing market environment.

Performance

as of June 30, 2022



Inception date is January 1, 1992. The 3-years, 5-years, 10-years, and since inception returns are annualized. It is important to note that historical performance is not a guarantee of future performance of the portfolio due to the cyclical nature of markets and the individual components thereof.

Overview

In order to maximize the important role that investment returns play in the funded status of MFPRSI's investment portfolio, the Board has adopted its Investment Policy as its investment guidelines. This document is designed to provide the framework necessary to guide the investment portfolio toward the retirement system's ongoing requirements of the benefit plan. The complete Investment Policy is available on MFPRSI's website, www.mfprsi.org.

MFPRSI's overall investment performance goal is to exceed an annualized actuarial assumed rate of return of 7.5 percent over a long-term time horizon. The actuarial assumed rate of return is the rate of return which will meet or exceed the benefits and administrative funding requirements of the retirement system. While the investment portfolio will exceed or fall short of that goal in shorter time periods, it is designed to withstand all market environments and out-pace the actuarial assumed rate of return over the long term.

MFPRSI's investments are managed by professional investment management firms who have full discretion to direct the investment and reinvestment of the assets in their respective accounts in accordance with MFPRSI's investment policies, applicable to federal and state statutes and regulations, and the executed and detailed investment management agreements.

The net investment market values reported in this section differ from those shown in the Financial Statements and Actuary sections of this report. The values used in this section are the appropriate industry standard basis for investment return calculations.

Asset Allocation and Diversification

Asset allocation is a process designed to construct an optimal long-term mix that achieves a specific set of investment objectives. The Board's Investment Policy establishes the retirement system's asset allocation policy to meet those objectives. The asset allocation policy is adopted to provide diversification of assets in order to maximize returns within appropriate levels of market and economic risks.

MFPRSI pursues diversification in the investment portfolio by varying its investment assets and style. The success of any individual investment style tends to be cyclical, and diversification of assets within the investment portfolio enhances the potential to achieve MFPRSI's long-term goal of meeting a 7.5 percent annualized actuarial assumed rate of return.

Risk

Investing in any asset involves the possibility that the asset's actual return will differ from its expected return. Investment risk can be defined as the potential occurrence of a loss relative to the expected return on investment.

Risk is a vital element when determining the forecast of an investment. MFPRSI and Marquette carefully consider investment risk when implementing its investment strategy. The investment portfolio is tasked with achieving a long-term 7.5 percent actuarially assumed rate of return. In order to do so, the investment portfolio must take on risk as simply investing in low-risk or no-risk assets would make it difficult for the investment portfolio to achieve its 7.5 percent benchmark. Therefore, a moderate amount of risk must be accepted in order to surpass the actuarial assumed rate of return.

One common tool to measure risk is standard deviation which is a statistical measure of the amount an investment's returns differ from the mean of its returns. The lower the standard deviation, the closer an investment's actual returns tend to be to its average returns, and the higher the standard deviation, the further its actual returns tend to be from its average returns.

In its measurement using data as of June 2022, Marquette reported the retirement system's expected 10-year volatility for its investment portfolio at 9.45 percent. This is the level of uncertainty the retirement system accepts in order to achieve its actuarial assumed rate of return. This is a relatively low-risk expectation given the task of building an investment portfolio is to provide annual returns of 7.5 percent.

MFPRSI and Marquette regularly review the investment portfolio's level of risk and will make changes as necessary to mitigate the investment portfolio's risk profile. This is done as part of the Board's commitment to being a sound retirement system.

Types of Assets

The retirement system's overall investment portfolio is separated into three main categories:

Private Markets

The fund may hire various investment managers who invest in private market opportunities, including but not limited to venture, buyout, opportunistic, secondary market, credit and debt-related, and direct investment. These opportunities will consist of investing in private companies that do not offer equity and fixed income securities on public markets.

MFPRSI may from time to time invest in real assets, which includes, but is not limited to core and non-core real estate, infrastructure, commodities, or energy-related investments. Real assets may be domestic or international, and may be either liquid, marketable investments, private market investments, or debt-related investments. Other than such property as it may elect to purchase and occupy for use as administrative offices, MFPRSI will not invest directly in real estate as either an equity owner or lender.

Core Portfolio

The Core Portfolio is comprised of a diversified mix of global public equity, fixed income, core real estate and infrastructure portfolios. The aggregate Core Portfolio's allocation and underlying investment manager makeup are determined by the Board, with the intention of out-performing a specified composite index on both an absolute and risk-adjusted basis and over a full market cycle. The composite index is currently weighted 51.1 percent to global equity, 23.3 percent to fixed income, 18.6 percent to real estate and 7 percent to infrastructure. This index is also determined and reviewed by the Board in an attempt to meet or exceed the retirement system's actuarial rate of return over time.

Strategic Portfolio

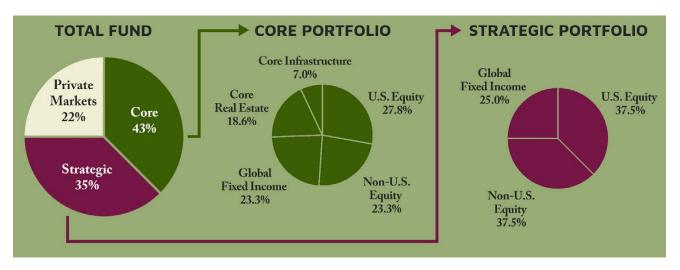
The Strategic Portfolio is comprised of multi-asset investment managers that invest in global securities, including but not limited to: public debt and equity, real assets, private market investments, currencies, derivatives, and cash. The intent of the Strategic Portfolio is to outperform a specified composite index on both an absolute and risk-adjusted basis over a full market cycle. The composite index is currently weighted 75 percent to global equity and 25 percent to fixed income. This index is determined and reviewed by the Board in an attempt to meet or exceed the retirement system's actuarial rate of return over time. Individual managers in the Strategic Portfolio are granted the flexibility to tactically adjust their underlying asset allocations to take advantage of market opportunities they believe will benefit the retirement system.

Investment Allocations

Total Fund Asset Class	Portfolio Target Percentage
Core Portfolio ¹	43%
Strategic Portfolio ²	35%
Private Markets	22%
Total	100.0%

¹Core Portfolio Asset Class	Portfolio Target Percentage
U.S. Equity	27.8%
Non-U.S. Equity	23.3%
Global Fixed	
Income	23.3%
Core Real Estate	18.6%
Core	
Infrastructure	7.0%
Total	100.0%

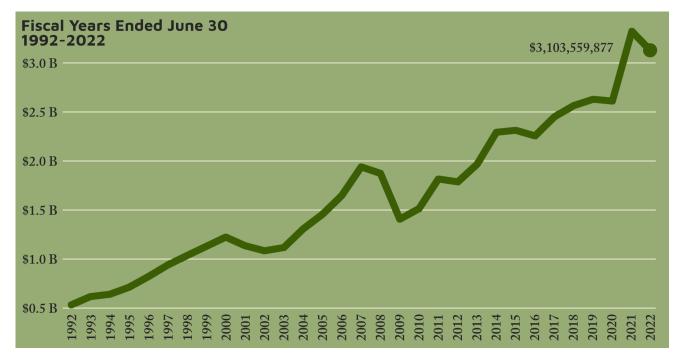
² Strategic Portfolio Asset Class	Portfolio Target Percentage
U.S. Equity	37.5%
Non-U.S. Equity	37.5%
Global Fixed	
Income	25.0%
Total	100.0%



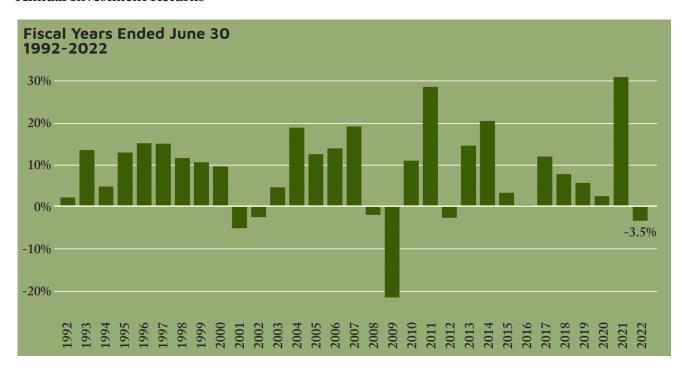
Caveats:

- 1. In the absence of suitable opportunities within a specific market, the funds shall be directed to the other components within the debt or equity category. Due to the fluctuation of market values, positioning within ±5 percent of the target shall constitute compliance with the policy.
- 2. A review of the allocation policy shall occur periodically to allow the Board of Trustees to consider the effect of any changes in market conditions or of the expectations for the retirement system.

Growth of Net Investment Portfolio Assets



Annual Investment Returns



Intentionally Blank

Benefits

Description of Benefit Plan Optional Forms of Retirement DROP - Deferred Retirement Option Plan Membership Data



Description of Benefit Plan

Benefit formulas are established by Iowa Code Chapter 411, and revisions to the benefit program can only be instituted by the Iowa General Assembly. The Board and staff are required to administer retirement benefits in compliance with the statutory provisions. Questions concerning an individual's eligibility should be directed to the administration.

Retirement Age

To qualify for a full service retirement, the member must be age 55 or older with a minimum of 22 years of service at termination of employment. Death and disability benefits do not have specific age or length of service requirements. Retirement under the ordinary disability or accidental disability programs of MFPRSI are available to members who become permanently disabled (while there are no age or length of service requirements, "permanently disabled" is defined as a duration of one year or longer) while employed as a firefighter or police officer.

Benefit Amounts

Current benefit amounts are based upon a percentage of the member's average monthly earnable compensation. The average monthly earnable compensation is calculated by adding the member's earnable compensation for the highest three years of service and dividing it by 36. The percentage multiplier varies by type of retirement and the length of the member's service. For service retirements, the benefit percentage is 66 percent with 22 years of service and 82 percent with 30 years of service.

Refund of Contributions

Since July 1, 1990 members who terminate service, other than by death or disability, may withdraw their contributions in total from their date of hire through their termination date. If a member withdraws contributions, the member waives any claim to benefits for the period of membership for which the withdrawal is made.

Members who terminate service also have the option to rollover the eligible portion of their refund to another qualified retirement plan or to an individual retirement account (IRA). Such rollovers must be approved in advance by MFPRSI. The contributions being withdrawn are credited with an annualized simple interest rate determined by the Board, currently set at 5 percent.

Vesting

When a member earns at least 4 years of credited service or reaches age 55 while performing membership service, the member becomes vested in the retirement system. Once vested, the member is entitled to a monthly benefit.

Optional Forms of Retirement

Members retiring through a service or vested service retirement have the opportunity to select either the "basic benefit" as provided by Chapter 411, or one of six optional forms of benefits. The basic benefit is a lifetime benefit based on the member's average monthly compensation and number of years of service. Each option is actuarially adjusted and based on the basic benefit.

1. **The Basic Benefit** - The member's spouse is entitled to 50 percent of the gross benefit at the time of the member's passing, but not less than 20 percent of the average earnable compensation of the active membership as reported by the actuary.

Please visit www.mfprsi.org for more information about the basic benefit.

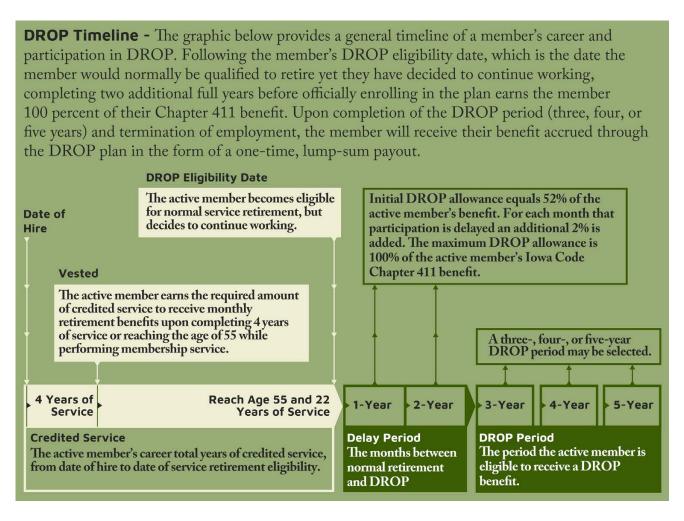
The optional forms of benefits below are calculated using actuarial tables which consider the age of the member at retirement, the age of the member's beneficiary, and the assumed life expectancy of both. The beneficiary receives this amount for his or her lifetime.

- 2. **Joint & 75 Percent Survivor Annuity** The designated beneficiary receives 75 percent of the gross amount of the member's retirement at the time of the member's passing. If the beneficiary passes before the member, then the benefits end upon the member's passing.
- 3. **Joint & 75 Percent Survivor Annuity with Pop-Up** The designated beneficiary receives 75 percent of the gross amount of the member's retirement at the time of the member's passing. Should the beneficiary pass before the member, the benefit will increase to the amount of the basic benefit and no survivor benefit is payable following the member's passing.
- 4. **Joint & 100 Percent Survivor Annuity** The designated beneficiary receives 100 percent of the gross amount of the member's retirement at the time of the member's passing. If the beneficiary passes before the member, then the benefits end upon the member's passing.
- 5. **Joint & 100 Percent Survivor Annuity with Pop-Up** The designated beneficiary receives 100 percent of the gross amount of the member's retirement at the time of the member's passing. Should the beneficiary pass before the member, the benefit will increase to the amount of the basic benefit and no survivor benefit is payable following the member's passing.
- 6. **Single-Life Annuity with Designated Lump Sum** The designated beneficiary receives a one-time, lump-sum payment upon the passing of the member. If the beneficiary passes prior to the member, the lump sum is paid to the member's estate.
- 7. **Straight-Life Annuity** Following the member's passing, no further benefits are payable.

DROP - Deferred Retirement Option Plan

Active members, at least 55 years old with 22 or more years of service, have the option to participate in DROP (Deferred Retirement Option Plan). This program is an arrangement for members who are otherwise eligible to retire and begin benefits, but continue working. Members can elect a three-, four-, or five-year DROP period. Members will sign a contract indicating they will retire at the end of the selected DROP period by electing to participate in the program.

During the member's DROP period the member's retirement benefit is frozen and a DROP benefit is credited to an account established for the member. The DROP benefit is equal to 52 percent of the member's retirement benefit at the member's earliest date eligible and 100 percent if the member delays enrollment for 24 months. At the member's actual date of retirement, the member's DROP account will be distributed in the form of a lump sum or rolled over to an eligible plan.



Membership Data

Retirement System Membership Profile

		Year Over
	As of	Year Increase/
Active members	July 1, 2022	(Decrease)
Number	4,155	48
Average age (in years)	40.2	(0.2)
Average past service (in years)	12.9	(0.3)
Average annual compensation	\$84,176	\$2,135
Non-active members in pay status		
Number	4,353	68
Average age (excluding children)	70.2	0.1
Average annual benefit	\$46,549	\$1,562
Non-active members with deferred benefits		
Number*	453	38
Average age	43.3	(0.4)
Average annual benefit	\$21,181	\$641

^{*}Excludes 114 terminated non-vested members in 2022 and 84 terminated non-vested members in 2021 who had not received a refund of contributions as of the end of the fiscal year.

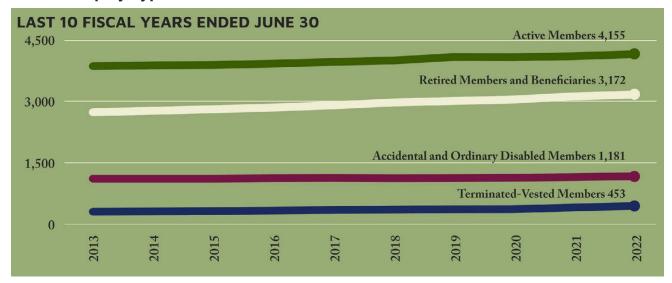
Participating Cities

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

^{*}Police department only.

Decorah

Membership by Type



Benefits by Type

Service Benefits

$\underline{\mathbf{Age}}$	<u>Number</u>	Total Annual Benefit	Average Annual Benefit
55 - 59	172	\$12,243,024	\$71,180
60 - 64	266	17,931,492	67,412
65 - 69	388	26,129,772	67,345
70 - 74	359	22,876,692	63,723
75 - 79	273	16,388,340	60,031
80 - 84	181	9,455,544	52,241
Over 84	127	5,464,884	43,031
Total	1,766	\$110,489,748	\$62,565

Accidental Disability Benefits

$\underline{\mathbf{Age}}$	<u>Number</u>	Total Annual Benefit	Average Annual Benefit
Under 40	13	\$590,208	\$45,401
40 - 49	65	2,976,972	45,800
50 - 59	189	10,179,228	53,858
60 - 69	289	15,693,888	54,304
70 - 79	293	14,476,644	49,408
Over 80	122	5,352,924	43,876
Total	971	\$49,269,864	\$50,741

Ordinary Disability Benefits

$\underline{\mathbf{Age}}$	<u>Number</u>	Total Annual Benefit	Average Annual Benefit
Under 40	8	\$248,304	\$31,038
40 - 49	40	1,514,100	37,853
50 - 59	47	2,172,372	46,221
60 - 69	49	2,306,052	47,062
70 - 79	47	2,031,060	43,214
Over 80	19	743,532	39,133
Total	210	\$9,015,420	\$42,931

Beneficiary (Spouse) Benefits

$\underline{\mathbf{Age}}$	Number	Total Annual Benefit	Average Annual Benefit
Under 50	23	\$737,280	\$32,056
50 - 59	51	1,490,940	29,234
60 - 69	146	4,280,112	29,316
70 - 79	274	7,409,184	27,041
Over 80	405	9,744,912	24,062
Total	899	\$23,662,428	\$26,321

Beneficiary (Children) Benefits

$\underline{\mathbf{Age}}$	Number	Total Annual Benefit	Average Annual Benefit
Under 12	8	\$44,700	\$5,588
12 - 17	12	74,220	6,185
18 and Over	26	205,164	7,891
Total	46	\$324,084	\$7,045

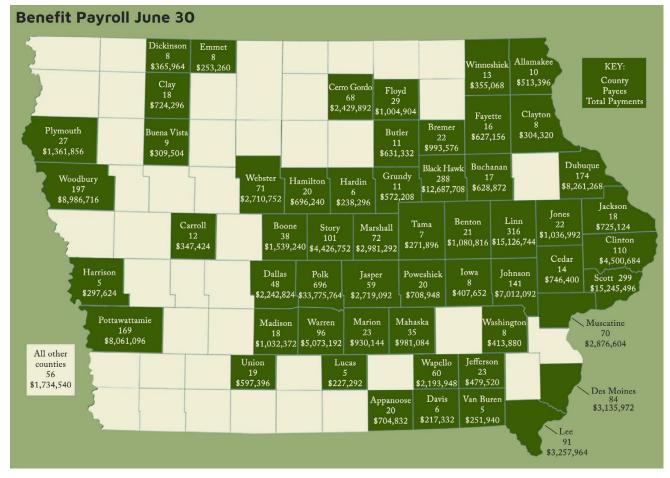
Vested Benefits

$\underline{\mathbf{Age}}$	<u>Number</u>	Total Annual Benefit	Average Annual Benefit
55 - 59	95	\$2,519,724	\$26,523
60 - 69	208	4,701,744	22,605
70 - 79	127	2,300,856	18,117
80 and Over	31	343,176	11,070
Total	461	\$9,865,500	\$21,400

Terminated-Vested Benefits

$\underline{\mathbf{Age}}$	<u>Number</u>	Total Annual Benefit	Average Annual Benefit
Under 40	154	\$2,231,316	\$14,489
40 - 49	177	3,840,480	21,698
50 and Over	122	3,523,320	28,880
Total	453	\$9,595,116	\$21 , 181

Payees and Total Benefit Payments by Counties in Iowa



The map above illustrates the number of benefit payments made to members with mailing addresses residing in the State of Iowa as of June 30, 2022. Approximately 85% of all members receiving a monthly benefit from MFPRSI reside in Iowa.

Benefit Payroll June 30 WA MT 6 ND OR MN 31 ID 3 SD 36 WI 23 WY 2 IA 3,836 PA MA₁ NE 41 NV 5 OH 3 CT 1 IN 5 IL 42 UT RIO CO 23 NI 1 MO 72 KS 13 DE 0 MD3 NC 13 DC₀ TN 11 OK AZ 80 AR 24 NM SC GA 10 AL MS TX 44 $\overline{106}$ International

Number of Benefit Payments to Members by U.S. State

The map above illustrates the number of benefit payments made to members with mailing addresses residing in the individual states and internationally as of June 30, 2022. Approximately 99% of all monthly benefit payments are done via ACH.

Preparation of Annual Report

The preparation of this report and financial statements were the result of the combined efforts of the retirement system's staff under the direction of the Executive Director, Deputy Director, and Chief Investment Officer.

MFPRSI's annual report for fiscal year 2022 was prepared by MFPRSI staff using data gathered from various sources including MFPRSI's actuarial services provider, SilverStone Group, investment consultant, Marquette Associates, and communications consultant, Wixted & Co. The story on pages 10 - 16 was written by Jill Johnson, communications advisor with Wixted & Co.

The firm of Eide Bailly, LLP, conducted an audit for the period ending June 30, 2022. A copy of the audit report has been provided to each of the employing cities and is viewable at www.mfprsi.org. Copies of the report are also available at MFPRSI's office in West Des Moines, Iowa.

This report is intended to provide reliable information as a basis for management decisions, legal compliance, and stewardship of the retirement system's assets. The Board and staff appreciate the efforts extended by city officials as well as the support given to MFPRSI by the active and retired memberships and city representatives.

Design/Production/Writing - Cody Jans Printing - Universal Printing Services



