MFPRSI
MUNICIPAL FIRE & POLICE RETIREMENT SYSTEM OF IOWA

ANNUAL REPORT FISCAL YEAR 2016

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

Fiscal Year 2016 Highlights

Membership

Active Members	3,926
Inactive Members	4,327

Investments

Market Value of Portfolio*	$2,254,541,768
Rate of Return*	0.2%

Funding

Funded Ratio**	81.4%

Contributions

Members	$25,455,597
Employers	$75,254,727
State	$0

Distributions

Benefits Paid	$155,469,400
Refund of Contributions Paid	$1,097,082

Actuarial

Total Pension Liability	$2,867,807,326
Plan Fiduciary Net Position	$(2,242,546,392)
Net Pension Liability	$625,260,934
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	78.2%

*The Market Value of Portfolio and Rate of Return as reported by MFPRSI's investment consultant, Summit Strategies Group

**The Funded Ratio measures the actuarial value of assets ($2,333,944,800) against the actuarial accrued liability ($2,867,807,326).

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

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

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

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

Introduction

"MFPRSI is the only pension for the men and women who put their lives on the line every day for the citizens of Iowa. Since they are not part of the social security system we are their life-line for a future they so greatly deserve. We benefit everyone in Iowa by providing that life-line as efficiently as possible."

Marty Pottebaum, Trustee
Chairperson
Retired Police Officer
Sioux City Police Department

Chairperson's Annual Letter

October 6, 2016

Dear Members and City Officials,

On behalf of the Board of Trustees (the "Board"), I am pleased to present MFPRSI's ("retirement system") *Annual Report* for the fiscal year ending June 30, 2016. In addition to providing information relating the financial status of your retirement system, this report also highlights other changes that occurred during the fiscal year. The Financial Statements section of this report is assembled in accordance with generally accepted accounting principles and includes financial statements that are properly verified by the retirement system's independent auditors.

MFPRSI's investments generated a return of 0.22% for FY16 and the investment portfolio is valued at $2.3 billion. Although this return is lower than what was generated in the previous three years (3.1% in FY15, 18.2% in FY14, and 12.8% in FY13), it reflects the extreme volatility that the financial markets experienced this fiscal year as compared to those years. As indicated in the investment section of this report, the five, ten, and since inception returns have been 6.7%, 5.6%, and 7.6%, respectively. This indicates that the portfolio has been built to perform efficiently over the long-term.

Several factors can be identified for the increased market volatility and portfolio under-performance we experienced this year. Recessionary fears lingered throughout the fiscal year as investors anxiously prepared for the U.S. Federal Reserve to raise the federal funds target interest rate. The Federal Open Market Committee (FOMC) raised the federal funds target rate for the first time in seven years to 0.25% - 0.50% in December 2015 due to improving economic indicators. Many investors believed the U.S. economy was strengthening and gradual rate increases would continue into 2016; however, the FOMC continued its low rate strategy creating turmoil as each FOMC meeting passed without a rate increase.

Additionally, the economy in China provided a cause for concern as it continued its transition from an industrial exporter to a consumer-based economy. Increased Chinese consumer activity decreased demand for imported goods from the U.S. and elsewhere. Along with this transition, the Chinese government devalued its currency in August 2015 causing havoc in financial markets worldwide. These events proved that economies across the globe, including the U.S., are more dependent on Chinese exports than previously thought.

The vote in the United Kingdom (U.K.) in late June on whether to leave the European Union (E.U.) or not also proved to be devastating to financial markets. Polls prior to the vote hinted at a nearly split decision between “leaving” the E.U. and “remaining” in the E.U. Despite these poll results, it was widely believed that the U.K. would remain as the drastic decision to untangle its economy from the E.U. appeared daunting. Financial markets rallied in the days leading up to the vote under the pretense that the U.K. would remain in the E.U. Unfortunately for investors, the U.K. narrowly voted to leave sparking a huge market sell-off as investors sought safe-haven assets such as gold and long-term U.S. bonds as opposed to stocks and corporate bonds. Ultimately, the retirement system’s investment return was hurt by the timing of the U.K. vote and market sell-off as both occurred in the final week of our fiscal year.

Despite this fiscal year’s under-performance our confidence in the sustainability of our retirement system has not diminished. The investment portfolio is diversified and poised to deliver appropriate returns over longer periods of time. We consider all options as fiduciaries of the retirement system and remain confident the investment portfolio will provide appropriate returns in the long run.

Last year we adopted a mission statement, which states that MFPRSI will 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.

In an effort to meet and exceed its objective, the Board created a strategic plan to define long-term missions, goals, and the means by which MFPRSI will measure its successes. The following two goals:

1. Obtain top quality management services for a cost that is mid-range for comparable retirement systems; and,
2. Achieve top-quartile investment returns for similarly sized plans

were investigated as part of the strategic plan.

In performing its research the staff compared MFPRSI's investment costs with all similarly sized fire and police retirement systems in the U.S. This analysis proved that the amount of money MFPRSI pays to administer the investment portfolio is at the median among its peers. Meanwhile, the data compiled when comparing the returns of our investment portfolio with similarly sized retirement plans in the U.S. proved that our investment returns ranked in the top quartile across longer periods of time (i.e., 3-year, 5-year, and 10-year) while ranking at the median for our 1-year return.*

Continuing our effort to improve the retirement system, the Board adopted national medical standards for participating municipality firefighter and police officer candidates. We surveyed city officials and our network of healthcare clinics regarding their knowledge of the national standards and collaborated with the Medical Board at the University of Iowa Hospital and Clinics to determine if changing the medical standards for police and fire candidates was warranted. After consulting with those parties we determined that using national medical standards for fire and police candidates was the best option. Therefore, we adopted National Fire Protection Association 1582 standards and the *Guidance for the Medical Evaluation of Law Enforcement Officers* from the American College of Occupational and Environmental Medicine as they offer the most current and appropriate standards available.

Understanding that communicating our message is a priority, the retirement system, along with our communications consultant, Wixted & Company, created a *Legislative Guide* and distributed it to key legislators in the Iowa General Assembly. The guide provides vital information and statistics about the retirement system in an effort to increase awareness about MFPRSI.

*The data compiled for these studies used investment returns and investment costs as of June 30, 2015.

We also created short videos and implemented them into our website, www.mfprsi.org. Three videos were produced with the assistance of Wixted & Company detailing the history and purpose of the retirement system, the types of benefits we provide, and how members and interested parties can learn more about us. These videos assisted in increasing awareness about the retirement system and pushing our message to a wider audience.

Fiscal Year 2016 was another successful year for MFPRSI. We implemented positive changes to the medical entrance standards for firefighter and police officer candidates and continued to advance our message of providing comprehensive retirement and disability benefits in a sustainable manner. While our 1-year investment returns were substandard, our longer-term returns remain on target. We have the utmost confidence our investment portfolio will deliver appropriate returns over the long-term.

I wish to thank the entire Board for their contributions this year as well as the staff for maintaining the high level of expertise and professionalism required in the pursuit of excellence in all of the activities in which we are involved. Lastly, I wish to sincerely thank the members for continuing in public service. Your dedication to law enforcement and firefighting for the citizens of Iowa is greatly appreciated.

Sincerely,

Marty Pottebaum

The preparation of this report and financial statements are the result of the combined efforts of the retirement system's staff under the direction of the Executive Director and Deputy Director. The accomplishments of the Board and staff over the last fiscal year are summarized on the following pages.

The firm of Eide Bailly, LLP, conducted an audit for the period ending June 30, 2016. A copy of the audit report has been provided to each of the employing cities and is viewable at MFPRSI's website, www.mfprsi.org. The report is also available at MFPRSI's office in West Des Moines, IA. The audit report can be viewed in the financial section of this report.

This report is intended to provide complete and 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.

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 eighty-seven local fire and police retirement systems formerly administered by forty-nine 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 purpose of MFPRSI is to provide a sound and secure retirement income for individuals receiving benefits under its programs. 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 (i.e., spouse and dependent benefits), and the refund of contribution 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 years of membership service, the average of the highest three years of earned wages as a member, and a multiplier.

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. Permanent full-time 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 fifty-five.

A Board is established by Iowa Code to provide direction and administration for the retirement system, as well as requiring it to act as fiduciaries for the retirement fund. The Board represents the police officer and firefighter 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 8,253 members at the end of fiscal year 2016, with 3,926 active members employed by the forty-nine participating cities. Of the remainder, 1,132 receive benefits due to disability, 2,854 are either retired or a beneficiary, and 341 are terminated vested members. MFPRSI made over 49,000 accurate and timely benefit payments over the course of the fiscal year. Approximately 98% 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. On its website, www.mfprsi.org, MFPRSI also provides its membership with a comprehensive *Member Handbook* which details the various benefit structures that are available.

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 who acts as the Chief Investment Officer. Investment recommendations are made by the Executive Director, Deputy Director, Summit Strategies Group ("Summit"), its 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 0.2% in fiscal year 2016. The five-year return for the period ending June 30, 2016, is 6.7%. The long-term target rate of return, as determined by the Board, is 7.5%. The target rate is adopted by the Board as the investment rate of return by which the retirement system can meet its liabilities at the current level of employee and employer contributions. The investment portfolio's performance since inception in 1992 is 7.6%.

MFPRSI's Accomplishments

Over the course of fiscal year 2016 (July 1, 2015, to June 30, 2016) MFPRSI engaged in a number of activities pertaining to both the retirement system's active and retired memberships as well as the financial management of the assets of the plan. The following projects were intended to either enhance the services provided to membership and cities or further the performance opportunities for the investment portfolio:

Administration. A strategic plan was created to define long-term missions, goals, and the means by which MFPRSI will measure its successes. As part of the research done while creating the strategic plan, it was discovered that the benefits provided to members are competitive with other police and firefighter retirement systems in the United States of America. Additionally, research uncovered that MFPRSI's administrative costs are average compared to retirement systems nationwide.

The Board adopted both a Mission Statement and a Vision Statement. The goal of both statements is to establish a clearly communicated and concise focus for the retirement system.

In conjunction with its communications consultant, Wixted & Company, the Board developed a Legislative Guide to be distributed to members of the Iowa General Assembly. The 4-page document highlighted important facts and statistics in order to provide useful information to legislators.

The Board and staff produced short videos and implemented them into its website, www.mfprsi.org. The videos focused on describing the retirement system and the benefits provided.

The Board reviewed its vendor relationships with SilverStone Group, its actuarial services provider, and Summit Strategies Group, its investment consultant. Both firms were retained for an additional 3 years after extensive examination.

MFPRSI soft-launched a document imaging system providing electronic file maintenance of member files. The document imaging system eliminates the need for paper records, improves long-term security of information, and enhances efficiency with processing member records.

The Board submitted its biennial *Legislative Interim Report* to the Public Retirement Systems Committee of the Iowa General Assembly. The report covers the goals, responsibilities, statistics, and major activities of MFPRSI.

Financial and Investments. In its annual review of the retirement system's *Investment Policy*, the Board added language to define certain segments of the investment portfolio. Specifically, the additional definitive language was developed to provide clarification to both the core and strategic components of the investment portfolio.

In addition to conducting its annual review of the *Investment Policy*, the Board and staff reviewed its *Investment Program Implementation and Oversight* (IPIO) document. This report provides, in detail, the components and concepts of the investment portfolio.

MFPRSI implemented Governmental Accounting Standards Board (GASB) Statement No. 68 in fiscal year 2016 for the second consecutive year. GASB is the source of accounting standards for state and local governments. GASB 68 provides standards for financial reporting and specifies the required approach for measuring a participating employer's pension liability for all defined benefit and defined contribution plans, of which MFPRSI is a defined benefit plan.

Summit apprised the Board on specific investment concepts related to the investment portfolio and investment markets. Topics covered during fiscal year 2016 included reviewing investments within the investment portfolio as well as unconstrained fixed income, an investment theme not included in the investment portfolio.

Investment officers traveled to investment firms managing assets on behalf of the retirement system. They met with professionals responsible for managing its investment portfolios.

The Board and staff conducted reviews with the investment firms managing MFPRSI's assets. In addition to the written reports provided by the firms, the staff engaged in regularly scheduled phone conference reviews with each investment firm.

Benefit Plan. The Board adopted national medical protocol standards for both firefighter and police officer candidates. National Fire Protection Association (NFPA) 1582 standards for firefighter candidates and American College of Occupational and Environmental Medicine (ACOEM) Guidance for the Medical Evaluation of Law Enforcement Officers for police officer candidates were ratified after surveying participating cities and its network of protocol clinics regarding their collective knowledge of the national standards. Both surveys indicated that national standards would be applicable to MFPRSI and candidates for firefighter and police officer positions.

MFPRSI continued the administration of the retirement, disability, and

Deferred Retirement Option Plan (DROP) programs. Individual counseling with members was provided upon request. Participation in DROP remained steady year-over-year at 46% of those eligible. Also, the Board periodically reviewed its fiduciary standards.

MFPRSI continued its application of the Federal Pension Protection Act of 2006. This act established a $3,000 income tax exclusion for eligible retired public safety officers who elect to use a portion of their distributions from an eligible retirement plan to directly pay for qualified health insurance premiums. The utilization of this program among eligible retirees has expanded significantly over the past several years.

Legislation. The retirement system's lobbying efforts produced a funding measure that would have reinstated state contributions at 3.79% for the fiscal year 2016. However, the legislation introduced did not pass into law by the 86th Iowa General Assembly.

Board Re-Elections. Frank Guihan and Michelle Weidner were re-elected for 4-year terms by the Iowa Professional Fire Fighters (IPFF) and the Iowa League of Cities, respectively. The average tenure for the nine voting trustees stands at 9 years as of April 30, 2016.

Board of Trustees

The activities of MFPRSI are under the direction of its Board which has nine voting members and four non-voting, legislative representatives. The voting membership of the Board is comprised of four representatives of the active and retired fire and police membership, 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.

Top row, left to right: Marty Pottebaum, Chairperson, retired police officer; Mary Bilden, citizen member; P. Kay Cmelik, city representative.

Middle row, left to right: Eric Court, active police officer; June Anne Gaeta, active firefighter; Frank Guihan, retired firefighter.

Bottom row, left to right: Duane Pitcher, city representative; Dan Ritter, city representative; Michelle Weidner, city representative.

Non-Voting Members.

Top row, left to right: Senator Wally Horn; Representative Scott Ourth

Bottom row, left to right: Representative Dawn Pettengill; Senator Jason Schultz

Staff

Top row, left to right: Terry Slattery, Executive Director; Dan Cassady, Deputy Director; BriAnna Nystrom, Executive Administrator

Second row, left to right: Sandra Wells, Sr. Pension Officer; Jill Hagge, Sr. Pension Officer; Angie Conner, Sr. Pension Officer

Third row, left to right: James Bybee, Accountant / Investment Officer; Blake Jeffrey, Accountant / Investment Officer; Brian Danielson, Accountant / Investment Officer

Cody Jans, Investment / Communications Officer

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

The executive administrator develops research information as required by management and maintains confidential information and contracts with external vendors.

The benefits team administers payrolls and establishes and maintains the membership records of the retirement system. Additionally, they communicate with members regarding benefit and membership status.

The accounting / investment officers perform accounting, auditing, and control functions of the retirement system operations. They also provide analysis for the investment portfolio.

The investment / communications officer creates visual media and provides analysis for the investment portfolio.

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"Our purpose is to provide retirement and disability benefits competitive with comparable police and fire systems, adequate to provide for our members and their families when they are no longer working or able to do so. We strive to manage the retirement system and the investment portfolio in a timely, professional, cost-effective, and customer-oriented manner and to fund stable and secure retirement benefits by application of sound fiduciary principles, independent governance, and appropriate risk management."

Mary Bilden, Trustee
Citizen Member
Boone, IA

Independent Audit Opinion

EideBailly

CPAs & BUSINESS ADVISORS

October 6, 2016

The Board of Trustees
MFPRSI
7155 Lake Drive, Suite 201
West Des Moines, IA 50266

Dear Board Members,

Report on the Financial Statements. We have audited the accompanying financial statements of MFPRSI, which comprise the statements of fiduciary net position as of June 30, 2016, and 2015, and the related statements of changes in fiduciary net position, for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements. Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditor's Responsibility. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

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

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

Opinion. 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, 2016, and 2015, and the respective changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter. As discussed in Notes 2 and 4 to the financial statements, total MFPRSI investments include investments valued at $761.6 million (33.7% of total assets) as of June 30, 2016, 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. Our opinion is not modified with respect to that or this matter.

Required Supplementary Information. Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the required supplementary information 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 October 7, 2016, 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 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 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.

Eide Bailly LLP

Eide Bailly, LLP
CPAs and Business Advisors

Management's Discussion and Analysis

The following discussion and analysis of MFPRSI's financial performance provides an overview of the retirement system's financial activities for the fiscal years ended June 30, 2016, and 2015. 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. The Actuarial Report section of this report provides the retirement system's funding status regarding long-term benefit obligations.

Financial Highlights. System assets exceeded its financial liabilities at the close of the fiscal years 2016 and 2015 by $2,242,546,392 and $2,300,180,355 (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, 2016, were $100,876,167, which is comprised of contributions of $100,710,324, net investment income of $164,100, and other income of $1,743. Additions for the year ended June 30, 2015, were $174,222,143, which is comprised of contributions of $104,371,253, net investment income of $69,833,569, and other income of $17,321.

Benefit payments were $155,469,400 and $149,019,028 for the years ended June 30, 2016, and 2015, respectively, a 4.3% increase year over year.

The Statements of Fiduciary Net Position and the Statements of Changes in Fiduciary Net Position. This annual report consists of two financial statements; the Statements of Fiduciary Net Position and the Statements of Changes in Fiduciary Net Position. These financial statements report information about MFPRSI's general financial condition. They 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 Statements of Fiduciary Net Position present all of the retirement system'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 MFPRSI's financial position is improving or deteriorating. The Statements of Changes in Fiduciary Net Position present the changes in plan net assets during the respective fiscal year.

Financial Analysis. Retirement system assets as of June 30, 2016, and 2015, were approximately $2.26 billion and $2.32 billion, respectively, and were primarily comprised of investments, cash, receivables from brokers, and contributions due from employers. The $57,085,400, or 2.5%, decrease in assets from June 30, 2015, to June 30, 2016, 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 $761.6 million (33.7% of total assets) and $752.8 million (32.4% of total assets) as of June 30, 2016, and 2015, 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.

Total liabilities as of June 30, 2016, and 2015, were $20,236,315 and $19,545,447, respectively, and were primarily comprised of obligations under benefits and refunds payable, as well as investment management expenses payable. The $690,868, or 3.5%, increase in liabilities from June 30, 2015, to June 30, 2016, was due to an increase in payables for benefits and refunds.

During the year ended June 30, 2016, plan net position restricted for pension benefits decreased $57,633,964, or 2.5%, from the previous fiscal year, primarily due to unrealized losses experienced in invested assets. This is in comparison to the previous fiscal year, when net assets increased by $22,359,902, or 1.0%, from the prior year.

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

Assets	2016	2015	YoY Inc/ (Dec)	2014	YoY Inc/ (Dec)
• Cash	$7,692	$4,330	77.6%	$56,944	-92.4%
• Investments	2,250,515	2,311,197	-2.6%	2,234,763	3.4%
• Receivables	4,327	4,220	2.5%	4,817	-12.4%
• Other Assets	188	60	213.3%	76	-21.1%
• Total assets	2,262,722	2,319,807	-2.5%	2,296,600	1.0%
• Pension Related Deferred Outflows	207	115	80.0%	0	0.0%
Liabilities					
• Benefits and Refunds Payable	16,781	$15,775	6.4%	15,067	4.7%
• Investment Management Expenses Payable	2,152	2,818	-23.6%	2,094	34.6%
• Administrative Expenses Payable	402	365	10.1%	293	24.6%
• Net Pension Liability attributed to IPERS	633	516		0	0.0%
• Payable to Brokers for Unsettled Trades	268	71	277.5%	689	-89.7%
• Total Liabilities	20,236	19,545	3.5%	18,143	7.7%
• Pension Related Deferred Inflows	147	197	-25.4%	0	0.0%
• Net Position Restricted for Pension Benefits	$2,242,546	$2,300,180	-2.5%	$2,278,457	1.0%

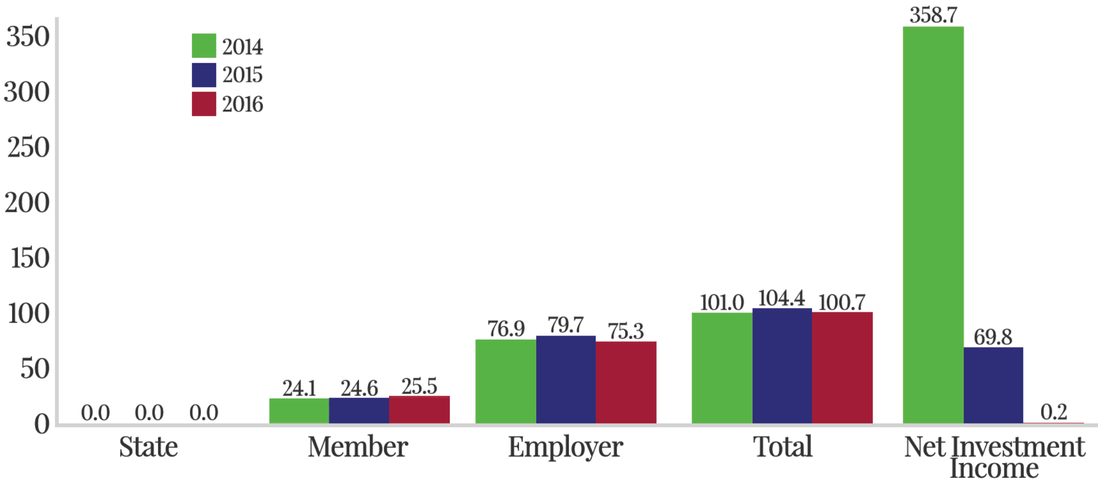
Condensed Statement of Changes in Fiduciary Net Position (In Thousands of $).

Additions	2016	2015	YoY Inc/ (Dec)	2014	YoY Inc/ (Dec)
• Contributions	$100,710	$104,371	-3.5%	$100,972	3.4%
• Net Investment Income	164	69,834	-99.8%	358,681	-80.5%
• Other Income	2	17	-88.2%	44	-61.4%
• Total Additions	$100,876	$174,222	-42.1%	$459,697	-62.1%
Deductions					
• Benefits and Refund Payments	156,566	150,026	4.4%	143,834	4.3%
• Administrative Expenses	1,944	1,836	5.9%	1,673	9.7%
• Total Deductions	158,510	151,862	4.4%	145,507	4.4%
• Net Increase (Decrease)	-57,634	22,360	-357.8%	314,190	-92.9%
Plan Net Position Restricted for Pension Benefits					
• Beginning of Year	2,300,180	2,278,457	1.0%	1,964,267	16.0%
• Prior Period Adjustment	0	-637	0.0%	0	0.0%
• End of Year	$2,242,546	$2,300,180	-2.5%	$2,278,457	1.0%

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 2016 totaled $100,876,167.

Contributions decreased from the previous year by $3,660,929. This decrease is primarily due to a decrease in the employer contribution rate from 30.41% to 27.77% for the years ended June 30, 2015 and 2016, respectively. Net investment income decreased from the previous year by $69,669,469. This change is primarily due to a reduced net appreciation in the fair value of investments.

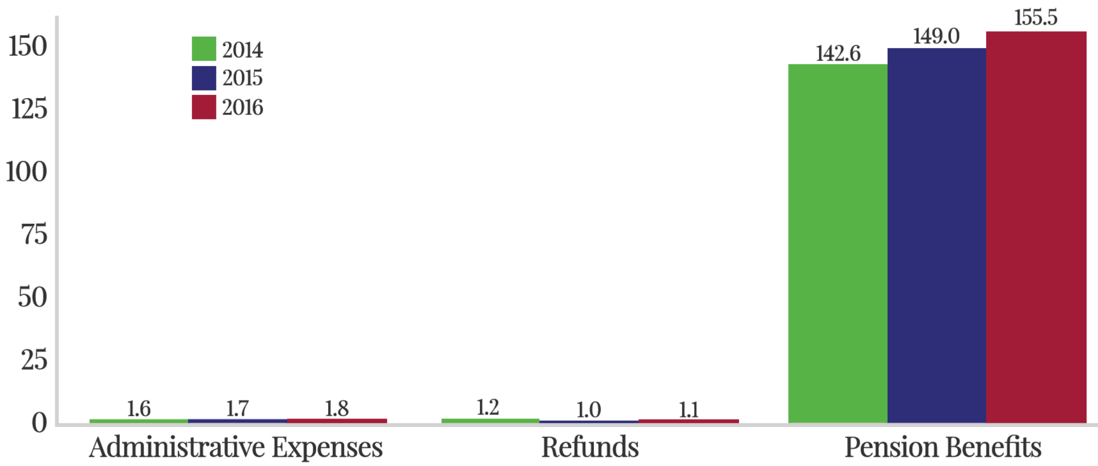
Additions to Plan Net Assets (In Millions $).



Expenses – Deductions from Fiduciary Net Position. The principal expenses of the retirement system include the payment of pension benefits to retired members and beneficiaries, refund of contributions to former members, and the cost of administering the System. Total deductions for the fiscal year 2016 were $158,510,130, an increase of 4.4% over fiscal year 2015 deductions.

Pension benefit payments increased by $6,450,372, or 4.3%, from the previous year. Refund of contributions increased by $89,804, or 8.9%. These changes are primarily due to the annual escalator fund applied to benefit payments and the noted increase in number of applications for refunds in 2016.

Deductions from Plan Net Assets (In Millions $).



Statements of Fiduciary Net Position
as of June 30, 2016, and 2015

	2016	2015
Assets		
• Cash	$7,692,232	$4,329,908
• Investments, at Fair Value:		
• U.S. Government Obligations	36,540,236	33,776,151
• U.S. Corporate Fixed Income	36,341,573	35,285,709
• U.S. Equity Securities	379,113,341	449,327,518
• Foreign Equity Securities	331,528,119	373,891,720
• Commingled Fixed Income	201,186,577	203,854,797
• Multi-Strategy Commingled Fund	51,515,754	66,986,892
• Short-Term Investments and Currency Positions	23,540,490	27,261,270
• Real Estate	285,563,595	256,962,404
• Private Markets	473,361,796	475,228,624
• Fund-of-Funds Commingled Investment	431,823,372	388,622,191
• Total Investments, at Fair Value	2,250,514,853	2,311,197,276
• Receivables		
• Contributions	3,093,200	3,610,291
• Investment Income	35,711	23,271
• Receivable from Brokers for Unsettled Trades, Net	1,198,449	586,764
• Total Receivables	4,327,360	4,220,326
• Other Assets	188,141	60,476
• Total Assets	2,262,722,586	2,319,807,986
• Pension Related Deferred Outflows	207,439	114,745
Liabilities		
• Benefits & Refunds Payable	16,780,731	15,774,792
• Investment Management Expenses Payable	2,152,250	2,817,909
• Administrative Expenses Payable	402,497	365,052
• Net Pension Liability Attributed to IPERS	632,688	516,371
• Payable to Brokers for Unsettled Trades, Net	268,148	71,323
• Total Liabilities	20,236,314	19,545,447
• Pension Related Deferred Inflows	147,319	196,929
Plan Net Position Restricted for Pension Benefits	$2,242,546,392	$2,300,180,355

See notes to financial statements.

Statements of Changes in Fiduciary Net Position
for the Years ended June 30, 2015, and 2014

	2016	2015
Additions		
• Contributions		
• Member	$25,455,597	$24,622,310
• Employer	75,254,727	79,748,943
• State Appropriations	0	0
• Total Contributions	100,710,324	104,371,253
• Investment Income		
• Interest	3,097,088	1,504,352
• Dividend	23,407,318	24,417,637
• Net Appreciation (Depreciation) in Fair Value of Investments	-8,780,267	61,544,290
• Net Investment Income from Investment Activity	17,724,139	87,466,279
• Less Investment Expenses		
• Management Fees and Other	17,560,039	17,632,710
• Net Investment Income	164,100	69,833,569
• Other Income	1,743	17,321
• Total Additions	100,876,167	174,222,143
Deductions		
• Benefit Payments	155,469,400	149,019,028
• Refund Payments	1,097,082	1,007,278
• Administrative Expenses	1,778,400	1,694,014
• Disability Expenses	165,248	141,921
• Total Deductions	158,510,130	151,862,241
• Net Increase	-57,633,963	22,359,902
• Plan Net Position Restricted for Pension Benefits		
• Net Position - Beginning of Year	2,300,180,355	2,277,820,453
• Net Position - End of Year	$2,242,546,392	$2,300,180,355

See notes to financial statements.

Notes to Financial Statements
as of and for the years ended June 30, 2016, and 2015

Plan Description. 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 1 county in Iowa ("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 the 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), ("the Plan"). It is governed by nine Trustees 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, 2016, the retirement system was comprised of 49 cities covering 3,926 active members; 341 terminated members entitled to benefits; and 3,986 retired firefighters, police officers, bailiffs, and eligible beneficiaries across Iowa.

Funding by Members - 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, 2016, and 2015.

Funding by Employers - 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 as permitted under Chapter 411 of the Code of Iowa. The normal contribution rate is provided by state statute to be the actuarial liabilities of the plan less current plan assets, with such total divided by 1 percent of the actuarially determined present value of prospective future compensation of all members, further reduced by member contributions and state appropriations. Under the Code of Iowa the employer's contribution rate cannot be less than 17.00% of earnable compensation. The contribution rate was 27.77% and 30.41% for the years ended June 30, 2016, and 2015, 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 non employer 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, 2016, and 2015.

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, 2016, and 2015:

Retirement - Members with 4 or more years of service are entitled to pension benefits beginning at age 55. Full service retirement benefits are granted to members with 22 years of service, while partial benefits are available to those members with 4 to 22 years of service based on the ratio of years completed to years required (22 years). Members with less than 4 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 3 years of compensation. The average of these 3 years becomes the member's average final compensation. The base benefit is 66 percent of the member's average final compensation. Additional benefits are available to members who perform more than 22 years of service (2 percent for each additional year of service, up to a maximum of 8 years). Survivor benefits are available to the beneficiary of a retired member according to the provisions of the benefit option chosen plus an additional benefit for each child. Survivor benefits are subject to a minimum benefit for those members who chose the basic benefit with a 50 percent surviving spouse benefit.

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

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

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

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

Deferred Retirement Option Program (DROP) - Active members, at least 55 years of age, with 22 or more years of service have the option to participate in the DROP Program. The DROP is an arrangement whereby a member who is otherwise eligible to retire and commence benefits opts to continue to work. A member can elect a 3, 4, or 5 year DROP period. By electing to participate in DROP the member is signing a contract indicating the member will retire at the end of the selected DROP period. During the DROP period the member's retirement benefit is frozen and a DROP benefit is credited to a DROP account established for the member. Assuming the member completes the DROP period, the DROP benefit is equal to 52% of the member's retirement benefit at the member's earliest date eligible and 100% if the member delays enrollment for 24 months. At the member's actual date of retirement, the member's DROP account will be distributed to the member in the form of a lump sum or rollover to an eligible plan. The balance of the amounts held by the retirement system pursuant to the DROP is $16,584,000 as of June 30, 2016 and $15,580,000 as of June 30, 2015.

Net Pension Liability of the Retirement System - The components of MFPRSI's net pension liability at June 30, 2016, and 2015 are displayed on Table 1.

Actuarial Assumptions – The total pension liability was determined by an actuarial valuation as of June 30, 2016, and 2015, using the following actuarial assumptions listed on Table 2.

Table 1. Net Pension Liability of the Retirement System

The components of MFPRSI's net pension liability at June 30, 2016, and 2015.

	2016	2015
• Total Pension Liability	$2,867,807,326	$2,769,994,684
• Plan Fiduciary Net Position	-2,242,546,392	-2,300,180,355
• MFPRSI's Net Pension Liability	$625,260,934	$469,814,329
• Plan Fiduciary Net Position as a Percentage of Total Pension Liability	78.20%	83.04%

Table 2. Actuarial Assumptions Used to Determine Total Pension Liability

• Inflation	3.0%
• Salary Increases	4.50 % to 15.11% including inflation
• Investment Rate of Return	7.5%, net of pension plan investment expense

Mortality rates as of June 2016 were based on RP 2000 Blue Collar Combined Healthy table with males setback two years, females set-forward one year and disabled set-forward one year (male only rates), with no projection of future mortality improvement.

Mortality rates as of June 30, 2015, were based on weighting equal to 1/12 of the 1971 Group Annuity Mortality (GAM) table and 11/12 of the 1994 GAM table with no projection of future mortality improvement.

The actuarial assumptions used in the June 30, 2016, and 2015, valuations were based on the results of an actuarial experience study for the period of July 1, 2002, to June 30, 2012.

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.

Table 3 lists real rates of return for the major asset classes included in MFPRSI's investment portfolio.

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

Table 3. Actuarial Assumptions - Estimated Real Rates of Return

Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of October 1, 2013, are summarized on Table 3.

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

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 – Table 4 provides MFPRSI's net pension liability using various discount rates.

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. 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 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

Table 4. Sensitivity of the Net Pension Liability to Changes in the Discounted Rate

The following presents MFPRSI's net pension liability, calculated using the discount rate of 7.5%, as well as what the retirement system's net pension liability would be if it were calculated using a discount rate that is 1% lower (6.5%) or 1% 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	$981,315,298	$625,260,934	$328,743,618

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 - 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 the 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.

Table 5 lists the retirement system's asset allocation policy as of the end of the fiscal year.

Rate of Return - For the years ended June 30, 2016, and 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 0.02% and 3.02%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Deferred Outflows/Inflows of Resources and Unavailable Revenue - 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 thus, 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 the financial note titled, "Iowa Public Employees Pension System (IPERS)" 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 the financial note titled, "Iowa Public Employees Pension System (IPERS)" for additional details.

Table 5. Asset Allocation Police as of June 30, 2016

Asset Class	Target Allocation
• Core Investments	40%
• Strategic Investments	35%
• Private Markets	15%
• Real Assets	10%
• Total	100%

New Accounting Pronouncements - During the current year the retirement system adopted GASB Statement No. 72, Fair Value Measurement and Application during the year ended June 30, 2016. This statement specifies a hierarchy of valuation classifications based on whether the inputs to the valuation techniques used in each valuation classification are observable or unobservable. These statements require enhanced note disclosures and descriptions of these classifications which are detailed in the financial note titled, "Investments." The adoption of this statement had no effect on net position.

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.

Cash. For cash deposits, custodial credit risk is the risk that in the event of a bank failure, the retirement system's deposits may not be returned. A summary of MFPRSI's cash balances is listed in Table 6.

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.

MFPRSI is prohibited from holding direct investments in the Sudan and Iran due to State statute.

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

Table 6. Summary of Cash Balances

as of June 30,	2016	2015
• Insured	$250,000	$250,000
• Uninsured and uncollateralized	8,261,540	4,992,421
• Bank Balance	$8,511,540	$5,242,421

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. The currency assets of the retirement system are represented within the individual portfolios of the investment managers, which have mandates, which include international bonds or stocks. The benchmark against which these managers run the portfolios may include 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 (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; which include 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 - Table 7 offers information pertaining to MFPRSI's fund-of-funds commingled investments.

Investment Risk Disclosure:
Credit Risk - Table 8 provides information pertaining to MFPRSI's credit risk profile.

Custodial Credit Risk - For an investment, custodial credit risk is the risk that, in the event of the failure of the counter-party, 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 counter-party or the counter-party's trust department or agent but not in the retirement system's name.
Iowa Code 411.7 establishes the secretary of the Board as the custodian of the fund and provides for the retirement system to select master custodian banks to provide custody of MFPRSI's assets. MFPRSI has arranged for Wells Fargo 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 - The retirement system is guided by statute and policy in the selection of security investments. No investments in any one organization represent 5% 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. Table 9 discloses the fair value and average duration of fixed income investments as of June 30, 2016.

Commitments - MFPRSI is committed, as of June 30, 2016, to invest approximately $297,000,000 in certain private equity,

Table 7. Fund-of-Funds Commingled Investments

as of June 30,	2016	2015
Investments - At Fair Value		
• U.S. Equity Securities	$185,331,516	$175,859,026
• Foreign Equity Securities	65,876,778	106,029,744
• Fixed Income	119,407,241	57,902,612
• Alternative Investments	27,246,320	6,639,964
• Short-Term Investments and Currency Positions	33,961,517	42,190,845
• Total Fund-of-Funds Commingled Investments	$431,823,372	$388,622,191

Table 8. Risk Disclosure

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations as of June 30, 2016, and 2015 are as follows:

2016

Quality Rating	Fair Value	Percentage of Portfolio
• AAA	$365,443	0.13%
• AA	88,446,786	32.27%
• A	84,680,709	30.90%
• BBB	80,365,499	29.32%
• BB	16,290,074	5.94%
• B	3,840,925	1.40%
• NR	78,950	0.03%
• Total Fixed Income Securities	$274,068,386	100%

2015

Quality Rating	Fair Value	Percentage of Portfolio
• AAA	$2,680,090	0.98%
• AA	91,087,429	33.38%
• A	84,763,542	31.06%
• BBB	86,243,656	31.60%
• BB	4,007,821	1.47%
• B	2,125,098	0.78%
• NR	2,009,022	0.74%
• Total Fixed Income Securities	$272,916,658	100%

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

Table 9. Interest Rate Risk

Investment Type	Fair Value	Duration
• Short-Term	$6,493,018	0.0321
• Fixed Income	72,881,809	4.0931
• Commingled	201,186,577	5.0284
• Total Fair Value	$280,561,404	
• Portfolio Modified Duration		4.6698

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 change in interest rates. 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%.

Table 10. Assets and Liabilities Measured at Fair Value on a Recurring Basis

Investments by Fair Value Level	Balance at June 30, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Debt Securities				
• U.S. Treasury Securities	$7,999,236	$7,999,236	$0	$0
• Mortgage-Related Securities	24,669,649	0	24,669,649	0
• Government-Related Securities	3,792,401	0	3,792,401	0
• Corporate Securities	36,341,573	0	36,341,573	0
• Cash Collateral	78,950	0	0	78,950
• Total Debt Securities	72,881,809	7,999,236	$64,803,623	78,950
Equity Securities				
• MLPs	100,821,699	100,821,699	0	0
• Preferred Stock	703,890	703,890	0	0
• Total Equity Securities	101,525,589	101,525,589	0	0
• Total Investments by Fair Value Level	174,407,398	$109,524,825	$64,803,623	$78,950
Investments Measured at the NAV				
• Domestic Equity Funds	265,772,739			
• International Equity Funds	321,186,391			
• Global Equity Funds	22,156,741			
• Global Bond Funds	137,293,542			
• Emerging Debt Funds	63,893,035			
• Real Estate Funds	280,148,670			
• Private Markets Funds	473,361,796			
• Multi-Strategy Hedge Funds	51,515,754			
• Fund-of-Funds Commingled Investments	431,823,372			
• Total Investments Measured at NAV	2,047,152,040			
• Total Investments Measured at Fair Value	$2,221,559,438			

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

The fair value of Mortgage-Related Securities, Corporate Securities and Government-Related Securities at June 30, 2016 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.

The fair value of Cash Collateral at June 30, 2016, was determined primarily based on level 3 inputs. Wells Fargo estimates the fair value of these investments using its own estimates using pricing models, discounted cash flow methodologies, or similar techniques taking into account the characteristics of the asset.

real estate partnerships, and real estate commingled funds.

Fair Value Measurements - The retirement system 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.

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. The organization's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. Table 10 displays more information on the retirement

Table 11. Investments Measured at the NAV (in millions)

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
• Domestic Equity Funds	$266		Daily	1-5 Days
• International Equity Funds	321		Daily, Monthly	1 week/15th
• Global Equity Funds	22		Daily	2 Days
• Global Bond Funds	137		Daily	1 Day
• Emerging Debt Funds	64		Monthly	3 Days
• Real Estate Funds	280	$65	N/A	N/A
• Private Markets Funds	473	$232	N/A	N/A
• Multi-Strategy Hedge Funds	52		Monthly	2 Weeks
• Fund-of-Funds Commingled Investments	432		Daily	1 Day
• Total Investments Measured at the NAV	$2,047			

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

system's fair value measurements.

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. Table 11 provides greater detail on these investments.

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 Statements of Fiduciary Net Position as 'Short-term investments and currency positions'. Changes in the values of derivative financial instruments are reported in the Statements 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, 2016, and 2015, 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 the retirement system as well as the Board to monitor compliance with the contracts. MFPRSI 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.

Iowa Public Employees Pension System (IPERS). *IPERS Plan Description* - IPERS membership is mandatory for employees of MFPRSI. Employees of MFPRSI are provided with pensions 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 or 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. Refer to the plan documents for 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, any time 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% 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 - Effective July 1, 2012, as a result of a 2010 law change, 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 1 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 the Investment Board.

In fiscal year 2016, pursuant to the required rate, Regular members contributed 5.95% of pay and MFPRSI contributed 8.93% for a total rate of 14.88%.

MFPRSI's total contributions to IPERS for the year ended June 30, 2016 were $80,581.

IPERS Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - At June 30, 2016, MFPRSI reported a liability of $632,688 for its proportionate share of the IPERS net pension liability. The IPERS net pension liability was measured as of June 30, 2015, and the IPERS total pension liability used to calculate the IPERS net pension liability was determined by an actuarial valuation as of that date. MFPRSI's proportion of the IPERS net pension liability was based on MFPRSI's share of contributions to the pension plan relative to the contributions of all IPERS participating employers. At June 30, 2015, MFPRSI's proportion was 0.012726%, which was a decrease from 0.012759%, its proportion measured as of June 30, 2014.

Table 12 displays the sources of MFPRSI's reported deferred outflows and inflows of resources.

$80,581 reported as deferred outflows of resources related to pensions resulting from MFPRSI's contributions subsequent to the measurement date will be

Table 12. Deferred Outflow and Deferred Inflow Sources

	Deferred Outflows of Resources	Deferred Inflows of Resources
• Difference between Expected and Actual Experience	$9,559	$0
• Changes of Assumptions	17,419	0
• Net Difference between Projected and Actual Earnings on Pension Plan Investments	94,663	147,319
• Changes in Proportion and Differences between MFPRSI's Contributions and Proportionate Share of Contributions	5,217	0
• MFPRSI's Contributions Subsequent to the Measurement Date of June 30, 2015	80,581	0
• Total	$207,439	147,319

Table 13. Deferred Outflows and Deferred Inflows of Resources Recognized as Pension Expense by Fiscal Year

Year Ended June 30:		
	2017	$-16,366
	2018	-16,366
	2019	-16,366
	2020	26,880
	2021	245
	Thereafter	0

There were no non-employer contributing entities at IPERS.

Table 14. Actuarial Assumptions Used by IPERS to Determine Total Pension Liability as of June 30, 2015

• Rate of Inflation (effective June 30, 2014)	3.0% per annum
• Rates of Salary Increases (effective June 30, 2010)	4.00% to 17.00% average, including inflation. Rates vary by membership group.
• Long-Term Investment Rate of Return (effective June 30, 1996)	7.5%, compounded annually, net of investment expense, including inflation.

recognized as a reduction of the net pension liability in the year ended June 30, 2016.

Table 13 offers the amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions.

Table 14 displays the assumptions used by IPERS to determine its total pension liability as of June 30, 2015.

IPERS' actuarial assumptions used in the June 30, 2015, valuation were based on the results of actuarial experience studies with dates corresponding to those listed above.

Mortality rates were based on the RP-2000 Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on Scale AA.

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 (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 weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in Table 15.

IPERS Discount Rate - The discount rate used to measure the total pension liability was 7.5%. 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,

Table 15. IPERS' Target Asset Allocation and Real Rates of Return Expectations

Asset Class	IPERS Target Allocation	IPERS Long-Term Expected Real Rate of Return
• U.S. Equity	24%	6.29%
• Non-U.S. Equity	16%	6.75%
• Private Equity	11%	11.32%
• Real Estate	8%	3.48%
• Core-Plus Fixed Income	28%	2.04%
• Credit Opportunities	5%	3.63%
• TIPS	5%	1.91%
• Other Real Assets	2%	6.24%
• Cash	1%	-0.71%
• Total	100%	

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 IPERS Net Pension Liability to Changes in the Discount Rate - Table 16 provides MFPRSI's net pension liability using various discount rates.

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, 2016, MFPRSI reported payables to the defined benefit pension plan of $6,250 for legally required employer contributions and $4,164 for legally required employee contributions which had been withheld from employee wages but not yet remitted to IPERS.

At June 30, 2015, MFPRSI reported payables to the defined benefit pension plan of $6,094 for legally required employer contributions and $4,060 for legally required employee contributions which had been withheld from employee wages but not yet remitted to IPERS

Table 16. Sensitivity of MFPRSI's Proportionate Share of IPERS' Net Pension Liability to Changes in the Discounted Rate

The following presents MFPRSI's proportionate share of IPERS' net pension liability calculated using the discount rate of 7.50%, as well as what MFPRSI's proportionate share of IPERS' net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.5%) than the current rate.

	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
• MFPRSI's Proportionate share of IPERS' Net Pension Liability	$1,107,722	$632,688	$231,724

Required Supplementary Information

Schedule of Changes in MFPRSI's Net Pension Liability
Last 5 Fiscal Years

Total Pension Liability	2016	2015	2014	2013	2012
• Service Cost	$51,366,130	$49,893,939	$48,020,046	$47,487,380	$45,660,053
• Interest	205,836,959	196,289,405	187,172,397	185,532,855	177,678,499
• Differences Between Expected and Actual Experience	7,643,609	15,374,059	-1,248,941	-22,020,082	14,628,549
• Changes of Assumptions	-10,467,574	17,508,411	32,616,664	-49,002,711	0
• Benefit Payments, Including Refunds	-156,566,482	-150,026,306	-143,833,568-	-137,617,880	-132,611,997
• Net Change in Total Pension Liability	97,812,642	129,039,508	122,726,598	24,379,562	105,355,104
• Total Pension Liability - Beginning	2,769,994,684	2,640,955,176	2,518,228,578	2,493,849,016	2,388,493,912
• Total Pension Liability - Ending	2,867,807,326	2,769,994,684	2,640,955,176	2,518,228,578	2,493,849,016
Plan Fiduciary Net Position					
• Contributions - Employer	75,254,727	79,748,943	76,917,460	65,327,766	62,661,684
• Contributions - Member	25,455,597	24,622,310	24,054,541	23,358,844	23,419,864
• Net Investment Income	164,100	69,833,569	358,680,682	229,592,075	4,057,940
• Benefit Payments, Including Refunds	-156,566,482	-150,026,306	-143,833,568	-137,617,880	-132,611,977
• Administrative Expense	-1,728,951	-1,680,944	-1,553,740	-1,523,477	-1,606,072
• Other	-212,954	-774,140	-75,070	-99,223	-98,573
• Net Change in Plan Fiduciary Net Position	-57,633,963	21,723,432	314,190,305	179,038,105	-44,177,154
• Plan Fiduciary Net Position - Beginning	2,300,180,355	2,278,456,923	1,964,266,618	1,785,228,513	1,829,405,667
• Plan Fiduciary Net Position - Ending	$2,242,546,392	$2,300,180,355	$2,278,456,923	$1,964,266,618	$1,785,228,513
System's Net Pension Liability (Asset) - Ending	$625,260,934	$469,814,329	$362,498,253	$553,961,960	$708,620,503

GASB Statement 68 requires ten years of information to be presented in this table; however, until a full ten-year trend is compiled, MFPRSI will present information for those years with information available.

See Notes to Required Supplementary Information.

Schedule of MFPRSI's Net Pension Liability
Last 5 Fiscal Years

	2016	2015	2014	2013	2012
• Total Pension Liability	$2,867,807,326	$2,769,994,684	$2,640,955,176	$2,518,228,578	$2,493,849,016
• Plan Fiduciary Net Position	2,242,546,392	2,300,180,355	2,278,456,923	1,964,266,618	1,785,228,513
• MFPRSI's Net Pension Liability (Asset)	692,260,934	469,814,329	362,498,253	553,961,960	708,620,503
• Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	78.20%	83.04%	86.27%	78.00%	71.59%
• Actuarial Projected Covered-Employee Payroll	$270,986,891	$262,260,060	$255,370,044	$250,107,112	$250,047,187
• MFPRSI's Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll	230.73%	179.14%	141.95%	221.49%	283.39%

GASB Statement 68 requires ten years of information to be presented in this table. However, until a full ten-year trend is compiled, MFPRSI will present information for those years with information available.

See Notes to Required Supplementary Information.

Schedule of MFPRSI's Contributions
Last 5 Fiscal Years

	2016	2015	2014	2013	2012
• Actuarially Determined Contribution	$75,254,727	$79,748,943	$76,917,460	$65,327,766	$61,911,684
• Contributions in Relation to the Actuarially Determined Contribution	75,254,727	79,748,943	76,917,460	65,327,766	61,911,684
• Contribution Deficiency (Excess)	$0	$0	$0	$0	$0
• Reported Covered-Employee Payroll	$270,986,891	$262,260,060	$255,370,044	$250,107,112	$250,047,187
• Contributions as a Percentage of Covered-Employee Payroll	27.77%	30.41%	30.12%	26.12%	24.76%

GASB Statement 68 requires ten years of information to be presented in this table. However, until a full ten-year trend is compiled, MFPRSI will present information for those years with information available.

See Notes to Required Supplementary Information.

Schedule of Investment Returns

Fiscal Year	Annual Money-Weighted Rate of Return, Net of Investment Expense
2016	0.02%
2015	3.02%
2014	17.97%
2013	13.10%
2012	-0.27%
2011	23.34%
2010	11.48%
2009	-21.80%
2008	-1.60%
2007	19.35%

See Notes to Required Supplementary Information.

Schedule of MFPRSI's Proportionate Share of the Net Pension Liability IPERS Last 2 Fiscal Years

	2015	2014
• MFPRSI's Proportion of the Net Pension Liability (Asset)	0.012726%	0.012759%
• MFPRSI's Proportionate Share of the Net Pension Liability (Asset)	$632,688	$516,371
• MFPRSI's Covered-Employee Payroll	$877,346	$851,989
• MFPRSI's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of its Covered-Employee Payroll	72.11%	60.61%
• Plan Fiduciary Net Position as a Percentage of the Total Net Pension Liability	84.19%	56.84%

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

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

See Notes to Required Supplementary Information.

Schedule of MFPRSI's Contributions
Last 3 Fiscal Years

	2016	2015	2014
• Actuarially Determined Contribution	$80,581	$78,347	$76,083
• Contributions in Relation to the Actuarially Determined Contribution	-80,581	-78,347	-76,083
• Contribution Deficiency (Excess)	$0	$0	$0
• Reported Covered-Employee Payroll	$902,363	$877,346	$851,989
• Contributions as a Percentage of Covered-Employee Payroll	8.93%	8.93%	8.93%

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

See Notes to Required Supplementary Information.

Methods and Assumptions Used in Calculations of Actuarial 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.

Notes to the Required Supplementary Information

• Valuation Date	July 1, 2016
• 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	4.50% to 15.11%
Post-Retirement Mortality Table:	
• Ordinary	RP 2000 Blue Collar Combined Healthy table with males set-back two years, females set-forward one year with no projection of future mortality improvement
• Disabled	RP 2000 Blue Collar Combined Healthy table set forward one year (male only rates),with no projection of future mortality improvement

* Aggregate cost method used July 1, 2003, - July 1, 2010.

Actuary

Actuarial Opinion
Actuarial Report Highlights

"Firefighters and police officers provide critical public safety functions to our citizens. It's important to provide retirement benefits that will be available for public safety employees during retirement or if they are unable to work. The Board and retirement system are committed to ensuring that these goals are met through the plan's management and investment strategies."

Michelle Weidner, Trustee
CPA, Chief Financial Officer
City of Waterloo

"MFPRSI is successful for everyone involved because we provide pension benefits, both service retirement and disability, for municipal police officers and firefighters within the state of Iowa. We accomplish our goals as a collective board that is a joint effort between city and member representatives. Together, as a group, we do what is best for the retirement system as fiduciaries and not as individuals."

June Anne Gaeta, Trustee
Active Firefighter
City of Muscatine

Actuarial Opinion

SilverStone GROUP

October 6, 2016

The Board of Trustees
MFPRSI
7155 Lake Drive, Suite 201
West Des Moines, IA 50266

Dear Board Members:

We are pleased to submit this actuarial report of the Municipal Fire & Police Retirement System of Iowa. The costs developed and presented in this report are based on asset values as of June 30, 2016, member census data as of July 1, 2016, and current retirement system provisions, all of which were supplied by the Municipal Fire & Police Retirement System of Iowa.

The purposes of the actuarial report are:

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 of Trustees in accordance with Iowa State Code Section 411.5.10-11. To the best of our knowledge, the information supplied in this report is complete and accurate and in our opinions, the assumptions are reasonably related to the experience of the retirement system and to reasonable expectations under the retirement system. The amounts presented in the following section have been determined appropriately according to the actuarial assumptions and methods stated herein, and fully and fairly disclose the actuarial position of the retirement system. The undersigned meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained in this section.

Sincerely,

Glen C. Gahan, FSA
Principal
Member of American Academy
of Actuaries
Enrolled Actuary No. 14-4875

Mike S. Ehmke, FSA
Principal
Member of American Academy
of Actuaries
Enrolled Actuary No. 14-5811

Actuarial Report Highlights

As of July 1,	2016	2015	2014
Cities Recommended Contribution	$72,838,723	$70,844,369	$73,941,905
Normal Contribution Rate	25.68%	25.92%	27.77%
Plan Assets			
• Market Value	2,242,546,392	2,300,180,355	2,278,456,923
• Actuarial Value	2,333,944,800	2,239,539,373	2,054,844,278
Prior Year Investment Return			
• Market Value	0.01%	3.07%	18.47%
• Actuarial Value	6.88%	11.43%	12.96%
Actuarial Accrued Liability	2,867,807,326	2,769,994,684	2,640,955,176
• Funded Ratio*	81.38%	80.85%	77.81%
Annual Participating Payroll	283,639,887	273,319,323	266,265,413
Annual Normal Cost	53,423,772	51,366,130	49,893,939
• Percent of Payroll	18.84%	18.79%	18.74%
Annual Pension Benefits			
• Service Retirement	82,955,208	79,525,488	75,127,236
• Disabled Retirement	45,967,620	44,024,136	42,097,668
• Vested Retirement	6,196,356	5,747,688	5,136,468
• Beneficiaries	17,580,996	17,506,836	16,613,052
• Total	152,700,180	146,804,148	138,974,424
Number of Members			
• Active	3,926	3,892	3,885
• Disabled	1,132	1,121	1,121
• Retirees and Beneficiaries	2,854	2,814	2,775
• Vested Terminated	341	328	321
• Total	8,253	8,155	8,102

*Based on the ratio of the Actuarial Value of Assets to Actuarial Accrued Liability

Actuarial Value of Assets
Year Ending June 30, 2016

1.	Actuarial Value of Assets at July 1, 2015	$2,239,539,373
2.	Contributions for 2015 Plan Year (Members, Cities, and State)	100,710,324
3.	Benefit Distributions and Refunds for 2015 Plan Year	-156,566,482
4.	Non-Investment Expenses	
a.	Administrative Expenses	-1,728,951
b.	Disability Expenses	-165,248
c.	Other Expenses	-49,449
d.	Total	-1,943,648
5.	Expected Return on Market Value of Assets for Year at 7.5%	170,385,218
6.	Asset Gains/(Losses) for Prior Five Plan Years	

	(I) Asset Gain or (Loss)	Years Recognized	Years Remaining	(II) Recognition Percentage	(I) x (II) Recognized Amount
a. 2015	$-170,219,375	1	4	20.00%	$-34,043,875
b. 2014	-99,921,132	2	3	20.00%	-19,984,226
c. 2013	213,044,387	3	2	20.00%	42,608,877
d. 2012	97,564,609	4	1	20.00%	19,512,922
e. 2011	-131,368,417	5	0	20.00%	-26,273,683
f. Total					$-18,179,985

7.	Asset Gains/(Losses) to be Recognized = 6(f)	-18,179,985
8.	Actuarial Value of Assets at July 1, 2016 = (1) + (2) + (3) + (4d) + (5) + (7)	2,333,944,800
9.	Market Value of Assets at July 1, 2016	2,242,546,392
10.	Ratio of Actuarial Value to Market Value at July 1, 2016 = (8) / (9)	104.08%

Unfunded Actuarial Accrued Liability. 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 MFPRSI 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 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 Actuarial Accrued Liability

As of July 1,	2016	2015
1. Actuarial Accrued Liability Before Changes		
a. Active Members		
Service Retirements / DROP	$975,784,101	$926,424,549
Ordinary Disability	20,879,197	20,208,715
Accidental Disability	134,091,184	128,987,635
Ordinary Death	5,518,165	5,369,614
Accidental Death	3,573,416	3,462,910
Withdrawal	21,154,806	21,200,739
Total Active	1,161,000,869	1,105,654,162
b. Inactive Members		
Members Receiving Benefits	1,678,663,673	1,610,490,711
Deferred Vested Terminations	38,337,081	36,157,699
Refund of Member Contributions Due	273,277	183,701
Total Inactive	1,717,274,031	1,646,832,111
c. Total Actuarial Accrued Liability	2,878,274,900	2,752,486,273
2. Actuarial Value of Plan Assets	2,333,944,800	2,239,539,373
3. Unfunded Actuarial Accrued Liability Before Changes = [Excess of (1) over (2)]	544,330,100	512,946,900
4. Change in Unfunded Actuarial Accrued Liability		
a. Change in System Provisions	0	0
b. Change in Actuarial Assumptions	-10,467,574	17,508,411
5. Unfunded Actuarial Accrued Liability After Changes	533,862,526	530,455,311

Annual Normal Cost*

	As of July 1,	2016	2015
1. Annual Normal Cost			
Benefit Normal Cost		$53,423,772	$51,366,130
Other		0	0
Total		53,423,772	51,366,130
2. Annual Participating Payroll		283,639,887	273,319,323
3. Annual Normal Cost as a Percentage of Participating Payroll = (1) / (2)		18.84%	18.79%

*The annual normal cost is the portion of MFPRSI's total costs assigned to the current year by the Actuarial Cost Method.

Annual Contributions

	As of July 1,	2016	2015
Preliminary Total Contribution			
1. Annual Normal Cost		$53,423,772	$51,366,130
2. Estimated Member Contributions		26,662,149	25,692,016
3. Unfunded Actuarial Accrued Liability Amortization Payment		46,066,886	45,164,944
4. Total (Cities plus State) Contributions = (1) – (2) + (3)		72,828,509	70,839,058
Cities' Contribution			
5. Preliminary Total Contribution = (4)		72,828,509	70,839,058
6. Estimated State Contribution		0	0
7. Preliminary Cities' Contribution = (5) – (6)		72,828,509	70,839,058
8. Covered Payroll		283,639,887	273,319,323
9. Cities' Contribution as a percent of payroll = (7) / (8)		25.68%	25.92%
10. Minimum Required Contribution Rate for Cities		17.00%	17.00%
11. Cities' Contribution = [Greater of (9) or (10)] x (8)		72,838,723	70,844,369

Unfunded Accrued Liability Payments. 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 established as of July 1, 2013.

- An increase in unfunded accrued liability if MFPRSI benefits are improved through amendments.

- An increase or decrease in the unfunded accrued liability associated with a change in actuarial assumptions.

- An increase or decrease in the unfunded accrued liability resulting from actuarial gains or losses due to retirement system experience more or less favorable than expected.

Unfunded Accrued Liability Payments

This chart documents the amortization bases established for MFPRSI and displays other values associated with determining the unfunded accrued liability payment.

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

Charge Bases

Initial Amortization Base	Initial Term-Years	Remaining Term on Valuation Date	Amortization Payment
$657,280,700	25	22	$54,851,249
32,616,664	25	23	2,721,919
17,508,411	25	24	1,461,108
21,275,521	25	25	1,775,480
		Total	60,809,756

Credit Bases

Initial Amortization Base	Initial Term-Years	Remaining Term on Valuation Date	Amortization Payment
$101,748,328	25	23	$8,491,080
64,447,420	25	24	5,378,252
10,467,521	25	25	873,538
		Total	14,742,870

Net Amortization Payment	$46,066,886

Actuarial Gain / Loss

Expected Unfunded Accrued Liability	
1. Expected Actuarial Accrued Liability	
Actuarial Accrued Liability on July 1, 2015	$2,769,994,684
Normal Cost	51,366,130
Benefit Distributions	-156,566,482
Interest on Above at 7.50% to June 30, 2016	205,836,959
Total	2,870,631,291
2. Expected Assets	
Actuarial Value of Assets on July 1, 2015	2,239,539,373
Contributions	100,710,324
Benefit Distributions and Non-Investment Expenses	-158,510,130
Interest on Above at 7.50% to June 30, 2016	165,837,145
Total	2,347,576,712
3. Expected Unfunded Actuarial Accrued Liability on June 30, 2016	523,054,579
Actual Unfunded Actuarial Accrued Liability	
1. Actuarial Accrued Liability Before Changes	2,878,274,900
2. Actuarial Value of Assets	2,333,944,800
3. Actual Unfunded Actuarial Accrued Liability on July 1, 2016 = (1) - (2)	544,330,100
Actuarial Gain or (Loss)	
1. Expected Unfunded Actuarial Accrued Liability	523,054,579
2. Actual Unfunded Actuarial Accrued Liability	544,330,100
3. Actuarial Gain or (Loss) for 2016 Fiscal Year = (1) - (2)	-21,275,521

Actuarial Present Value of Accrued Benefits

As of July 1,	2016	2015
1. Present Value of Vested Accrued Benefits		
a. Present Value of Vested Accrued Benefits for Active Members	$871,315,876	$829,725,368
b. Present Value of Benefits for Terminated Members	38,819,638	36,509,148
c. Present Value of Benefits for Service Retirees, Beneficiaries, and Disabled Retirees	1,660,602,787	1,621,932,989
Total	$2,570,738,301	$2,488,167,505
2. Present Value of Accrued Non-Vested Benefits	31,990,578	30,463,572
3. Present Value of All Accrued Benefits = (1) + (2)	$2,602,728,879	$2,518,631,077
4. Market Value of Assets	$2,242,546,392	$2,300,180,355
5. Ratio of Market Value of Assets to the Present Value of All Accrued Benefits = (4) / (3)	86.16%	91.33%
6. Ratio of Market Value of Assets to the Present Value of Vested Accrued Benefits = (4) / (1)	87.23%	92.44%

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 are displayed below.

Actuarial Present Value of Accrued Benefits on July 1, 2015	$2,518,631,077
Change in Present Value of Accrued Benefits from July 1, 2015, to July 1, 2016 due to:	
• Additional Benefits Accumulated	$69,787,714
• Interest Due to Passage of Time	183,132,229
• Benefits Paid	-156,566,482
• Change in Assumptions	-12,255,659
• Changes in MFPRSI Provisions	0
Actuarial Present Value of Accrued Benefits on July 1, 2016	$2,602,728,879

Benefits

Description of Benefit Plan

Optional Forms of Benefit Payment

DROP - Deferred Retirement Option Plan

"The benefits provided by MFPRSI allow firefighters and police officers to do their job knowing that their families are secure, should something happen to them, and for when they are no longer working or able to do so. MFPRSI allows Iowa cities to provide a competitive benefit package that is needed to recruit and retain competent, professional, and dedicated public safety employees. That dedication, professionalism, and expertise is what Iowans have come to know and expect from its city police officers and firefighters."

Dan Ritter, Trustee
Finance Director
City of Des Moines

"The Board has hired a distinctly qualified staff to run the day-to-day operations of the retirement system. The entire team is dedicated to providing an efficient, sound, and sustainable system which provides benefits for term-vested, disability, and service retirement members. By assembling a great administrative staff, MFPRSI is in a great position to continue its commitments to its members' retirement needs."

Eric J. Court, Trustee
Active Police Officer
Davenport Police Department

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 administration 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 fifty-five or older with a minimum of twenty-two years of service at termination of employment. The other forms of benefits, with the exception of vested retirement and DROP, 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 (permanently defined as a duration of one year or longer) while employed as a firefighter or police officer without regard to the age of the member.

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 thirty-six. The percentage multiplier varies by type of retirement and the length of the member's service. The benefit percentage for a service retirement is sixty-six percent with twenty-two years of service and eighty-two percent with thirty years of service.

Refunds. 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. If the member has at least four years of service, or if the member retires reaches age fifty-five and has fewer than twenty-two years of service, the member is entitled to a vested service retirement payable starting at age fifty-five or at termination. The benefit formula is a fraction of the pension the member would have received under a regular service retirement.

Optional Forms of Benefit Payment

Members retiring as 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 benefit. The basic benefit is a lifetime based on the member's average monthly compensation and number of years of service. Each option is an actuarially adjusted benefit based on the basic benefit.

Basic Benefit. The member receives a lifetime monthly benefit. Upon the member's death the surviving spouse is entitled to fifty percent of the member's gross benefit at the time of the member's death. If there is no surviving spouse, the benefit ends. Please visit www.mfprsi.org for more information about the basic benefit. The optional forms of payment 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.

Joint and Seventy-Five Percent Survivor Annuity Benefit. The named beneficiary receives seventy-five percent of the gross amount of the member's payment at the time of the member's death. The beneficiary receives this amount for his or her lifetime.

Upon the death of the beneficiary, the benefit ends. If the beneficiary dies before the member, the benefit ends with the death of the member.

Joint and Seventy-Five Percent Survivor Annuity with Pop-up. The designated beneficiary of the member will receive, for the duration of his or her lifetime, seventy-five percent of the member's retirement allowance at the time of the member's death.

If the designated beneficiary predeceases the member, the member's retirement allowance shall be increased to the amount of the service retirement allowance under the basic benefit and no survivor benefit is payable following the death of the member.

Joint and One Hundred Percent Survivor Annuity Benefit. The named beneficiary receives one hundred percent of the gross amount of the member's payment at the time of the member's death. The beneficiary receives this amount for the duration of his or her lifetime. Upon the death of the beneficiary, the benefit ends. If the beneficiary dies before the member, the benefit ends with the death of the member.

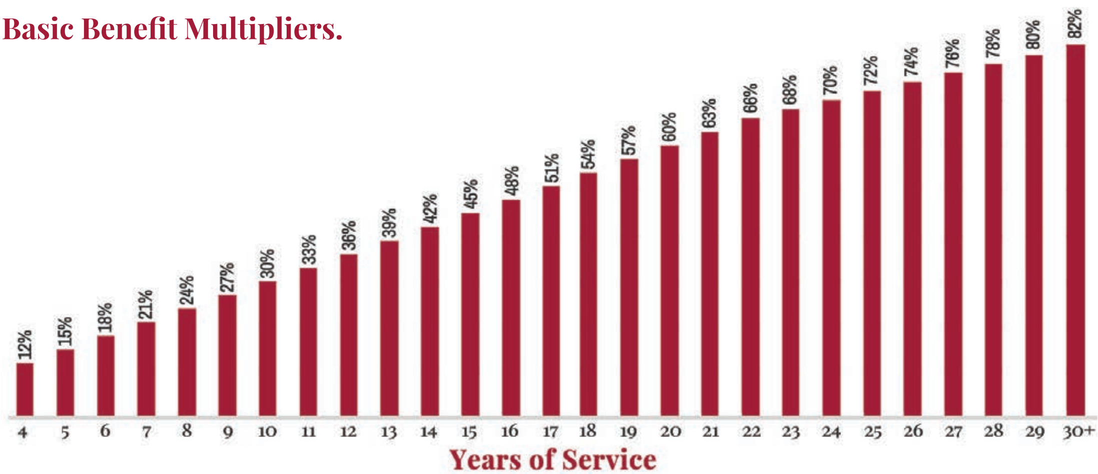
Joint and One Hundred Percent Survivor Annuity with Pop-up. Following the member's death, the designated beneficiary of the member will receive, for the duration of his or her lifetime, one hundred percent of the member's retirement allowance at the time of the member's death. If the designated beneficiary predeceases the member, the member's retirement allowance shall be increased to the amount of the service retirement allowance under the basic benefit and no survivor benefit is payable following the death of the member.

Single Life Annuity with Designated Lump Sum Benefit. Upon the death of the member, a predesignated lump sum is paid to the named beneficiary or beneficiaries and the benefit ends.

If the beneficiary dies before the member, the lump sum is paid to the member's estate.

Straight Life Annuity Benefit. Following the member's death, no further benefits are payable.

Basic Benefit Multipliers.



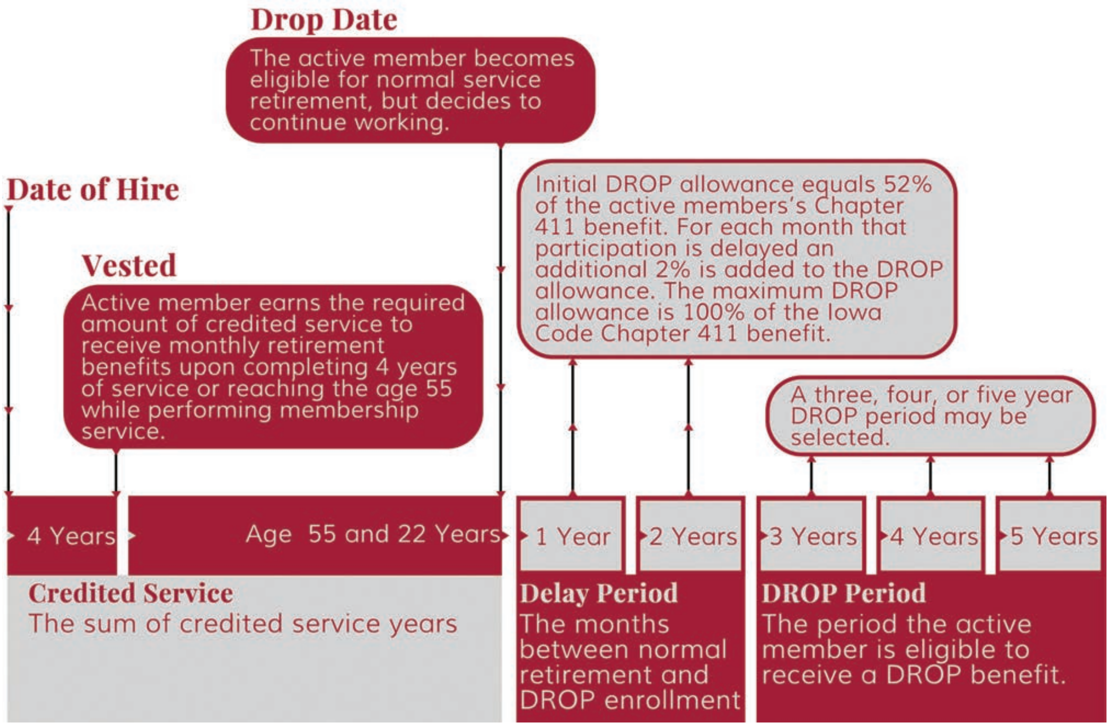
Active members become vested at the completion of 4 years of service and are eligible to earn 12% of earnable compensation at retirement. From year 5 to year 22, an additional 3% of earnable compensation per year may be earned. For each year of service beyond 22, an additional 2% may be earned. The maximum benefit is 82% of the average final compensation. Basic service retirement eligibility begins when reaching age 55 and 22 years of service.

DROP - Deferred Retirement Option Program

Active members, at least fifty-five years old, with twenty-two or more years of service have the option to participate in DROP which is an arrangement whereby a member who is otherwise eligible to retire and begin 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. The DROP benefit is equal to fifty-two percent of the member's retirement benefit at the member's earliest date eligible and one hundred percent if the member delays enrollment for twenty-four 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.

DROP Illustration.



Investments

Investment Consultant's Report

Performance

Overview

Allocation

Portfolio Managers

"The Board establishes, implements, and regularly monitors a program to invest plan assets methodically, balancing rates of return with risk and volatility. We do this to meet both the current and long-term funding needs of the retirement system. In order to meet these goals MFPRSI has diversified its investments across multiple asset classes with further diversification within the classes. This helps mitigate both market risk and concentration risk within various markets."

Duane Pitcher, Trustee
Director of Finance
City of Ames

Investment Consultant's Report

October 6, 2016

The Board of Trustees
MFPRSI
7155 Lake Drive, Suite 201
West Des Moines, IA 50266

Dear Board Members,

As of June 30, 2016, MFPRSI's aggregate portfolio totaled $2.25 billion after earning a +0.2% investment return, net of fees, for the fiscal year. For the period of July 1, 2015, to June 30, 2016, global investment market returns were subdued compared to previous years. The largest market movement of the year happened in the third quarter of 2015 when global equities experienced their worst quarterly performance (MSCI ACWI IMI, -9.6%) in four years. Major drivers during this time included concerns over slowing economic growth, specifically in China, and uncertainty surrounding future monetary policy actions by the U.S. Federal Reserve. After the initial sharp draw-down, global stocks experienced a positive return throughout the remainder of the year (ACWI IMI: 4Q15 +3.5%; 1Q16 +0.3%; 2Q16 +1.1%), but it was not high enough to reverse the initial loss (ACWI IMI -3.9% for fiscal year).

Low global growth and continued low inflation expectations not only increased equity market volatility throughout the year, but they also kept investor demand high for the stability and income of bonds, particularly U.S. government and investment grade securities. The high level of bond purchases drove interest rates lower for yet another year. The yield on the U.S. 10 Year Treasury Bond started the fiscal year at 2.4%, and the yield fell to 1.5% on June 30, 2016. On the positive side, this action was a boon for domestic bond prices for the year. The Barclays U.S. Universal Index returned 5.8%, out-pacing even domestic equities (Russell 3000 +2.1%), over the fiscal year.

In this environment, a hypothetical portfolio of 60% global stocks and 40% domestic bonds would have earned a +0.9% return for the year, out-pacing MFPRSI's return by +0.7%. In this period of high investor uncertainty, domestic bonds proved to be one of the best performers of any available asset class, and thus a 40% allocation helped this hypothetical portfolio relative to most portfolios.

MFPRSI's investment portfolio is significantly more diversified than a traditional 60/40 allocation. MFPRSI is invested in real estate, which was a strong contributor to performance for the year (NCREIF ODCE +11.8%). The retirement system is also invested in bonds issued in emerging market countries. These bonds had a positive return for the year (JPM GBI-EM +2.0%), however they did not have as high of a return as did domestic bonds.

MFPRSI has investments in U.S. companies responsible for transferring energy across the country called Master Limited Partnerships ("MLPs"). Due to the sell-off in oil over the second half of 2015, MLPs lost money for the fiscal year (S&P MLP Index -18.9%).

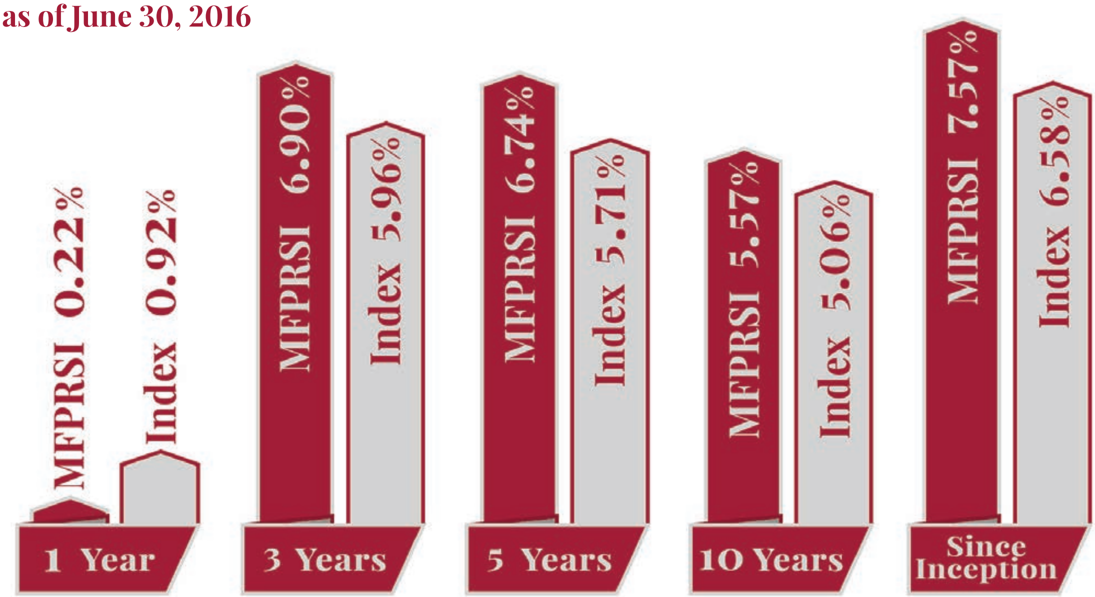
Finally, the retirement system has investments in private equity partnerships. These are equity investments in companies who do not trade on public stock exchanges. These returns are cash-flow based, with the largest amount of returns typically coming in at the end of the stated investment period. For MFPRSI's fiscal year, private equity had a positive return (4.8%), however even this did not keep up with domestic bonds for the year.

Overall, June 30, 2015, through June 30, 2016, was a period where diversification away from U.S. stocks and bonds was a detriment to investors. This is an instance that can, and sometimes does, happen in a short period of time; however, over the long-term diversification of investments has proven to be the prudent and correct choice for a portfolio. Over the trailing three-year period, the retirement system's portfolio outperforms the hypothetical 60/40 portfolio by +1.0% per year. This is the same outperformance MFPRSI has had relative to this hypothetical portfolio, net of fees, per year since the retirement system's inception.

Sincerely,

Phineas Troy, CFA
Vice President, Consulting
Summit Strategies Group

Performance
as of June 30, 2016



	1 Year	3 Years	5 Years	10 Years	Since Inception*
Total Fund	0.22%	6.90%	6.74%	5.57%	7.57%
Policy Index**	0.92%	5.96%	5.71%	5.06%	6.58%
Excess Return	-0.70%	0.94%	1.03%	0.51%	0.99%
Target Actuarial Rate	7.50%	7.50%	7.50%	7.50%	7.50%

*Inception Date: January 1, 1992
**Policy Index = 60% MSCI ACWI IMI Index; 40% BarCap Aggregate Index.
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' investment portfolio the Board has adopted an *Investment Policy & Objectives* statement. 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 & Objectives* statement 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% 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 *Investment Policy & Objectives* 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 style. The success of any individual investment style tends to be cyclical and diversification is one tool to help reduce overexposure to any one asset class. For example, growth equities may outperform value equities over several consecutive time periods and then reverse over several consecutive time periods. Diversification limits exposure to each asset class in the example during time periods when they are out of favor with investors.

Ultimately, investment markets are cyclical and no one investment style or asset class outperforms over the long-term. Investment styles come in and out of fashion and using this logic, MFPRSI utilizes multiple approaches to investing. Performance at the total investment fund level, therefore, avoids dependency on any one style of investment.

Overall, diversification of assets within the investment portfolio enhances the potential to achieve MFPRSI's long-term goal of meeting a 7.5% annualized actuarial assumed rate of return.

Risk. Investing in any asset involves the possibility that the asset's actual return will differentiate from its expected return. Investment risk can be defined as when the actual return of an asset is less than what was expected. In other words, it is the measure of the level of uncertainty of achieving the returns as expected by the investor.

Risk is a vital element when determining the forecast of an investment. Typically, most investors shy away from risk as no investor truly wants to lose money on an investment. This is prudent behavior as being leery of risky assets can help avoid losing money. However, the rule of thumb towards risk is that the higher the risk, the better the return.

MFPRSI and its investment consultant, Summit Strategies, carefully considers investment risk when implementing its investment strategy. The investment portfolio is tasked with achieving a 7.5% actuarially assumed rate of return and in order to do so, the investment portfolio must take on risk.

Simply investing in low-risk or no-risk assets (e.g., certificates of deposit whose 1-year interest rates are typically in the low 1% range) would make it difficult for the investment portfolio to achieve the 7.5% 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, in the retirement system's case, is the average amount an investment's returns differ from its return means. The lower the standard deviation, the closer an investment's actual returns are to its average returns; meanwhile, the higher the standard deviation, the farther its actual returns are from its average returns.

In its most recent measurement in 2015 Summit Strategies reported the retirement system's standard deviation for its investment portfolio at 12.2%. 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 to provide annual returns of 7.5%.

MFPRSI and Summit Strategies 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 our commitment to being a sound retirement system.

Allocation Terminology. Core Investments are comprised of a diversified mix of global public equity and debt portfolios. The aggregate Core Investments' 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.

Strategic Investments are 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. Individual managers in the Strategic Investments 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.

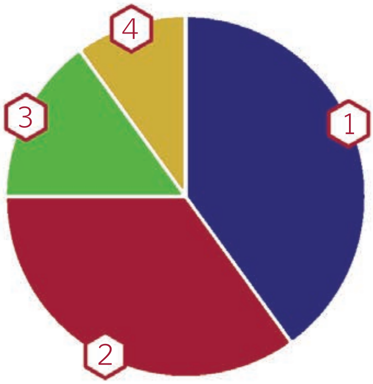
The indices for Core and Strategic Investments are determined and regularly reviewed by the Board in an attempt to meet or exceed MFPRSI's actuarial assumed rate of return over time.

Private Markets refer to various investment managers who invest in private market opportunities, including but not limited to venture, buyout, opportunistic, secondary market, 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.

Real Assets consist primarily of real estate and may also include, but is not limited to other real assets, such as infrastructure, commodities, or energy related investments. Real assets may be domestic or international, and may be either liquid, marketable investments or private market investments.

Allocation

Total Fund Asset Allocation

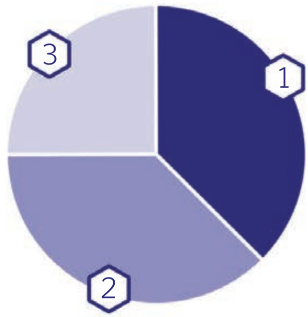


	Asset Class	Portfolio Target %
1	Core Investments	40%
2	Strategic Investments	35%
3	Private Markets	15%
4	Real Assets	10%
	Total	100%
	Total plan 10-year performance expectation*	7.6%
	Standard deviation (risk projection)*	12.2%

*Performance expectation and risk projection based upon Summit Strategies' 2015 assumptions.

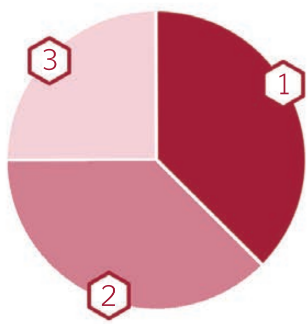
	Asset Class	Portfolio Target %
1	U.S. Equity	37.5%
2	Non-U.S. Equity	37.5%
3	Global Fixed Income	25%
	Total	100%

Core Investments Asset Allocation



	Asset Class	Portfolio Target %
1	U.S. Equity	37.5%
2	Non-U.S. Equity	37.5%
3	Global Fixed Income	25%
	Total	100%

Strategic Investments Asset Allocation



Portfolio Managers

Firm	Portfolio	Allocation
Aberdeen Asset Management	Total Return Bond Plus Strategy	Core Investments
Adams Street Partners	2003 Vintage	Private Markets
Adams Street Partners	2006 Vintage	Private Markets
Adams Street Partners	2014 Global	Private Markets
Adams Street Partners	Co-Investment 3	Private Markets
Ares Partners	Fund 5	Real Assets
Baillie Gifford Overseas Ltd.	International Choice Fund	Core Investments
Contrarian Capital Management	Distressed Real Estate Fund 2	Real Assets
Contrarian Capital Management	Distressed Real Estate 3	Real Assets
Dimensional Fund Advisors	U.S. Small Cap Subtrust	Core Investments
Dodge & Cox	Fixed Income Separate Account	Core Investments
GMO	Global Tactical Asset Allocation	Strategic Investments
Harbourvest Partners	Buyout 7	Private Markets
Harbourvest Partners	Buyout 8	Private Markets
Harbourvest Partners	Venture 7	Private Markets
Harbourvest Partners	Venture 8	Private Markets
Harbourvest Partners	Venture 9	Private Markets
Harbourvest Partners	HIPEP 6	Private Markets
Harbourvest Partners	Dover Street 8	Private Markets
Harvest Group Advisors	MLP Separate Account	Core Investments
Hines Interests	US Office Value Added Fund 2	Real Assets
Intech Investment Management	U.S. Broad Enhanced Plus	Core Investments
JPMorgan Asset Management	Large Cap Core Plus 130/30	Core Investments
JPMorgan Asset Management	Strategic Property Fund	Real Assets
JPMorgan Asset Management	Global Tactical Asset Allocation	Strategic Investments
Long Wharf Real Estate Partners	Fidelity Real Estate Growth Fund 3	Real Assets
Long Wharf Real Estate Partners	Long Wharf Real Estate Partners 5	Real Assets
Mondrian Investment Partners	ACWI Ex-U.S. Equity Fund	Core Investments
Neuberger Berman Group LLC	Crossroads 2010 Fund	Private Markets
Neuberger Berman Group LLC	Crossroads XX Fund	Private Markets
Pictet Asset Management	Emerging Local Currency Debt Fund	Core Investments
Principal Global Investors	Enhanced Property Fund	Real Assets
Principal Global Investors	CMBS Fund	Real Assets
Tortoise Capital Advisors	MLP Separate Account	Core Investments
Schroders Investment Mgmt.	Diversified Growth	Strategic Investments
Sentinel Real Estate Corporation	Sentinel Realty Partners Fund VI	Real Assets
Siguler Guff & Company	Distressed Opportunities Fund 2	Private Markets
Siguler Guff & Company	Distressed Opportunities Fund 3	Private Markets
Siguler Guff & Company	BRIC Fund 2	Private Markets
Siguler Guff & Company	Hawkeye - Separate Account	Private Markets
State Street Global Advisors	ACWI IMI Index	Core Investments
TA Associates Realty	Realty Associates Fund VIII	Real Assets

Statistics

Methods
Membership Data
Contribution Rate
Investment Graphs

"MFPRSI is successful because of the strong disciplined board and staff that knows the importance of protecting and managing the retirement funds of our police officers and firefighters in an efficient, effective, and sustainable manner. We spend a great deal of time making sure the plan is competitive and sound to ensure we are attracting and retaining quality police officers and firefighters while providing for them and their families when they are no longer working or able to do so."

P. Kay Cmelik, Trustee
City Clerk / Finance Officer
City of Grinnell

"It is important to me to have a role as a Trustee to ensure every member of the retirement system is provided a lifetime source of income during their retirement years. This includes disability benefits and, in the event of a death, the member's surviving spouse and children receive their benefits."

Frank Guihan, Trustee
Retired Firefighter
Burlington Fire Department

Methods

The Statistics section provides financial, operating, and investment trend information in order to render the details necessary to better understand MFPRSI's financial condition.

Data for the Statistics section are derived from information and data provided by MFPRSI's actuarial consultant, SilverStone Group, and investment consultant, Summit Strategies. Additional data are derived from financial statements and internal sources as prepared by MFPRSI.

In order to better understand the following statistical information, the following list of terms and their definitions are provided:

"Active members" is defined as those members of MFPRSI with wages reported for the last quarter of each fiscal year.

"Non-active members" is defined as those members of MFPRSI who are retired from service as a firefighter or police officer from a participating city and receiving benefit payments as of the final month of each fiscal year.

"Retired members" and **"beneficiaries"** are those members of the retirement system who were paid benefits in the final month of each fiscal year.

"Accidental disability" and **"ordinary disability"** are used to describe members who either received an accidental disability payment or an ordinary disability payment, respectively.

"Terminated (or 'term') vested" is used to describe former members of MFPRSI who have left the retirement system after achieving vested status (i.e., four years of employment as a firefighter or a police officer with a participating city employer), but before reaching eligibility for a service retirement as of the final month of each fiscal year.

Retirement System Profile

Active Members	as of July 1,	2016	YoY Increase/ Decrease
Number		3,926	34
Average Age		41.2	0.1
Average Past Service		13.8	0.0
Total Annual Compensation		$283,639,887	$10,320,564
Average Annual Compensation		$72,247	$2,021
Non-Active Members with Deferred Benefits			
Number*		341	13
Average Age		43.9	-0.2
Total Annual Benefits		$5,827,692	$368,244
Average Annual Benefit		$17,090	$445
Members and Beneficiaries in Pay Status			
Number		3,986	51
Average Age (Excluding Children)		69.5	0.2
Total Annual Benefits		$152,700,180	$5,896,032
Average Annual Benefit		$38,309	$1,002

*Excludes 31 and 42 terminated non-vested members who had not yet received a refund of contributions as of 2015 and 2016, respectively.

Participating Cities.

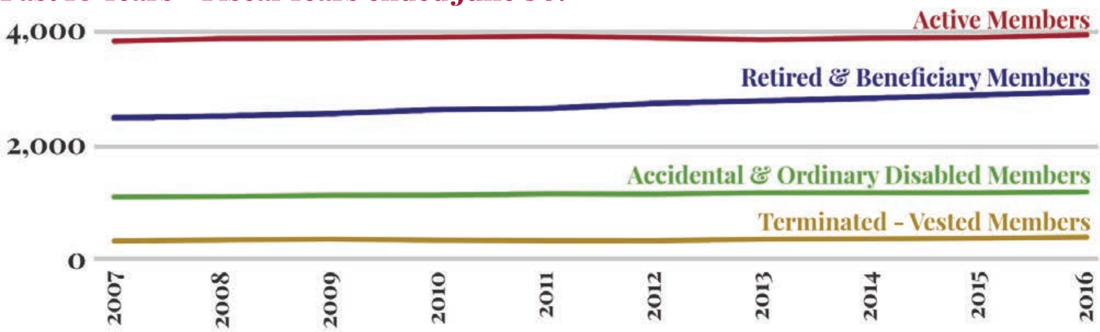
Ames	Ankeny	Bettendorf
Boone	Burlington	Camanche
Carroll*	Cedar Falls	Cedar Rapids
Centerville	Charles City	Clinton
Clive*	Council Bluffs	Creston
Davenport	Decorah	Des Moines
DeWitt*	Dubuque	Estherville*
Evansdale*	Fairfield	Fort Dodge
Fort Madison	Grinnell	Indianola*
Iowa City	Keokuk	Knoxville*
Le Mars*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

*Police department only.

Membership by Type
Past 10 Years - Fiscal Years ended June 30

	Active Members	Accidental & Ordinary Disabled Members	Retirees & Beneficiaries	Terminated-Vested Members
2007	3,847	1,068	2,532	293
2008	3,881	1,073	2,552	306
2009	3,886	1,088	2,582	315
2010	3,895	1,090	2,631	302
2011	3,908	1,108	2,645	298
2012	3,888	1,105	2,711	296
2013	3,866	1,121	2,741	315
2014	3,885	1,121	2,775	321
2015	3,892	1,121	2,814	328
2016	3,926	1,132	2,854	341

Membership by Type Graph.
Past 10 Years - Fiscal Years ended June 30.



Membership Data

Service Benefits

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	142	$9,021,336	$63,531
60-64	339	20,143,572	59,421
65-69	387	21,692,604	56,053
70-74	274	13,810,344	50,403
75-79	215	9,416,760	43,799
80-84	134	4,870,140	36,344
85 and over	122	4,000,452	32,791
Total	1,613	$82,955,208	$51,429

Accidental Disability Benefits

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	21	$800,808	$38,134
40-44	19	702,804	36,990
45-49	45	1,769,340	39,319
50-54	50	2,107,776	42,156
55-59	112	5,011,800	44,748
60-64	176	8,088,468	45,957
65-69	178	7,752,240	43,552
70-74	156	6,366,648	40,812
75-79	94	3,587,652	38,167
80-84	58	2,028,012	34,966
85 and over	35	1,209,708	34,563
Total	944	$39,425,256	$41,764

Ordinary Disability Benefits

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	10	$250,296	$25,030
40-44	12	360,048	30,004
45-49	13	406,164	31,243
50-54	17	533,316	31,372
55-59	21	838,788	39,942
60-64	35	1,387,488	39,643
65-69	35	1,269,564	36,273
70-74	25	877,632	35,105
75-79	12	390,780	32,565
80 and over	8	228,288	28,536
Total	188	$6,542,364	$34,800

Beneficiaries (Spouse) Benefits

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 49	27	691,896	22,626
50-54	15	347,736	23,182
55-59	30	618,036	20,601
60-64	67	1,649,640	24,621
65-69	90	2,134,812	23,720
70-74	105	2,149,548	20,472
75-79	151	3,070,260	20,333
80-84	139	2,593,848	18,661
85 and over	224	4,051,212	18,086
Total	848	$17,306,988	$20,409

Beneficiaries (Children) Benefits

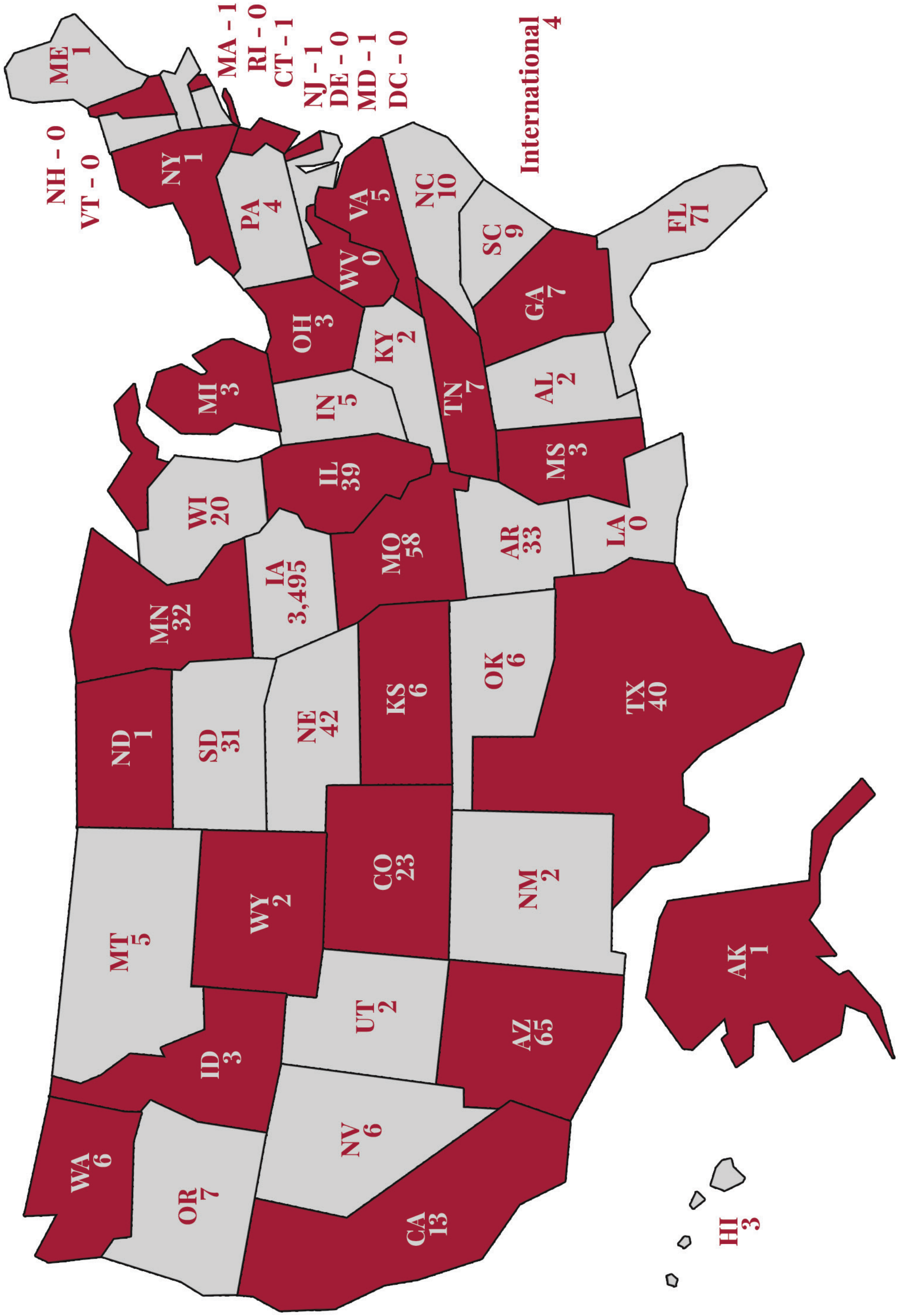
Age	Number	Total Annual Benefit	Average Annual Benefit
11 and under	10	$46,236	$4,624
12-17	14	81,000	5,786
18 and over	24	146,772	6,116
Total	48	$274,008	$5,709

Vested Benefits

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	89	$1,763,904	$19,819
60-64	95	2,078,352	21,877
65-69	80	1,373,124	17,164
70-74	40	605,736	15,143
75 and over	41	375,240	9,152
Total	345	$6,196,356	$17,960

Terminated Vested Benefits

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	103	$1,159,176	$11,254
40-44	62	1,026,108	16,550
45-49	76	1,450,416	19,084
50 and over	100	2,191,992	21,920
Total	341	$5,827,692	$17,090



Number of Benefit Payments by State.
as of June 30, 2016.

Contribution Rate

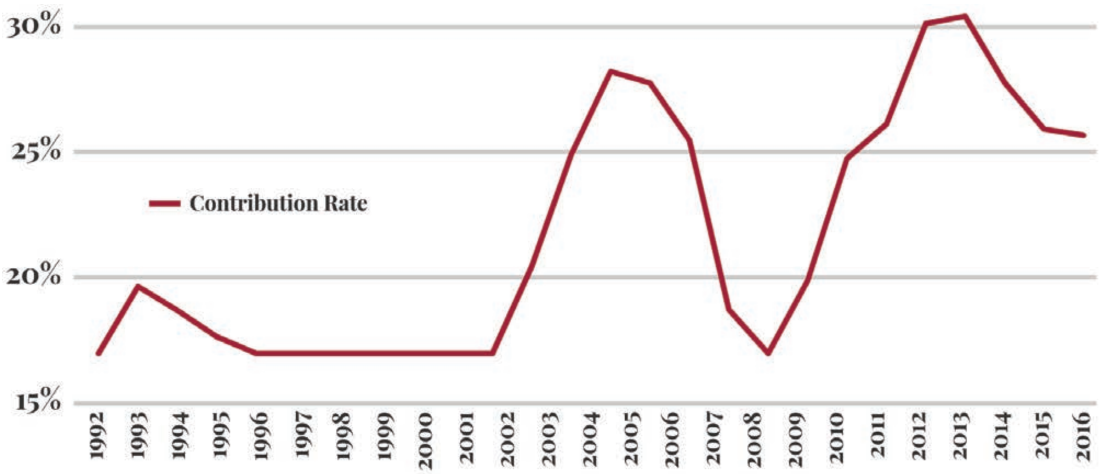
Contribution Rate History.

Fiscal Year beginning July 1	Rate	Fiscal Year beginning July 1	Rate
1992*	17.00%	1993	19.66%
1994	18.71%	1995	17.66%
1996#	17.00%	1997#	17.00%
1998#	17.00%	1999#	17.00%
2000#	17.00%	2001#	17.00%
2002#	17.00%	2003	20.48%
2004	24.92%	2005	28.21%
2006	27.75%	2007	25.48%
2008	18.75%	2009#	17.00%
2010	19.90%	2011	24.76%
2012	26.12%	2013	30.12%
2014	30.41%	2015	27.77%
2016	25.92%	2017	25.68%

*MFPRSI's first fiscal year started January 1, 1992. In all subsequent years the fiscal year began July 1.

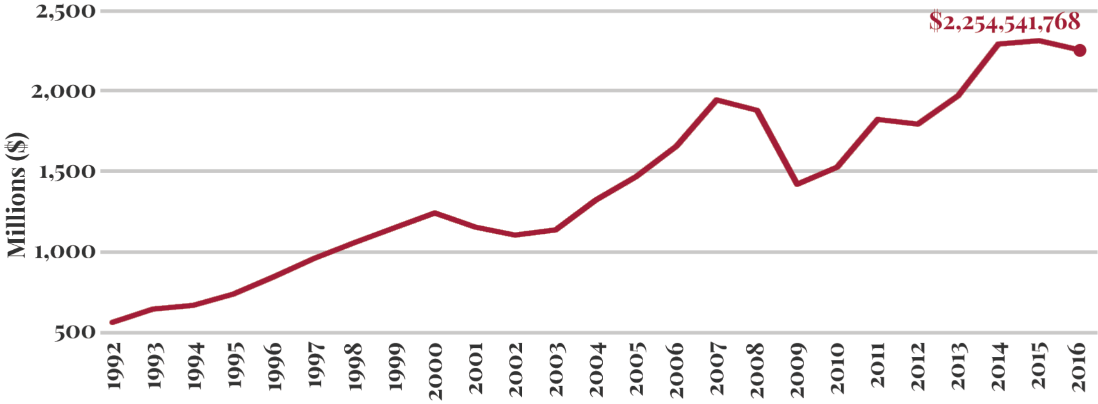
#Rate certified at a minimum of 17.00%.

Contribution Rate History Graph.
Fiscal Year Beginning July 1.

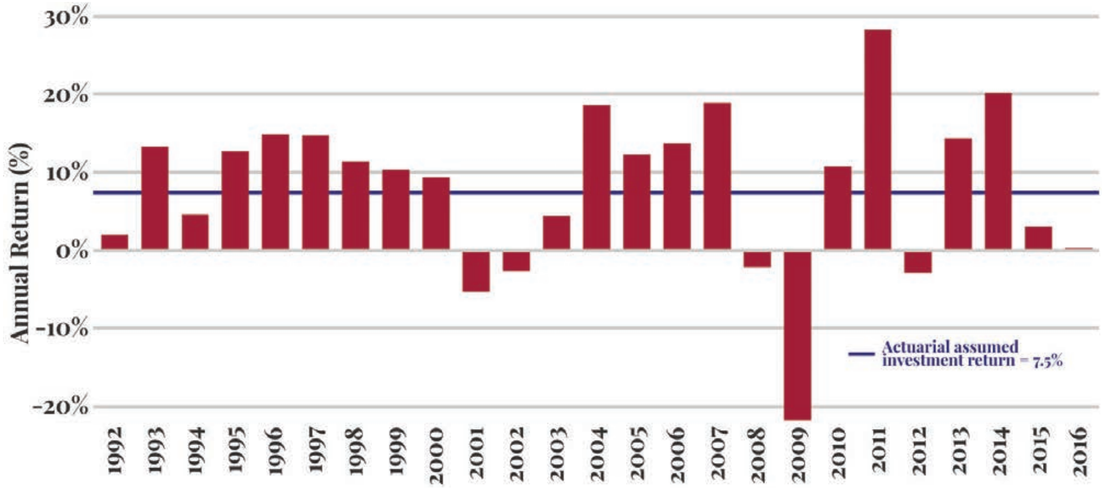


Investment Graphs

Growth of Net Investment Portfolio Assets.
Fiscal Years ended June 30.



Investment Returns.
Fiscal Years ended June 30.



MFPRSI Annual Report Fiscal Year 2016 is prepared by MFPRSI staff using data gathered from various sources, including MFPRSI's actuarial services provider, SilverStone Group, and investment consultant, Summit Strategies Group.

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GET HAPPY!


2:00 AM
TO 6:00 AM