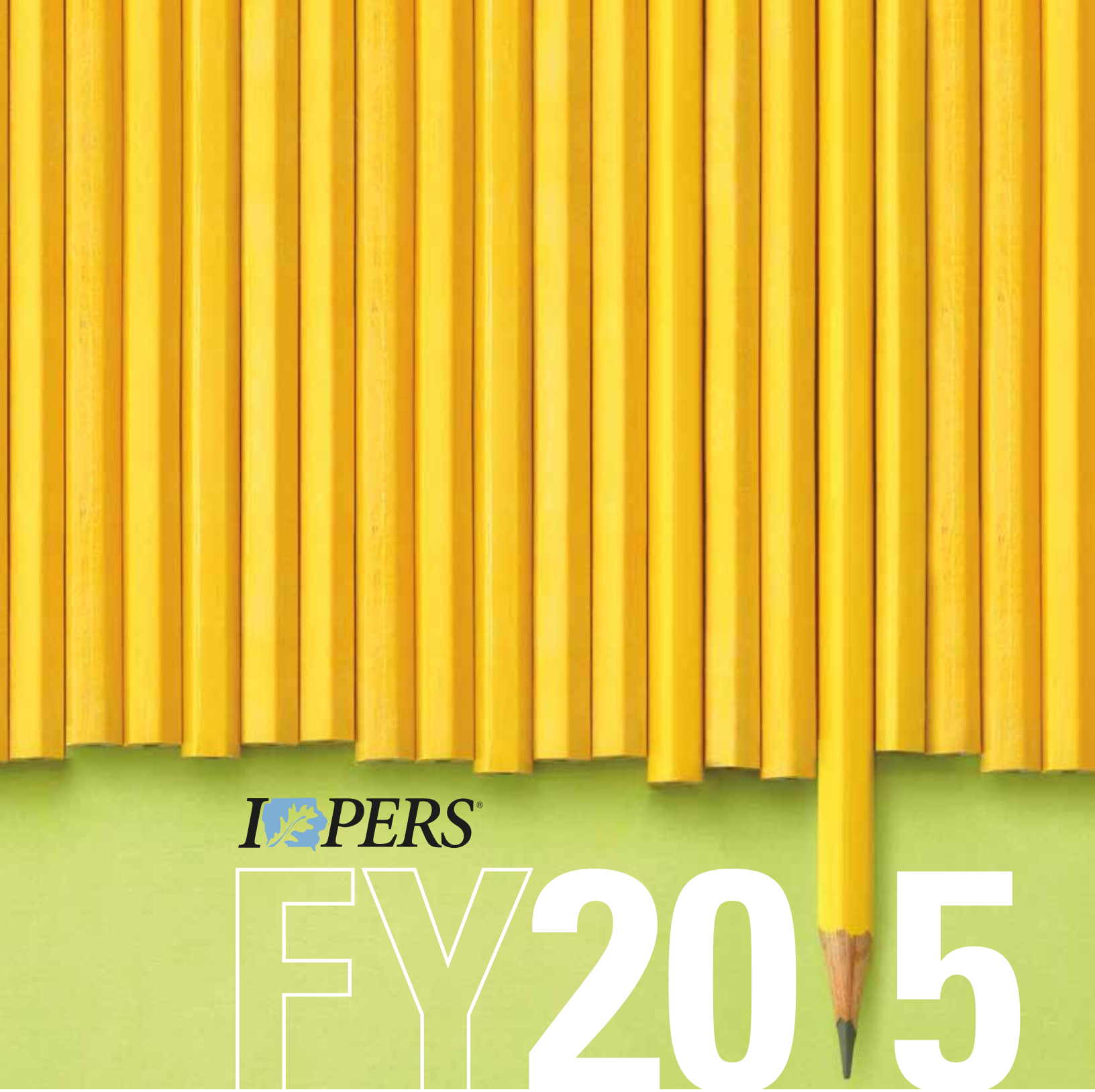

IPERS®

FY2015

COMPREHENSIVE ANNUAL FINANCIAL REPORT

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

A PENSION TRUST FUND OF THE STATE OF IOWA FOR THE FISCAL YEAR ENDED JUNE 30, 2015

FY2015 COMPREHENSIVE ANNUAL FINANCIAL REPORT

Iowa Public Employees' Retirement System

A PENSION TRUST FUND OF THE STATE OF IOWA FOR THE FISCAL YEAR ENDED JUNE 30, 2015

PREPARED BY IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
DONNA M. MUELLER, CHIEF EXECUTIVE OFFICER

FISCAL YEAR 2015 HIGHLIGHTS

Membership

Active Members	**167,367**
Inactive Members	**67,374**
Retired Members*	**111,368**
Total	**346,109**

Contributions

Employee	**$441,213,236**
Employer	**$656,911,160**
Service Purchases	**$17,475,633**

Distributions

Benefits Paid	**$1,744,601,010**
Refunds Paid	**$47,167,431**

Investments

Net Investment and Securities Lending Income	**$1,080,045,104**
Investment Rate of Return	**3.96%**

Financial

Total Pension Liability	**$33,370,318,731**
Fiduciary Net Position	**$28,429,834,829**
Net Pension Liability	**$4,940,483,902**
Ratio of Fiduciary Net Position to Total Pension Liability	**85.19%**

Funding

Ratio of Actuarial Assets to Actuarial Liabilities	**83.65%**

*Unless specifically noted, references to retirees throughout this report include beneficiaries.

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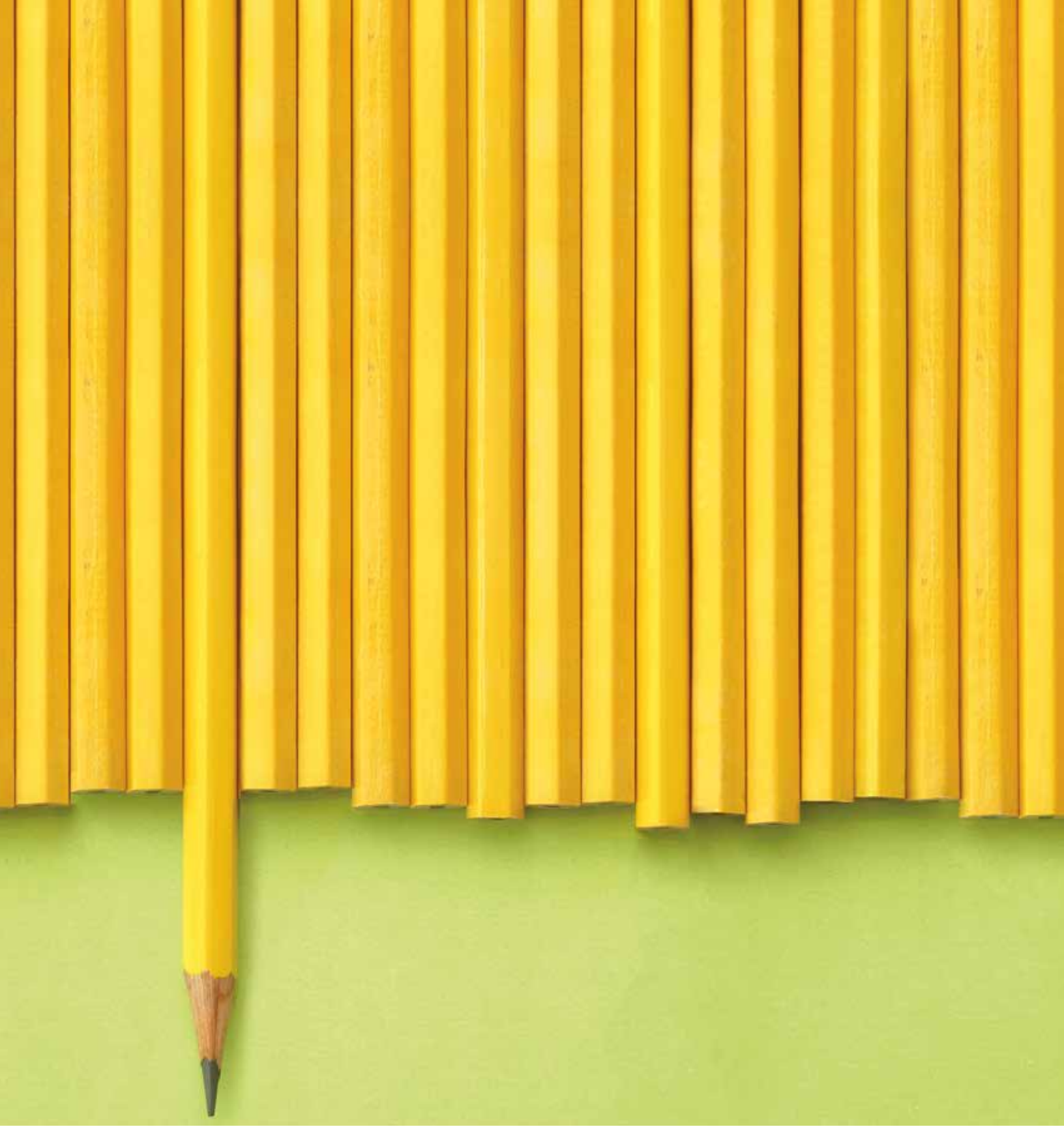

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ADMINISTRATION

INVESTMENT BOARD

BENEFITS ADVISORY COMMITTEE

PROFESSIONAL AND CONSULTING SERVICES

INTRODUCTION

Terry E. Branstad
GOVERNOR

Kim Reynolds
LT. GOVERNOR

IPERS®

Donna M. Mueller
CHIEF EXECUTIVE OFFICER

December 15, 2015

To the Governor and the General Assembly of the State of Iowa:

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the Iowa Public Employees' Retirement System (IPERS, System, or plan) for the fiscal year ended June 30, 2015 (FY2015). This report presents a thorough discussion of IPERS' activities and financial status.

This publication fulfills the requirements set forth in Iowa Code section 97B.4(4)(a). The preparation of this report and the financial statements are the result of the combined effort of the System's staff under the direction of the management and CEO, who are responsible for the contents of the report.

IPERS' objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements since the cost of internal control should not exceed the benefits obtained. To that end, IPERS' administration maintains an internal accounting control system. It ensures that transactions are executed as intended by the administration, assets are accounted for, and the records of transactions are sufficient to permit preparation of the financial statements. Financial statements must be consistent with generally accepted accounting principles (GAAP) for governmental accounting and reporting. GAAP are pronounced or adopted by the Governmental Accounting Standards Board (GASB).

The Auditor of State is required by the Iowa Code to conduct an annual audit of the financial statements. The audit has been completed in accordance with generally accepted auditing standards, State law, and *Government Auditing Standards*. The Auditor's report is contained in the Financial section.

The Financial section also contains Management's Discussion and Analysis. This is intended to satisfy the GASB requirement that the System provide a narrative introduction, overview, and analysis to accompany the basic financial statements. This letter of transmittal complements Management's Discussion and Analysis and should be read in conjunction with it.

Membership numbers in the Actuarial section differ from those in other sections because the Actuarial section reflects projections of future costs. Therefore, member deaths that occurred during the last month of the fiscal year are not counted in the membership numbers of that section. However, because there is a financial obligation for some of these members, they are included in the membership numbers in the remainder of this report.

System Overview

IPERS was established by the Iowa Legislature on July 4, 1953, to replace the Iowa Old-Age and Survivors' Insurance System (IOASI). At that time, the Legislature also voted to include Iowa's public employees in the federal Social Security plan retroactive to 1951.

Iowa Code chapter 97B was the chapter created to govern IPERS and the IPERS Trust Fund. The Code establishes IPERS as an independent agency within the Executive Branch of State Government. The Governor and the Iowa Legislature, as creators of the plan, are the plan sponsors.

Initially, IPERS was a money purchase system that calculated benefits based on contributions. Today, IPERS is a contributory defined benefit plan with benefits based on a formula using a member's years of

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
7401 Register Drive P.O. Box 9117 Des Moines, IA 50306-9117 1-800-622-3849 *www.ipers.org*
PHONE 515-281-0020 BENEFITS FAX 515-281-0053 LEGAL & INVESTMENTS FAX 515-281-0045 E-MAIL info@ipers.org

service, average salary, and a multiplier. IPERS is diligent in maintaining its tax qualification under the Internal Revenue Code. The most recent IRS determination letter of qualification is dated July 29, 2014. IPERS benefits are designed to provide an adequate retirement income when combined with Social Security benefits and individual savings.

Most public employees in Iowa become members of IPERS when they start employment with a covered employer, which includes schools, state agencies, counties, cities, townships, and other public entities. Public employees not covered by IPERS are judges, peace officers in the Iowa Department of Public Safety, police and fire personnel covered by the Municipal Fire and Police Retirement System of Iowa (MFPRSI), and university and community college personnel who elect other coverage.

As a multiple-employer, cost-sharing pension plan with 346,109 members, IPERS is the largest public pension system in Iowa. The IPERS Trust Fund paid $1.542 billion in benefits to Iowans in FY2015. One in ten Iowans is an IPERS member.

Membership Services

Members and employers have access to information online, over the phone, and in print. The IPERS website contains news and announcements, publications, forms, and a benefit estimator tool.

Members have online access to their benefits statements, which are updated quarterly and mailed each spring. IPERS publishes easy-to-read booklets to explain benefits at various career stages as well as a comprehensive Member Handbook. Annually, IPERS mails members information about benefits, plan changes, finances, and performance.

Fiscal Year 2015	
Preretirement counseling sessions	10,500
Phone inquiries	93,540
E-mail replies	7,372
Benefit estimates prepared	41,743
Service purchase cost quotes prepared	2,663
Service purchases made	591

IPERS' 1,845 employers receive training and technical assistance to encourage voluntary compliance with IPERS' requirements. Employers also receive newsletters and a handbook of procedures and reporting requirements. IPERS' team of compliance officers conducts frequent employer audits.

Investments

IPERS manages a large and diversified investment portfolio using external investment advisers. IPERS' long-term horizon allows it to maximize investment returns and lower transaction costs on behalf of its members in a way an individual investor cannot.

A staff of professional investment officers oversees IPERS' investments. These investment officers, most of whom have earned the respected Chartered Financial Analyst (CFA) or Certified Public Accountant (CPA) designation, oversee all asset classes in which IPERS invests. IPERS' investment officers and investment consultant make recommendations concerning asset allocation, investment policies, investment strategies, and contractor selection to the IPERS Investment Board, which makes the final decisions.

IPERS' investment staff also manages the competitive selection process, negotiates detailed service contracts, and monitors contractors' compliance with their IPERS service agreements. The investment management firms select individual investments in the IPERS portfolio. See page 45 of the Financial section for information on expenses related to these investment management firms and page 60 of the Investments section for a Schedule of Brokerage Commissions Paid.

Financial Highlights

Total Net Position

Total net position restricted for pensions increased from $28.039 billion on June 30, 2014, to $28.430 billion on June 30, 2015. These assets consist of capital assets owned by IPERS and investment portfolio assets. An overview and analysis of IPERS' financial activities for FY2015 is in Management's Discussion and Analysis, which begins on page 18 in the Financial section of this report.

In FY2015, employee and employer contributions, including service purchases, totaled $1.116 billion, while total member benefits equaled $1.792 billion (monthly benefits, lump-sum retirement benefits, death benefits, refunds, and dividend payments). The resulting $676 million contribution shortfall was funded with earnings and sales proceeds from the investment portfolio.

Financial Reporting Changes

IPERS implemented GASB Statement No. 67 (GASB 67), *Financial Reporting for Pension Plans*, in FY2014. The previous financial reporting statement, GASB Statement No. 25 (GASB 25), *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, was more aligned with the funding focus of the actuarial valuation. The new financial reporting approach of GASB 67 separates funding from financial reporting, resulting in less direct correlation with the results of the annual actuarial valuation.

An important difference between the GASB 67 calculations and the actuarial funding calculations is that the GASB 67 calculations use the market value of assets, which can result in a great deal of volatility from one year to the next. The actuarial funding calculations use the actuarial value of assets. In calculating the actuarial value of assets, investment experience gains or losses are smoothed (recognized over a longer period of time), resulting in less year-to-year volatility. This is an important concept in bringing stability and predictability to the contribution rates, which are determined based on the results of the actuarial funding calculations.

Many of IPERS' employers are implementing GASB Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions*, in FY2015. This new standard requires employers following U.S. generally accepted accounting principles to record a portion of IPERS' pension liability on their financial statements, as well as a portion of the pension liability from any other defined benefit pension plans administered through trusts in which they participate. GASB 68 also requires additional pension-related disclosures by all audited employers.

IPERS, together with the Office of Auditor of State, provided information needed by the employers to comply with this new reporting standard. Educational outreach was done through webinars, presentations, and written materials. Employers were provided with amounts and information needed for their financial statements, their Notes to Financial Statements, and their Required Supplementary Information. Employers with a June 30 fiscal year-end will employ a one-year lag by using IPERS' June 30, 2014, information for their June 30, 2015, reporting, as allowed by the GASB.

Investment Portfolio Assets

Investment portfolio assets are based on fair value, but are calculated according to industry standards that are different from the financial statement reporting requirements of GASB 67, which reports the investments at fair value as shown in the Financial section of this report. In fiscal year 2015, IPERS' investment expenses were 0.28 percent of the portfolio's total quarterly average fair value.

At the close of FY2015, IPERS' net investment portfolio assets had a fair value of $28.393 billion. The change in fair value represents an increase of $417 million from the $27.976 billion net investment asset fair value as of June 30, 2014. The increase was mainly attributable to the investment portfolio return of 3.96 percent in fiscal year 2015, which was much lower than the previous fiscal year's investment return of 15.88 percent.

IPERS' investment return for the fiscal year did not meet the actuarial assumed investment return of 7.50 percent, but did exceed the policy benchmark return of 3.51 percent and the year's Consumer Price Index (CPI) increase of 0.12 percent. IPERS' investment return of 3.96 percent also outpaced the estimated 1.44 percent growth in IPERS' liabilities in fiscal year 2015, based on a market-valued liability proxy developed by IPERS and its investment consultant, Wilshire Associates.

Stability in Funding

The ultimate test of IPERS' financial soundness is whether it can pay all of its promised benefits as they come due, today and in the decades ahead. In this regard, the System's Contribution Rate Funding Policy establishes procedures to set contribution rates that, when combined with investment income, will fully fund the benefits in

an expeditious and reasonable manner. An annual actuarial valuation is undertaken to measure the System's progress toward its goal of full funding and to determine the required contributions. The 2015 actuarial valuation shows stability and continual progress in IPERS' ability to fund the pension benefits in three major areas: improved funded ratio, lower UAL, and full payment of the actuarial contribution rates.

Funding progress is typically expressed as a funded ratio of actuarial assets to actuarial liabilities. During fiscal year 2015, IPERS' funded ratio increased from 82.7 percent to 83.7 percent. This incremental increase is indicative of steady funding progress and recovery from investment losses incurred in the Great Recession, when the funded ratio dropped from 89.1 percent in fiscal year 2008 to a low point of 79.9 percent in fiscal year 2011.

The improvement in the funded ratio in FY2015 is primarily the result of strong deferred investment performance from the previous two years. For actuarial funding purposes, only a portion of investment experience above or below the 7.5 percent actuarial assumed investment return is included in the valuation of assets each year. This results in a deferral of gains or losses to future years. In FY2014, there was a cumulative deferred investment gain of $1.579 billion. Due to the 3.96 percent investment return on the market value of assets in FY2015, a portion of the deferred investment gain was applied to the actuarial value of assets in the 2015 valuation process. As a result, the deferred investment gain decreased to $514 million at the end of FY2015.

The growth in the funded ratio means that the unfunded actuarial liability (the difference between the actuarial liabilities and the actuarial value of assets) has decreased. This is the third consecutive year that the UAL has dropped. In fiscal year 2015, the net decrease in the UAL was $89 million.

Perhaps most notable over the past two years is the turnaround in the experience with payment of the actuarial contribution rates. While the actuarial contribution rates have always been paid by the Special service members, the contribution rates for the Regular members (95 percent of the active membership) were set in statute below the actuarial rate from FY2002 to FY2013. Legislation effective July 1, 2012, authorized the System to set the contribution rates using the actuarial assumptions, actuarial methods, and the funding policy adopted by the Investment Board with the stipulation that the contribution rates for Regular members cannot vary by more than 1 percentage point annually. This cap prevented payment of the actuarial contribution rate in FY2013. The contribution rates for FY2014 were not affected by the cap and reached 100 percent of the actuarial contribution rate. In an effort to bring about stability in contribution rates, as well as fully fund the System, the funding policy requires contribution rates to be at least the actuarial rate (unless capped by the statutory 1 percentage point annual variance) and to remain at or above the actuarial rate until the funded ratio of the membership group is 95 percent or greater. As a result of this policy, the required contribution rates of all three membership groups were greater than their respective actuarial contribution rates in FY2015. This also contributed to a decline in the UAL, after contribution underpayments added to the UAL for 11 years.

Independent Performance Evaluations

To maintain a focus on effectively administering the plan, IPERS completed voluntary reviews of its performance during fiscal year 2015. CEM Benchmarking Inc., an independent company that reviews pension systems worldwide, conducted a benchmarking study on IPERS' benefits administration for the previous year. IPERS was lowest in costs when compared to its peers, while receiving high ratings for its services.

CEM also conducted a benchmarking study of IPERS' investment program that compared the Trust Fund's costs and investment performance to results for peers in CEM's extensive pension fund database. The study covered a 5-year period that ended December 31, 2014. IPERS' investment program was rated by CEM as a low-cost program for that time period, but IPERS' net added value was –0.30 percent, which was below peers.

Wilshire Associates, IPERS' investment consultant, also reviews IPERS' investment performance against a peer group of U.S. public pension funds. IPERS' FY2015 investment return ranked in the top 29th percentile of funds in the Trust Universe Comparison Service (TUCS) Universe of Public Funds with Assets Greater than $1 billion. IPERS' ranking was due mainly to its comparatively more conservative investment structure in a year when risk taking was generally not rewarded. When peer performance is measured in terms of return per unit

of risk, Wilshire data shows that IPERS' risk-adjusted returns (returns divided by standard deviation of returns) have consistently ranked in the top 15 percent of the TUCS Universe of Public Funds with Assets Greater than $1 billion for the 5- and 10-year periods.

An independent actuarial audit completed in FY2015 concluded IPERS' actuarial program is accurate and reliable. Because IPERS' long-term funding depends on the correct mix of contributions and investment income to support benefits, accurate actuarial valuations are essential.

Professional Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to IPERS for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2014. A Certificate of Achievement is valid for only one year; this was the 22nd consecutive year IPERS has earned this prestigious award. To receive a Certificate of Achievement, a governmental entity must publish an easy-to-read and efficiently organized CAFR that satisfies both generally accepted accounting principles and applicable legal requirements. We believe our current CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

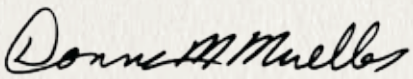
For the seventh consecutive year, IPERS received the Public Pension Standards Award for the fiscal year ended June 30, 2015, from the Public Pension Coordinating Council (PPCC), in recognition of meeting the professional standards for plan funding and administration as set forth in the Public Pension Standards. The PPCC is a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR).

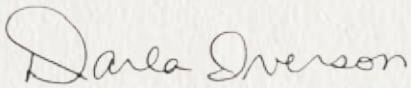
Acknowledgments

This report is available online or in hard copy by request. It is provided to the Governor, legislative leadership, IPERS Investment Board members, IPERS Benefits Advisory Committee members, and state fiscal staff in the Executive and Legislative Branches. IPERS also publishes an annual summary of the information contained in this report, which is offered to members, employers, policymakers, and others.

This report is intended to provide complete and reliable information as a basis for management decisions, legal compliance, and stewardship of the System's assets. We appreciate the dedication and commitment of IPERS' Board members and staff to provide the highest possible level of service to members and retirees.

Respectfully submitted,





Donna M. Mueller
Chief Executive Officer

Darla Iverson
Chief Financial Officer

PROFESSIONAL AWARDS

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Iowa Public Employees' Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2014

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2015

Presented to

Iowa Public Employees' Retirement System

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

ADMINISTRATION

IPERS' primary purposes are to provide a secure core retirement benefit to Iowa's former and current public employees, and to attract and retain quality employees in public service. The activities of the administration are designed to accomplish these purposes and include:

- Providing counseling services and retirement information to active and retired members.
- Providing retirement, disability, and death benefits to members and beneficiaries.
- Providing refunds to members, which may be rolled over to other IRS-qualified retirement plans.
- Collecting employer contributions, employee contributions, and employee wage information in accordance with State law and IPERS' administrative rules.
- Providing recommendations to the Governor and General Assembly on plan design adjustments.
- Overseeing the investment of the System's funds in accordance with the Investment Policy and Goal Statement adopted by the Investment Board.

Iowa Public Employees' Retirement System

Donna M. Mueller, Chief Executive Officer

Investments Division

Karl C. Koch, Chief Investment Officer

Benefits Division

David Martin, Chief Benefits Officer

General Counsel Office

Gregg A. Schochenmaier, General Counsel

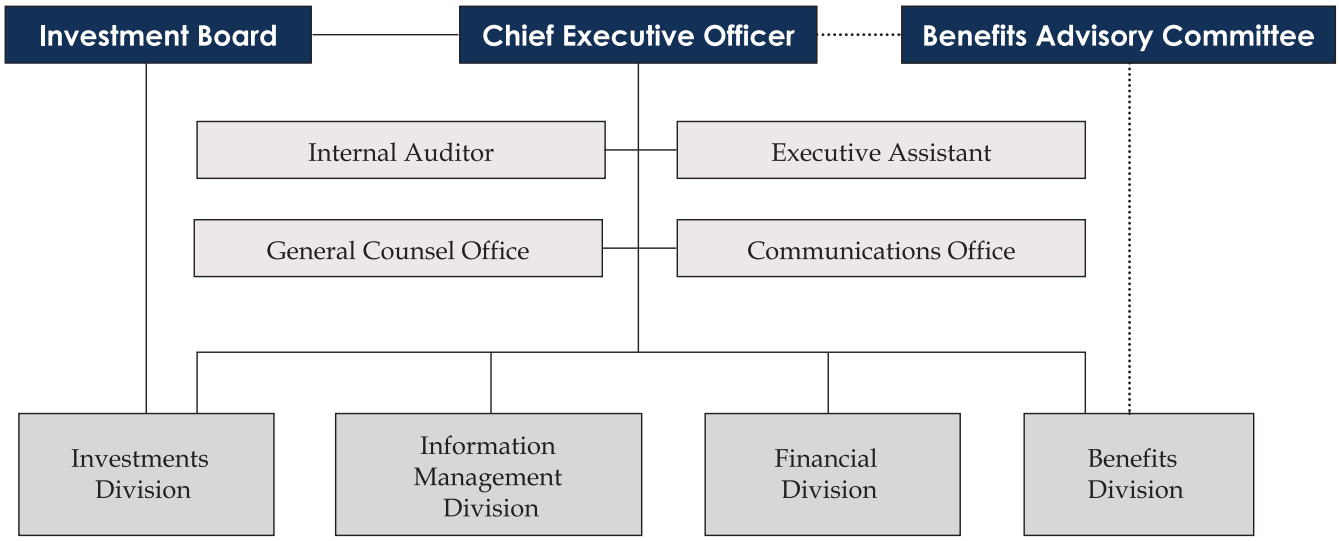
Financial Division

Darla Iverson, Chief Financial Officer

Information Management Division

Rick Hindman, Chief Technology Officer

Table of Organization



INVESTMENT BOARD

The IPERS Investment Board is designated as the Fund's trustee. The Board has eleven members: seven voting members and four nonvoting members. The following voting members serve six-year terms:

- Three public members appointed by the Governor and confirmed by the Iowa Senate.
- Three members of the System appointed by the Governor and confirmed by the Iowa Senate.

The State Treasurer is also a voting member. The nonvoting members include two state representatives and two state senators.

APPOINTED BY THE GOVERNOR:

Lisa Stange, Chairperson
Public Member
Term Ends: April 30, 2017

David Creighton, Vice Chairperson
Public Member
Term Ends: April 30, 2021

Phyllis Peterson
Retired IPERS Member
Term Ends: April 30, 2016

Marlene Sprouse
IPERS Educational Member
Term Ends: April 30, 2017

Wayne Walter
Active IPERS Member
Term Ends: April 30, 2019

Dennis Young
Public Member
Term Ends: April 30, 2019

EX OFFICIO MEMBER:

Michael Fitzgerald
State Treasurer

APPOINTED BY THE HOUSE SPEAKER AND MINORITY LEADER:

Representative Mary Mascher
State Representative
Term Ends: January 12, 2017

Representative Dawn Pettengill
State Representative
Term Ends: January 12, 2017

APPOINTED BY THE SENATE MAJORITY AND MINORITY LEADERS:

Senator Julian Garrett
State Senator
Term Ends: January 12, 2017

Senator Matt McCoy
State Senator
Term Ends: January 12, 2017

BENEFITS ADVISORY COMMITTEE

The IPERS Benefits Advisory Committee (BAC) members represent major member, employer, and retiree associations, and have extensive experience in education, public safety, workforce development, human resources, and other disciplines. While Iowa law names the constituent groups to serve on the BAC, each association chooses its BAC representative.

Len Cockman, Chairperson
Employer Representative
Iowa Association of School Boards

Bradley Hudson, Vice Chairperson
Member Representative
Iowa State Education Association

Susanna Brown
Member Representative
State Police Officers Council

Matt Carver
Member Representative
School Administrators of Iowa

Jesse Case
Member Representative
International Brotherhood of Teamsters

Lowell Dauenbaugh
Public Member

Andrew Hennesy
Member Representative
IPERS Improvement Association

Steve Hoffman
Member Representative
Iowa State Sheriffs and Deputies Association

Danny Homan
Member Representative
AFSCME

A.J. Mumm
Employer Representative
Iowa Association of Counties

Janet Phipps
Ex Officio Employer Representative
Iowa Department of Administrative Services

Philip Tetzloff
Member Representative
Retired School Personnel Association

Mark Tomb
Employer Representative
Iowa League of Cities

Sandy Tryon
Employer Representative
Iowa Association of Community College Trustees

PROFESSIONAL AND CONSULTING SERVICES

Actuary
- Cavanaugh Macdonald Consulting, LLC

Legal Counsel
- Foster Pepper PLLC
- Ice Miller, LLP

Securities Litigation Monitoring Counsel
- Barrack, Rodos & Bacine
- Kessler Topaz Meltzer Check
- Lieff Cabraser Heimann & Bernstein

Investment Management Consultant
- Wilshire Associates, Inc.

Master Custodian
- The Bank of New York Mellon

Securities Lending Agent
- Deutsche Bank

Information Technology Consultant
- Vitech Systems Group, Inc.

Benchmarking Consultant
- CEM Benchmarking Inc.

Investment Managers

Domestic Equity
- BlackRock Institutional Trust Company, NA
- Columbia Management Investment Advisers, LLC
- Fisher Investments
- Janus Capital Management LLC
- J.P. Morgan Investment Management, Inc.
- Mellon Capital Management Corporation
- PanAgora Asset Management, Inc.
- Wellington Management Company, LLP

International Equity
- BlackRock Institutional Trust Company, NA
- GAM USA Inc.
- Mellon Capital Management Corporation
- Oechsle International Advisors, LLC
- Quantitative Management Associates LLC
- Wellington Management Company, LLP

Core-Plus Fixed Income
- BlackRock Financial Management, Inc.
- MacKay Shields LLC
- Mellon Capital Management Corporation
- Pacific Investment Management Company LLC
- Principal Global Investors, LLC
- Western Asset Management Company

Credit Opportunities
- AEGON USA Investment Management, LLC
- Oaktree Capital Management, L.P.
- Western Asset Management Company

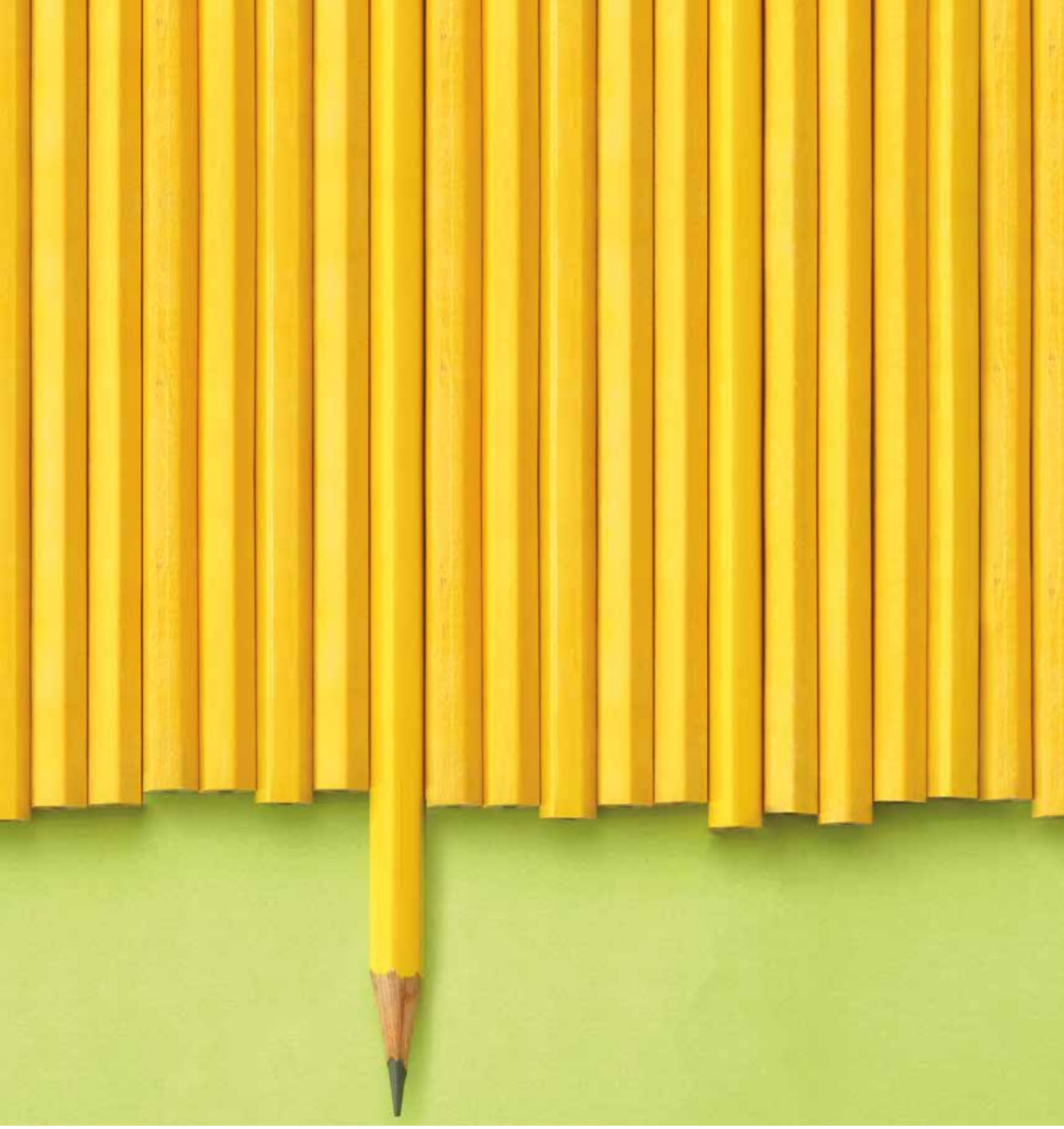
U.S. Treasury Inflation-Protected Securities
- BlackRock Institutional Trust Company, NA
- Fischer Francis Trees & Watts, Inc.

Other Real Assets
- Forest Investment Associates L.P.
- Harvest Fund Advisors LLC
- UBS AgriVest LLC

Private Equity/Debt
- Pathway Capital Management, LP

Real Estate
- Blackstone Real Estate Debt Strategies Associates II L.P.
- CenterSquare Investment Management, Inc.
- Clarion Partners, LLC
- Invesco Real Estate
- Principal Real Estate Debt Fund, LP
- RREEF America, L.L.C.
- State Street Global Advisors
- UBS Realty Investors, LLC

Transition Management Services
- BlackRock Institutional Trust Company, NA
- Russell Implementation Services, Inc.
- State Street Bank and Trust Company



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- **Statement of Changes in Fiduciary Net Position**
- **Notes to Financial Statements**

REQUIRED SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

FINANCIAL

OFFICE OF AUDITOR OF STATE
STATE OF IOWA

Mary Mosiman, CPA
Auditor of State

State Capitol Building
Des Moines, Iowa 50319-0004

Telephone (515) 281-5834 Facsimile (515) 242-6134

Independent Auditor's Report

To the Members of the
Iowa Public Employees' Retirement System Investment Board:

Report on the Financial Statements

We have audited the accompanying Statement of Fiduciary Net Position of the Iowa Public Employees' Retirement System (IPERS) as of June 30, 2015, and the related Statement of Changes in Fiduciary Net Position for the year then ended and the related Notes to Financial Statements, which collectively comprise the Iowa Public Employees' Retirement System's basic financial statements listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles. 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 audit. We conducted our audit in accordance with U.S. generally accepted auditing standards 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 from 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 IPERS' 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 IPERS' 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 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 fiduciary net position of IPERS at June 30, 2015, and the changes in its fiduciary net position for the year then ended in accordance with U.S. generally accepted accounting principles.

Emphasis of a Matter

As discussed in Note 1, the financial statements present the financial position and the changes in financial position of only that portion of the reporting entity of the State of Iowa that is attributable to the transactions of IPERS. They do not purport to, and do not, present fairly the financial position of the State of Iowa as of June 30, 2015, and the changes in its financial position and its cash flows, where applicable, for the year then ended in conformity with U.S. generally accepted accounting principles.

Report on Summarized Comparative Information

We have previously audited the financial statements of IPERS for the year ended June 30, 2014, and we expressed an unmodified audit opinion on those audited financial statements in our report dated December 12, 2014. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2014 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require Management's Discussion and Analysis, the Schedule of Changes in the Employers' Net Pension Liability and Related Ratios, the Schedule of Employers' Contributions and the Schedule of Investment Returns on pages 18 through 20 and 40 through 43 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 which 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 U.S. generally accepted auditing standards, 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.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise IPERS' basic financial statements. The supplementary information included in Schedules 1 and 2 on pages 44 and 45 is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with U.S. generally accepted auditing standards. In our opinion, the supplementary information is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Other Information

We did not audit the data included in the Introduction, Investments, Actuarial and Statistical sections and, accordingly, we express no opinion on the information presented in those sections.

Other Reporting Required by Government Auditing Standards

Our report on IPERS' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and other matters required by Government Auditing Standards will be issued under separate cover. 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 the 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 IPERS' internal control over financial reporting and compliance.

Mary Mosiman

MARY MOSIMAN, CPA
Auditor of State

Warren Jenkins

WARREN G. JENKINS, CPA
Chief Deputy Auditor of State

December 9, 2015

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Iowa Public Employees' Retirement System provides an overview of the retirement system's financial activities for the fiscal year ended June 30, 2015. It is intended to be used in conjunction with the transmittal letter and IPERS' financial statements and notes, which begin on page 21 of this report.

Using This Financial Report

This Comprehensive Annual Financial Report reflects the activities of the Iowa Public Employees' Retirement System as reported in the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position (see pages 21–22). These statements are presented on an accrual basis and reflect all Trust Fund activities as incurred. The Notes to Financial Statements are an integral part of the financial statements and include additional information not readily evident in the statements themselves. The Required Supplementary Information and Supplementary Information following the Notes to Financial Statements provide historical information and additional details considered useful in evaluating the condition of the plan. Investment data in the Financial section are presented at fair value. See the Actuarial section of this report for a detailed discussion of the actuarial value of assets and liabilities and the funded status.

Financial Highlights

- IPERS' net position restricted for pensions increased by $391.3 million during fiscal year 2015. On June 30, 2015, total plan assets (including capital assets of $22.4 million) were $30.389 billion, exceeding total liabilities of $1.959 billion, resulting in a net position restricted for pensions of $28.430 billion.
- Covered wages, from which both employee and employer contributions are calculated, increased $227.1 million, or 3.20 percent, over the last fiscal year and totaled $7.326 billion. In comparison, fiscal year 2014 wages totaled $7.099 billion, a 3.19 percent increase from the prior fiscal year's wages of $6.880 billion.
- Additions from employee and employer contributions totaled $1.098 billion in fiscal year 2015, an increase of 2.80 percent. In comparison, fiscal year 2014 saw a 6.12 percent increase in contributions. Growth in covered payroll increased contributions in both years, while a contribution rate increase meant a more significant change for fiscal year 2014.
- Contribution rates remained the same for all membership groups in FY2015, whereas FY2014 rates increased for Regular members and decreased for the sheriffs and deputies and the protection occupation members.
- Service purchase contributions for FY2015 were $17.5 million, a 22.00 percent increase over the prior year. In contrast, service purchase contributions were $14.3 million for FY2014, a 19.26 percent increase from the FY2013 amount of $12.0 million.
- Net investment and securities lending income, after all investment-related expenses, was $1.080 billion in FY2015, $3.904 billion in FY2014, and $2.338 billion in FY2013. These differences are explained by the disparity in IPERS' investment returns—the FY2015 return was 3.96 percent, while the returns for FY2014 and FY2013 were 15.88 percent and 10.12 percent, respectively.
- Investment management expenses were $78.0 million for FY2015. In comparison, investment management expenses were $62.6 million for FY2014 and $60.4 million for FY2013. The increase in investment management expenses in FY2015 was primarily related to performance incentive fees paid to investment managers in the domestic equity, other real assets, and international equity asset classes. The System's ratio of investment management expenses to the portfolio's quarterly average fair value was 0.28 percent for FY2015, compared to ratios of 0.23 percent for FY2014 and 0.25 percent for FY2013.
- Total contributions, investments, and other income resulted in total additions to the Fund of $2.196 billion in fiscal year 2015. This compares to total additions of $4.987 billion in FY2014 and $3.357 billion in FY2013. The decreased additions in fiscal

year 2015 resulted from the lower market return.

- Benefit and refund payments totaled $1.792 billion in FY2015, a decrease of 1.13 percent from the prior fiscal year. Pension benefit payments decreased by $19.5 million, while refunds decreased by $1.0 million. Benefit payments decreased because retirees did not receive Favorable Experience Dividend (FED) payments in FY2015, after the FED reserve account was depleted in January 2014. In comparison, benefit and refund payments totaled $1.812 billion in FY2014, an increase of 5.97 percent, and $1.710 billion in FY2013, an increase of 7.38 percent.
- Administrative expenses totaled $12.6 million in FY2015, compared to $14.9 million for FY2014 and $11.6 million for FY2013. A return to lower computer support expenses drove this year's decrease. Computer support services saw the biggest increase in FY2014, primarily because of expenses related to I-Que (the pension administration system). Administrative expenses had remained stable at 0.05 percent of the value of net position in FY2014, FY2013, and FY2012, but decreased to 0.04 percent in FY2015.
- In FY2015, capital assets decreased from $24.0 million to $22.4 million, mostly as a result of depreciation. In addition, with I-Que in full production, related costs are no longer capitalized, but are expensed instead. Capital assets decreased from $26.1 million at the end of FY2013 to $24.0 million at the end of FY2014 for the same reasons.

Analysis of Net Position

The investment rates of return for the current and preceding two fiscal years were 3.96 percent, 15.88 percent, and 10.12 percent, respectively. IPERS' total net position increased 1.40 percent in FY2015, 12.70 percent in FY2014, and 7.03 percent in FY2013, primarily as a result of these market returns. The following table contains the fiscal year 2015 performance of each asset class and its respective benchmark, as well as the Fund's allocation to each asset class as a percentage of total Fund market value at June 30, 2015. (See also the Investments section of this report beginning on page 47 for more information on rates of return.)

Investment Returns and Allocations

Fiscal Year Ended June 30, 2015

Asset Class	Return	Benchmark	Allocation
Domestic equity	8.93%	7.09%	24.50%
International equity	–4.40%	–4.85%	16.08%
Core-plus fixed income	1.68%	1.61%	28.13%
Credit opportunities	–1.20%	–1.06%	4.99%
U.S. TIPS	–1.73%	–1.85%	4.52%
Other real assets	–4.67%	–10.38%	1.59%
Private equity/debt	12.37%	12.37%	11.43%
Real estate	11.33%	11.64%	8.02%
Cash	0.12%	0.02%	0.74%
Total Fund	**3.96%**	**3.51%**	**100.00%**

The two tables on the next page present condensed summaries of IPERS' net position and a breakdown of the changes in the net position with comparison to the previous two fiscal years.

A large percentage of total assets, 95 percent, is represented by investments held to provide retirement, death, and disability benefits to qualified members and their beneficiaries. Other assets, including cash and cash equivalents, receivables from employee and employer contributions, receivables from investment-related transactions, and capital assets, make up 5 percent of total assets.

Total liabilities in the following table represent current liabilities and do not reflect the actuarial liabilities discussed in other sections of this report. These current liabilities chiefly consist of amounts owed for investment-related transactions, including the value of rebates and collateral due back to borrowers of securities at the conclusion of securities lending transactions, amounts owed to members or their beneficiaries, and amounts owed to contractors and vendors. Total liabilities decreased $1.278 billion from fiscal year 2014 to 2015. In comparison, liabilities increased by $180.9 million between fiscal years 2013 and 2014. These fluctuations are primarily related to foreign exchange contracts payable.

Benefits paid out continued to exceed contributions received by $676.2 million, $729.7 million, and $691.4 million for fiscal years 2015, 2014, and 2013, respectively. This excess of benefits paid relative to contributions received is characteristic of a mature pension plan such as IPERS.

Fiduciary Net Position

(Dollar Values Expressed in Thousands)
Fiscal Years Ended June 30

	2015	2014	2015/2014 Percentage Change	2013	2014/2013 Percentage Change
Cash and investments at fair value	$29,046,141	$28,471,552	2.0	$25,521,578	11.6
Receivables	1,319,598	2,779,050	(52.5)	2,386,912	16.4
Capital assets	22,440	23,998	(6.5)	26,066	(7.9)
Other assets	712	815	(12.6)	91	795.6
Total assets	***30,388,891***	***31,275,415***	***(2.8)***	***27,934,647***	***12.0***
Total liabilities	***1,959,056***	***3,236,865***	***(39.5)***	***3,055,941***	***5.9***
Total net position	**$28,429,835**	**$28,038,550**	**1.4**	**$24,878,706**	**12.7**

Changes in Fiduciary Net Position

(Dollar Values Expressed in Thousands)
Fiscal Years Ended June 30

Additions	2015	2014	2015/2014 Percentage Change	2013	2014/2013 Percentage Change
Contributions and service purchases	$1,115,600	$1,082,521	3.1	$1,018,617	6.3
Net investment and securities lending income	1,080,045	3,904,374	(72.3)	2,338,201	67.0
Total additions	***2,195,645***	***4,986,895***	***(56.0)***	***3,356,818***	***48.6***
Deductions					
Benefits and refunds	1,791,768	1,812,185	(1.1)	1,710,066	6.0
Administrative expenses	12,592	14,866	(15.3)	11,587	28.3
Total deductions	***1,804,360***	***1,827,051***	***(1.2)***	***1,721,653***	***6.1***
Increase in net position	**$ 391,285**	**$3,159,844**	**(87.6)**	**$1,635,165**	**93.2**

Request for Information

This financial report is designed to provide the Governor and Iowa Legislature (plan sponsors), the Investment Board, the Benefits Advisory Committee, the System's membership, contributors, taxpayers, and creditors with a general overview of the System's finances and to demonstrate the System's accountability for the money it manages. Questions about this report or requests for additional financial information should be directed to the Iowa Public Employees' Retirement System by e-mail at info@ipers.org, by phone at 515-281-0020 or 1-800-622-3849, or by mail at P.O. Box 9117, Des Moines, IA 50306-9117.

Statement of Fiduciary Net Position

June 30, 2015, with Comparative Totals for June 30, 2014

	2015 Pension Trust Fund	2015 QBA Fund*	2015 Total	2014 Total
ASSETS				
Cash and cash equivalents	**$ 239,272,364**	**$27**	**$ 239,272,391**	**$ 284,577,389**
Receivables				
Contributions	68,110,378	---	68,110,378	66,059,989
Accrued interest and dividends	79,458,974	---	79,458,974	83,811,328
Investment sales	518,782,977	---	518,782,977	422,438,641
Foreign exchange contracts	653,245,413	---	653,245,413	2,206,740,458
Total receivables	***1,319,597,742***	***---***	***1,319,597,742***	***2,779,050,416***
Investments at fair value				
Fixed income	9,614,624,576	---	9,614,624,576	9,127,798,628
Domestic equity	6,873,198,695	---	6,873,198,695	7,318,648,087
International equity	4,514,880,142	---	4,514,880,142	4,407,820,631
Real assets	452,383,026	---	452,383,026	467,759,445
U.S. TIPS	1,279,855,747	---	1,279,855,747	1,198,116,139
Real estate	2,275,126,213	---	2,275,126,213	2,178,305,492
Private equity/debt	3,242,207,126	---	3,242,207,126	3,074,933,741
Total investments at fair value	***28,252,275,525***	***---***	***28,252,275,525***	***27,773,382,163***
Securities lending collateral pool	**554,592,727**	**---**	**554,592,727**	**413,591,929**
Capital assets				
Depreciable assets, net of accumulated depreciation	21,939,738	---	21,939,738	23,498,255
Nondepreciable assets: land	500,000	---	500,000	500,000
Total capital assets	***22,439,738***	***---***	***22,439,738***	***23,998,255***
Other assets	**712,447**	**---**	**712,447**	**814,865**
Total assets	***30,388,890,543***	***27***	***30,388,890,570***	***31,275,415,017***
LIABILITIES				
Accounts payable and accrued expenses	39,004,065	---	39,004,065	25,168,123
Investment purchases payable	708,132,271	---	708,132,271	588,815,244
Rebates and collateral payable	554,404,832	---	554,404,832	413,287,851
Foreign exchange contracts payable	657,514,573	---	657,514,573	2,209,593,906
Total liabilities	***1,959,055,741***	***---***	***1,959,055,741***	***3,236,865,124***
Net position restricted for pensions (Note 7, page 39)	**$28,429,834,802**	**$27**	**$28,429,834,829**	**$28,038,549,893**

See accompanying Notes to Financial Statements beginning on page 23.
*See Note 8 on page 39.

Statement of Changes in Fiduciary Net Position

Year Ended June 30, 2015, with Comparative Totals for Year Ended June 30, 2014

	2015 Pension Trust Fund	2015 QBA Fund*	2015 Total	2014 Total
ADDITIONS				
Contributions				
Employer contributions	$ 656,908,560	$2,600	$ 656,911,160	$ 639,001,548
Employee contributions	441,213,236	---	441,213,236	429,195,536
Service purchases	17,475,633	---	17,475,633	14,324,144
Total contributions	***1,115,597,429***	***2,600***	***1,115,600,029***	***1,082,521,228***
Investments				
Interest	314,701,344	1	314,701,345	306,565,735
Dividends	109,804,697	---	109,804,697	114,750,582
Real estate and private equity/debt	109,488,751	---	109,488,751	128,404,339
Net appreciation in fair value of investments	622,196,068	---	622,196,068	3,403,949,197
Recaptured commissions	90,362	---	90,362	118,756
Investment management expenses	(77,977,569)	---	(77,977,569)	(62,618,912)
Net investment income	***1,078,303,653***	***1***	***1,078,303,654***	***3,891,169,697***
Securities lending				
Securities lending income	281,300	---	281,300	290,717
Securities lending net appreciation in fair value of collateral pool	---	---	---	9,640,573
Securities lending expenses/rebates	1,460,150	---	1,460,150	3,272,637
Net securities lending income	***1,741,450***	***---***	***1,741,450***	***13,203,927***
Total net investment income	***1,080,045,103***	***1***	***1,080,045,104***	***3,904,373,624***
Total additions	***2,195,642,532***	***2,601***	***2,195,645,133***	***4,986,894,852***
DEDUCTIONS				
Benefit payments	1,744,598,297	2,713	1,744,601,010	1,764,064,264
Member refunds	47,167,431	---	47,167,431	48,120,596
Administrative expenses	12,591,517	239	12,591,756	14,866,128
Total deductions	***1,804,357,245***	***2,952***	***1,804,360,197***	***1,827,050,988***
Net increase/(decrease)	***391,285,287***	***(351)***	***391,284,936***	***3,159,843,864***
Net position restricted for pensions, beginning of year	28,038,549,515	378	28,038,549,893	24,878,706,029
Net position restricted for pensions (Note 7, page 39)	**$28,429,834,802**	**$ 27**	**$28,429,834,829**	**$28,038,549,893**

See accompanying Notes to Financial Statements beginning on page 23.
*See Note 8 on page 39.

Notes to Financial Statements

June 30, 2015, and 2014

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

IPERS, a public employee retirement system, was created by the Iowa Legislature. IPERS is an integral part of the primary government of the State of Iowa and, accordingly, has been included as a pension trust fund in the Iowa Comprehensive Annual Financial Report (CAFR) as well as having its own stand-alone Comprehensive Annual Financial Report. The State's CAFR may be viewed on the Iowa Department of Administrative Services' website.

For financial reporting purposes, IPERS considers all potential component units for which it is financially accountable and other organizations for which the nature and significance of their relationship with IPERS is such that exclusion would cause IPERS' financial statements to be misleading or incomplete. GASB has set forth criteria to be considered in determining financial accountability. These criteria are (1) whether IPERS could appoint a voting majority of an organization's governing body, (2) the ability of IPERS to impose its will on that organization, and (3) the potential for the organization to provide specific benefits to or impose specific financial burdens on IPERS. IPERS has no component units that meet the GASB criteria.

A. Basis of Accounting

IPERS' financial statements have been prepared using the accrual basis of accounting in conformity with U.S. generally accepted accounting principles (GAAP) as applied to governmental accounting for fiduciary funds. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. Actual amounts could differ from those estimates.

The System is funded through a combination of employee and employer contributions and investment income. Revenues are recognized when they are earned and become measurable. Employee contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide them.

Expenses are recognized when the liability is incurred. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Investment sales and purchases are recorded as of their trade date. All investments are reported at fair value. The determination of fair value is generally based on published market prices and quotations from major investment brokers. Investments without quoted market prices have been valued based on yields and maturities currently available on comparable securities of similar issue. Fair values for real estate investments are based on periodic assessments or appraisals of the underlying investments. Private equities and one real estate investment, Blackstone Real Estate Debt Strategies, are valued based on March 31 net asset values plus or minus purchases, sales, and cash flows from April 1 through June 30 of the reporting year. Futures contracts are valued daily with the resulting adjustments recorded as realized gains/losses arising from the daily settlement of the variation margin.

The basic financial statements include prior-year summarized comparative information in total, but not at the level of detail required for a presentation in conformity with U.S. generally accepted accounting principles. Accordingly, such information should be read in conjunction with IPERS' financial statements for the year ended June 30, 2014, from which the summarized information was derived.

B. Cash and Cash Equivalents

For the purpose of financial reporting, cash and cash equivalents represent cash and money market investments with an original maturity of three months or less held by the System's administration, and cash allocated to the System's investment managers for investment.

C. Foreign Exchange Contracts

The System's investment managers enter into forward foreign exchange contracts to obtain or short an exposure to foreign currencies or to minimize the short-term impact of currency fluctuations on their foreign investments. The gains or losses on these contracts are recorded in the period in which the exchange rates change.

D. Investments

Iowa Code section 97B.7 grants the IPERS Investment Board authority to establish investment policies. These policies are documented in the IPERS Investment Policy and Goal Statement, and reviewed annually by the Investment Board. The Investment Policy and Goal Statement is located on pages 62–74.

The Investment Board adopted the following significant changes to IPERS' investment policy during the fiscal year:

- Clarified and delineated the possible sources of investment risk, and established subcomponents for these sources within the risk budgets established in the risk management policy.
- Reduced the policy benchmark target allocation for private equity from 13 percent to 11 percent, increased the international equity target allocation from 15 percent to 16 percent, increased the domestic equity target allocation from 23.5 percent to 24 percent, and increased the other real assets target allocation from 1.5 percent to 2 percent.
- Expanded the target allocation range for cash in the policy benchmark to a range of –2 to 4 percent, from the previous range of 0 to 2 percent.
- Provided authority to staff to trade futures contracts and exchange traded funds (ETFs) for the purpose of implementing risk management or tactical allocation decisions.
- Clarified that investment managers may use cleared swaps.
- Clarified that the chief investment officer has discretion to determine which products are considered actively managed for the purpose of the active management diversification rule.
- Eliminated the provision that the Investment Board must authorize the issuance of an RFP.
- Allowed the use of securities lending agents that agree to indemnify the System in the event of a counterparty insolvency.

The investment activities of the System are designed to provide a return on the Fund that, when coupled with the periodic contributions of the membership and employers, will meet or exceed the funding requirements of the plan over time while staying within the Investment Board's tolerance for risk as expressed in the Investment Policy and Goal Statement. Of primary consideration is the maintenance of funding which is adequate to provide for the payment of the plan's actuarial liabilities over time. The following is the Investment Board's adopted asset allocation policy as of June 30, 2015.

Target Allocations

As of June 30, 2015

Asset Class	Target Allocation
Core-plus fixed income	28%
Domestic equity	24%
International equity	16%
Private equity/debt	11%
Real estate	8%
Credit opportunities	5%
U.S. TIPS	5%
Other real assets	2%
Cash	1%

For the fiscal year ended June 30, 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 3.91 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The Treasurer of State is the statutory custodian of the System, and in this capacity, has arranged to have the custodial bank account collateralized or covered by the State Sinking Fund. The Treasurer of State selected the Bank of New York Mellon, a AA-rated bank according to Fitch Ratings, to serve as the custodian bank for IPERS.

Consistent with the System's investment policy, the investment securities are held by the System's custodian and registered in the System's name. All of the System's investment securities are held by the System's custodial bank in the System's name, except for investment securities on loan with brokers for cash collateral, investments in mutual and commingled funds, real estate properties, and limited partnerships, which, by nature, are not required to be categorized. Investments in the Short-Term Investment Funds (STIF) are held in a collective trust fund offered through the System's custodial bank. The fair value of the position in the trust fund equals the value of the fund shares. A summary of investments as of June 30, 2015, follows.

GASB Statement No. 40, *Deposit and Investment Risk Disclosures*, is an amendment to GASB Statement No. 3, *Deposits With Financial Institutions, Investments (Including Repurchase Agreements), and Reverse Repurchase Agreements*. GASB 40 addresses common

deposit and investment risks related to credit risk, concentration of credit risk, custodial credit risk, interest rate risk, and foreign currency risk. Each risk identified in GASB 40, as it relates to the System, is discussed in the remainder of this note. No System-wide formal policy exists relating to specific investment-related risks identified in GASB 40. Each portfolio is managed in accordance with an investment contract that identifies and seeks to control the various types of investment-related risks.

Prior-year disclosures for investment type, credit risk quality ratings, and effective duration have not been included because the information is not believed to be of continuing significance.

Invested Assets

(Dollar Values Expressed in Thousands)
June 30, 2015

Investment Type	Total Fair Value	Fair Value on Loan
Cash	**$ 16,299**	**---**
Cash collateral at broker	**30,586**	**---**
Pooled funds and mutual funds	714,922	---
Treasuries	33,576	---
Agencies	39,997	---
Short-term investments	**788,495**	**---**
Common stocks	5,030,957	$253,051
Real estate investment trusts	488,644	12
Master limited partnerships	286,619	16,037
Preferred stock	103,963	6,033
Other equities	18,962	21,512
Equity investments	**5,929,145**	**296,645**
U.S. TIPS	800,979	---
U.S. Treasury notes	1,405,253	97,156
Ginnie Mae	168,095	---
Freddie Mac	316,928	---
Fannie Mae	816,096	---
Other government agencies	12,355	---
Collateralized mortgage-backed securities	170,301	---
Collateralized mortgage obligations	40,859	---
Other government mortgage-backed securities	16,197	---
Other government fixed income	358,469	25,575
Corporate bonds	2,541,676	84,175
Corporate asset-backed securities	177,935	---
Private placements	1,441,880	38,248
State and local obligations	25,173	---
Certificates of deposit	21,700	---
Fixed-income investments	**8,313,896**	**245,154**
Derivatives	**(7,170)**	**---**
Real estate	**1,638,194**	**---**
Equity commingled funds	6,099,200	---
Fixed-income commingled funds	2,076,117	---
REIT commingled funds	245,176	---
Commingled funds	**8,420,493**	**---**
Special equity	2,355,741	---
Venture capital	875,935	---
Private equity	**3,231,676**	**---**
Real assets	**147,206**	**---**
Total	**$28,508,820**	**$541,799**
Total from above	**$28,508,820**	
Cash in managers' accounts	(256,784)	
Forest Investment Associates incentive management fee	240	
Investments on Statement of Fiduciary Net Position	**$28,252,276**	

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to IPERS. Credit risk associated with all fixed-income holdings, including collateral for repurchase agreements and securities lending collateral, has been included in this report.

The tables summarize IPERS' fixed-income portfolio exposure levels and credit quality ratings. The table below includes $3.418 billion of U.S. Treasury obligations and $168.1 million of Ginnie Mae obligations. These securities are explicitly guaranteed by the U.S. government and represent 32.1 percent of the total Fund's fixed-income exposure. Therefore, as of June 30, 2015, IPERS' fixed-income assets that are not explicitly government-guaranteed represented 67.9 percent of the fixed-income portfolio.

As a matter of practice, there are no overarching limitations or policies for credit risk exposures within the overall fixed income portfolio. Each fixed-income

Credit Risk: S&P Quality Ratings

(Dollar Values Expressed in Thousands)
June 30, 2015

Investment Type	Total	TSY	AGY	AAA	AA	A	BBB	BB	B	CCC & Below	NR
Pooled funds and mutual funds	$ 714,922	---	---	---	---	---	---	---	---	---	$ 714,922
Treasuries	33,576	$ 33,576	---	---	---	---	---	---	---	---	---
Agencies	39,997	---	---	---	$ 39,997	---	---	---	---	---	---
Short-term investments	**788,495**	**33,576**	**---**	**---**	**39,997**	**---**	**---**	**---**	**---**	**---**	**714,922**
U.S. TIPS	800,979	800,979	---	---	---	---	---	---	---	---	---
U.S. Treasury notes	1,405,253	1,405,253	---	---	---	---	---	---	---	---	---
Ginnie Mae	168,095	---	$168,095	---	---	---	---	---	---	---	---
Freddie Mac*	316,928	---	---	$ 1,659	276,593	---	---	---	---	---	38,676
Fannie Mae*	816,096	---	---	---	549,965	---	---	---	---	---	266,131
Other government agencies	12,355	---	---	---	9,023	---	---	---	---	---	3,332
Collateralized mortgage-backed securities	170,301	---	---	31,806	23,599	$ 21,182	$ 13,167	---	$ 6,016	$ 5,419	69,112
Collateralized mortgage obligations	40,859	---	---	347	8,258	6,202	6,537	$ 1,295	1,507	5,656	11,057
Other government mortgage-backed securities	16,197	---	---	5,194	---	---	---	---	---	---	11,003
Other government fixed income	358,469	---	---	1,552	6,744	62,147	109,521	45,923	6,277	16,383	109,922
Corporate bonds	2,541,676	---	---	31,412	152,872	577,032	782,775	568,366	344,985	37,460	46,774
Corporate asset-backed securities	177,935	---	---	49,203	59,928	13,799	798	6,478	10,361	3,181	34,187
Private placements	1,441,880	---	---	86,624	88,322	199,331	239,852	298,537	264,442	45,467	219,305
State and local obligations	25,173	---	---	3,522	9,865	10,528	---	1,109	149	---	---
Certificates of deposit	21,700	---	---	---	---	21,700	---	---	---	---	---
Fixed-income investments	**8,313,896**	**2,206,232**	**168,095**	**211,319**	**1,185,169**	**911,921**	**1,152,650**	**921,708**	**633,737**	**113,566**	**809,499**
Commingled bond funds	**2,076,117**	**1,177,813**	**45,119**	**608,833**	**36,943**	**98,287**	**109,122**	**---**	**---**	**---**	**---**
Total	**$11,178,508**	**$3,417,621**	**$213,214**	**$820,152**	**$1,262,109**	**$1,010,208**	**$1,261,772**	**$921,708**	**$633,737**	**$113,566**	**$1,524,421**

*Fannie Mae and Freddie Mac mortgage pools consist of thousands of mortgages. Because of the complexity of these pools, hiring ratings agencies to rate each pool is cost-prohibitive. With no explicit ratings given to the pools, investors consider the ratings to be the same as the issuer's long-term rating, and the pools were reported as such in this table.

portfolio is managed in accordance with an investment contract that is specific as to permissible credit quality ranges and the average credit quality of the overall portfolios. In circumstances where downgrades occurred subsequent to purchase, investment managers are permitted to hold a downgraded security if the manager believes it is prudent to do so. Credit risk for derivative instruments held by the System results from counterparty risk assumed by IPERS. This is essentially the risk the counterparty will be unable to meet its obligation. Information regarding IPERS' credit risk related to derivatives is found under the derivatives disclosures on pages 29–31 of these notes. Policies related to credit risk pertaining to IPERS' securities lending program are found under the securities lending disclosures on page 31 of these notes.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of investment in a single issuer. IPERS' guidelines for each investment manager establish limits on investments in any corporate entity. The System has no separate account investment in any specific stock or bond issues of any commercial or industrial organization other than the U.S. government and its instrumentalities whose fair value exceeds 5 percent of IPERS' net position restricted for pensions.

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of a failure of the counterparty, the System will not be able to recover the value of its investment 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 System, and are held by either the counterparty or the counterparty's trust department or agent but not in the System's name.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of a fixed-income investment. This risk is measured using the effective duration (or option-adjusted) methodology. The methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve.

Effective Duration

(Dollar Values Expressed in Thousands)
June 30, 2015

Investment Type	Fair Value	Effective Duration (Years)
Pooled funds and mutual funds	$ 714,922	0.01
Treasuries	33,576	0.38
Agencies	39,997	0.15
Short-term investments	**788,495**	**0.03**
U.S. TIPS	800,979	6.38
U.S. Treasury notes	1,405,253	6.63
Ginnie Mae	168,095	2.85
Freddie Mac	316,928	2.23
Fannie Mae	816,096	2.92
Other government agencies	12,355	4.28
Collateralized mortgage-backed securities	170,301	2.47
Collateralized mortgage obligations	40,859	0.84
Other government mortgage-backed securities	16,197	0.54
Other government fixed income	358,469	7.15
Corporate bonds	2,541,676	5.56
Corporate asset-backed securities	177,935	0.66
Private placements	1,441,880	4.54
State and local obligations	25,173	9.83
Certificates of deposit	21,700	0.21
Fixed-income investments	**8,313,896**	**5.07**
Commingled bond funds	**2,076,117**	**6.34**
Total	**$11,178,508**	**4.95**

There are no organization-wide policies for interest rate risk exposure within the overall fixed-income portfolio. The System's core-plus fixed-income investment contracts generally require the effective duration of the manager's portfolio to remain between 75 percent and 125 percent of the effective duration measure of a specific fixed-income index. However, two of IPERS' core-plus managers have authority under their contracts to reduce the interest rate sensitivity of their core-plus portfolios to less than 75 percent of the benchmark's effective duration (up to zero effective duration) if the managers forecast a period of rising interest rates. For high-yield bond portfolios, the effective duration must remain between 75 percent and 125 percent of the benchmark's effective duration. It is believed the reporting of effective duration found in the preceding table quantifies to the fullest extent possible the interest rate risk of the System's fixed-income assets. Interest rate risks associated with swaps and other

derivative investments are found in the derivatives disclosures. No interest rate futures or options positions will be established that affect the duration or weighted average maturity of the managed account by more than one year.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. IPERS' currency policy is to allow its investment managers the discretion to hedge their foreign currency exposures. IPERS generally does not allow its investment managers to enter into currency positions greater than 100 percent or less than 0 percent of the underlying asset exposure in their respective portfolios. The only exceptions are (1) as it relates to specific cross-hedging activity, which may be permitted in certain investment manager contracts, and (2) in global macro investment strategies where the manager is permitted to tactically allocate across several asset classes and strategies, including currency. The net foreign currency exposure of the global macro managers was less than 1 percent of the System's total foreign currency exposure on June 30, 2015.

Foreign Currency Risk by Investment Type

(Dollar Values Expressed in Thousands)
June 30, 2015

Currency	Total	Cash & Cash Equivalents	Derivatives	Equity	Fixed Income
Australian Dollar	$ 240,130	$ 40,185	$ (504)	$ 159,599	$ 40,850
Brazilian Real	30,894	(3,068)	---	25,037	8,925
British Pound	215,356	(59,478)	1,577	254,711	18,546
Canadian Dollar	(20,724)	(20,623)	(101)	---	---
Chilean Peso	3,190	---	---	3,190	---
Chinese Yuan Renminbi	6,170	6,170	---	---	---
Czech Koruna	4,388	---	---	4,388	---
Danish Krone	32,008	131	---	31,877	---
Euro	749,798	(44,622)	(1,492)	734,189	61,723
Hong Kong Dollar	229,008	2,769	(426)	226,405	260
Hungarian Forint	1,033	---	---	1,033	---
Indian Rupee	50,128	143	---	49,985	---
Indonesian Rupiah	9,399	49	---	9,350	---
Japanese Yen	602,713	49,046	(784)	555,249	(798)
Mexican Peso	54,701	152	---	15,489	39,060
New Zealand Dollar	34,806	33,862	---	944	---
Norwegian Krone	30,064	2,415	---	27,649	---
Philippine Peso	7,382	---	---	7,382	---
Polish Zloty	2,975	2	---	2,973	---
Singapore Dollar	26,818	399	---	26,419	---
South African Rand	41,666	163	---	41,503	---
South Korean Won	64,841	1	---	64,840	---
Swedish Krona	6,116	(8,788)	---	14,904	---
Swiss Franc	30,657	(37,920)	---	68,577	---
Taiwanese Dollar	43,576	377	---	43,199	---
Thai Baht	10,865	---	---	10,865	---
Turkish Lira	11,027	---	---	11,027	---
United Arab Emirates Dirham	6,005	---	---	6,005	---
Total	**$2,524,990**	**$(38,635)**	**$(1,730)**	**$2,396,789**	**$168,566**

Derivatives

GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, requires the fair value of financial arrangements called "derivatives" or "derivative instruments" to be reported in the financial statements of state and local governments. The statement further requires derivatives to be categorized as either a hedging derivative or an investment derivative. All of the System's derivative exposures at June 30, 2015, are categorized as investment derivatives and therefore the hedge accounting provisions of GASB 53 are not applicable.

Some of the System's external investment managers may be permitted through their individual investment contracts to use derivative instruments, subject to the System's derivative policy contained in its Investment Policy and Goal Statement. Derivatives are contracts or securities whose returns are derived from the returns of other securities, indexes, or derivatives. While this definition includes the most common type of derivative, collateralized mortgage obligations (which typically make up a portion of the System's fixed-income portfolio), it is also intended to include (but not be limited to) futures, forwards, options, options on futures, swaps, and swaptions. The System's managers are not permitted to utilize derivatives for speculative purposes, but may use them to efficiently access desired markets and to control and manage portfolio risk. Examples of appropriate applications of derivative strategies include hedging interest rate and currency risk, maintaining exposure to a desired asset class while effecting asset allocation changes, managing duration risk, augmenting index fund performance through index arbitrage, and implementing portable alpha strategies.

The various derivatives utilized by the System's investment managers are described below. Although the notional values associated with these derivative instruments are not recorded in the financial statements, the fair value amounts of exposure (unrealized gains/losses) are reported in the Statement of Fiduciary Net Position. IPERS holds investments in limited partnerships and commingled investment funds, which may utilize derivatives from time to time for hedging purposes, and any derivatives held by these types of investment vehicles are not included in the information describing the System's derivatives on pages 29–31. IPERS could be exposed to risk if the counterparties to derivatives contracts are unable to meet the terms of the contracts. IPERS' investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, exposure monitoring procedures, and in some cases the collateralization of gains or losses. IPERS anticipates the counterparties will be able to satisfy their obligations under the contracts. Limited partnerships and commingled investment vehicles in which IPERS invests may also have exposure to counterparty risk from the use of derivatives for hedging purposes.

Futures and Options Contracts

The System had investments in various futures and options during the year. These contracts are reported at their fair value in the Statement of Fiduciary Net Position.

A listing of futures and options contracts outstanding at June 30, 2015, follows. Futures and options can potentially offer lower-cost and more efficient alternatives to buying the underlying securities or currency. Futures and options can also serve to minimize certain unwanted risks within the portfolio. The market, currency, and credit risk of the futures were the same as if the System had owned the underlying securities or currency.

Futures Exposure Summary

(Dollar Values Expressed in Thousands)
June 30, 2015

	Expiration Date	Long/ Short	Notional Value	Fair Value
Amsterdam Index	July 2015	Long	$ 22,301	$ (375)
CAC 40 Euro Index	July 2015	Long	7,840	(9)
Hang Seng Index	July 2015	Long	10,140	(427)
IBEX 35 Index	July 2015	Long	1,201	11
10-year Australian bonds	Sept. 2015	Short	(46,501)	(317)
10-year Canadian bonds	Sept. 2015	Short	(54,612)	(147)
DAX Index	Sept. 2015	Long	57,306	288
Euro bunds	Sept. 2015	Short	(261,659)	(1,100)
Euro BTP	Sept. 2015	Long	3,772	18
FTSE 100 Index	Sept. 2015	Short	(76,905)	1,566
10-year Japanese bonds	Sept. 2015	Long	67,260	172
10-year Japanese minibonds	Sept. 2015	Short	(1,321)	(3)
E-mini (S&P 500)	Sept. 2015	Long	45,915	(898)
S&P MIB Index	Sept. 2015	Short	(17,983)	(324)
SPI 200 Index	Sept. 2015	Long	14,519	(186)
S&P/TSE 60 Index	Sept. 2015	Short	(3,515)	47
E-mini (MSCI Emerging Market)	Sept. 2015	Long	1,439	(18)
TOPIX Index	Sept. 2015	Long	41,840	(953)
U.K. Long Gilts	Sept. 2015	Long	58,971	11
2-year U.S. Treasury notes	Sept. 2015	Short	(626,161)	(687)
5-year U.S. Treasury notes	Sept. 2015	Long	136,311	2
10-year U.S. Treasury notes	Sept. 2015	Long	167,430	(2,622)
U.S. Treasury bonds	Sept. 2015	Long	99,406	950
U.S. Ultra bonds	Sept. 2015	Long	65,630	(954)
90-day Eurodollar	Sept. 2015	Short	(569,165)	(163)
90-day Eurodollar	Dec. 2015	Short	(102,449)	(113)
90-day Eurodollar	March 2016	Short	(431,372)	(250)
90-day Eurodollar	June 2016	Short	(82,480)	(83)
90-day Eurodollar	Sept. 2016	Short	(18,534)	(24)
90-day Eurodollar	Dec. 2016	Short	(101,095)	(87)
90-day Eurodollar	March 2017	Short	(25,842)	(20)
Total			**$(1,618,313)**	**$(6,695)**

Options Exposure Summary

(Dollar Values Expressed in Thousands)
June 30, 2015

	Expiration Date	Long/ Short	Option Type	Strike Price	Fair Value
90-day Eurodollar	Dec. 2015	Long	Put	$ 98.00	$ 2
90-day Eurodollar	Dec. 2015	Long	Put	99.00	8
90-day Eurodollar	Dec. 2015	Short	Put	98.50	(5)
U.S. Treasury bonds	Aug. 2015	Short	Call	166.00	(36)
U.S. Treasury bonds	Aug. 2015	Long	Call	154.00	532
U.S. Treasury bonds	Sept. 2015	Short	Call	157.00	(556)
Total					**$ (55)**

Credit Default Swaps

The System had investments in credit default swaps during the year. The credit default swaps held by the System are derivative instruments that are used to hedge or to replicate investments in debt obligations of corporate bond issuers. The risk of the credit default swap is comparable to the credit risk of the reference security. At June 30, 2015, the net notional value of the credit default swaps held in the System's fixed-income portfolio was –$14.7 million. The credit default swaps are reported at a fair value of $993,095 in the Statement of Fiduciary Net Position.

Interest Rate Swaps

Interest rate swaps are transactions between two parties in which interest payments from different indexes are swapped. Interest rate swaps are often used to alter the portfolios' exposure to interest rate fluctuations, by swapping fixed-rate obligations for floating-rate obligations, or swapping floating-rate obligations for fixed-rate obligations. By utilizing interest rate swaps, the System's investment managers are able to alter their interest rate exposure and bring it in line with their strategic objectives for interest rate risk. At June 30, 2015, the net notional value of the interest rate swaps held in the System's fixed-income portfolio was –$41.2 million. All interest rate swaps held by the System are reported at a fair value of –$1.3 million in the Statement of Fiduciary Net Position.

Total Return Swaps

A total return swap is a contract in which two parties swap payments based on the total return of a reference asset. The reference asset may be any asset, index, or basket of assets. At June 30, 2015, the net notional value of the total return swaps held in the System's fixed-income portfolio was –$20.0 million. The total return swaps held by the System are reported at a fair value of –$236,860 in the Statement of Fiduciary Net Position.

Mortgage-Backed Securities

The System invests in mortgage-backed securities, which are reported in the Statement of Fiduciary Net Position at fair value based on estimated future cash flows from the interest and principal payments of the underlying mortgages. Mortgage-backed securities prices are sensitive to prepayments by mortgagees, a scenario that is more likely in declining-interest-rate environments. The System invests in mortgage-backed securities to diversify the portfolio and earn the return premium associated with prepayment risk. Details on interest rate risks for these investments are included in the interest rate risk disclosures on pages 27–28.

Securities Lending

IPERS participates in the securities lending program administered by the Treasurer of State. The Treasurer of State selected Deutsche Bank, an A-rated bank according to Fitch Ratings, to serve as the lending agent for IPERS' securities lending program. In its capacity as lending agent, Deutsche Bank is responsible for operating the program and is permitted to lend IPERS' securities to broker-dealers and other entities in exchange for collateral.

Deutsche Bank is permitted to accept collateral in the form of cash in U.S. dollars, U.S. government securities, or irrevocable letters of credit. A borrower is required to initially deliver collateral in an amount equal to 102 percent of the fair value of any U.S. securities lent and 105 percent of the fair value of any non-U.S. securities lent. Borrowers are required to provide additional collateral anytime the value of the collateral drops below 100 percent of the value of the security lent plus accrued investment income.

At fiscal year-end, IPERS had no risk exposure to borrowers because the amounts they owed IPERS did not exceed the amount IPERS owed them on any loans. The contract with Deutsche Bank requires it to indemnify IPERS only if 1) a borrower becomes insolvent, or 2) a loss is incurred from an investment of collateral in an overnight repurchase agreement.

Securities Lending Cash Collateral Account

(Dollar Values Expressed in Thousands)

June 30, 2015

Investment Type	Fair Value	Credit Risk: S&P Quality Rating	Investment Maturity (Years)
Overnight repurchase agreements	$554,543	Not rated	Less than 1

The securities lending contract does not allow IPERS to pledge or sell any collateral securities unless the borrower defaults. As of June 30, 2015, IPERS had securities on loan, including accrued interest income, with a fair value (carrying value) of $541.8 million against collateral, including borrower rebate, with a total fair value (carrying value) of $554.4 million.

The majority of securities loans are open loans, that is, one-day maturity, where the rebate rate due to the borrower is renegotiated daily. Either IPERS or the borrower can terminate all securities loans on demand. Cash collateral received from borrowers is invested in a cash collateral investment account, which is managed by Deutsche Bank in accordance with investment guidelines established by the Treasurer of State and reviewed by IPERS. The investment guidelines do not require a matching of investment maturities with loan maturities, but do establish minimum levels of liquidity and other investment restrictions designed to minimize the risks associated with not matching the maturity of the investments with the maturity of the loans. The effective duration of the cash collateral account at June 30, 2015, was 0.00. Credit quality and years to maturity statistics for the cash collateral account at June 30, 2015, are shown in the table above.

E. Capital Assets

The IPERS headquarters at 7401 Register Drive, Des Moines, Iowa, is held as a capital asset. Building and land are recorded at cost, including the costs of acquisition and remodeling. The building is being depreciated using the straight-line method and a useful life of 39 years. Land, a nonexhaustible asset, is not depreciated. Other capital assets consist primarily of office equipment, data processing equipment, and software. All purchased equipment is recorded at cost. Depreciation on equipment is computed using the straight-line method based on estimated useful lives ranging from 3 to 10 years. Software is depreciated over 15 years.

Total depreciation expense for the year ended June 30, 2015, was $2.4 million. Of that amount, $29,891 was reclassified as an investment-related expense on the Schedule of Investment-Related Expenses on page 45. In FY2015, capital asset additions of $845,298 were capitalized.

F. Compensated Absences and Other Postemployment Benefits

IPERS staff members, as State of Iowa employees, participate in the benefits available to all State of Iowa employees. Expenses related to accumulated vacation and sick leave earned by IPERS employees are recorded when earned.

IPERS has recorded liabilities of $712,858 related to the Sick Leave Insurance Program (SLIP). The SLIP calculates a dollar value based on the unused sick leave balance to be credited to a retiree's account and used to pay the employer's share of the selected State group health insurance premium.

IPERS has also recorded liabilities for other postemployment benefits. These benefits consist of an implicit rate subsidy, which is the difference between the blended premiums paid by all participants in the State's health care plans and the expected claims for the retiree group. This liability, as determined by the State GAAP Team, was $5,681 for each full-time employee of IPERS, for a total liability of $431,756.

These accrued liabilities are included in accounts payable and accrued expenses in the Statement of Fiduciary Net Position on page 21. Details are provided on a statewide basis in the State of Iowa's CAFR.

(2) PLAN DESCRIPTION

A. Administration

IPERS is a cost-sharing, multiple-employer, contributory defined benefit public employee retirement system. Administrative expenses are appropriated each year by the Iowa Legislature and paid from the Trust Fund.

The IPERS Investment Board is designated as the Fund's trustee. It sets investment policies and oversees the actuarial program of the System. The Investment Board holds public meetings regularly to review actuarial findings and investment performance, and to formalize policies with the administration.

Eleven members serve on the Investment Board: seven voting members and four nonvoting members.

Summary of Capital Assets

As of June 30, 2015, and 2014

Capital Assets	Land	Building and Improvements	Land Improvements	Furniture, Equipment, and Software	Total Capital Assets
Balances as of June 30, 2014	$500,000	$7,040,926	$413,226	$24,615,012	$32,569,164
Additions	---	---	---	845,298	845,298
Deletions	---	---	---	(230,826)	(230,826)
Balances as of June 30, 2015	500,000	7,040,926	413,226	25,229,484	33,183,636
Accumulated Depreciation					
Balances as of June 30, 2014	---	1,877,728	20,661	6,672,520	8,570,909
Depreciation expense	---	210,953	13,774	2,175,985	2,400,712
Deletions	---	---	---	(227,723)	(227,723)
Balances as of June 30, 2015	---	2,088,681	34,435	8,620,782	10,743,898
Net capital assets as of June 30, 2015	**$500,000**	**$4,952,245**	**$378,791**	**$16,608,702**	**$22,439,738**

The voting members include:

- Three public members, appointed by the Governor, who are not members of IPERS and who each have substantial institutional investment experience or substantial institutional financial experience.
- Three members, appointed by the Governor, who are members of IPERS: one must be an active member who is an employee of a school district, area education agency, or merged area; one must be an active member who is not an employee of a school; and one must be a retired member of IPERS.
- The Treasurer of State.

The nonvoting members include:

- Two state representatives (one appointed by the speaker of the Iowa House of Representatives, and one appointed by the minority leader of the Iowa House).
- Two state senators (one appointed by the majority leader of the Iowa Senate, and one appointed by the minority leader of the Iowa Senate).

The term for an Investment Board member appointed by the Governor is six years. Gubernatorial appointees are subject to confirmation by the Iowa Senate.

The IPERS Benefits Advisory Committee is statutorily charged to make benefit and service recommendations to IPERS and the General Assembly.

The Committee is composed of representatives of constituent groups concerned with the System, and includes representatives of all major employer groups and major active and retired member associations.

B. Membership

Participation in IPERS is mandatory for most employees of the State of Iowa and its political subdivisions, including public school systems. Exceptions include those employees covered by another retirement system, other than Social Security, supported in whole or in part by public contributions. Membership is optional for the members of the Iowa General Assembly and certain other individuals.

At June 30, 2015, there were 167,367 members contributing to the System (active members), employed by 1,845 public employers. The number of active members increased by 0.88 percent from June 30, 2014.

The Plan Membership tables and pie charts provide further information on the composition of the membership as of June 30, 2015.

Plan Membership

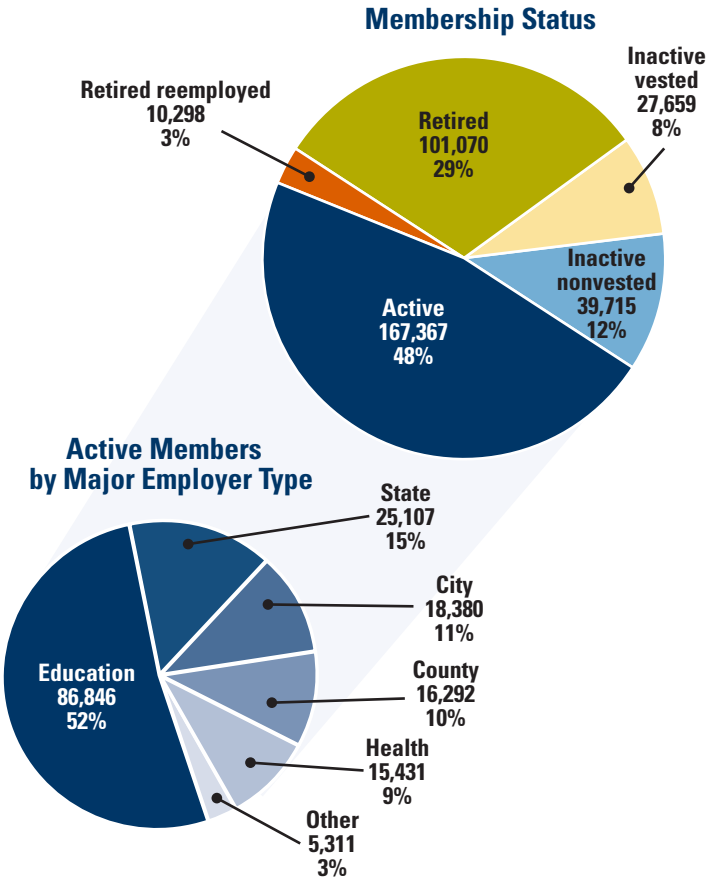
Fiscal Years Ended June 30

Members	2015	2014
Retirees and beneficiaries	111,368	108,233
Active vested	106,743	112,867
Inactive vested	27,659	28,765
Active nonvested	60,624	53,046
Inactive nonvested	39,715	43,502
Total	**346,109**	**346,413**

Note: Retired reemployed members are included in the number of retirees and beneficiaries. Retired reemployed members consist of all retirees who have at any time returned to covered employment but have not subsequently requested a refund or a benefit recalculation.

	2015		2014	
Employer Type	**Number of Entities**	**Covered Wages**	**Number of Entities**	**Covered Wages**
City	876	$ 706,841,608	948	$ 830,532,874
Education	362	3,582,036,843	371	3,437,530,093
County	272	740,447,292	332	732,270,341
Other	137	108,881,714	149	102,302,327
Utilities	131	98,060,023	134	90,081,829
Health	66	696,050,759	57	525,415,604
State	1	1,394,029,902	10	1,381,144,212
Total	**1,845**	**$7,326,348,141**	**2,001**	**$7,099,277,280**

Note: In compliance with GASB Statement No. 67, the 2014 employer counts were adjusted in 2014. Additional adjustments have been made to the 2015 counts.



C. Benefit Plan

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.

Vesting

Requirements for becoming a vested member of IPERS changed for Regular members on July 1, 2012. Starting July 1, 2012, a Regular member who completes seven years of covered service or has reached the age of 65 while in IPERS-covered employment becomes vested. Before that date, a member who completed four years of covered service or reached the age of 55 while in IPERS-covered employment became vested. Special service members continue to vest under the pre-July 1, 2012, rules.

Service Purchases

Under certain circumstances, members may restore (buy back) previously refunded member service, purchase (buy in) IPERS service credit for employment elsewhere or time spent away from work, or convert (buy up) Regular service credit to Special service credit. The cost of purchasing service is determined by the System's actuary.

Refunds

IPERS members who terminate public employment for any reason may request a full refund of their accumulated contributions. Vested members requesting a refund also receive a portion of their accumulated employer contributions. Acceptance of the refund automatically terminates IPERS membership and all claims to future benefits. If an employee works in covered employment for less than six months, the employer may file a wage adjustment and the applicable IPERS contributions will be refunded to the individual and employer.

Eligibility for Pensions

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

Members who are age 70 and still working for an IPERS-covered employer may apply to begin receiving IPERS retirement benefits while still employed.

Special service members are eligible for retirement benefits if they are vested, no longer working for an IPERS-covered employer, and reach age 55. Sheriffs and deputies may become eligible for retirement benefits at age 50 if they have 22 years of qualified service.

Pension Benefit Formula

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.)
- An early-retirement reduction, only if the benefit is first paid before the member reaches normal retirement age.

If a Regular member receives benefits before normal retirement age, a permanent early-retirement reduction will apply. For service earned before July 1, 2012, a reduction of 0.25 percent per month is applied for each month the benefit is paid before normal retirement age. For service earned after June 30, 2012, the reduction is 0.50 percent per month and applies to each month that the member receives a benefit before age 65.

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

- A multiplier (based on years of service).
- The member's highest three-year average salary.

Benefit Options

Upon retirement, an IPERS member may choose from six benefit options. Each of the six options provides a lifetime benefit for the IPERS member. The amount of the member's benefits and the amount and availability of death benefits vary according to the option selected.

Option 1

A member receives a lifetime monthly benefit. At retirement, the member specifies a lump-sum death benefit amount, in an increment of $1,000, to be paid

to a designated beneficiary upon the death of the member. The death benefit cannot exceed the member's accumulated contributions. The death benefit cannot lower the monthly benefit as calculated under Option 2 by more than 50 percent.

Option 2

A member receives a lifetime monthly benefit. When the member dies, the designated beneficiary receives a lump-sum refund of the excess, if any, of the member's accumulated contributions minus the amount of all retirement benefits paid to the member prior to death.

Option 3

A member receives the maximum lifetime monthly benefit. No payment is made to a beneficiary upon the member's death.

Option 4

A member receives a lifetime monthly benefit actuarially reduced to provide for a lifetime monthly benefit to the contingent annuitant upon the member's death. The age of the contingent annuitant can affect the cost of the lifetime payments to the member based on actuarial tables. The contingent annuitant can receive 100 percent, 75 percent, 50 percent, or 25 percent of the member's monthly benefit. The choice in percentages will be limited if the contingent annuitant is not the member's spouse and is more than ten years younger than the member.

Option 5

A member receives a lifetime benefit with a ten-year guarantee. If the member dies before ten full years have passed (120 monthly payments are made), the member's designated beneficiary will receive a monthly benefit for the remainder of the ten years. If the beneficiary dies before the ten years expire, the beneficiary's estate will receive a commuted lump-sum settlement. If the member designates more than one beneficiary, payments will be made in a lump sum only. Members who have attained age 90 as of the first month of entitlement are not allowed to select this option.

Option 6

The member receives a reduced monthly benefit so that a lifetime monthly benefit may be provided after the member's death to the person named by the member as the contingent annuitant. In addition, the monthly amounts are reduced to pay for a pop-up feature. The pop-up feature provides that if the contingent annuitant dies before the member, the member's benefit will pop back up to what it would have been under IPERS Option 2, and death benefits may be payable to the member's designated beneficiary if certain conditions are met.

Level Payment Options

Special service members may choose to apply a level payment feature to Options 1–5. Level payment options provide for a lifetime monthly benefit that will be permanently reduced when the member reaches age 62. Level payment options allow members to receive approximately equal payments before and after they begin receiving Social Security benefits. The death benefit provisions for each level payment option match the provisions of the corresponding "normal" option.

Dividend Payments

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, for retirees who began receiving benefits prior to July 1990, a guaranteed dividend is included with a member's November benefit payment. The dividend payable in any given year is the sum of the dollar amount of the dividend payable in the previous November and a dividend adjustment. The dividend adjustment, as set out in Iowa Code section 97B.49F(1)(b), is calculated by multiplying the total of the retiree's monthly benefit payments and the dividend payable to the retiree in the previous calendar year by the applicable percentage, up to a maximum of 3 percent.

Until January 2014, post-June 1990 retirees received a Favorable Experience Dividend (FED) with their January benefit payment. Unlike the November dividend, the FED payment was never a guaranteed payment. The FED was paid from a reserve account that was created within the IPERS Trust Fund in 1998 by the Iowa Legislature. This reserve account was used only for FED payments, and it was exhausted after the January 2014 payments.

By law, IPERS cannot transfer additional funds to the FED reserve account until the Trust Fund is 100 percent funded and would remain so after the transfer.

Disability 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.

Special service members who retire because of a disability may meet the requirements to receive Regular or Special service disability benefits from IPERS.

Death Benefits

Preretirement Death Benefits

If an IPERS member dies before retirement, the member's designated beneficiary may receive a lump-sum payment based on the greater of the following two formulas:

$$\textbf{Death benefit} = \text{The actuarial present value of the member's accrued benefit as of date of death.}$$

$$\textbf{Death benefit} = \text{Member's accumulated contributions} + \left[\text{Member's highest annual covered wage} \times \frac{\text{Years of service}}{30^*}\right]$$

*The denominator is 22 for all Special service members.

If the member's designated beneficiary is a sole individual, the beneficiary will be offered the choice between receiving a lump sum or a lifetime annuity.

Postretirement Death Benefits

If an IPERS member dies after retirement, payment is made to the beneficiary according to the option selected by the member at the time of retirement.

(3) ACTUARIAL CONTRIBUTIONS COMPARED TO CONTRIBUTIONS PAID

Each year, IPERS' actuary performs a valuation of the liabilities and assets of the IPERS Trust Fund in accordance with Iowa Code section 97B.4(4)(d). The actuary also calculates an actuarial contribution rate for each membership group, which is the contribution rate necessary to fully fund the benefits provided under Iowa Code chapter 97B.

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 closed 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.

Although the actuarial contribution rates were calculated each year for all three membership groups, the contribution rates for the Regular membership were set in law through June 30, 2012. From FY2002 through FY2013, the rate allowed by statute was less than the actuarial rate, in spite of rate increases passed by the Iowa Legislature in 2006 and 2010. 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 vary each year to 1 percentage point for Regular members.

In fiscal year 2014, the contribution rate for Regular members equaled the actuarial rate and in fiscal year 2015, it exceeded the actuarial rate.

Iowa statute authorizes the contribution rates for the Special service groups to be set pursuant to the Contribution Rate Funding Policy. Therefore, these groups have paid the rates needed to fully fund their benefits each year through FY2014. In FY2015, the rates for the Special service members exceeded the actuarial rates.

Contribution Rates

Fiscal Year 2015

	Employee	Employer	Total
Regular members	5.95%	8.93%	14.88%
Sheriffs and deputies	9.88%	9.88%	19.76%
Protection occupation members	6.76%	10.14%	16.90%

Contributions are remitted by participating employers. IPERS, as a participating employer, is subject to paying contributions at the Regular membership rate.

Wages were covered up to the Internal Revenue Code section 401(a)(17) compensation limits of $260,000 for calendar year 2014, and $265,000 in calendar year 2015. A detailed Schedule of Employers' Contributions encompassing ten years can be found on page 41 of the Required Supplementary Information following these notes.

(4) NET PENSION LIABILITY

The components of the net pension liability (NPL) at June 30, 2015, were as follows:

Total pension liability	$33,370,318,731
Plan fiduciary net position	$28,429,834,829
Employers' net pension liability	$4,940,483,902
Plan fiduciary net position as a percentage of the total pension liability	85.19%

The total pension liability (TPL) was determined by an actuarial valuation as of June 30, 2015. Actuarial valuations involve projections of benefit payments, contributions, and other amounts decades into the future. These projections are based on actuarial assumptions and methods adopted by the IPERS Investment Board. Assumptions such as salary increases, investment rates of return, retirement and disability rates, mortality rates, and inflation rates are compared against actual experience in actuarial experience studies conducted every four years. These studies assist IPERS in evaluating the accuracy with which the assumptions predict actual experience. The Investment Board adopted and approved the use of the assumptions and methods shown in the following table. These are the assumptions the actuary used to comply with GASB 67. Additional methods and assumptions used in the actuarial valuation for funding purposes are listed in the Actuarial section of this report.

Actuarial Methods and Assumptions

Actuarial cost method	Entry age normal
Assumed investment return	7.50%
Projected salary increases	4%–17% depending upon years of service
Mortality tables	RP-2000 Employee and Healthy Annuitant Tables with generational scaling and age adjustments
Inflation rate	3%
Wage growth	4%

The long-term actuarial assumed investment return reflects the anticipated returns on current and future plan assets. It provides a discount rate to determine the present value of future benefit payments.

The actuarial assumed investment return is reviewed as part of the experience studies prepared for the System by IPERS' actuary. The most recent analysis, performed for the period covering fiscal years 2010 through 2013, is outlined in a report dated May 27, 2014. Several factors are considered in evaluating the actuarial assumed investment return including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the actuarial assumed investment return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the actuarial assumed investment return for funding pension plans, which covers a longer timeframe. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

Best estimates of arithmetic real rates of return for each major asset class included in IPERS' target asset allocation as of June 30, 2015, are shown in the following table.

Target Allocations and Long-Term Expected Real Rates of Return

As of June 30, 2015

	Target Allocation	Long-Term Expected Real Rate of Return
Core-plus fixed income	28%	2.04%
Domestic equity	24%	6.29%
International equity	16%	6.75%
Private equity/debt	11%	11.32%
Real estate	8%	3.48%
Credit opportunities	5%	3.63%
U.S. TIPS	5%	1.91%
Other real assets	2%	6.24%
Cash	1%	–0.71%

A. Discount Rate

The discount rate used to calculate the TPL is 7.50 percent. The projection of cash flows used to determine the discount rate assumed that contributions from employees and employers will be made at the contractually required rates, which are set by the Contribution Rate Funding Policy and derived from

the actuarial valuation. Based on those assumptions, IPERS' fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the actuarial assumed investment return was applied to all periods of projected benefit payments to determine the TPL.

B. Net Pension Liability Sensitivity

GASB 67 requires the disclosure of the sensitivity of the NPL to changes in the discount rate. The table below shows the NPL if it were calculated using discount rates of 6.50 percent and 8.50 percent, which are 1 percentage point lower and 1 percentage point higher than the actuarial assumed investment return of 7.50 percent.

1% Decrease: 6.50%	Current Discount Rate: 7.50%	1% Increase: 8.50%
$8,917,538,097	$4,940,483,902	$1,584,153,398

C. Proportioning the Net Pension Liability

Many of IPERS' employers are implementing GASB Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions*, in FY2015. This new standard requires employers following U.S. generally accepted accounting principles (GAAP) to record a portion of IPERS' net pension liability on their financial statements, as well as a portion of the net pension liability from any other defined benefit pension plans administered through trusts in which they participate.

IPERS, in association with the Auditor of State, provides information needed by the employers to comply with this new reporting standard. Previously, employers reported only their contributions paid to IPERS. With the implementation of GASB 68, employers that report on a GAAP basis will report their proportionate share of the NPL, a new measure of pension expense, deferred inflows of resources, and deferred outflows of resources related to pensions on their financial statements. GASB 68 also requires additional note disclosures, as well as new tables and related notes in the Required Supplementary Information.

Employers with a June 30 fiscal year end employ a one-year lag by using IPERS' June 30, 2014, information for their June 30, 2015, reporting, as allowed by the GASB. The NPL of $4.940 billion will be apportioned to employers for their FY2016 financial reporting. IPERS apportions the NPL among participating employers based on the contributions each employer paid during the fiscal year as a percentage of all employer contributions paid to IPERS for the fiscal year.

(5) LITIGATION AND CONTINGENCIES

IPERS monitors, evaluates, and takes the necessary actions related to litigation for or against IPERS. This includes, but is not limited to, federal and state court actions and defending administrative appeals filed against IPERS. IPERS employs outside legal counsel, utilizes the legal services of the Iowa Attorney General's Office, and utilizes in-house legal counsel to assert and defend claims for IPERS.

IPERS participates in federal securities class actions as the lead plaintiff, co-lead plaintiff, as a named plaintiff, or as a member of the class action. During the fiscal year, IPERS made several recoveries benefiting the Trust Fund. The recoveries are reflected in the financial statements for the year ended June 30, 2015.

In the fraud action against Westridge Capital Management, IPERS continues to pursue full recovery. In recent years, IPERS recovered $225.7 million, which is nearly 90 percent of its initial investment. However, in fiscal year 2015, IPERS did not receive a distribution.

IPERS was notified by one of its investment managers that IPERS has been named as a defendant, along with approximately 500 other investors, in an action before the United States Bankruptcy Court for the Southern District of New York known as *Motors Liquidation Company Avoidance Action Trust v. JP Morgan Chase Bank, N.A. et. al.*, Proceeding Nos. 09-50026 and 09-00504. IPERS cannot estimate its potential losses because the Court has sealed the documents related to this action.

IPERS successfully defended several appeals filed under the Iowa Administrative Procedures Act. No administrative appeal resulted in a loss to the Trust Fund.

(6) COMMITMENTS

At June 30, 2015, IPERS had commitments to fund an additional $1.999 billion to various private equity/debt partnerships and $117.7 million to real estate debt partnerships.

(7) NET POSITION RESTRICTED FOR PENSIONS

There is only one IPERS Trust Fund where all investment income, employee contributions, and employer contributions are pooled. However, IPERS' three distinct membership groups are characterized by different benefit levels and occupation types. Because of these varied characteristics, each group has its own contribution rate. To calculate contribution rates, it is necessary to separately identify the liabilities and assets associated with each group. Assets of members with service in more than one membership group are aggregated in a single group, as noted on the "transfers between groups" line in the following table. The end result is a closer match of liabilities with assets and therefore more refined contribution rates.

(8) QUALIFIED BENEFITS ARRANGEMENT (QBA)

The purpose of the QBA is to permit IPERS retirees to receive the amount of their calculated monthly benefit that exceeds the IRS limits under IRC section 415(b). The QBA is maintained as a separate trust arrangement and no commingling with the IPERS Trust Fund is permitted. The QBA is funded by employer contributions on an as-needed basis and is therefore fully funded.

(9) SUBSEQUENT EVENT

In October 2015, IPERS received a distribution of $20.0 million in the Westridge Capital Management fraud action. IPERS has now recovered 97 percent of its investment principal. IPERS may receive one or two future distributions as the receivership draws down. Any future distributions are expected to be in much smaller amounts.

Allocation of Net Position Restricted for Pensions

Fiscal Year Ended June 30, 2015

	Regular Members	Sheriffs and Deputies	Protection Occupation Members	Total
Net position as of June 30, 2014	**$26,157,761,036**	**$559,260,253**	**$1,321,528,604**	**$28,038,549,893**
Additions				
Contributions	1,023,294,530	19,634,772	55,195,094	1,098,124,396
Service purchases	16,378,230	380,522	716,881	17,475,633
Investment and miscellaneous income	1,079,547,834	23,276,163	55,198,676	1,158,022,673
Total additions	***2,119,220,594***	***43,291,457***	***111,110,651***	***2,273,622,702***
Deductions				
Benefit payments	1,667,665,590	24,654,004	52,281,416	1,744,601,010
Member refunds	40,546,738	488,710	6,131,983	47,167,431
Administrative expenses	12,102,219	91,897	397,640	12,591,756
Investment expenses	72,693,323	1,567,343	3,716,903	77,977,569
Total deductions	***1,793,007,870***	***26,801,954***	***62,527,942***	***1,882,337,766***
Preliminary net position	**26,483,973,760**	**575,749,756**	**1,370,111,313**	**28,429,834,829**
Transfers between groups	**(3,567,837)**	**2,581,684**	**986,153**	**---**
Adjusted net position as of June 30, 2015	**$26,480,405,923**	**$578,331,440**	**$1,371,097,466**	**$28,429,834,829**

Note: QBA Fund amounts are included in the Regular Members column.

Schedule 1: Schedule of Changes in the Employers' Net Pension Liability and Related Ratios

Fiscal Years Ended June 30, 2015, and 2014

	2015	2014
Total pension liability		
Service cost	$ 775,968,193	$ 710,882,930
Interest	2,334,357,588	2,229,800,454
Benefit term changes	---	---
Differences between expected and actual experience	47,305,303	41,027,658
Assumption changes	---	214,545,272
Benefit payments, including member refunds	(1,791,768,441)	(1,812,184,860)
Net change in total pension liability	***1,365,862,643***	***1,384,071,454***
Total pension liability–beginning	***32,004,456,088***	***30,620,384,634***
Total pension liability–ending	***33,370,318,731***	***32,004,456,088***
Plan fiduciary net position		
Employer contributions	656,911,160	639,001,548
Employee contributions	441,213,236	429,195,536
Service purchases	17,475,633	14,324,144
Net investment income, including net securities lending income	1,080,045,104	3,904,373,624
Benefit payments, including member refunds	(1,791,768,441)	(1,812,184,860)
Administrative expenses	(12,591,756)	(14,866,128)
Net change in plan fiduciary net position	***391,284,936***	***3,159,843,864***
Plan fiduciary net position–beginning	***28,038,549,893***	***24,878,706,029***
Plan fiduciary net position–ending	***28,429,834,829***	***28,038,549,893***
Net pension liability–ending	**$ 4,940,483,902**	**$ 3,965,906,195**
Plan fiduciary net position as a percentage of the total pension liability	**85.19%**	**87.61%**
Covered payroll	**$ 7,326,348,141**	**$ 7,099,277,280**
Employers' net pension liability as a percentage of covered payroll	**67.43%**	**55.86%**

Note: Schedule is intended to show a 10-year trend. Additional years will be reported as they become available.

Schedule 2: Schedule of Employers' Contributions

Last 10 Fiscal Years

Fiscal Year	Actuarial Contributions	Contributions Paid*	Contribution Deficiency (Excess)	Covered Payroll	Contributions Paid as a Percentage of Covered-Employee Payroll
2015					
Regular members	$602,423,393	$613,976,718	$(11,553,325)	$6,899,669,544	8.90%
Sheriffs and deputies	9,588,844	9,817,386	(228,542)	99,568,974	9.86%
Protection occupation members	32,548,775	33,117,056	(568,281)	327,109,623	10.12%
2015 Total	**$644,561,012**	**$656,911,160**	**$(12,350,148)**	**$7,326,348,141**	**8.97%**
2014					
Regular members	$596,983,323	$596,983,323	---	$6,683,171,236	8.93%
Sheriffs and deputies	9,583,512	9,583,512	---	96,396,464	9.94%
Protection occupation members	32,434,713	32,434,713	---	319,709,580	10.15%
2014 Total	**$639,001,548**	**$639,001,548**	**---**	**$7,099,277,280**	**9.00%**
2013					
Regular members	$573,480,969	$560,587,243	$12,893,726	$6,473,445,372	8.66%
Sheriffs and deputies	9,246,766	9,246,766	---	93,426,040	9.90%
Protection occupation members	32,118,873	32,118,873	---	313,259,722	10.25%
2013 Total	**$614,846,608**	**$601,952,882**	**$12,893,726**	**$6,880,131,134**	**8.75%**
2012					
Regular members	$528,525,785	$518,075,221	$10,450,564	$6,384,444,604	8.11%
Sheriffs and deputies	8,999,273	8,999,273	---	92,082,564	9.77%
Protection occupation members	30,864,449	30,864,449	---	309,631,552	9.97%
2012 Total	**$568,389,507**	**$557,938,943**	**$10,450,564**	**$6,786,158,720**	**8.22%**
2011					
Regular members	$530,692,453	$429,936,439	$100,756,014	$6,187,127,465	6.95%
Sheriffs and deputies	7,994,058	7,994,058	---	89,378,089	8.94%
Protection occupation members	29,711,050	29,711,050	---	298,367,165	9.96%
2011 Total	**$568,397,561**	**$467,641,547**	**$100,756,014**	**$6,574,872,719**	**7.11%**
2010					
Regular members	$467,839,274	$414,715,905	$53,123,369	$6,189,106,241	6.70%
Sheriffs and deputies	6,725,778	6,725,778	---	87,535,984	7.68%
Protection occupation members	27,328,184	27,328,184	---	294,539,780	9.28%
2010 Total	**$501,893,236**	**$448,769,867**	**$53,123,369**	**$6,571,182,005**	**6.83%**
2009					
Regular members	$441,951,764	$383,886,018	$58,065,746	$6,060,164,555	6.33%
Sheriffs and deputies	6,365,911	6,365,911	---	84,855,625	7.50%
Protection occupation members	24,736,688	24,736,688	---	293,622,944	8.42%
2009 Total	**$473,054,363**	**$414,988,617**	**$58,065,746**	**$6,438,643,124**	**6.45%**
2008					
Regular members	$408,882,080	$353,154,089	$55,727,991	$5,823,789,388	6.06%
Sheriffs and deputies	6,301,171	6,301,171	---	81,786,933	7.70%
Protection occupation members	17,644,966	17,644,966	---	225,869,056	7.81%
2008 Total	**$432,828,217**	**$377,100,226**	**$55,727,991**	**$6,131,445,377**	**6.15%**
2007					
Regular members	$387,578,925	$318,468,194	$69,110,731	$5,510,516,261	5.78%
Sheriffs and deputies	6,577,652	6,577,652	---	78,074,667	8.42%
Protection occupation members	17,723,013	17,723,013	---	193,115,271	9.18%
2007 Total	**$411,879,590**	**$342,768,859**	**$69,110,731**	**$5,781,706,199**	**5.93%**
2006					
Regular members	$364,424,911	$301,272,133	$63,152,778	$5,264,024,719	5.72%
Sheriffs and deputies	6,228,675	6,228,675	---	76,239,815	8.17%
Protection occupation members	16,888,833	16,888,833	---	183,598,787	9.20%
2006 Total	**$387,542,419**	**$324,389,641**	**$63,152,778**	**$5,523,863,321**	**5.87%**

*Contributions paid and recognized by the System are the same as the contractually required contributions.
Note: Methodology was revised in fiscal year 2009 to more appropriately reflect contribution amounts for the Special service groups. Prior years have been restated to reflect this change.

Schedule 3: Schedule of Investment Returns

Fiscal Years Ended June 30, 2015, and 2014

	2015	2014
Annual money-weighted rate of return, net of investment expense	3.91%	15.96%

Note: Schedule is intended to show a 10-year trend. Additional years will be reported as they become available.

Notes to Required Supplementary Information

Benefit terms, actuarial assumptions and methods, and funding policies affect the actuarial contribution rates. Changes over the past ten years that had a significant impact on the actuarial contribution rates are summarized below. More detail may be obtained from the annual valuation reports.

(1) CHANGES IN BENEFIT TERMS

Legislation passed in 2010 modified benefit terms for current Regular members. The definition of final average salary changed from the highest three to the highest five years of covered wages. The vesting requirement changed from four years of service to seven years. The early retirement reduction increased from 3 percent per year measured from the member's first unreduced retirement age to a 6 percent reduction for each year of retirement before age 65.

In 2008, legislative action transferred four groups—emergency medical service providers, county jailers, county attorney investigators, and National Guard installation security officers—from Regular membership to the protection occupation group for future service only.

The 2006 Legislature passed several provisions. One of these was the requirement that the System must be fully funded before benefits can be increased, and it must remain fully funded after the benefit change. A benefit increase may be enacted if such increase is accompanied by an increase in the contribution rate necessary to support the benefit enhancement. In addition, no transfer may be made to the Favorable Experience Dividend reserve account unless the System is fully funded and would remain so after the transfer.

Benefit provisions for sheriffs and deputies were changed in the 2004 legislative session. The eligibility for unreduced retirement benefits was lowered from age 55 by one year each July 1 (beginning in 2004) until it reached age 50 on July 1, 2008. The years of service requirement remained at 22 or more. Their contribution rates were also changed to be shared 50-50 by the employee and employer, instead of the previous 40-60 split.

(2) CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS

The 2014 valuation implemented the following refinements as a result of a quadrennial experience study:

- Decreased the inflation assumption from 3.25 percent to 3.00 percent per year.
- Decreased the assumed rate of interest on member accounts from 4.00 percent to 3.75 percent per year.
- Adjusted male mortality rates for retirees in the Regular membership group.
- Reduced retirement rates for sheriffs and deputies between the ages of 55 and 64.
- Moved from an open 30-year amortization period to a closed 30-year amortization period for the UAL beginning June 30, 2014. Each year thereafter, changes in the UAL from plan experience will be amortized on a separate closed 20-year period.

The 2010 valuation implemented the following refinements as a result of a quadrennial experience study:

- Adjusted retiree mortality assumptions.
- Modified retirement rates to reflect fewer retirements.
- Lowered disability rates at most ages.
- Lowered employment termination rates.
- Increased the probability that terminating members would eventually receive a retirement benefit.
- Modified salary increase assumptions based on various service durations.

The 2007 valuation adjusted the application of the entry age normal cost method to better match projected contributions to the projected salary stream in future years. It also included in the calculation of the UAL amortization payment the one-year lag between the valuation date and the effective date of the annual actuarial contribution rate.

The 2006 valuation implemented the following refinements as a result of a quadrennial experience study:

- Adjusted salary increase assumptions to service-based assumptions.
- Decreased the assumed interest rate credited on employee contributions from 4.25 percent to 4.00 percent.

- Lowered the inflation assumption from 3.50 percent to 3.25 percent.
- Lowered disability rates for sheriffs and deputies and protection occupation members.

(3) FUNDING POLICIES

The difference between the actuarial contribution rates and contributions paid is due entirely to statutorily set contributions that have differed from the actuarial contribution rates. Special service members have always paid at least the actuarial contribution rates.

Contribution rates for Regular members were set in statute at 9.45 percent from 1979 to 2007. In 2006, legislation allowed a 0.50 percentage point increase for each of the following four years, leading to a rate of 11.45 percent effective for FY2011. In 2010, an additional contribution rate increase to 13.45 percent, effective in FY2012, was passed by the Legislature.

The same legislation authorized IPERS to change the contribution rates by 1 percentage point each year, to bring them closer in line with the actuarial contribution rates, starting in FY2013. The FY2013 required contribution rate for Regular members was capped at 14.45 percent because of the statutory restriction, while the actuarial contribution rate was 14.77 percent. In FY2014, the required contribution rate for Regular members equaled the actuarial contribution rate and in FY2015 the required contribution rate exceeded the actuarial contribution rate.

The Contribution Rate Funding Policy adopted by the IPERS Investment Board establishes procedures for setting the contribution rates for all membership groups. The actuarial contributions in the Schedule of Employers' Contributions are calculated annually on each valuation date (June 30), and apply one year after the valuation. Accordingly, the actuarial methods and assumptions shown in the following table are from the June 30, 2013 actuarial valuation, which established the actuarially determined employer contributions for FY2015.

FY2013 Actuarial Methods and Assumptions

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	Expected value plus 25% of difference between market value and expected value
Inflation rate	3.25%
Wage growth	4%
Projected salary increases	4%–17%, including inflation, depending on years of service
Assumed investment return	7.50% compounded annually, net of investment expense and including inflation
Mortality tables	RP-2000 Generational Mortality Tables, with age setbacks and age set-forwards as well as other adjustments based on different membership groups. Future mortality improvements are anticipated using Projection Scale AA. Different adjustments apply to preretirement, postretirement, and postdisability mortality tables.

Schedule 1: Schedule of Administrative Expenses

Fiscal Years Ended June 30, 2015, and 2014

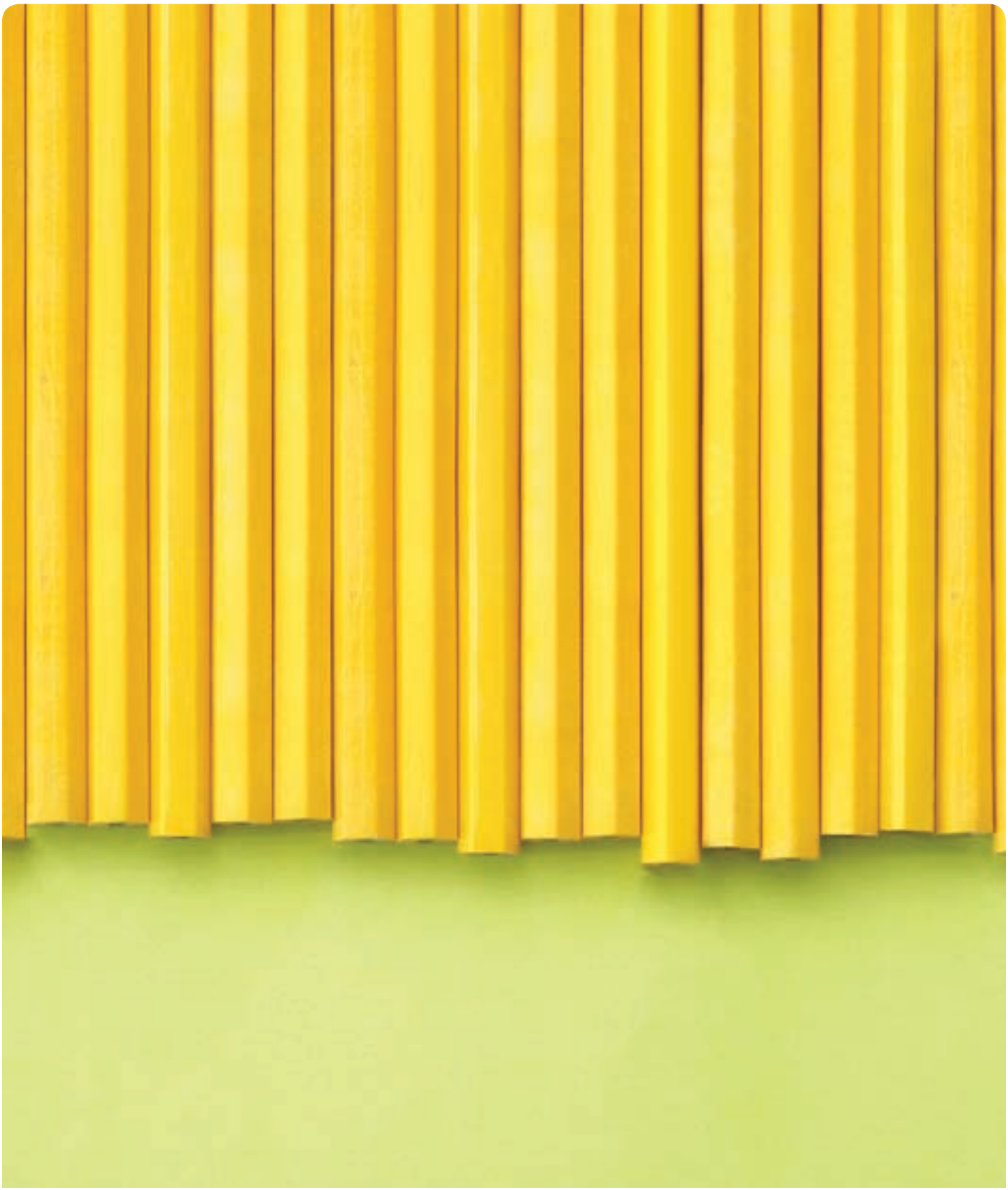
	2015	2014
Personnel		
Salaries and wages	$ 6,268,284	$ 6,059,899
Travel	129,908	102,451
Professional and technical services		
Professional	502,282	694,221
Actuary	185,890	183,250
Computer support services	2,083,995	4,467,483
Auditing	141,668	116,200
Communications		
Telephone	137,090	153,337
Printing	137,172	166,644
Other expenses		
Supplies	489,523	567,357
Utilities	50,780	44,535
Depreciation	2,370,821	2,213,509
Miscellaneous	94,343	97,242
Total administrative expenses	**$12,591,756**	**$14,866,128**

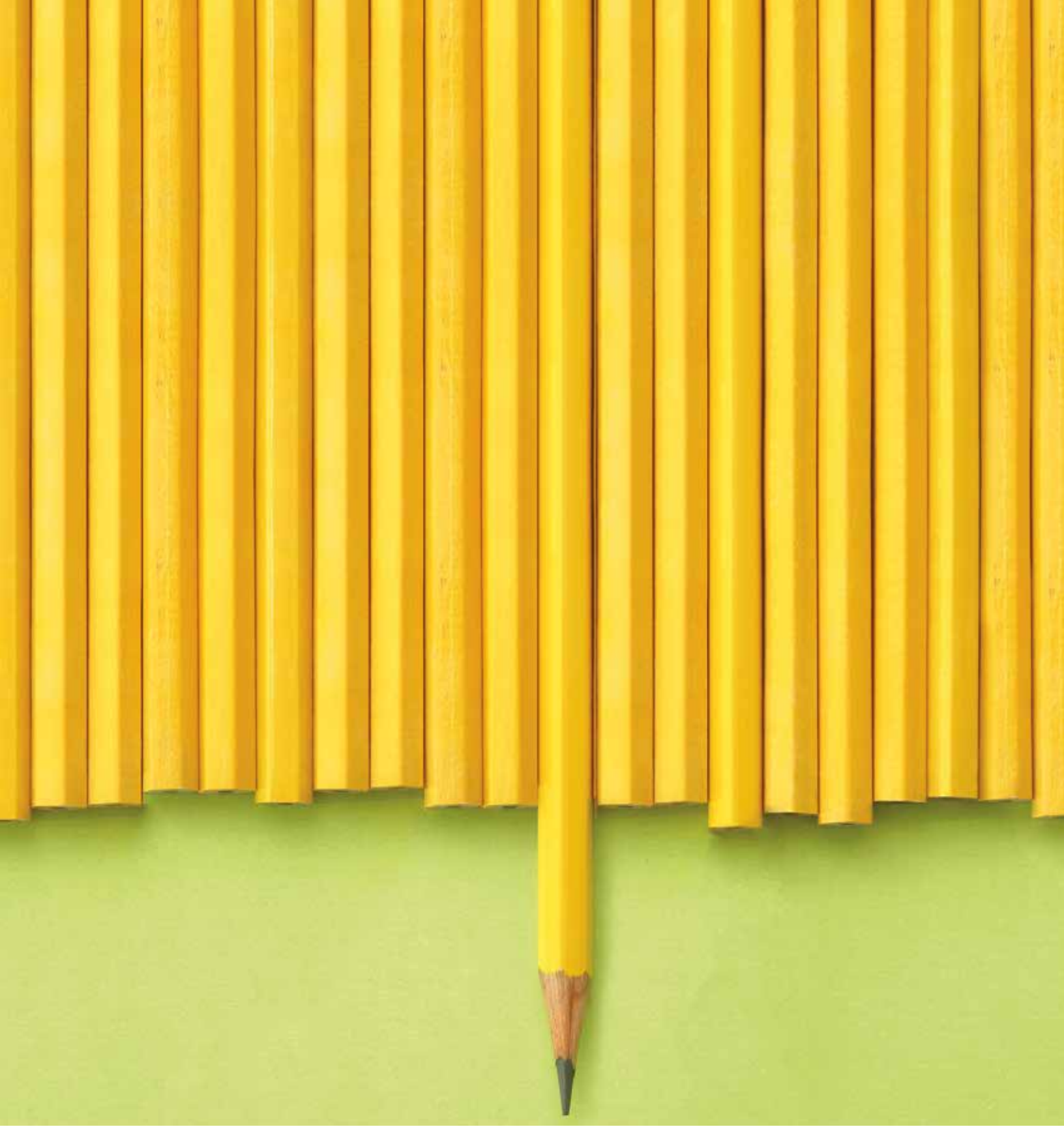
Note: Administrative expenses related to investments do not appear here but are included in the investment expenses reported in the Schedule of Investment-Related Expenses on the next page. Repairs and rent, which were previously reported individually, have been included in miscellaneous other expenses due to immateriality.

Schedule 2: Schedule of Investment-Related Expenses

Fiscal Years Ended June 30, 2015, and 2014

	2015	2014
BlackRock Institutional Trust Company, NA	$ 2,236,300	$ 3,450,198
Columbia Management Investment Advisers, LLC	2,938,790	333,755
First Quadrant, L.P.	526,007	789,561
Fisher Investments	771,021	552,009
Janus Capital Management LLC	1,530,428	857,901
J.P. Morgan Investment Management, Inc.	1,755,616	1,577,162
Mellon Capital Management Corporation	3,914,605	877,831
PanAgora Asset Management, Inc.	492,273	470,550
Wellington Management Company, LLP	3,031,651	2,219,313
Total domestic equity	***17,196,691***	***11,128,280***
AEGON USA Investment Management, LLC	2,266,153	1,086,524
BlackRock Financial Management, Inc.	1,019,795	929,552
MacKay Shields LLC	1,720,576	1,852,864
Mellon Capital Management Corporation	(985,960)	56,372
Oaktree Capital Management, L.P.	1,152,541	1,848,573
Pacific Investment Management Company LLC	---	1,436,776
Principal Global Investors, LLC	437,863	402,545
Western Asset Management Company	2,855,587	2,248,833
Total fixed income	***8,466,555***	***9,862,039***
BlackRock Institutional Trust Company, NA	101,602	98,966
Fischer Francis Trees & Watts, Inc.	398,809	346,690
Total U.S. TIPS	***500,411***	***445,656***
Forest Investment Associates L.P.	1,089,156	670,989
Harvest Fund Advisors LLC	3,584,362	3,450,902
Total other real assets	***4,673,518***	***4,121,891***
Ashmore Equities Investment Management (US), LLC	2,230,537	2,627,033
BlackRock Institutional Trust Company, NA	5,939,745	3,268,501
GAM USA Inc.	398,100	334,473
Mellon Capital Management Corporation	(7,775)	---
Oechsle International Advisors, LLC	4,890,730	1,941,337
Quantitative Management Associates LLC	2,502,046	1,575,840
Wellington Management Company, LLP	2,773,946	2,091,629
Total international equity	***18,727,329***	***11,838,813***
Blackstone Real Estate Debt Strategies Associates II L.P.	1,543,500	689,823
CenterSquare Investment Management, Inc.	1,931,839	1,336,287
Clarion Partners, LLC	1,878,536	1,452,289
Invesco Real Estate	2,593,555	3,028,650
Principal Real Estate Debt Fund, LP	50,690	902
RREEF America, LLC	2,479,243	2,074,907
RREEF America, LLC (REIT)	377,477	1,036,694
State Street Global Advisors	113,368	---
UBS Realty Investors, LLC	1,776,756	1,731,951
Total real estate	***12,744,964***	***11,351,503***
Pathway Capital Management, LP	5,650,467	5,088,809
Total private equity/debt	***5,650,467***	***5,088,809***
Wilshire Associates, Inc.	331,000	346,700
Total investment consultant fees	***331,000***	***346,700***
The Bank of New York Mellon	294,957	217,614
Treasurer of State	87,997	75,627
Total custody expenses	***382,954***	***293,241***
Commission expenses	7,194,138	6,555,314
Investment staff and Board expenses	1,374,204	981,010
Miscellaneous expenses	735,338	605,656
Total other investment expenses	***9,303,680***	***8,141,980***
Total investment-related expenses	**$77,977,569**	**$62,618,912**





INTRODUCTION FINANCIAL **INVESTMENTS** ACTUARIAL STATISTICAL

INVESTMENT OVERVIEW

INVESTMENT RESULTS

INVESTMENT POLICY AND GOAL STATEMENT

INVESTMENTS

INVESTMENT OVERVIEW

This section of the CAFR was compiled by IPERS' investment staff using information provided by Wilshire Associates and The Bank of New York Mellon. Except where noted otherwise, investment returns are based on investment asset fair values and calculated using time-weighted return calculation methodologies.

Investment returns play an important role in the funded status of the IPERS Trust Fund. The Investment Board has adopted an Investment Policy and Goal Statement, with the objective to benefit the members of the System by maximizing the total rate of return on investments within prudent risk parameters. IPERS' overall investment performance goal is to achieve an annualized rate of return which, when combined with the required employee and employer contributions, will meet or exceed the benefits and administrative funding requirements of the System. (See the Investment Policy and Goal Statement at the end of this section for more information concerning IPERS' investment return objectives.)

The System's investments are managed by professional investment management firms based upon statutory investment authority, the investment policies adopted by the Investment Board, and a detailed service contract with each manager. The investment staff coordinates and monitors the investment of the Trust Fund's assets and assists the Investment Board in the formulation and implementation of investment policies and long-term investment strategy.

The IPERS net investment portfolio fair values reported in this section, and used as the basis for calculating investment returns, differ from those shown in the Financial and Actuarial sections of this report. The values used in this section are the appropriate industry standard basis for investment return calculation. Compared to the fair values shown in this report's Financial and Actuarial sections, the values reflected in this Investments section are gross of investment receivables and cash in investment manager accounts, and net of payables and securities lending collateral.

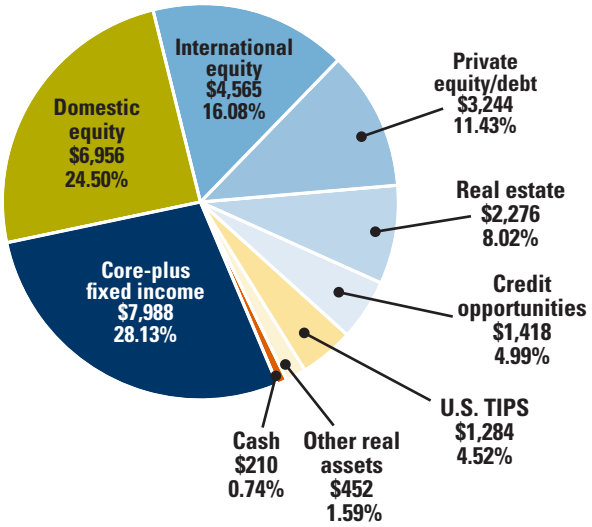
Asset Allocation and Diversification

Asset allocation is a process designed to construct an optimal long-term asset mix that achieves a specific set of investment objectives. The Investment Policy and Goal Statement establishes the System's asset allocation policy as designed to meet those objectives. The asset allocation policy is adopted to provide for diversification of assets in an effort to maximize the investment return to IPERS consistent with prudent levels of market and economic risks. Of all the components of investment strategy formulation, the determination of asset allocation targets is the most important decision.

The chart below illustrates the actual allocation to each type of investment, as of June 30, 2015.

Summary of Investments by Asset Class

(Fair Values in Millions)
As of June 30, 2015



In addition to diversifying the portfolio through asset class diversification, IPERS seeks to diversify the investment portfolio by investment management styles. The success of a particular investment style tends to be cyclical. For example, growth stock investing may outperform value stock investing for several quarters, or perhaps several years, until that trend is inevitably reversed for a subsequent period.

By utilizing several investment management firms with a variety of investment styles, the investment performance at the total Fund level is not dependent upon the success of one particular investment style.

The System also requires its investment managers to diversify their portfolios at the security level. Managers are required to diversify across sectors, industries, and individual securities. IPERS develops specific contractual investment guidelines for each manager that control the risk of high concentrations in a particular sector, industry, or security.

Overall, diversification of the System's assets among various asset classes, investment management styles, and individual securities enhances the potential of the IPERS investment portfolio to achieve its long-term objectives.

Capital Markets Commentary

Investment returns ultimately reflect changes in prices, and in fiscal year 2015, several factors led to the repricing of global capital assets in publicly traded securities. From the perspective of an unhedged U.S. investor, stocks issued by Japanese and U.S. companies provided the best returns in fiscal year 2015, returning 8.31 percent and 7.09 percent respectively, as those economies experienced positive growth and low inflation. However, European stocks returned –7.65 percent due to the turmoil in Greece, and emerging market stocks as a group returned –5.12 percent as a result of the slowing Chinese economy (in U.S. dollar returns).

Low inflation and debate about when the Federal Reserve would begin raising interest rates kept bond returns low with the broad U.S. bond market returning 1.61 percent for fiscal year 2015 (as measured by the Barclays Capital U.S. Universal index). The Barclays Capital U.S. Treasury index returned 2.31 percent for the period, while U.S. corporate high-yield bonds returned –0.40 percent and U.S. Treasury inflation-protected securities (U.S. TIPS) returned –1.85 percent.

Low interest rates helped real estate assets produce good returns early in the fiscal year, but as talk of rate hikes increased, those returns were trimmed back. Still, U.S. real estate securities (REITs) returned 5.21 percent in fiscal year 2015 as measured by the Wilshire REIT index.

Private market investments fared better in fiscal year 2015. Private real estate equity investments returned 13.37 percent as measured by the National Council of Real Estate Investment Fiduciaries (NCREIF) Open-End Diversified Core Equity index. Private equity investments, such as global leveraged buyouts and venture capital partnerships, returned 9.11 percent for the fiscal year as measured by the Burgiss All Regions Private Equity Composite.

One of the biggest events of fiscal year 2015 was the sharp decline in commodity prices, led mainly by the precipitous drop in crude oil prices. Commodities, as measured by the S&P Goldman Sachs Commodity index, returned –36.8 percent for fiscal year 2015. While lower oil prices are generally welcomed by the U.S. consumer, the steep decline in oil prices threatened the survival of the United States' resurgent energy industry.

Another major factor in fiscal year 2015 capital market returns was the continued appreciation of the U.S. dollar against most major world currencies. For example, the U.S. dollar appreciated 18.62 percent against the euro, and 17.21 percent against the Japanese yen. For unhedged U.S. investors such as IPERS, the impact was to reduce investment returns on non-U.S.-dollar-denominated investments.

Investment Portfolio Assets

At the close of fiscal year 2015, IPERS' net investment portfolio assets had a fair value of $28.393 billion. This represents an increase of $417.0 million from the $27.976 billion net investment asset fair value as of June 30, 2014. The main factor contributing to the small increase in net assets was the low investment portfolio return for fiscal year 2015.

INVESTMENT RESULTS

IPERS posted a total portfolio investment return of 3.96 percent for the fiscal year ended June 30, 2015. This return exceeded the 3.51 percent return of IPERS' policy benchmark, a set of market indexes and weightings to those indexes that reflect IPERS' target asset class allocations. The outperformance against the policy benchmark was mainly attributable to strong performance by domestic and international equity and other real asset active managers.

IPERS' 3.96 percent return did not exceed the actuarial assumed investment return of 7.50 percent, but did exceed the annual rate of inflation, as measured by the Consumer Price Index, which was 0.12 percent for the fiscal year. IPERS' annual investment return on its assets also exceeded the 1.44 percent estimated return of its liabilities, based on a proxy of IPERS' liabilities constructed by Wilshire Associates.

IPERS' private equity/debt portfolio had the highest return for the fiscal year at 12.37 percent, followed by the real estate portfolio, which produced a return of 11.33 percent for the fiscal year. IPERS' U.S. stock portfolio returned 8.93 percent for the fiscal year. The lowest-performing assets in the IPERS portfolio for the fiscal year were other real assets (investments in energy-related master limited partnerships and timberland) with a –4.67 percent return, international equities with a –4.40 percent return, and U.S. Treasury inflation-protected securities with a –1.73 percent return for the fiscal year.

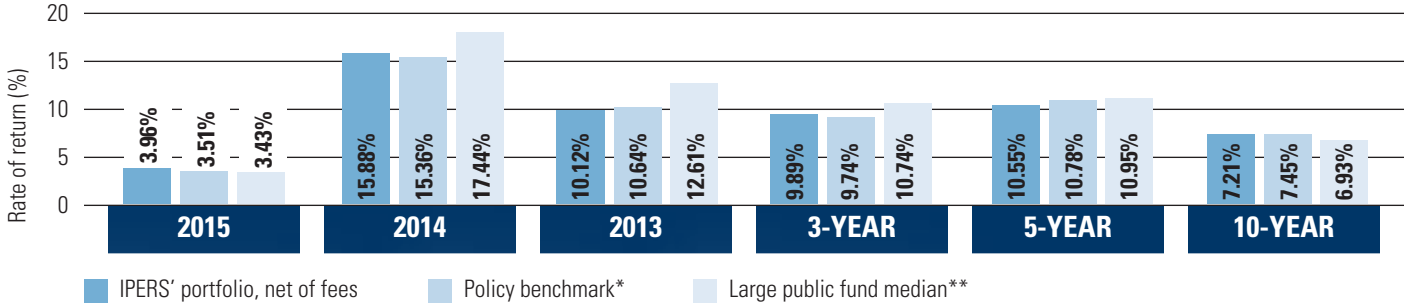
The following tables provide a historical perspective of IPERS' investment returns and performance over the last ten years. IPERS' net-of-fees investment returns are shown for the total portfolio and for each asset class over various time periods. For comparison purposes, the benchmark for each asset class is also shown.

While the impact of the Great Recession is still evident in the investment returns, IPERS' longer-term investment performance has usually exceeded actuarial assumptions. The IPERS Trust Fund's annualized investment returns for the 15-, 20-, 25-, and 30-year periods ended June 30, 2015, were 6.12 percent, 8.58 percent, 8.68 percent, and 9.38 percent, respectively. The annual investment returns for the IPERS Trust Fund for each of the past 30 years are shown in the Statistical section.

The total return an investment portfolio achieves over the long term is largely determined by the level of risk that the investor is willing to accept. In general, the greater the risk, the higher the return has to be over long time periods to compensate the investor for accepting that risk. A pension fund's willingness to accept additional risk is often the result of its need to achieve or maintain an actuarially sound funded status. Given the disparities in funding levels and the resulting differences in asset allocation that exist among pension funds, it is often difficult, if not impossible, to make a meaningful comparison of a pension system's investment performance based solely on returns.

Investment Performance Summary

For the Periods Ended June 30



*A benchmark composed of market indexes with weightings reflective of IPERS' asset allocation targets.
**Trust Universe Comparison Service (TUCS) Public Funds with Total Market Value Greater than $1 billion.
Note: 3-, 5-, and 10-year results are annualized returns.

Rates of Return

For Periods Ended June 30, 2015[1]

Asset Class	Annualized Returns (%) 1-Year	3-Year	5-Year	10-Year
Total Fund				
IPERS	3.96	9.89	10.55	7.21
Policy benchmark[2]	3.51	9.74	10.78	7.45
CPI + 3 percentage points	3.12	4.31	4.83	5.07
Actuarial assumed investment return	7.50	7.50	7.50	7.50
TUCS Public Funds > $1 billion universe median	3.43	10.74	10.95	6.93
Domestic equity				
IPERS	8.93	18.33	17.89	7.34
Wilshire 5000	7.09	17.45	17.33	8.16
International equity				
IPERS	–4.40	10.60	8.31	5.66
Custom benchmark	–4.85	9.91	8.23	6.01
Core-plus fixed income				
IPERS	1.68	2.49	4.19	4.87
Custom benchmark	1.61	2.33	3.81	4.68
Credit opportunities				
IPERS	–1.20	5.06	7.45	6.92
Custom benchmark	–1.06	5.08	7.51	6.97
Private equity/debt[3]				
IPERS	12.37	15.52	15.78	14.95
Custom benchmark	12.37	16.93	16.21	10.74
Real estate				
IPERS	11.33	9.80	12.21	7.07
Custom benchmark	11.64	11.43	13.43	8.59
U.S. TIPS composite[4]				
IPERS	–1.73	–0.61	NA	NA
Custom benchmark	–1.85	–0.59	NA	NA
Other real assets[5]				
IPERS	–4.67	14.78	NA	NA
Custom benchmark	–10.38	10.02	NA	NA
Cash				
IPERS	0.12	0.12	0.32	1.82
U.S. Treasury bills	0.02	0.06	0.08	1.41

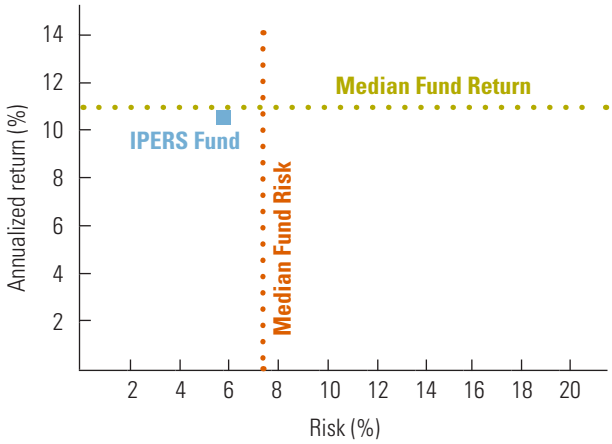
[1]All returns are time-weighted returns. All returns beyond one year are annualized.
[2]The policy benchmark on June 30, 2015, consisted of 24 percent Wilshire 5000, 16 percent MSCI ACWI ex U.S., 28 percent Barclays Universal, 5 percent Barclays U.S. TIPS, 1 percent Treasury bills, 5 percent Citigroup High-Yield Cash-Pay Capped, 11 percent IPERS private equity portfolio, 2 percent custom benchmark for other real assets, and 8 percent of a weighted benchmark consisting of 75 percent NCREIF Property index and 25 percent Wilshire REIT index. The composition of the policy benchmark has changed over the 10-year period.
[3]Private equity/debt portfolio returns and benchmark returns are provided here as time-weighted returns to allow comparison to the time-weighted returns used for other asset classes. However, the more appropriate performance measurement for the private equity asset class is a dollar-weighted or internal rate of return (IRR) calculation over long periods of time, usually many years. Note that effective Oct. 1, 2013, the private equity component of the policy benchmark changed from Wilshire 5000 + 3 percentage points to the return of the private equity portfolio itself. The change was made in recognition of the very long-term nature of private equity, the lack of investable benchmarks for the asset class, and the ineffectiveness of time-weighted returns to measure the performance of private equity. See the Private Equity/Debt section of this report for a discussion of the private equity/debt portfolio's performance using IRRs.
[4]Initial funding for this asset class occurred in the fourth quarter of 2010.
[5]Initial funding for this asset class occurred in the second quarter of 2012.

A more meaningful peer comparison can be made if returns are compared on the basis of how much return was earned for each unit of risk taken, where risk is measured by the volatility (standard deviation) of returns.

The following graph provides a comparison of IPERS' investment return per unit of risk taken for the last five years against the TUCS Universe of Public Funds with Assets Greater than $1 billion. The vertical line represents the median level of risk experienced by this universe of funds. The horizontal line represents the median rate of return earned by the group of funds. As shown in the graph, the return on IPERS' investments for the five years ended June 30, 2015, was lower than the median large public pension fund return, but it was earned with less risk than the median large public pension fund.

Risk vs. Total Return

Public Funds Greater than $1 billion
5 Years Ended June 30, 2015



Domestic Equity

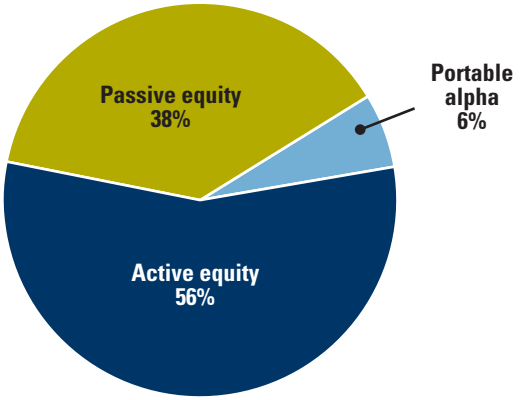
At June 30, 2015, 24.50 percent of IPERS' total portfolio was invested in domestic equities (U.S. stocks). The total net fair value of the domestic equity portfolio was $6.956 billion. The portfolio is widely diversified across various equity market sectors and industries.

The IPERS domestic equity portfolio has three components:

PASSIVE EQUITY. The passive component is divided into large-cap and small- to midcap strategies for management purposes and consists primarily of investments in commingled index funds, index futures, and short-term securities. The return objective for each passive strategy is to track, within a certain range,

Domestic Equity Portfolio

June 30, 2015



the returns of a broad market index. The passive component is designed to add diversity to the overall portfolio while complementing the active investment styles of IPERS' other domestic equity portfolios. The passive component constitutes an efficient, low-cost means of obtaining market exposure to the domestic stock market.

ACTIVE EQUITY. An actively managed portfolio consists primarily of large-capitalization stocks. For management purposes, the portfolio is divided among separate strategies that focus on different investment styles: a value portfolio, which focuses on companies undervalued relative to their prospective dividend and earnings growth; a growth portfolio, which focuses on companies whose earnings are expected to grow at rates exceeding that of the general economy; and a core portfolio, which seeks to add value across all sectors through stock selection. Each investment strategy is expected to exceed an appropriate style benchmark over a full market cycle.

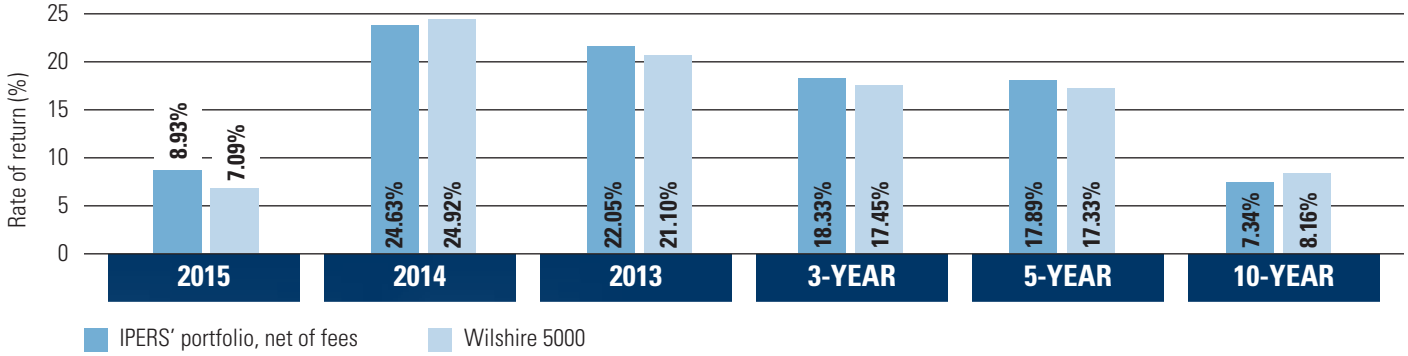
PORTABLE ALPHA. Traditional active equity strategies seek to produce returns in excess of the market (known as "alpha") through sector and stock selection. However, these traditional active strategies have historically produced mediocre excess returns, usually with a lot of volatility. This is generally because the U.S. equity market is the most efficient market in the world, making it very difficult for the average active stock manager to consistently beat the market return.

IPERS' utilization of portable alpha strategies within the domestic equity portfolio is an effort to improve the return of the portfolio without significantly increasing the risk. Portable alpha strategies attempt to achieve better risk-adjusted returns by blending excess returns (alpha) from a skillful manager, regardless of the asset class where the alpha may be achieved, with the return of any specified market index. Portable alpha strategies should work as long as (1) skillful managers exist and can be identified, (2) the alpha is not highly correlated to the market returns, and (3) derivatives are available that can replicate market returns at a low cost. The concept is that alpha is no longer constrained to the asset class—IPERS can look for alpha anywhere, and then use low-cost derivatives or index funds to obtain the required market exposure so the System can maintain its strategic asset allocation targets.

For the year ended June 30, 2015, IPERS' domestic equity portfolio delivered a return of 8.93 percent, compared to 7.09 percent for its benchmark, the Wilshire 5000 index. Significant outperformance by both of the small- to midcap mandates, the concentrated large-cap growth mandate, and the programs' sole portable alpha mandate were the main contributors to the outperformance for the fiscal year.

Domestic Equity Performance

For Periods Ended June 30



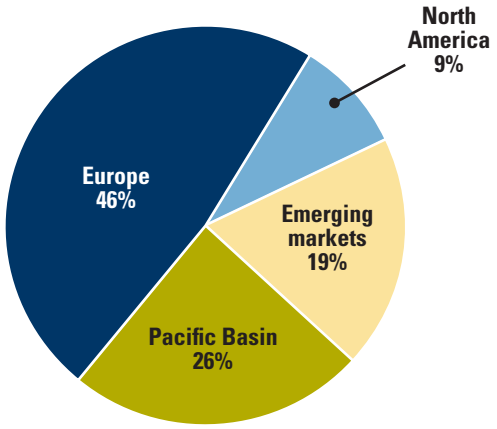
Note: 3-, 5-, and 10-year results are annualized returns.

International Equity

At June 30, 2015, the international equity portfolio had a net fair value of $4.565 billion, representing 16.08 percent of the total IPERS portfolio. IPERS' international equity portfolio is composed primarily of common stocks or equity commingled funds, foreign exchange contracts, and cash. The portfolio assets are allocated across many regions, countries, industries, and securities for diversification purposes. Regional weights are maintained in the same proportions as reflected in the MSCI All Country World ex U.S. asset class benchmark.

International Equity Portfolio

June 30, 2015



The international equity portfolio has two components:

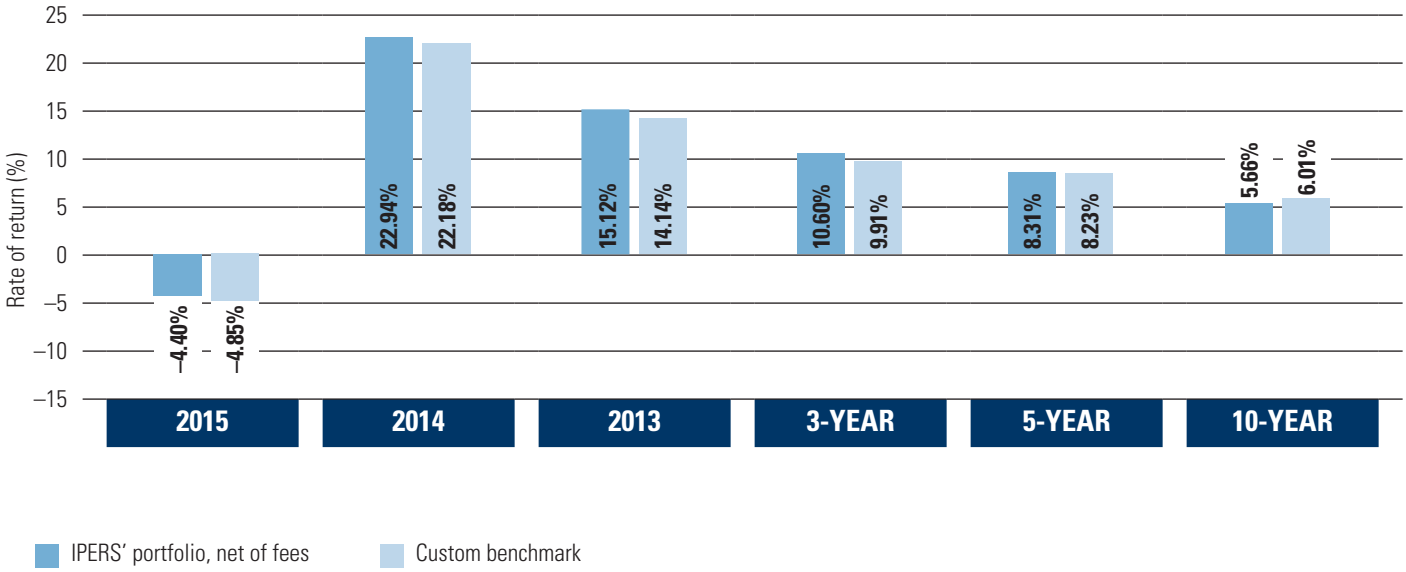
ACTIVE EQUITY. This component is an actively managed diversified portfolio consisting primarily of equity securities issued by foreign companies in both developed and emerging countries. For purposes of investment management, a regional approach is used to invest in these international markets. The active equity portfolio's performance objective is to exceed the return of the MSCI All Country World ex U.S. index.

PASSIVE EQUITY. This component is a passively managed diversified portfolio consisting of commingled index fund investments in Canadian, European, EAFE (European, Australasian, and Far East), and global emerging market countries' corporate equity securities. The objective of the passive equity portfolios is to track the performance of the respective MSCI indexes for each region.

With the exception of the Pacific region markets, developed international equity markets suffered a significant correction in FY2015. Concerns over future economic growth in China as well as falling oil prices were key drivers of the negative returns experienced. On a regional basis, the Pacific's 1-year return of 2.69 percent was the only positive annual return for any of the developed or emerging market regions. Japan's export-driven economy was the prime benefactor of its central government's efforts to devalue the yen against the U.S. dollar. The international equity market returned –4.85 percent, as measured by the MSCI All

International Equity Performance

For Periods Ended June 30



Note: 3-, 5-, and 10-year results are annualized returns.

Country World Free ex U.S. index in U.S. dollars, for the fiscal year ended June 30, 2015. German stocks were the main driver of the developed European equity market's 1-year negative return of –7.65 percent. Recurring concerns over the stability in Greece as well as the speed of the general economic recovery had a negative impact on the German economy.

IPERS' international equity portfolio outperformed in fiscal year 2015, returning –4.40 percent versus –4.85 percent for the benchmark. Strong overall stock selection by all of the active managers in the developed market mandates were a significant source of added value in fiscal year 2015, while the active decisions made by managers in the emerging market component of the international program detracted value. At June 30, 2015, the portfolio's 5-year return of 8.31 percent had slightly outpaced the 8.23 percent recorded for the asset class composite benchmark over the same time period.

Public Equity Portfolio: Top Ten Holdings

The top ten holdings within the public equity portfolio (domestic and international combined) at June 30, 2015, follow. The listing does not include the fair value of units held in commingled fund investments. A complete listing of the holdings, including commingled fund holdings, is available upon request.

Ten Largest Holdings at June 30, 2015	Fair Value ($000)	% of Total
Apple, Inc.	$ 75,147	1.27
Facebook, Inc.	58,256	0.98
Wells Fargo & Company	49,242	0.83
Bristol-Myers Squibb Company	49,109	0.83
Simon Property Group, Inc.	38,507	0.65
Bank of America Corporation	38,467	0.65
Toyota Motor Corporation	38,325	0.65
Biogen, Inc.	37,270	0.63
Amazon.com, Inc.	36,516	0.62
Vertex Pharmaceuticals, Inc.	36,233	0.61
Total	**$457,072**	**7.72**

Fixed Income

IPERS has a significant allocation to fixed-income securities, with a target asset allocation of 28 percent to core-plus fixed-income securities and 5 percent to credit opportunities securities. At fiscal year-end, IPERS' core-plus portfolio was 28.13 percent of total Fund assets and the credit opportunities bond portfolio was 4.99 percent of total Fund assets. The total return for the consolidated fixed-income portfolio (core-plus and credit opportunities portfolios combined) for the year ended June 30, 2015, was 1.23 percent. The consolidated fixed-income portfolio fair value was $9.406 billion and the average bond rating for the portfolio was A.

IPERS' fixed-income portfolio has two main components:

CORE-PLUS FIXED INCOME. The objective of the core-plus fixed-income portfolio is to generate a return above the return of the core fixed-income market. Approximately 15 percent of the core-plus portfolio is dedicated to a passively managed "core" investment in an index fund designed to earn the return of the Barclays U.S. Aggregate index (Aggregate index), an index consisting of high-quality U.S. investment-grade fixed-income securities. The remainder of the core-plus portfolio is actively managed with the objective of exceeding the return of the Barclays U.S. Universal index (Universal index), net of fees, over a full market cycle. The Universal index is a broader index, consisting of the core Aggregate index, plus other fixed-income sectors available to U.S. investors, such as high-yield bonds, dollar-denominated emerging market debt, and eurodollar bonds.

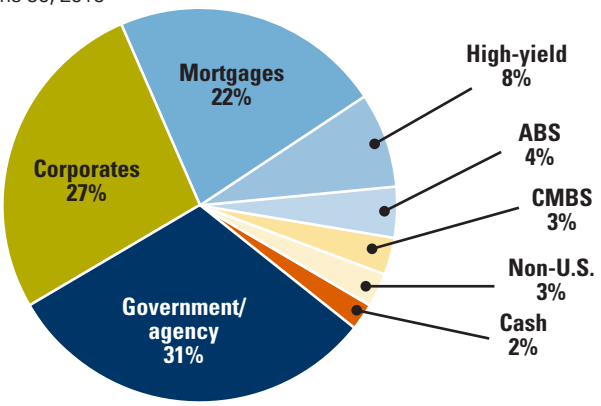
The core-plus portfolio is a diversified portfolio of fixed-income securities, utilizing cash and cash equivalents, forward foreign exchange contracts, swaps, currency options, financial futures, government and government agency bonds, eurobonds, nondollar bonds, nonconvertible preferred stock, options on fixed-income instruments, mortgage-backed bonds, corporate bonds, commercial mortgage-backed securities, private placement corporate bonds, and asset-backed securities. The actively managed portion of the core-plus portfolio is expected to have interest rate sensitivity similar to the Universal index, and be diversified by industry, sector, and security issuers.

The fixed-income market generated relatively lackluster returns for fiscal year 2015. Short-term interest rates remained low and relatively unchanged over the period, while credit spreads generally

widened over the fiscal year due to several geopolitical factors. This resulted in underperformance in some of the credit sectors of the bond market versus the safer, lower-yielding government securities. According to the Barclays index returns, the Treasury sector generated a return of 2.31 percent, while the U.S. credit sector provided a return of 0.93 percent and the U.S. corporate high-yield sector generated a return of –0.40 percent. Emerging market debt securities returned –1.57 percent, according to the J.P. Morgan EMBI Global index. IPERS' core-plus fixed-income portfolio return of 1.68 percent slightly outperformed the Barclays Capital U.S. Universal index return of 1.61 percent for the fiscal year ended June 30, 2015.

Core-Plus Fixed-Income Portfolio

June 30, 2015

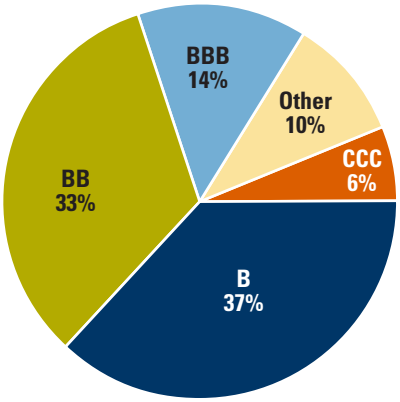


CREDIT OPPORTUNITIES FIXED INCOME. The objective of the credit opportunities fixed-income portfolio is to enhance the long-term returns of the Fund, to provide current income, and to provide diversification benefits. Approximately two-thirds of the credit opportunities portfolio is invested in high-yield securities, while approximately one-third is invested in emerging market debt securities.

IPERS' credit opportunities fixed-income portfolio generated a return of –1.20 percent for fiscal year 2015 versus its custom benchmark return of –1.06 percent. The high-yield portion of the portfolio provided a return of 0.35 percent versus the Citigroup High-Yield Cash-Pay Capped index return of –0.80 percent. The emerging market debt portion of the portfolio generated a return of –4.88 percent through June 30, 2015, underperforming the J.P. Morgan EMBI Global index return of –1.57 percent over the same time period.

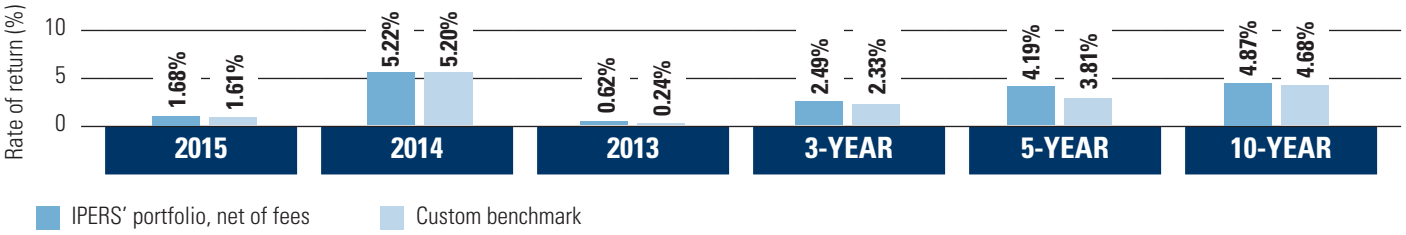
Credit Opportunities Fixed-Income Portfolio

June 30, 2015



Core-Plus Fixed-Income Performance

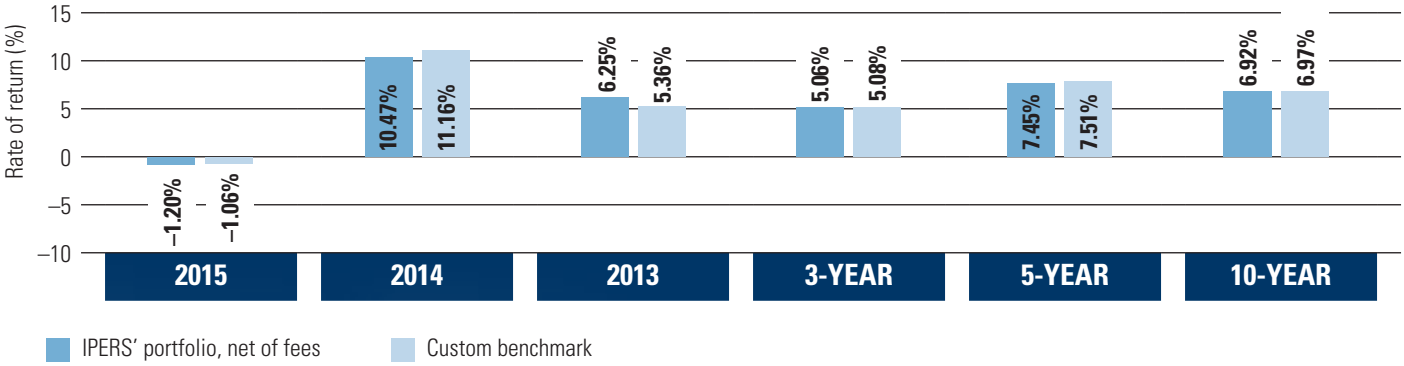
For Periods Ended June 30



Note: 3-, 5-, and 10-year results are annualized returns.

Credit Opportunities Fixed-Income Performance

For Periods Ended June 30



Note: 3-, 5-, and 10-year results are annualized returns.

Fixed-Income Portfolio: Top Ten Holdings

The top ten holdings within the consolidated fixed-income portfolio (core-plus and credit opportunities combined) at June 30, 2015, are illustrated below. The listing does not include the fair value of units held in commingled fund investments. A complete listing of the holdings, including commingled fund holdings, is available upon request.

Ten Largest Holdings at June 30, 2015	Fair Value ($000)	% of Total
U.S. Treasury Note—0.500%, 1/31/17	$133,159	1.61
U.S. TIPS—0.125%, 7/15/24	127,253	1.54
U.S. Treasury Note—2.125%, 12/31/21	107,120	1.30
U.S. TIPS—2.375%, 1/15/25	87,439	1.06
FNMA TBA 30-Year—3.500%, 7/1/45	72,365	0.88
U.S. Treasury Note—0.500%, 3/31/17	69,329	0.84
U.S. TIPS—0.125%, 7/15/22	65,961	0.80
U.S. Treasury Note—2.250%, 7/31/21	62,500	0.76
U.S. Treasury Note—0.625%, 10/15/16	58,931	0.71
U.S. TIPS—0.625%, 1/15/24	57,670	0.70
Total	**$841,727**	**10.20**

Private Equity/Debt

At June 30, 2015, IPERS' private equity/debt portfolio had a fair value of $3.244 billion, representing 11.43 percent of the total IPERS portfolio. From the inception of the private equity/debt portfolio through June 30, 2015, the System has committed $9.012 billion to 269 partnerships and one fund-of-funds investment. During fiscal year 2015, IPERS committed a total of $918.3 million to the fund-of-funds investment. At June 30, 2015, commitments of $1.999 billion remained to be called for investment.

IPERS began investing in private equity in 1985 and has, since January 1, 1993, utilized the services of a full-discretion investment management firm, Pathway Capital Management, LLP, to select partnerships and manage the portfolio of private equity funds. Beginning January 1, 2014, IPERS began utilizing a new structure for private equity investments by creating a fund-of-funds partnership (Pathway Private Equity Fund XXV) with Pathway. The fund-of-funds investment structure is expected to reduce IPERS' operational burden while allowing IPERS to more efficiently invest in secondary and coinvestment opportunities. The new structure did not result in any changes to Pathway's existing contract, including fee arrangements.

IPERS seeks to minimize the risk associated with private equity by investing in a variety of top-tier partnerships with different investment styles and objectives. The portfolio is also diversified by industry focus, geographic location, and, most importantly, time, which means that capital is committed to partnerships over the full course of the business cycle and not concentrated in any one year.

IPERS' goal for the private equity/debt portfolio is to exceed the internal rate of return (IRR) of the Wilshire 5000 index by 3 percentage points (net of investment management fees) over rolling 10-year periods. The internal rate of return is used because private equity investments are generally illiquid and cash inflows and outflows can be controlled by the general partner of the private equity partnership, making time-weighted returns inappropriate. Private equity investments typically span ten years or more, so a longer evaluation time horizon is appropriate.

The total private equity/debt portfolio returned 14.41 percent (net IRR) versus its benchmark return

of 11.37 percent for the 10-year period ended June 30, 2015. Since inception in 1985, IPERS' total private equity/debt portfolio has returned 14.19 percent, underperforming the 14.77 percent asset class benchmark for private equity (Wilshire 5000 + 3 percentage points).

"Distributions to paid-in capital" (DPI) ratios, which measure the ratio of cumulative distributions to cumulative paid-in capital for the time period, is another metric for evaluating private equity performance. Since 1985, the total private equity/debt portfolio's DPI was 1.22.

The Burgiss All Regions Private Equity Composite performance database includes data from thousands of partnerships and makes it possible to compare a portfolio to a universe of private equity partnerships that raised capital over the same time period. As explained in the Summary of Significant Accounting Policies in the Financial section of this report, IPERS utilizes a one-quarter valuation lag for its private equity/debt investments. All Burgiss information is as of October 2015, with data current for reporting periods ended March 31, 2015 (that is, it is also lagged by one quarter). Data is continuously updated and is therefore subject to change.

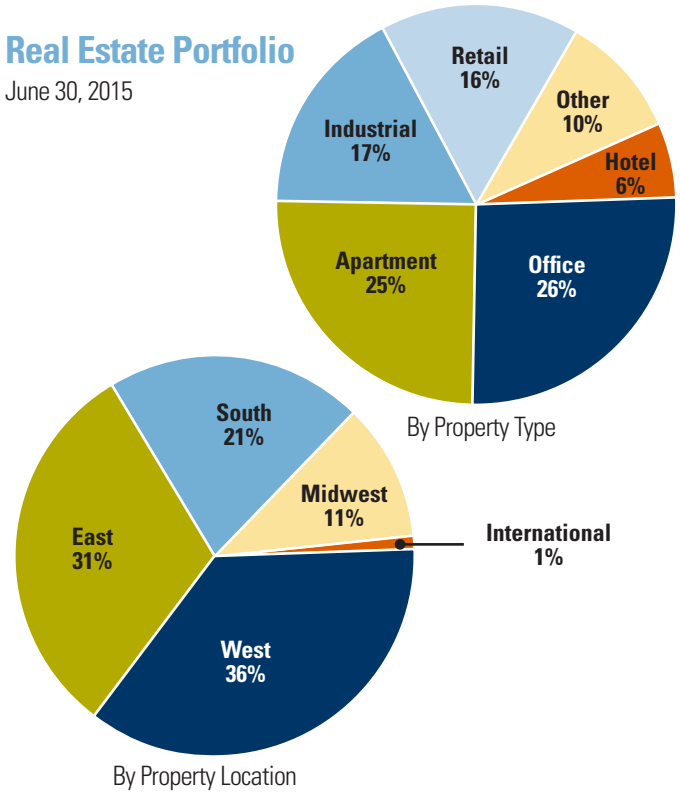
The following table compares the IRR and DPI of IPERS' private equity/debt portfolio to those calculated for all private equity partnerships in the Burgiss database for the period 1985–2015. The IPERS program compares favorably for this period.

Vintage Years 1985–2015	IRR	DPI
IPERS' private equity/debt portfolio	14.19%	1.22
Burgiss All Regions Private Equity Composite	14.05%	0.96

Real Estate

At June 30, 2015, $2.276 billion, or 8.02 percent, of IPERS' total portfolio at fair value was invested in various private equity real estate properties, two real estate private debt funds, and publicly traded real estate investment trusts (REITs). In FY2013 IPERS expanded its real estate program to include private real estate debt strategies. As of June 30, 2015, IPERS had funded approximately $105.3 million across the two debt funds and had remaining commitments of $117.7 million.

The real estate program serves three distinct purposes for IPERS: diversification, income production, and inflation protection. In order to mitigate risk, the real estate portfolio is diversified by both geographic location and property type, as shown in the following pie charts.



The IPERS real estate portfolio benchmark is a blended benchmark of 75 percent NCREIF Open-End Diversified Core index and 25 percent Wilshire REIT index. For the fiscal year, IPERS' real estate program posted a return of 11.33 percent versus the benchmark return of 11.64 percent. Outperformance in the public REIT portfolio and favorable income returns in the private portfolio were offset by trailing appreciation returns in the private portfolio. As with the private equity/debt portfolio, the real estate program invests in assets with long holding periods and should be evaluated over a longer time horizon. For the 10 years ended June 30, 2015, the real estate portfolio returned 7.07 percent, net of fees, versus the portfolio's benchmark of 8.59 percent. The long-term underperformance can be explained entirely by the private portion of the real estate program, with much of it attributable to one manager that was terminated in 2012.

U.S. TIPS

At June 30, 2015, $1.284 billion, or 4.52 percent, of IPERS' total portfolio at fair value was invested in U.S.

Treasury inflation-protected securities. IPERS invests in U.S. TIPS to provide inflation protection and risk diversification. U.S. TIPS can also provide deflation risk protection because the securities cannot accrue a negative coupon even if the inflation rate is negative (which is a deflationary environment). IPERS utilizes one active U.S. TIPS manager that is benchmarked against the Barclays Capital U.S. TIPS 1–10 Year index and one passive manager that is benchmarked against the broader Barclays Capital U.S. TIPS index. IPERS' U.S. TIPS portfolio generated a return of –1.73 percent for the fiscal year, which slightly outperformed the blended custom benchmark return of –1.85 percent.

Other Real Assets

IPERS invests in real estate and U.S. TIPS for the purpose of protecting the investment portfolio from inflation. The other real assets portfolio has the same objective, but can invest in less traditional strategies in order to better diversify IPERS' inflation protection and its overall investment portfolio. In September 2010, the Investment Board approved a 2 percent target allocation to other real assets, with the stipulation that the target allocation would be accomplished over time by reducing the target allocation to domestic equity as these strategies were funded. At June 30, 2015, IPERS had invested $452.3 million, representing 1.59 percent of the total Fund market value. The total return for this portfolio for the year ended June 30, 2015, was –4.67 percent, which exceeded its custom benchmark return of –10.38 percent. IPERS' other real assets portfolio currently has three main components:

TIMBERLAND. The objective of the timberland strategy is to achieve a 5 percent real return after inflation and manager fees. The portfolio is diversified by geography, species, and timber markets. The benchmark for the timberland portfolio is the Consumer Price Index plus 5 percentage points.

While the IPERS timberland portfolio is still in the acquisition phase, it has acquired several parcels of U.S. timberland with a market value of $147.2 million as of June 30, 2015, and returned 5.17 percent for the fiscal year versus its benchmark return of 5.13 percent. Timberland investments represented 33 percent of the other real assets portfolio on June 30, 2015.

ENERGY INFRASTRUCTURE. Master limited partnerships, which are tax-favored investment vehicles traded on public stock exchanges, have become an important source of funding for the development and improvement of America's energy infrastructure (such as pipelines, storage facilities, and transportation). Master limited partnerships have also become an attractive investment for institutional investors because the securities provide access to inflation-protected revenue streams, a substantial dividend yield, and the liquidity of the public stock markets. The objective of the master limited partnership strategy is to achieve a return above the S&P Master Limited Partnership Total Return index, net of fees. IPERS' master limited partnership portfolio had a market value of $305.1 million as of June 30, 2015, and returned –8.62 percent for the fiscal year versus its benchmark return of –16.48 percent. Master limited partnership investments represented 67 percent of the other real assets portfolio on June 30, 2015.

FARMLAND. IPERS contracts with an investment manager to acquire farmland in the United States. However, the manager has not yet identified any quality U.S. farmland investments that can achieve IPERS' objective of a 5 percent real return after inflation and all fees. Therefore, IPERS had no farmland investments as of June 30, 2015.

Investments in Iowa

Iowa Code section 97B.7A authorizes IPERS to invest the moneys of the Trust Fund in accordance with the Investment Policy and Goal Statement adopted by the Investment Board and subject to the "prudent person" rule. Section 97B.7A also directs that, where consistent with the aforementioned standards, IPERS will invest ". . . in a manner that will enhance the economy of the state, and in particular, will result in increased employment of the residents of the state." At June 30, 2015, the System held investments of $1.623 billion in companies of Iowa interest.

Holdings in Companies of Iowa Interest

June 30, 2015

Asset Class	Amount
Stocks	$1,143,520,931
Bonds	473,537,080
Private equity/debt	5,836,700
Total	**$1,622,894,711**

Schedule of Brokerage Commissions Paid

Fiscal Year Ended June 30, 2015

PUBLIC EQUITY Brokerage Firm	Amount Paid	Shares Traded	Average Per Share
J.P. Morgan	$ 610,233	273,190,691	$0.002
Merrill Lynch	485,517	110,429,252	0.004
Citigroup	482,930	118,180,992	0.004
UBS	480,863	142,135,113	0.003
Morgan Stanley & Co. Inc.	451,132	132,863,050	0.003
Credit Suisse	408,421	92,447,284	0.004
Goldman Sachs & Co.	384,095	80,196,175	0.005
Deutsche Bank	295,460	55,428,188	0.005
Macquarie Securities	203,057	102,657,384	0.002
Barclays Capital, Inc.	165,857	32,758,369	0.005
Instinet Corporation	165,291	64,650,366	0.003
Credit Lyonnais Securities	103,309	28,263,668	0.004
RBC Capital Markets LLC	94,039	4,044,301	0.023
Jefferies & Co. Inc.	88,600	6,705,828	0.013
Stifel Nicolaus	77,875	2,023,645	0.038
Liquidnet	76,103	8,932,946	0.009
Wells Fargo Securities LLC	76,084	2,492,969	0.031
Weeden & Co.	66,537	2,520,985	0.026
Bernstein Sanford C & Co.	64,947	5,201,306	0.012
HSBC Securities	61,616	26,046,163	0.002
State Street	60,390	6,493,533	0.009
Banco Santander	56,265	6,669,143	0.008
SG Securities	54,874	27,514,222	0.002
Citation Group/BCC Clearing	50,929	1,277,148	0.040
BNP Paribas Securities Corporation	47,981	24,454,018	0.002
All others (includes 135 brokerage firms)	1,017,041	225,913,196	0.005
Total Public Equity	**$6,129,446**	**1,583,489,935**	**$0.004**

FUTURES AND OPTIONS Brokerage Firm	Amount Paid	Contracts Traded	Average Per Contract
J.P. Morgan	$ 324,782	120,278	$2.70
Goldman Sachs & Co.	535,336	173,357	3.09
Morgan Stanley & Co. Inc.	169,133	74,006	2.29
UBS	26,641	21,020	1.27
Barclays Capital, Inc.	5,188	5,598	0.93
Citigroup	3,094	1,172	2.64
Credit Suisse	518	424	1.22
Total Futures and Options	**$1,064,692**	**395,855**	**$2.69**

Total Commissions	**$7,194,138**

Note: Brokerage commissions do not include commissions paid by external managers utilizing commingled fund structures.

Schedule of Investment Fees

Fiscal Year Ended June 30, 2015

	Amount Paid	Average Quarterly Market Value
Domestic equity	$17,196,691	$ 6,995,769,000
Fixed income	8,466,555	9,247,165,750
U.S. TIPS	500,411	1,253,485,000
Other real assets	4,673,518	446,567,250
International equity	18,727,329	4,440,467,000
Real estate	12,744,964	2,273,046,250
Private equity/debt	5,650,467	3,184,298,750
Total Fees	**$67,959,935**	**$27,840,799,000**

Note: See Schedule 2: Schedule of Investment-Related Expenses on page 45 for fees by manager.

INVESTMENT POLICY AND GOAL STATEMENT

The following excerpt from the Iowa Public Employees' Retirement System's Investment Policy and Goal Statement, as adopted by the IPERS Investment Board and last revised in April 2015, includes all Policy text, but excludes the addenda referenced in the Policy. IPERS' current investment policies are available online at www.ipers.org.

I. Introduction: IPERS' Purpose and Principles

The Iowa Public Employees' Retirement System (IPERS or System) was established in 1953, and is governed by Iowa Code chapter 97B. Since its creation, IPERS' activities have been directed toward fulfilling the foundational purpose of the System, as described in §97B.2:

> . . . to promote economy and efficiency in the public service by providing an orderly means for employees, without hardship or prejudice, to have a retirement system which will provide for the payment of annuities, enabling the employees to care for themselves in retirement, and which will improve public employment within the state, reduce excessive personnel turnover, and offer suitable attraction to high-grade men and women to enter public service in the state.

The Investment Board (Board) is the trustee of the IPERS Trust Fund (Fund). The Board's primary mission is to establish the System's tolerance for investment risk. The primary duties of the Board are to establish investment policy, to communicate its tolerance for investment risk, review policy implementation, and approve the retention of service providers in matters relating to the investment of IPERS' assets. As trustee, the Board also adopts the actuarial methods and assumptions, approves the retention of service providers in matters relating to the actuarial valuation of the System's assets and liabilities, and adopts the System's contribution rate funding policy.

IPERS is administered through a chief executive officer, chief investment officer, chief benefits officer, and other full-time staff. The investment activities of the Board and staff are governed by the "prudent person" rules as defined in §97B.7A. The purposes of the System and the prudent person rule shall guide the Board and staff in developing this investment policy and goal statement. IPERS' investment activities shall be executed in a manner to fulfill these goals. The investment policy and the investment strategies will be periodically reviewed to ensure they conform to §§97B.2 and 97B.7A.

The chief investment officer is responsible for the administration of the investment program pursuant to the policies of the Board. Additionally, the Board supports the retention and development of sufficient investment staff and the provision of other resources as necessary to ensure the thorough oversight and administration of each investment program undertaken by the System.

II. Investment Objectives

The Board adopts the following investment objectives for the Fund:

A. The investment activities will be designed and executed in a manner that serves the best interests of the members and beneficiaries of the System.

B. The investment program will strive to maintain the Board's investment risk tolerance as communicated through this policy.

C. The investment activities will be designed to provide a return on the Fund that, when coupled with

the periodic contributions of the membership and employers, will meet or exceed the benefit funding requirements of the plan over time while staying within the Board's tolerance for risk expressed in this policy. Of primary consideration is the maintenance of funding which is adequate to provide for the payment of the plan's actuarially determined liabilities over time.

D. The investment activities will achieve, after the deduction of management expenses, an annualized investment return that exceeds the return of the Policy Benchmark (defined in Section III.A.1 of this policy) over a minimum evaluation period of five years while staying within the Board's tolerance for active risk expressed in this policy.

III. Investment Policy Statement

IPERS' investment policies are structured to maximize the probability that the investment goals will be fulfilled. All investment policy decisions shall include liquidity and risk considerations that are prudent and reasonable under the circumstances that exist over time. IPERS' investment policies will evolve as the internal conditions of the Fund and the capital markets environments change.

Achievement of IPERS' investment goals ultimately depends upon earning a sufficient return on the System's investments while taking a prudent amount of risk to attain the return. Investment return is comprised of two components known as "beta" and "alpha." Beta return is the return generated from exposure to a specific market or asset class. Alpha return is the excess return resulting from subtracting the beta return from the total investment return, and is conditional upon skillful active investment decision making. IPERS believes that risk-adjusted investment returns can be improved by separating beta and alpha decisions in actively managed (that is, non-passive or non-index) portfolios.

Beta decisions should focus on maximizing expected market returns at prudent levels of risk. The Board will adopt a Policy Benchmark representing what it believes is the most efficient portfolio of market exposures (the beta portfolio) that will meet the Fund's mission and goals while staying within the Board's tolerance for risk. Staff, with the assistance of the System's consultants, will implement the Board's beta decisions in the most cost-efficient manner possible and will be responsible for maintaining the beta exposure levels within the acceptable ranges established by the Board.

Alpha decisions are expected to provide additional return without significantly increasing the overall risk of the portfolio. Alpha returns can come from selection decisions of external active managers or tactical asset allocation and manager selection decisions of investment staff. The Board will adopt an active risk budget that establishes its tolerance for active risk. Staff will be responsible for allocating and rebalancing active risk with the objective of maintaining the active risk budget established by the Board.

Beta and alpha decisions shall be made and evaluated according to the Risk Management Policy adopted by the Board. (See Appendix F.) The Risk Management Policy communicates the Board's tolerance for investment risk by establishing investment risk budgets for the Fund's surplus risk and active risk. (Surplus risk takes into account the timing and potential volatility of the Fund's liabilities.)

A. The Beta Portfolio
   1. Policy Benchmark
      The System adopts a Policy Benchmark that represents a mix of beta exposures that is expected over the long term to maximize the risk-adjusted beta return to the System consistent with the Board's tolerance for risk. The Policy Benchmark is predicated on a number of factors, including:
      a. The liabilities.
      b. The relationship between the current and projected assets of the plan and the plan's projected liabilities.
      c. Expectations regarding long-term capital market returns and risks, including the impact of correlations.

d. Historical distribution of returns, average volatility of returns, and correlations between asset classes as well as liabilities.
e. The perception of future economic conditions, including inflation and interest rate assumptions, and their impacts on the System's assets and liabilities.

The table below represents the Board's adopted Policy Benchmark. The Policy Benchmark Weights establish the Board's target exposure to each asset class, measured on a market value basis, while the Asset Class Ranges establish the ranges within which actual weights may fluctuate. The Policy Benchmark Return is the sum of the products of the Policy Benchmark Weights and the respective Policy Benchmark Index returns for the period. If staff utilizes futures for rebalancing or tactical allocation decisions, the gross (notional) amount of futures contracts shall be used in calculating compliance with Policy Benchmark Weights and Asset Class Ranges.

Asset Class	Asset Class Ranges	Policy Benchmark Weights	Policy Benchmark Index
Equities		**51.0%**	
Domestic Equities	21%–27%	24.4%	Wilshire 5000
International Equities	13%–19%	16.0%	MSCI ACWI ex U.S.
Private Equity / Debt	8%–13%	11.0%	Custom Index[1]
Fixed Income		**33.0%**	
Core Plus Fixed Income	25%–31%	28.0%	Barclays Capital U.S. Universal
Credit Opportunities	3%–7%	5.0%	Custom Index[2]
Real Assets		**15.0%**	
Equity Real Estate	6%–10%	8.0%	Custom Index[3]
U.S. TIPS	3%–7%	5.0%	Custom Index[4]
Other Real Assets	0%–4%	1.6%	Custom Index[5]
Cash	-2%–4%	**1.0%**	Merrill Lynch 91-Day T-Bill

[1] For purposes of calculating a Policy Benchmark return for this asset class, the custom index is the private equity/debt portfolio itself. See Private Equity/Debt section under 2. Policy Benchmark Components for explanation.
[2] The credit opportunities custom index for purposes of the Policy Benchmark Index is weighted 67 percent Citigroup HY Cash Pay Capped Index and 33 percent JP Morgan EMBI Global Index.
[3] The equity real estate custom index for purposes of the Policy Benchmark Index is weighted 75 percent NCREIF Open-End Diversified Core Index (ODCE) and 25 percent Wilshire REIT Index.
[4] This benchmark is defined as 50 percent Barclays Capital U.S. TIPS Index and 50 percent Barclays Capital 1-10 Year U.S. TIPS Index.
[5] This benchmark will be defined as specific real asset mandates are funded. See discussion under "Other Real Assets" below.

2. Policy Benchmark Components

Apart from any alpha expectations described in Section III.B., IPERS seeks to earn market returns from each asset class in the Policy Benchmark. This market exposure may be achieved by purchasing securities that comprise the respective asset classes or by purchasing derivatives designed to provide the return of a particular market. Each public market asset class has a Policy Benchmark Index that is believed to best represent the broadest market opportunity set for the respective asset class. The return on each Policy Benchmark Index is the market return (beta return) for each asset class.

Domestic Equities

IPERS invests in the domestic equity market to earn an equity risk premium to enhance the long-term returns of the Fund. This asset class includes the broad market of publicly traded U.S. equities with varying characteristics related to market capitalization and investment style. The Policy Benchmark Index for Domestic Equities is the Wilshire 5000 Index.

International Equities

IPERS invests in international equities to earn an equity risk premium and to diversify the equity exposure within the Fund. The International Equities asset class includes both developed and emerging equity markets. The Policy Benchmark Index for International Equities is the Morgan Stanley Capital

International (MSCI) All-Country World Index ex-U.S. (ACWI ex-U.S.) calculated gross of tax credits from dividend reinvestment.

Core Plus Fixed Income

IPERS invests in fixed income assets to provide stable income for the payment of benefit obligations and to diversify the market risk of the investment portfolio. The Core Plus fixed income market represents a global opportunity set of fixed income instruments available to U.S. institutional investors. The Policy Benchmark Index for Core Plus fixed income is the Barclays Capital U.S. Universal Index.

Credit Opportunities

IPERS has made a strategic allocation to credit opportunities in high-yield corporate bonds and emerging markets corporate and sovereign debt to enhance the long-term returns of the investment portfolio, to provide current income, and to provide diversification benefits. The Policy Benchmark Index for Credit Opportunities is a weighted custom index of 67 percent the Citigroup High-Yield Cash-Pay Capped Index and 33 percent the JP Morgan EMBI Global Index.

Equity Real Estate

IPERS invests in equity real estate to provide diversification in the investment portfolio, provide some inflation protection, and for income generation. The Policy Benchmark Index for Equity Real Estate is a weighted custom index of 75 percent the National Council of Real Estate Investment Fiduciaries' (NCREIF) Open-End Diversified Core Index (ODCE) and 25 percent the Wilshire Real Estate Investment Trust Index (Wilshire REIT). (See Appendix A for IPERS' Real Estate Investment Policy.)

Private Equity/Debt

IPERS invests in private equity/debt to enhance the investment portfolio return through long-term capital appreciation. Private equity investments are highly illiquid, generally have lock-up periods of ten years or more, and are subject to long valuation lags. IPERS seeks to be compensated for such illiquidity by earning returns substantially greater than those available from publicly traded equity markets. There is no appropriate benchmark for measuring private equity performance on a time-weighted basis over short time periods. Therefore, for purposes of calculating a Policy Benchmark return for this asset class, the custom index is the portfolio itself. However, Private Equity/Debt will be evaluated annually against a Wilshire 5000 plus 300 basis point benchmark, but using internal rates of return and long-term evaluation periods and vintage year comparisons. (See Appendix B for IPERS' Private Equity/Debt Investment Policy.)

U.S. TIPS

IPERS invests in U.S. Treasury Inflation Protected Securities (U.S. TIPS) to provide inflation protection and risk diversification for the investment portfolio. U.S. TIPS can also provide some deflation risk protection because the securities cannot accrue a negative coupon even if the inflation rate is negative (which is a deflationary environment). However, U.S. TIPS can introduce interest rate risk into the Fund portfolio, and IPERS will utilize some shorter duration U.S. TIPS strategies in order to mitigate some of the interest rate risk. The Policy Benchmark Index for U.S. TIPS is a weighted custom index of 50 percent the Barclays Capital U.S. Treasury Inflation Protected Securities Index and 50 percent the Barclays Capital 1-10 Year U.S. Treasury Inflation Protected Securities Index.

Other Real Assets

IPERS invests in other real assets to provide inflation protection for the investment portfolio. Other real assets may consist of commodities, farmland, timberland, private energy partnerships, public energy partnerships (aka master limited partnerships (MLPs)), or infrastructure investments where principal or

future income streams are protected from inflation. The Policy Benchmark Index for Other Real Assets will be created based upon the type of mandate that is funded, and will be revised as additional real asset strategies are added to the portfolio over time. The Policy Benchmark allocation for Other Real Assets shall not take effect until a mandate is funded in this asset category, and the allocation percentage shall be adjusted quarterly to reflect the actual investment in the asset class until such time that the target Policy Benchmark Weight has been achieved. Any "unused" allocation prior to reaching the target weight will remain in the target weight for Domestic Equities. Once the target weight for Other Real Assets has been achieved, the Policy Benchmark Weight will be two percent for future periods.

Cash

Cash, for the purpose of applying the Policy Benchmark Weights and Asset Class Ranges, is limited to funds available prior to distribution to investment managers and the amount reserved to pay near-term benefits and administrative costs. The Policy Benchmark Index for Cash is the Merrill Lynch 91-Day Treasury Bill Index.

3. Policy Benchmark Rebalancing

Because of the fluctuation of market values, and the effect of cash flows in and out of the System, the actual weights of each asset class can differ from the target weights established in the Policy Benchmark. In recognition of this, the Board has also adopted Asset Class Ranges for each asset class, and positioning within a specified Asset Class Range is acceptable and constitutes compliance with the Policy Benchmark. It is the responsibility of IPERS staff to keep actual weights within the Asset Class Ranges. However, it is anticipated that the Board will make periodic revisions to the Policy Benchmark, and it is recognized that in some cases it may be prudent to allow an extended period of time to fully implement revisions to the Policy Benchmark. In the absence of suitable opportunities within a specific market, the funds shall be directed to the other components within the ranges specified. The Board and staff will regularly monitor the actual asset allocation versus the Policy Benchmark Weights and evaluate any variations. In addition, it is acknowledged that market conditions or circumstances beyond IPERS' control may lead to asset class weightings being temporarily out of their target ranges, especially as those ranges relate to illiquid asset classes.

B. The Alpha Portfolio

Alpha is the difference resulting from subtracting a beta return from a portfolio's actual return. IPERS believes that positive alpha can be consistently earned by selecting skillful managers and applying that skill to a broad set of investment strategies. By employing a combination of strategies that have low return correlation with one another, and also exhibit low correlation with beta returns, IPERS believes that consistent positive active returns (net of all fees) can be achieved at low levels of additional risk to the total fund.

Various strategies may be employed in the creation of a diversified alpha portfolio. Factors that will determine the alpha portfolio composition will include market structure and dynamics, the estimated degree of correlation between a strategy's performance and the Policy Benchmark, the breadth and depth of available active managers, and contribution to the active risk budget. Traditional long-only management strategies may continue to be utilized in order to capture alpha, while portable alpha strategies, which allow alpha earned in other asset classes to be transported to a particular asset class or the total fund as an overlay through the use of derivatives, may also be utilized. In reviewing the effectiveness of alpha portfolio decisions, it is understood that a sufficient time frame is necessary to measure results through market cycles. A five-year period will generally be used to judge the results of alpha portfolio decisions.

The Board acknowledges that portable alpha strategies introduce a component of leverage into the portfolio, since market exposure is obtained through the use of derivatives while cash not needed to

maintain the derivatives position is invested in alpha-producing assets. However, it is believed that a properly constructed alpha portfolio with a low correlation to the underlying beta portfolio is, from an economic perspective, equivalent to utilizing traditional long-only strategies in terms of risk and return.

Properly executed portable alpha strategies, which seek to apply manager skill across multiple alpha sources with low correlation to one another, can also have unique implementation risks that must be carefully monitored and managed. Some strategies can introduce high levels of financial leverage, valuation risks due to a lack of transparency, custody risks due to assets being held by prime brokers, and operational risks due to the use of complex, highly quantitative strategies. Staff will seek to mitigate these risks by employing a careful and thorough due diligence process in the evaluation and selection of reputable, experienced portable alpha managers. However, it is acknowledged that it may not be possible to eliminate some implementation risks associated with some portable alpha strategies.

Most hedge fund strategies will have many, if not all, of the implementation risks described above. Staff does not currently have the resources to perform adequate due diligence on the many hedge funds available in the market. Therefore, the Board has directed staff to utilize only fund of hedge fund managers to execute any portable alpha strategies that invest in hedge funds.

The alpha portfolio will be structured to meet an active risk budget established and defined in the Risk Management Policy that reflects the Board's tolerance for active risk. The Board and staff will annually evaluate the alpha portfolio against the Active Risk Target and determine if any actions should be taken to address any deviations.

It shall be the staff's responsibility to manage the alpha portfolio's active risk. Staff will monitor active risk on an ex-ante and ex-post basis, and shall have the discretion to take action to lower or increase the ex-ante active risk if necessary to stay within the Active Risk Budget established in the Risk Management Policy. Because of the volatility of short-term alpha returns, positioning within the specified Active Risk Range is acceptable and constitutes compliance with the policy. It is anticipated that the Board will periodically revise the active risk budget, and it is acknowledged that it may be prudent to allow an extended period of time to fully implement revisions to the active risk budget.

C. Investment Management

IPERS will select and utilize external investment management firms or funds to manage each of its portfolio accounts. Staff has authority to buy and sell exchange-traded futures contracts and exchange traded funds (ETFs) for the purpose of implementing risk management or tactical asset allocation strategies. The System will also utilize the services of investment management consultants for the purpose of performance review, asset allocation studies, risk budgeting, manager selection screening, and topical studies.

1. Manager/Consultant Utilization and Selection

   The selection of the managers and consultants is accomplished in accordance with the applicable provisions of Iowa Code §§ 8.47 and 8.52, and the administrative rules adopted thereunder, except as otherwise provided in duly issued waivers by the ruling authority. The System will procure manager and consultant services with adequate attention to the principles of competition and reasonableness of costs, and will wherever feasible compensate the external managers through the use of performance-based fees.

   Each investment manager and consultant shall function under a formal contract that delineates their responsibilities and the appropriate risk management and performance expectations.

2. Manager Discretion

   The investment managers shall have full discretion to direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with this document, applicable federal and state statutes and regulations, and the executed contracts. Further, the investment managers shall have full discretion to establish and execute trades through accounts with one or more securities broker/dealers as the managers may select. The investment managers will attempt to obtain the

"best available price and most favorable execution" with respect to all of the portfolio transactions. In accordance with this principle, broker/dealers with an office in Iowa will be given an opportunity to compete for various transactions.

The Board and staff will consider the comments and recommendations of the managers and consultants in conjunction with other available information in making informed, prudent decisions.

3. Manager Evaluation

   The investment managers under contract with the System will meet periodically with the Investment Board and/or staff for the purpose of reviewing the investment activities of their assigned portfolio, its performance, the investment strategy that governs its management, and the marketplace in which it exists. Such meetings may be conducted at the offices of the investment firms. A detailed discussion of IPERS' manager evaluation policies and procedures is provided in the IPERS Manager Monitoring and Retention Policy. (See Appendix C for IPERS' Investment Manager Monitoring and Retention Policy.)

4. Manager Diversification

   The investment manager structure shall be diversified to reduce the risk of having too many of IPERS' actively managed investment assets with one firm or having IPERS' assets comprise too much of a firm's actively managed investment strategy. The following diversification limits shall apply:

   a. An investment manager's combined responsibility for actively managed investment strategies on behalf of IPERS shall not exceed 15 percent of the Fund's total assets;
   b. IPERS' investment in an investment manager's actively managed strategy shall not exceed 20 percent of the manager's total assets under management in that strategy. However, the chief investment officer shall have discretion to determine what types of similar products offered by a manager can be included in the definition of "actively managed strategy" for purposes of this calculation.

   For purposes of this section, enhanced indexing, equity real estate, and private equity are considered to be actively managed investment strategies.

   The Board acknowledges that there may be times when manager diversification limits could be exceeded due to manager terminations, abrupt changes in market conditions, or decisions made by other clients of a manager. In such times, staff shall inform the Board of the situation and shall attempt to rebalance to the diversification limits as soon as prudently possible, with periodic progress reports to the Board.

D. Cash Management

Staff will ensure that adequate cash is available for the payment of benefit obligations and the funding of investments, and any cash held pending such uses shall be temporarily invested in the custodian's Short Term Investment Fund (STIF) or other suitable short-term investment vehicle authorized by the Board. Cash held within the accounts of investment management firms will be managed in accordance with the guidelines established in the contractual agreement with each firm. In the case of cash denominated in a currency other than the U.S. dollar (USD), it shall be the responsibility of the investment management firm to repatriate or obtain foreign currency for any non-USD cash flows in its account. Investment managers are expected to obtain best execution on all foreign exchange transactions. IPERS staff shall have responsibility for repatriating or funding any non-USD cash flows from the Private Equity/Debt program, and will use an agency broker to attempt to obtain best execution on those foreign exchange transactions.

E. Currency Risk Management

Investment in non-USD denominated assets introduces the risk of loss due to currency fluctuations. It shall be the responsibility of each investment manager to manage any currency risk within its portfolio according to the terms of the contract between the manager and the System. The objective of currency management is not the elimination of all currency risk, but rather the prudent management of risks associated with investing in currencies or in assets that are not denominated in U.S. dollars.

F. Custody

The Treasurer of the State of Iowa is the custodian of the Fund. The Treasurer will hold the System's assets in a custody/recordkeeping account in a master custody bank located in a national money center and in the international subcustodian banks under contract to the custodian bank. The Treasurer shall consult with the Board prior to selecting the master custody bank. A formal written agreement shall be established between the Treasurer of State and any third-party custodian. The custodian bank agreement shall be reviewed periodically by the staff and Investment Board.

G. Securities Lending

The primary objective of the securities lending program shall be to safely generate income from lending the System's securities to qualified borrowers. The program will only utilize lending agents that agree to indemnification provisions in the event of a counterparty insolvency.

Cash collateral received against loans of securities shall be prudently invested in a low-risk investment strategy that invests only in: (a) commingled funds or money market funds managed in accordance with the regulations and criteria specified in Rule 2(a)(7) promulgated under the Investment Company Act of 1940, or (b) separate accounts that have investment guidelines identical to those required of a 2(a)(7) fund, or (c) overnight repurchase agreements collateralized with obligations issued by the United States Treasury or obligations issued by agencies or government-sponsored entities of the United States government.

The key investment objectives for investing the cash collateral shall be to: (a) safeguard principal; (b) maintain adequate liquidity; and (c) consistent with the foregoing objectives, optimize the spread between the collateral earnings and the rebate paid to the borrower of securities.

The Investment Board may select its own securities lending agent or authorize the Treasurer of the State of Iowa to manage the securities lending program in accordance with the risk guidelines established herein. Staff shall execute a formal written agreement between any lending agent (or the Treasurer, as the case may be) and IPERS stipulating the risk parameters and performance benchmarks of the program, which shall be in accordance with these guidelines. The securities lending program will be annually reviewed by the Board, and the ongoing operation of such program shall be subject to periodic reauthorization by the Board.

H. Proxy Voting

IPERS acknowledges that proxies are a significant and valuable tool in corporate governance and therefore have economic value. The System commits to managing its proxy voting rights with the same care, skill, diligence, and prudence as is exercised in managing its other valuable assets. As responsible fiduciaries, the System's staff, its designated voting agents, its investment managers, and the trustees or agents of the System's collective, common, or pooled fund investments will exercise their proxy voting rights in the sole interest of the System's members and in accordance with the applicable statutes.

The voting rights of individual stocks held in any separate account, or any collective, common, or pooled fund will be exercised by the manager, trustees, or agents of said account or fund in accordance with their own proxy voting policies, upon the review and determination by the System that such proxy policies fulfill the above-stated mandates.

I. Commission Recapture and Soft-Dollars

The System encourages, but does not require, certain of its active equity managers to direct brokerage transactions to commission recapture brokers to the extent these brokers can provide best execution. Best execution is defined as achieving the most favorable price and execution service available, bearing in mind the System's best interests, and considering all relevant factors. The System will monitor on an ongoing basis the services provided by the commission recapture brokers so as to assure that the investment managers are securing the best execution of the Fund's brokerage transactions.

All rebates or credits from commissions paid by the System's investment managers to the commission recapture brokers will be realized in cash and remitted directly to the Fund. It is the System's policy

to refrain from using soft- dollar credits to acquire products or services to be used in the internal administration of the Fund. If the generation of soft-dollar credits is unavoidable in certain instances, the System will make a best effort to have the credits converted to cash and remitted directly to the Fund, and, failing such conversion, will regularly monitor the managers' expenditure of soft-dollar credits to ensure an appropriate relationship to the management of their IPERS accounts.

J. Derivatives

The System recognizes that certain derivative instruments can be useful tools in managing portfolio risk and in efficiently replicating cash market positions. However, the System also recognizes that derivatives can introduce unique risks into the portfolio that must be controlled. The following guidelines shall apply to the use of derivatives by the System's managers, and are designed to provide general risk controls that apply to all managers. The System's staff and investment consultant shall establish specific guidelines in each manager's contract to control the various risks associated with the use of derivatives for a particular manager and mandate. With the exception of portable alpha strategies, a manager is only authorized to utilize the derivative instruments permitted in this policy, and then only to the extent such usage is authorized in the manager's contract with the System.

The System defines a derivative instrument (derivative) to be a financial instrument with a return or value that is obtained from the return or value of another underlying financial instrument. Mortgage-backed securities and asset-backed securities are not considered derivatives for the purposes of this policy.

The following is a list of categories of derivatives that are permitted under this policy.

1. Futures – Bond futures, interest rate futures, stock index futures, and currency futures that are listed on major exchanges in the United States, Japan, France, the United Kingdom, and Germany.
2. Options – Options on stocks and bonds, index options, currency options, and options on futures and swaps.
3. Currency forward contracts.
4. Swaps – Interest rate, currency, index, credit default, or specific security or a group of securities swaps.
5. Warrants – A manager is not permitted to purchase warrants separately. However, a manager may purchase securities that have warrants attached to them if such securities are permitted under their contract. A manager may also hold warrants in its portfolio if such warrants were received as part of a restructuring or settlement concerning an authorized investment.

The following restrictions shall apply to any manager using derivatives in the portfolio they manage for IPERS (in addition to any other restrictions or limitations included in the manager's contract):

1. Under no circumstances shall a manager use derivatives for the purpose of leveraging its portfolio.
2. Prior to utilizing any derivative, a manager shall take all steps necessary to fully understand the instrument, its potential risks and rewards, and the impact adverse market conditions could have on the instrument and the overall portfolio, and to ensure that it has all of the operational and risk management capabilities required to prudently monitor and manage the derivative.
3. A manager utilizing over the counter, non-exchange-traded swaps or options (OTC Derivatives) shall use prudent caution in selecting counterparties, and shall have written policies in place specifying how the manager will manage the credit risk of the counterparties. Such policies shall include, at a minimum, how the management firm will evaluate and monitor the creditworthiness of counterparties, an explanation of how the firm will determine the maximum firm-wide net market exposure amount to each counterparty, how the firm will monitor and enforce compliance with its credit policies, and other key terms that are required to be included in non-exchange- traded derivative contracts. Staff and IPERS' investment consultant shall periodically review these policies.
4. A manager shall not invest in OTC Derivatives with a counterparty that has a rating below "A3" as defined by Moody's or "A-" as defined by Standard & Poor's (S&P). Managers shall not use unrated

counterparties, nor shall they use counterparties that have a "split rating" where one of the ratings is below A3 by Moody's or A- by S&P. However, managers may utilize an unrated counterparty if the manager has documentation evidencing that a parent or affiliate of the counterparty is: (a) legally bound to cover the obligations of the counterparty, and (b) has a rating of at least A3 by Moody's or A- by S&P. The counterparty shall be regulated in either the United States or the United Kingdom.

5. A manager utilizing OTC Derivatives in IPERS' account shall control the counterparty credit risk of such transactions by: (a) utilizing payment netting arrangements to minimize the amount at risk, (b) performing daily marking-to-market of derivatives contracts, and (c) requiring collateralization of net amounts owed under the contracts after meeting minimum threshold for transfers.
6. A manager shall limit the System's exposure to counterparty defaults from OTC Derivatives by limiting the dollar amount at risk with any counterparty (net of the value of any collateral held) to no more than 5 percent of the market value of the IPERS account for a counterparty with a rating above A by Moody's or A+ by S&P, or 3 percent of the market value of the IPERS account for a counterparty with a rating of or below A by Moody's or A+ by S&P. The limitations of this paragraph apply only to the net exposure attributable to OTC Derivatives.
7. OTC Derivative transactions shall be executed under an International Swap Dealers Association (ISDA) agreement, or a clearing agreement in the case of a cleared swap. Collateral provided to IPERS by counterparties under a derivatives contract shall be delivered to and held by the System's custodian bank, or delivered and held by a third party agent under a swap clearing agreement or a Credit Support Annex (CSA) to the ISDA agreement executed by IPERS or the investment manager on behalf of IPERS.
8. Managers shall reconcile cash and margin requirements concerning derivatives on a daily basis with the System's custodian bank or any applicable third party under a CSA or swap clearing agreement.
9. These restrictions do not apply to portable alpha strategies utilized by the System. In lieu of such restrictions, staff shall attempt to ensure that contracts with managers executing portable alpha strategies adequately address as many of the restrictions as possible while allowing these managers the latitude necessary to manage a portable alpha portfolio where the alpha and beta sources are in different asset classes.
10. Contracts for portable alpha portfolios will articulate the specific derivative usage allowed within the manager's strategy. Additionally, the contract will incorporate the derivatives exposure parameters for that strategy. The contract will also articulate the data to be provided to IPERS staff and consultants in order to enable sufficient monitoring and evaluation of derivatives exposures.

K. Social Investing

As fiduciaries, the IPERS Investment Board, staff, and investment managers must perform their duties for the exclusive benefit and in the best economic interest of the System's members and beneficiaries. The System and the Board will not support investment policies or strategies which seek to promote specific social issues or agendas through investment or divestment of IPERS' assets. To act otherwise could be construed as a violation of fiduciary duty and could endanger the System's tax-exempt status.

L. Securities Monitoring and Litigation

IPERS has a fiduciary duty to preserve trust assets to meet the retirement promises made to its members. Included in this duty is the obligation to recover investments in public securities that incur losses as a result of corporate mismanagement and/or fraud. To preserve trust assets, the Board has adopted a securities monitoring and litigation policy to guide the System's involvement in and monitoring of securities litigation. (See Appendix D for IPERS' Securities Monitoring and Litigation Policy.)

M. Confidential Investment Information

Iowa Code §22.7 and §97B.17(2)e provide that certain records and information in IPERS' possession are considered confidential and thus are exceptions to Iowa's Open Records (chapter 22) laws. Included in the exceptions is information which, if released:

1. Could result in a loss to the System or to the provider of the information.
2. Would give advantage to competitors and serve no public purpose.
3. Would violate trade secrets which are recognized and protected by law.

While the staff shall provide the Board with all essential information about the investment program, communication of information that is confidential under the above Iowa Code provisions will be identified as such in the communication.

Iowa Code §97B.8A(5), an explicit exception to Iowa's Open Meetings (chapter 21) laws, reinforces the need and obligation to maintain the confidentiality of such information by expressly authorizing the Board to hold closed sessions for discussion of this information.

N. Ethics

Fiduciaries of the System must exercise the highest standards of care in acting for the exclusive benefit of the plan participants. IPERS has adopted an ethics policy to govern the activities of Board members, staff, consultants, and managers as it relates to the System. (See Appendix E for IPERS' Ethics Policy.)

O. Sudan and Iran Investment Restrictions and Divestment

Iowa Code chapters 12F and 12H require IPERS to develop lists of scrutinized companies with operations in the Sudan and/or Iran, and to restrict its purchases of, and, under certain circumstances, to divest of holdings of publicly traded securities in any company determined to have active business operations in the Sudan and/or Iran. To comply with this legislative mandate, IPERS will utilize the research and findings of an organization recognized to be an authoritative source of information in this area. This list will be updated quarterly. Staff will engage the companies on the scrutinized companies list to determine if such companies are prohibited investments under Iowa law. Firms that are deemed to be prohibited under Iowa law will be placed on a prohibited companies list.

P. Continuing Education

The Investment Board consists of dedicated Iowans that have agreed to serve the public in the very important roles of fiduciary and trustee for the Fund. The Board members have been entrusted with making decisions concerning complex actuarial and investment issues. However, it is recognized that Board members have varying degrees of knowledge and experience in dealing with actuarial and investment issues. Therefore, to facilitate the ongoing education of its members so that they may obtain the knowledge required to make informed decisions, the Board establishes the following continuing education guidelines applicable to all Board members:

1. In the first 12 months following appointment, a Board member is encouraged to attend an educational session concerning fiduciary duties of trustees, and another educational session concerning asset allocation, actuarial principles, or investment policy.
2. For the period from 12 months following appointment until the end of the Board member's service on the Board, a Board member is encouraged to attend at least one educational session per year concerning any investment-related topic relevant to the Fund.
3. An educational session is defined as a conference, seminar, workshop, course, or other substantive educational activity on any investment or pension fund administration subject. If possible, staff will

attempt to make some educational sessions annually available in Iowa in order to meet the needs of Board members' schedules.

4. Board members are responsible for self-evaluating their educational needs and obtaining knowledge in specific-needs areas in a fiscally responsible manner. Board members are encouraged to engage the chief executive officer or IPERS investment staff to assist them in determining what educational sessions are available to meet their educational needs.
5. Board members must receive approval of the Board if they wish to attend more than two educational sessions in any 12-month period. This requirement applies only to educational sessions that require out-of-state travel.

IV. Responsibilities of the Investment Board and Staff

Successful management and oversight of IPERS' investment activities require the Investment Board and staff to have specific responsibilities, as outlined below:

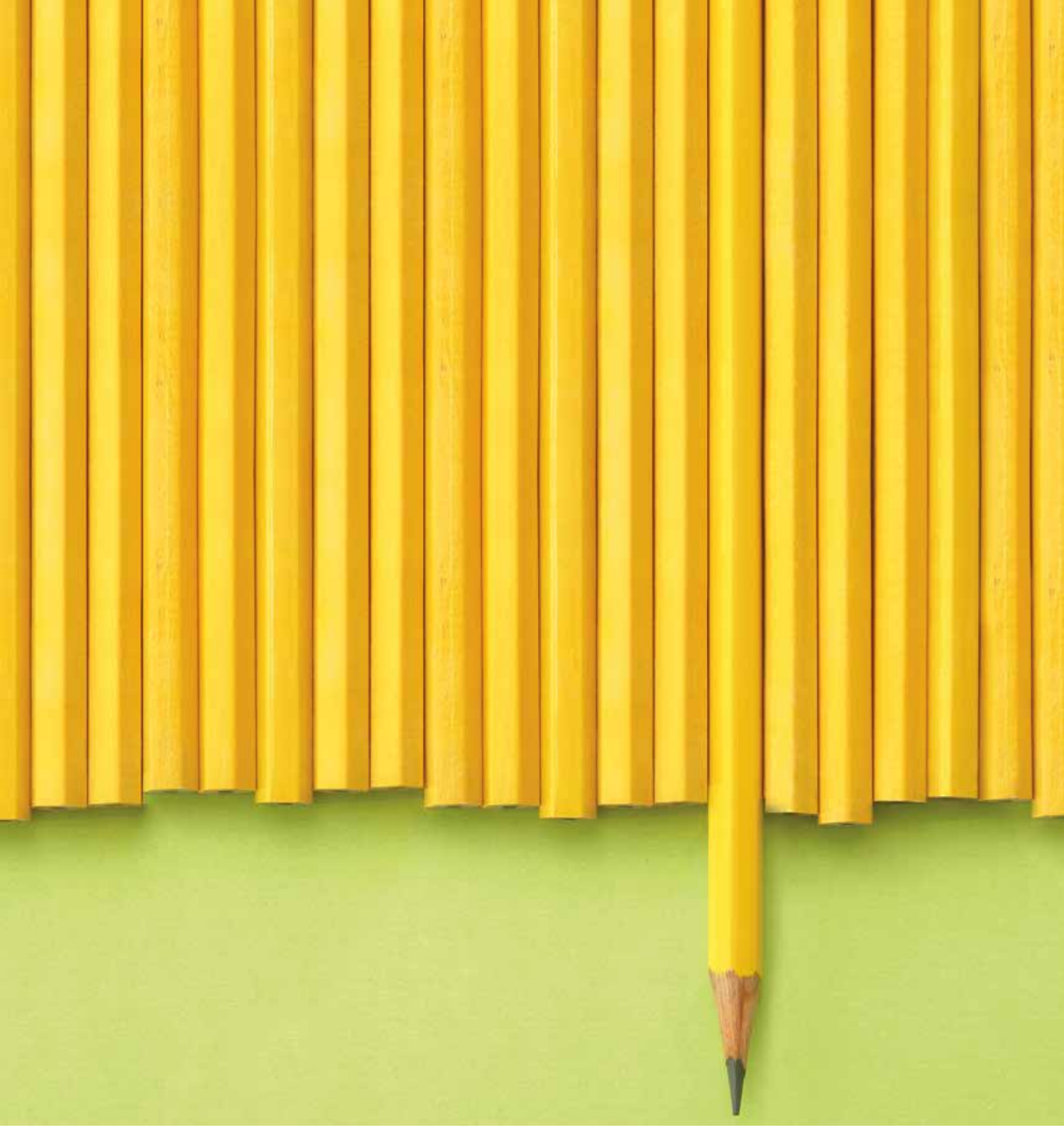
A. Statutory Responsibilities
   1. The Board shall annually adopt an Investment Policy and Goal Statement which is consistent with Iowa Code §§97B.7A and 97B.8A.
   2. The Board shall at least annually conduct a review of the investment policies and procedures utilized by the System.
   3. The Board shall at least annually conduct a public meeting to review the policies and the investment performance of the Fund.
   4. With the approval of the Board, the Treasurer of State may conduct a program of lending securities in the IPERS portfolio.
   5. The Board shall review and approve, prior to the execution of a contract, the hiring of each investment manager and investment consultant outside of state government.
   6. The Board shall select the actuary to be employed by the System, and shall adopt the mortality tables, and actuarial methods and assumptions to be used by the actuary for the annual valuation of assets.
   7. The chief executive officer will consult with the Board prior to employing a chief investment officer.
   8. The Board shall participate in the annual performance evaluation of the chief investment officer.
   9. The chief executive officer shall consult with the Board on the budget program for the System.
   10. The Treasurer of State shall consult with the Board prior to selecting any bank or other third party for purposes of investment asset safekeeping, other custody, or settlement services.
   11. The Board shall consist of seven voting members and four nonvoting members as required by Iowa Code §97B.8A. Four voting members of the Board shall constitute a quorum.
   12. Staff shall provide advance notice to the public of the time, date, tentative agenda, and place of each Board meeting in compliance with Iowa Code chapter 21.
   13. The Board shall set the salary of the chief executive officer.

B. Operational Responsibilities
   1. Upon recommendation of the staff, consultants, or of individual Board members, the Board shall periodically and as necessary adopt changes to the Investment Policy and Goal Statement, including revisions to the Policy Benchmark targets, beta portfolio components, and active risk budgets.
   2. The Board shall review the specific types and proportions of assets being utilized in implementing the overall policy, as established by the staff (for example, the proportion of mortgage bonds within the Core Plus Fixed Income portfolio).
   3. The Board shall periodically review the staff's rebalancing activities and the System's compliance with Policy Benchmark Weights and Active Risk Targets within their designated ranges.
   4. The staff shall have the authority to terminate, amend, or renew contracts with existing managers. Staff shall inform the Board in advance of its decision to terminate a manager.

5. The Board shall approve the termination of consultants and the solicitation of proposals for consultants. The staff shall have the authority to amend or renew contracts with existing consultants.
6. If the chief executive officer, chief investment officer, chief risk officer, any investment officer, or any IPERS attorney is in possession of information which would lead a reasonable person familiar with such matters to conclude that an investment, a commitment to an investment, or a decision to engage or terminate a contracted service provider, contradicts the fiduciary duties of the party or parties having the final authority to take such actions, it is the Board's expectation that the issue will be placed on a Board meeting agenda for review.
7. The Board shall hold public meetings to review the investment performance of the Fund, to hear presentations from a portion of the System's investment managers, and to effect its statutory and operational responsibilities.
8. To maintain and strengthen the investment management of the System:
   a. The Board and staff shall participate in conferences/seminars related to the investment activities of public and private institutional investors.
   b. The staff, and as appropriate, the Board, shall meet periodically with the investment managers of the Fund at the firms' offices to review and clarify investment or administrative issues related to the management of the portfolio.
   c. The staff, and as appropriate, the Board, shall participate in investor meetings conducted by the various managers of the Fund.

These activities shall be conducted in compliance with Iowa Code chapter 68B, the "Iowa Public Officials Act."

C. Administrative Responsibilities
1. Board meeting dates for the fiscal year shall be set by members of the Board at the first meeting of the fiscal year.
2. At the first meeting in each fiscal year, the voting Board members shall elect a chair and vice chair.
3. Parties wishing to present items for the Board's next meeting agenda shall file a written request with the chair at least five business days prior to the meeting. The Board may take up matters not included on its agenda.
4. To the extent there is no law, statute, or administrative rule governing a procedure, Board meetings shall be governed by the procedural rules established in the latest version of *Robert's Rules of Order, Newly Revised*.



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ACTUARIAL

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 5, 2015

This report presents the results of the June 30, 2015 annual actuarial valuation of the Iowa Public Employees' Retirement System (IPERS). The primary purposes of performing the valuation are as follows:

- to determine the Actuarial Contribution Rates (ACR) and the Required Contribution Rates (RCR) for the Regular membership, Sheriffs and Deputies, and the Protection Occupation group (all public safety members other than Sheriffs and Deputies) in accordance with IPERS' Contribution Rate Funding Policy,
- to evaluate the funded status of the System and disclose various asset and liability measures as of June 30, 2015,
- to determine the experience of the System since the last valuation, and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

The actuarial valuation results provide a "snapshot" view of the System's financial condition on June 30, 2015. There were no changes in the plan provisions or actuarial assumptions and methods since the prior valuation. The valuation results reflect net favorable experience for the past plan year as demonstrated by an unfunded actuarial liability (UAL) that was lower than expected. The UAL on June 30, 2015 for all three membership groups covered by IPERS is $5.455 billion as compared to an expected UAL of $5.616 billion. The favorable experience was the net result of an experience gain of $171 million on the actuarial value of assets and an experience loss of about $30 million on System liabilities.

Historically, the contribution rate for Regular members was set by state statute. Effective with the 2011 valuation, IPERS has the authority to set the Required Contribution Rate for the Regular membership group based on the Actuarial Contribution Rate developed in the annual actuarial valuation, subject to a change of no more than 1% per year. Based on the current Contribution Rate Funding Policy, the Required Contribution Rate for Sheriffs and Deputies will decrease 0.50% for FY2017, and it will remain unchanged for Protection Occupation and Regular members. The Required Contribution Rate is higher than the ACR for all three groups, as shown in the following table:

Contribution Rate for FY2017			
	Regular Membership	Sheriffs and Deputies	Protection Occupation
1. Normal Cost Rate	10.22%	16.50%	16.01%
2. Amortization of UAL	3.95%	1.00%	(0.30)%*
3. Actuarial Contribution Rate	14.17%	17.50%	16.01%
4. Required Contribution Rate	14.88%	19.26%	16.40%
5. Shortfall/(Margin) (3) – (4)	(0.71)%	(1.76)%	(0.39)%
6. Employee Contribution Rate	5.95%	9.63%	6.56%
7. Employer Contribution Rate (4) – (6)	8.93%	9.63%	9.84%
8. Unfunded Actuarial Liability ($M)	$5,449	$24	$(17)
9. Funded Ratio	82.7%	96.0%	101.3%

* According to the Actuarial Amortization Method, a negative UAL rate is not reflected until the group has been 110% funded for three consecutive years.

Actuarial Value of Net Assets

For financial statement purposes, the System's assets are reported at current fair values. For actuarial purposes, the assets are valued using a technique which dampens the volatility in the fair value. Specifically, the assets are valued at their expected value at the valuation date (based on the assumed rate of investment return) plus 25% of the difference between the fair value and the expected value on the valuation date. The actuarial value of assets must fall within a corridor of 80% to 120% of market value. Based on this methodology, there was an actuarial gain on assets of about $171 million. Between June 30, 2014 and June 30, 2015, the actuarial value of assets increased by $1.455 billion. This represented an approximate rate of return of 8.2%, higher than the actuarial assumed rate of return of 7.5%.

Liabilities

The actuarial liability is that portion of the present value of future benefits that will not be paid by future normal costs. The difference between this liability and the actuarial value of assets at the same date is called the unfunded actuarial liability. The dollar amount of unfunded actuarial liability is reduced if the contributions to the System exceed the normal cost for the year plus interest on the prior year's UAL.

The unfunded actuarial liability by group is shown as of June 30, 2015 in the following table:

($Millions)	Regular Membership	Sheriffs & Deputies	Protection Occupation	Total*
Actuarial Liability	$31,452	$591	$1,327	$33,370
Actuarial Value of Assets	26,003	567	1,345	27,915
Unfunded Actuarial Liability*	5,449	24	(17)	5,455
Funded Ratio	82.7%	96.0%	101.3%	83.7%

*May not add due to rounding.

Changes in the UAL occur for various reasons. The net decrease in the UAL from June 30, 2014 to June 30, 2015 was $89 million. The components of this net change are shown in the following table (in millions):

Unfunded Actuarial Liability, June 30, 2014 ($M)	$	5,544
• Expected increase from amortization method		72
• Expected decrease from contributions above actuarial rate		(20)
• Investment experience		(171)
• Liability experience*		30
• Other		0
Unfunded Actuarial Liability before FED transfer, June 30, 2015	$	5,455
• FED Transfer for favorable experience		0
Unfunded Actuarial Liability after FED transfer, June 30, 2015	$	5,455

* Liability experience is 0.09% of the actuarial liability.

As seen above, various factors impacted the UAL. Actuarial gains (losses), which result from actual experience that is more (less) favorable than anticipated based on the actuarial assumptions, are reflected in the UAL and are measured as the difference between the expected unfunded actuarial liability and the actual unfunded actuarial liability, taking into account any changes due to actuarial assumptions and methods or benefit provision changes. Overall, the System experienced a net actuarial gain of $141 million. The total actuarial gain may be explained by considering the separate experience of assets and liabilities. As noted earlier, there was a $171 million actuarial gain as measured on the actuarial value of assets. There was a net actuarial loss of $30 million from demographic and other experience that was less favorable than anticipated by the actuarial assumptions.

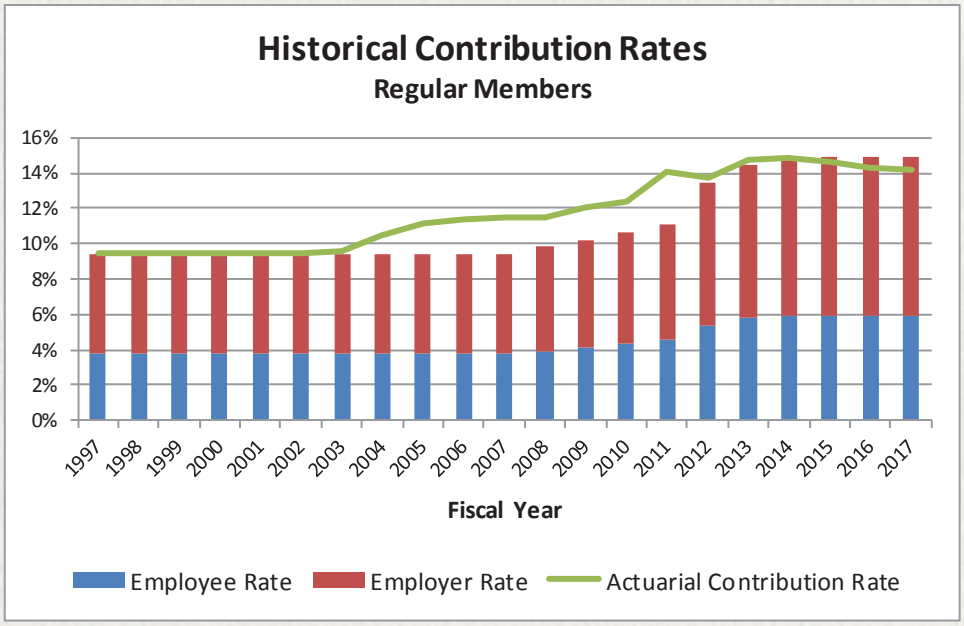
Contribution Rate

Under the Entry Age Normal cost method, the actuarial contribution rate consists of two components:

- a "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date, and

- an "unfunded actuarial liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets on hand.

In 2006 and 2010, legislation was passed that increased the statutory contribution rate for Regular members. Beginning with the 2011 valuation (FY2013), the Investment Board was given the authority to set the Required Contribution Rate for Regular members subject to certain statutory limitations. A historical summary of the actual contribution rate and the actuarial contribution rate is shown in the following graph:



There were several factors that impacted the contribution rates in the 2015 valuation. The contribution rates are summarized in the following table:

Contribution Rate for FY2017	Regular Membership	Sheriffs & Deputies	Protection Occupation
1. Actuarial Contribution Rate	14.17%	17.50%	16.01%
2. Required Contribution Rate	14.88%	19.26%	16.40%
3. Employee Contribution Rate	5.95%	9.63%	6.56%
4. Employer Contribution Rate (2) – (3)	8.93%	9.63%	9.84%
5. Shortfall/(Margin) (1) – (2)	(0.71)%	(1.76)%	(0.39)%

Based on the results of this valuation, the Required Contribution Rate for Regular members for the fiscal year ending June 30, 2017 is 14.88%, which is above the Actuarial Contribution Rate. The remaining 5% of the active members, the Sheriffs and Deputies group and the Protection Occupation group, have historically contributed at the Actuarial Contribution Rate which was subject to change each year. However, based on the current Contribution Rate Funding Policy, the Required Contribution Rate for the Protection Occupation group remained unchanged, while the Sheriffs and Deputies group decreased by 0.50% due to their funded status. The Required Contribution Rate for the Sheriffs and Deputies group is still higher than the ACR due to the Funding Policy. As a result, the Required Contribution Rate for all three groups exceeds their respective ACR. Therefore, a higher stream of contributions in the future is anticipated to fund the UAL so the number of years to amortize the UAL, based on the Required Contribution Rate, would be less than the amortization period set by the Actuarial Amortization Policy.

The Actuarial Contribution Rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2015, and applies only for the fiscal year beginning July 1, 2016. The Actuarial Contribution Rate in future years will change each year as the deferred actuarial investment experience is recognized and other experience (both investment and demographic) impacts the System. The Required Contribution Rate will be set in each future year based on the Actuarial Contribution Rate for that year and the Contribution Rate Funding Policy.

Summary

The investment return on the market value of assets for FY2015 was 3.96%, as reported by IPERS. As a result of favorable net experience gains, the System's funded ratio increased from 82.7% in the June 30, 2014 valuation to 83.7% in this valuation.

As mentioned earlier in this section, the System utilizes an asset smoothing method in the valuation process. While this is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred investment experience. The asset smoothing method impacts only the timing of when the actual market experience is recognized in the valuation process. As a result of favorable investment experience in several recent years that had not yet been recognized in the asset smoothing method, the return on the actuarial value of assets was 8.16%, higher than the assumed 7.50%, resulting in an actuarial gain. Due to the return on the market value of assets of 3.96%, the deferred investment gain has decreased from $1.58 billion in last year's valuation to $514 million in the current valuation.

Based on the Contribution Rate Funding Policy adopted by the Investment Board, the Required Contribution Rate determined in this year's valuation for Regular members will remain unchanged from last year, i.e., 14.88%, and will apply for the fiscal year ending June 30, 2017. The Required Contribution Rate for the Sheriffs and Deputies group in this valuation declined by 0.50% from last year's rate due to their funded ratio and the provisions of the Contribution Rate Funding Policy, but the Required Contribution Rate remains higher than the Actuarial Contribution Rate. The Required Contribution Rate for the Protection Occupation group remains unchanged. As a result, for all three groups the Required Contribution Rate exceeds the Actuarial Contribution Rate for FY2017.

The Actuarial Contribution Rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2015, and applies only for the fiscal year beginning July 1, 2016. The Actuarial Contribution Rate in future years will change each year as the deferred actuarial investment experience is recognized and as other experience (both investment and demographic) impacts the System. While the Required Contribution Rate can vary each year, the annual change to the rate is limited to 1.0% for Regular members. Therefore, depending on actual experience in future years, the Required Contribution Rate may vary from the Actuarial Contribution Rate.

The long-term financial health of this retirement system is heavily dependent on two key items: (1) future investment returns and (2) systematic contributions to the System at the full actuarially determined rate. Given the System's current funded status, the Actuarial Contribution Rate, and the Required Contribution Rate, the System's funded ratio is expected to improve over the long term, assuming all actuarial assumptions are met.

In performing the valuation, we have relied upon membership and financial data reported to us by the System. We did not verify the accuracy of the information, but did review it for reasonableness in relation to the data submitted for previous years. We provided the Principal Valuation Results, the Actuarial Balance Sheet, the Schedule of Funding Progress, and the Solvency Test in the Actuarial section. We also provided some information in the Financial Section, including the calculation of the Total Pension Liability, the Schedule of Changes in the Employers' Net Pension Liability, and the sensitivity analysis on the Net Pension Liability. In addition, we provided the contribution rates used to calculate the actuarially required contributions reflected in the Schedule of Employers' Contributions found in the Required Supplementary Information.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this information is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations of future experience); and which, in combination, offer our best estimate of anticipated experience affecting the System. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Investment Board has the final decision regarding the appropriateness of the assumptions and adopted them as of the dates shown for each assumption.

Actuarial computations presented in the 2015 actuarial valuation report are for purposes of determining the recommended funding amounts for the System. The calculations have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results shown in the June 30, 2015 actuarial valuation report. Accordingly, additional determinations may be needed for other purposes. We also prepared actuarial computations as of June 30, 2015 for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standard No. 67 (GASB 67) based on the results of the June 30, 2015 actuarial valuation. The assumptions used in the funding valuation were also used for GASB 67 reporting, including the use of a 7.5% discount rate for the GASB 67 calculation of the Total Pension Liability (7.5% is the assumed rate of return used in the funding valuation). In addition, the entry age normal actuarial cost method, which is required to be used under GASB 67, is also used in the funding valuation. The actuarial assumptions and methods meet the parameters set by Actuarial Standards of Practice, as issued by the Actuarial Standards Board, and generally accepted accounting principles (GAAP) applicable in the United State of America as promulgated by the Governmental Accounting Standards Board.

In conclusion, on the following page we present comparative statistics and actuarial information on both the June 30, 2015 and June 30, 2014 valuations. All figures shown include the Regular members¸ Sheriffs and Deputies and the Protection Occupation groups. The membership counts reflect the data as of June 30, appropriate for valuation purposes, and may differ from other reporting numbers.

I, Patrice A. Beckham, F.S.A., am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Brent A. Banister, F.S.A., am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully Submitted,

CAVANAUGH MACDONALD CONSULTING, LLC

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Brent A. Banister PhD, FSA, EA, FCA, MAAA
Chief Pension Actuary

PRINCIPAL VALUATION RESULTS

	June 30, 2015	June 30, 2014	% Chg
SYSTEM MEMBERSHIP			
1. Active Membership			
- Number of Members (excluding Retired/Reemployed)	167,368	165,911	0.9
- Projected Payroll for Upcoming Fiscal Year	$7,573M	$7,337M	3.2
- Average Salary	$45,247	$44,225	2.3
2. Inactive Membership			
- Number Not in Pay Status	67,374	72,214	(6.7)
- Number of Retirees/Beneficiaries	111,127	107,934	3.0
- Average Annual Benefit	$15,745	$15,293	3.0
ASSETS AND LIABILITIES			
1. Net Assets (excluding FED reserve)			
- Market Value	$28,430M	$28,039M	1.4
- Actuarial Value	27,915M	26,460M	5.5
2. Projected Liabilities			
- Retired Members	$16,843M	$15,975M	5.4
- Inactive Members	699M	651M	7.4
- Active Members	22,599M	21,927M	3.1
- Total Liability	$40,142M	$38,553M	4.1
3. Actuarial Liability	$33,370M	$32,004M	4.3
4. Unfunded Actuarial Liability	$5,455M	$5,544M	(1.6)
5. Funded Ratio			
a. Actuarial Value Assets/Actuarial Liability	83.65%	82.68%	1.2
b. Market Value Assets/Actuarial Liability	85.19%	87.61%	(2.8)
SYSTEM CONTRIBUTIONS			
Required Contribution Rate, Regular Members*	14.88%	14.88%	0.0
Employer Contribution Rate	8.93%	8.93%	0.0
Employee Contribution Rate	5.95%	5.95%	0.0
Total Actuarial Contribution Rate	14.17%	14.35%	(1.3)
Shortfall/(Margin)	(0.71%)	(0.53%)	34.0

Note: Totals may not add due to rounding

M = ($)Millions

* Contribution rates for Sheriffs and Deputies are 9.63% for employers, 9.63% for employees

Contribution rates for Protection Occupation are 9.84% for employers, 6.56% for employees

Note: For valuation purposes, the data provided by IPERS was reclassified by CMC into the membership category that would most accurately reflect the actuarial liability of the individual member on the valuation date. As a result, the counts shown in this exhibit may vary from those shown in other sections of this report.

ACTUARIAL BALANCE SHEET
as of June 30, 2015

	Regular Membership	Sheriffs & Deputies	Protection Occupation	Total
ASSETS				
Actuarial value of assets	$26,003,123,075	$567,387,135	$1,344,868,893	$27,915,379,103
Present value of future normal costs	6,096,474,931	149,752,816	525,022,073	6,771,249,820
Present value of future contributions to amortize unfunded actuarial liability	5,448,728,880	23,614,901	(17,404,153)	5,454,939,628
Total Assets	$37,548,326,886	$740,754,852	$1,852,486,813	$40,141,568,551
LIABILITIES				
Present Value of Future Benefits:				
Retired Members and Beneficiaries	$16,028,939,271	$266,693,628	$547,545,074	$16,843,177,973
Active Members	20,859,884,327	466,621,946	1,272,931,694	22,599,437,967
Inactive Members	659,503,288	7,439,278	32,010,045	698,952,611
Total Liabilities	$37,548,326,886	$740,754,852	$1,852,486,813	$40,141,568,551

SOLVENCY TEST

A short-term solvency test, which is one means of determining a system's progress under its funding program, compares the plan's present assets with: 1) the liability for active member contributions on deposit; 2) the liability for future benefits to present retirees; and (3) the liability for service already rendered by active members. In a system that has been following the level percent of payroll financing discipline, the obligation for active member contributions on deposit (Item 1) and the liabilities for future benefits to present retired lives (Item 2) will be fully covered by present assets with the exception of rare circumstances. The obligation for service already rendered by active members (Item 3) will be partially covered by the remainder of present assets. Absent any significant benefit changes, if the system has been using level cost financing, the funded portion of Item 3 usually will increase over a period of time.

Actuarial Valuation	Active Member Contributions (1)	Retirees and Beneficiaries (2)	Active Members Employer Financed Portion (3)	Actuarial Value of Assets	Portions of Liabilities Covered by Assets (1)	(2)	(3)
2015	$4,150,432,107	$16,843,177,973	$12,376,708,651	$27,915,379,103	100%	100%	56%
2014	3,974,396,951	15,974,726,784	12,055,332,353	26,460,428,085	100%	100%	54%
2013	3,789,330,469	15,000,576,427	11,708,435,424	24,711,096,187	100%	100%	51%
2012	3,675,848,243	14,151,967,558	11,618,381,685	23,530,094,461	100%	100%	49%
2011	3,562,999,712	13,252,276,665	11,441,803,737	22,575,309,199	100%	100%	50%
2010	3,569,189,416	12,321,926,878	10,577,303,356	21,537,458,560	100%	100%	53%
2009	3,501,951,261	10,623,480,763	11,893,161,799	21,123,979,941	100%	100%	59%
2008	3,343,722,874	9,922,758,244	11,255,735,471	21,857,423,183	100%	100%	76%
2007	3,165,389,448	9,217,242,773	10,643,481,561	20,759,628,415	100%	100%	79%
2006	3,027,543,237	8,448,946,704	10,174,632,478	19,144,036,519	100%	100%	75%

Note: The combined accrued liabilities in columns 1, 2, and 3 are based on the entry age normal cost method.

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Fiscal Years Ended June 30	Number of Participating Employers	Active Members	Annual Payroll	Annual Average Pay	Percentage Change in Average Pay
2015	1,845	167,367	$7,326,348,141	$43,774	2.30
2014	2,001	165,913	7,099,277,280	42,789	2.68
2013	2,147	165,095	6,880,131,134	41,674	0.83
2012	2,153	164,200	6,786,158,720	41,329	3.38
2011	2,177	164,467	6,574,872,719	39,977	0.78
2010	2,229	165,660	6,571,182,005	39,667	3.33
2009	2,241	167,717	6,438,643,124	38,390	5.09
2008	2,259	167,850	6,131,445,367	36,529	4.40
2007	2,293	165,241	5,781,706,199	34,990	3.31
2006	2,363	163,091	5,523,863,321	33,870	4.07

Note: In compliance with GASB Statement No. 67, the 2014 employer counts were adjusted in 2014. Additional adjustments have been made to the 2015 counts.

RETIREES AND BENEFICIARIES—CHANGES IN ROLLS

Schedule of Retirees Added to and Removed From Rolls

Fiscal Year	Added to Rolls		Removed From Rolls		Rolls at Year-End		Percentage Change in Annual Allowances	Average Annual Allowances
	Number*	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
2015	5,926	$ 8,930,554	3,104	$18,262,385	105,837	$1,654,215,137	(0.56)	$15,630
2014	6,008	124,411,510	3,008	30,068,643	103,015	1,663,546,968	6.01	16,149
2013	5,759	133,822,874	3,004	27,729,949	100,015	1,569,204,101	7.25	15,690
2012	5,979	116,825,979	2,788	24,589,757	97,260	1,463,111,176	6.73	15,043
2011	7,383	183,137,035	2,767	13,377,850	94,069	1,370,874,954	14.13	14,573
2010	6,387	104,167,926	2,705	12,096,634	89,453	1,201,115,769	8.30	13,427
2009	4,908	92,013,786	2,761	12,041,683	85,771	1,109,044,477	7.77	12,930
2008	5,098	92,991,307	2,687	10,789,250	83,624	1,029,072,374	8.68	12,306
2007	5,246	88,603,387	2,718	10,883,501	81,213	946,870,317	8.94	11,659
2006	4,892	71,906,397	2,510	10,155,290	78,685	869,150,431	7.65	11,046

Schedule of Beneficiaries Added to and Removed From Rolls

Fiscal Year	Added to Rolls		Removed From Rolls		Rolls at Year-End		Percentage Change in Annual Allowances	Average Annual Allowances
	Number*	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
2015	580	$2,130,837	267	$1,321,475	5,531	$56,341,950	1.46	$10,187
2014	555	7,013,711	255	2,175,827	5,218	55,532,588	9.54	10,643
2013	496	6,073,050	266	2,129,400	4,918	50,694,704	8.44	10,308
2012	464	5,918,466	247	1,858,259	4,688	46,751,054	9.51	9,972
2011	456	4,497,000	224	911,691	4,471	42,690,847	9.17	9,548
2010	397	4,387,178	239	1,231,637	4,239	39,105,538	8.78	9,225
2009	429	3,930,377	214	876,249	4,081	35,949,997	9.28	8,809
2008	335	3,673,542	205	934,239	3,866	32,895,869	9.08	8,509
2007	374	3,299,984	157	857,512	3,736	30,156,566	8.81	8,072
2006	390	3,237,968	172	681,014	3,519	27,714,094	10.16	7,876

*The number of retirees and beneficiaries added to rolls in these tables does not equal the number of new retirees reported elsewhere in the CAFR. This is because all retirees who died during the fiscal year have been removed from the retiree table and their beneficiaries have been added to the beneficiary table.

Note: Tables on pages 86–87 are provided by IPERS.

SCHEDULE OF FUNDING PROGRESS

Fiscal Years Ended June 30	Actuarial Value of Assets	Actuarial Liability	Percentage Funded	Unfunded Actuarial Liability (UAL)	Covered Payroll*	UAL as a Percentage of Covered Payroll
2015	$27,915,379,103	$33,370,318,731	83.65	$5,454,939,628	$7,326,348,141	74.46
2014	26,460,428,085	32,004,456,088	82.68	5,544,028,003	7,099,277,280	78.09
2013	24,711,096,187	30,498,342,320	81.02	5,787,246,133	6,880,131,134	84.12
2012	23,530,094,461	29,446,197,486	79.91	5,916,103,025	6,786,158,720	87.18
2011	22,575,309,199	28,257,080,114	79.89	5,681,770,915	6,574,872,719	86.42
2010	21,537,458,560	26,468,419,650	81.37	4,930,961,090	6,571,182,005	75.04
2009	21,123,979,941	26,018,593,823	81.19	4,894,613,882	6,438,643,124	76.02
2008	21,857,423,183	24,522,216,589	89.13	2,664,793,406	6,131,445,367	43.46
2007	20,759,628,415	23,026,113,782	90.16	2,266,485,367	5,781,706,199	39.20
2006	19,144,036,519	21,651,122,419	88.42	2,507,085,900	5,523,863,321	45.39

*Annual covered payroll is the amount of wages subject to contributions to IPERS, not to exceed the federal covered wage limit in effect at the time the wages are paid.

Note: See the ten-year Schedule of Employers' Contributions in the Required Supplementary Information on page 41 for information on actuarial contributions and required contributions paid.

ACTUARIAL ASSUMPTIONS AND METHODS

ECONOMIC ASSUMPTIONS:

Rate of Inflation (effective June 30, 2014)

3.00% per annum

Rate of Crediting Interest on Contribution Balances (effective June 30, 2014)

3.75% per annum, compounded annually

Rate of Investment Return (effective June 30, 1996)

7.50% per annum, compounded annually, net of expenses

Wage Growth Assumption (effective June 30, 1999)*

4.00% per annum based on 3.00% inflation assumption and 1.00% real wage inflation.

*Total of 4.00% did not change, but the components changed June 30, 2006 and June 30, 2014

Payroll Increase Assumption (effective June 30, 1999)

4.00% per year

DEMOGRAPHIC ASSUMPTIONS:

Rates of Mortality

To reflect anticipated future mortality improvements, generational mortality is used with projected mortality improvements based on Projection Scale AA.

Pre-Retirement (effective June 30, 2010)

State	
Male	RP-2000 Employee Table, Generational, set back 3 years
Female	RP-2000 Employee Table, Generational, set back 8 years
School	
Male	RP-2000 Employee Table, Generational, set back 3 years
Female	RP-2000 Employee Table, Generational, set back 8 years
Other	
Male	RP-2000 Employee Table, Generational, no set back
Female	RP-2000 Employee Table, Generational, set back 8 years
Sheriffs/Deputies and Protection Occupation	
Male	RP-2000 Employee Table, Generational
Female	RP-2000 Employee Table, Generational

5% of active deaths are assumed to be service related for non-regular members.

Post-Retirement (effective June 30, 2014)

State	RP-2000 Healthy Annuitant Table, Generational
Male	No age adjustment
Female	1 Year set back with 5% increase above age 75
School	RP-2000 Healthy Annuitant Table, Generational
Male	1 Year set back with rates decreased by 5% below age 75
Female	3 Year set back with 10% decrease before age 75 and 10% increase above age 75
Other	RP-2000 Healthy Annuitant Table, Generational
Male	No age adjustment
Female	2 Year set back with 5% increase above age 75
Sheriffs/Deputies and Protection Occupation	RP-2000 Healthy Annuitant Table, Generational
Male	No age adjustment
Female	No age adjustment
Beneficiaries:	Same as members
Disabled Members (all groups):	RP-2000 Disabled Mortality, Generational Set back 1 year for males and set forward 3 years for females

Retirement Rates (effective June 30, 2014)

Upon meeting the requirements for early retirement, the following rates apply to Regular Members:

	Assumed Retirement Rates – Early		
Age	State	School	Other
55	5.0%	8.0%	5.0%
56	5.0%	8.0%	5.0%
57	5.0%	8.0%	5.0%
58	5.0%	8.0%	5.0%
59	5.0%	9.0%	5.0%
60	5.0%	10.0%	5.0%
61	15.0%	15.0%	10.0%
62	15.0%	20.0%	20.0%
63	15.0%	20.0%	20.0%
64	15.0%	20.0%	20.0%

Upon reaching the requirements for normal retirement (unreduced benefits), the following rates apply:

	Assumed Retirement Rates – Select Unreduced		
Age	State	School	Other
55	20.0%	30.0%	20.0%
56	15.0%	30.0%	20.0%
57	15.0%	30.0%	20.0%
58	15.0%	30.0%	20.0%
59	15.0%	30.0%	20.0%
60	15.0%	30.0%	20.0%
61	20.0%	30.0%	20.0%
62	40.0%	40.0%	40.0%
63	35.0%	30.0%	35.0%
64	30.0%	30.0%	35.0%
65	30.0%	30.0%	30.0%

	Assumed Retirement Rates – Ultimate Unreduced		
Age	State	School	Other
55	15.0%	23.0%	15.0%
56	15.0%	23.0%	15.0%
57	15.0%	23.0%	15.0%
58	15.0%	23.0%	15.0%
59	15.0%	23.0%	15.0%
60	15.0%	23.0%	15.0%
61	20.0%	30.0%	20.0%
62	40.0%	35.0%	35.0%
63	30.0%	30.0%	25.0%
64	30.0%	30.0%	25.0%
65	30.0%	45.0%	40.0%
66	30.0%	35.0%	30.0%
67	20.0%	25.0%	20.0%
68	20.0%	25.0%	20.0%
69	35.0%	40.0%	40.0%
70	100.0%	100.0%	100.0%

	Assumed Retirement Rates	
Age	Sheriffs and Deputies	Protection Occupation
50	20.0%	
51	20.0%	
52	20.0%	
53	20.0%	
54	20.0%	
55	17.0%	20.0%
56	17.0%	10.0%
57	17.0%	10.0%
58	17.0%	10.0%
59	17.0%	10.0%
60	17.0%	10.0%
61	17.0%	10.0%
62	30.0%	35.0%
63	30.0%	30.0%
64	30.0%	30.0%
65	100.0%	100.0%

Terminated vested members are assumed to retire at age 62 (55 for Sheriffs/Deputies and Protection Occupation groups).

For Regular membership, retired reemployed members are assumed to retire at a rate of 25% per year until age 80 when all are assumed to retire.

All retirees are assumed to elect a modified cash refund annuity (Option 2).

Rates of Disablement (effective June 30, 2010)

	Assumed Rates					
	Males			Females		
Age	State	School	Other	State	School	Other
27	0.020%	0.020%	0.020%	0.020%	0.030%	0.020%
32	0.020%	0.020%	0.020%	0.020%	0.030%	0.020%
37	0.040%	0.040%	0.040%	0.032%	0.040%	0.032%
42	0.065%	0.065%	0.065%	0.051%	0.050%	0.051%
47	0.120%	0.110%	0.140%	0.087%	0.090%	0.087%
52	0.220%	0.160%	0.326%	0.220%	0.165%	0.200%
57	0.320%	0.260%	0.630%	0.390%	0.240%	0.350%
62	0.420%	0.360%	0.900%	0.620%	0.320%	0.500%

Assumed Rates
Sheriffs/Deputies
Protection Occupation

Age	Rate
27	0.150%
32	0.150%
37	0.150%
42	0.180%
47	0.230%
52	0.280%
57	0.380%
62	0.510%

Rates of Termination of Employment (effective June 30, 2010)

Regular Membership

	Male			Female		
Years of Service	State	School	Other	State	School	Other
1	15.4%	15.0%	21.0%	15.4%	15.0%	21.0%
5	5.5%	6.9%	8.4%	5.5%	6.9%	9.2%
10	2.2%	2.9%	4.3%	2.2%	2.9%	5.8%
15	1.7%	1.8%	2.6%	1.7%	1.8%	4.1%
20	1.1%	1.3%	2.4%	1.1%	1.3%	3.2%
25	1.1%	1.2%	2.0%	1.1%	1.2%	2.4%
30	1.1%	1.2%	1.2%	1.1%	1.2%	1.5%

Sheriffs/Deputies and Protection Occupation

Age	Rate of Termination
22	5.8%
27	5.8%
32	3.5%
37	3.0%
42	2.6%
47	2.0%
52	2.0%

Probability of Electing a Deferred Vested Benefit (effective June 30, 2010)

	Regular Membership					
	Male			Female		
Years of Service	State	School	Other	State	School	Other
5	66.0%	76.0%	61.0%	61.0%	80.0%	70.0%
10	73.0%	81.0%	66.0%	66.0%	80.0%	73.0%
15	78.0%	86.0%	71.0%	76.0%	85.0%	80.0%
20	83.0%	91.0%	76.0%	86.0%	90.0%	85.0%
25	88.0%	95.0%	80.0%	96.0%	95.0%	90.0%
30	90.0%	95.0%	80.0%	100.0%	100.0%	90.0%

	Sheriffs/Deputies and Protection Occupation
Years of Service	Rate
5	53.0%
10	65.0%
15	85.0%
20	95.0%
25	100.0%
30	100.0%

Rates of Salary Increase* (effective June 30, 2010)

	Annual Increase			
Years of Service	State	School	Other	Sheriffs/Deputies and Protection Occupation
1	15.0%	17.0%	15.0%	17.0%
5	7.6%	6.5%	6.1%	6.5%
10	6.3%	5.3%	5.3%	5.3%
15	5.2%	4.5%	4.8%	4.8%
20	4.8%	4.2%	4.5%	4.5%
25	4.6%	4.0%	4.4%	4.5%
30+	4.3%	4.0%	4.4%	4.0%

* Includes 4.0% wage growth

ACTUARIAL COST METHOD (adopted 1996)

The actuarial cost method is a procedure for allocating the actuarial present value of pension plan benefits and expenses to time periods. The method used for the valuation is known as the entry age normal actuarial cost method. Under this method, a total contribution rate is determined which consists of two parts: (i) the normal cost rate and (ii) the unfunded actuarial liability (UAL) rate. The entry age normal cost method has the following characteristics:

(i) The annual normal costs for each individual active member are sufficient to accumulate the value of the member's pension at time of retirement.

(ii) Each annual normal cost is a constant percentage of the member's year by year projected compensation rates.

The entry age normal actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's compensation rates between the entry age of the member and the assumed exit ages.

ACTUARIAL AMORTIZATION METHOD (adopted 2013)

The portion of the actuarial present value of benefits allocated to the valuation year is called the normal cost. The portion of the actuarial present value of benefits not provided for by the actuarial present value of future normal costs is called the actuarial liability. Deducting the actuarial value of assets from the actuarial liability determines the unfunded actuarial liability (UAL). The one-year lag between the valuation date and the date the contribution rate is effective is reflected in calculating the corresponding amortization payment. The UAL is amortized according to the Actuarial Amortization Method adopted by the Investment Board and summarized below:

1. Amortization payments will be calculated as a level percentage of payroll.
2. For the actuarial valuation prepared as of June 30, 2013, the amortization period of the UAL shall be 30-year open for all membership groups.
3. For the actuarial valuation prepared as of June 30, 2014:
   a. The UAL for each membership group shall be amortized over a 30-year closed period.
   b. This will be designated as the initial UAL base for subsequent valuations and it will be amortized over the remaining years of the 30-year closed period set on June 30, 2014.
4. For each valuation subsequent to June 30, 2014, annual net experience gains/losses for each membership group will be amortized over a new, closed 20-year period.
5. Subsequent plan amendments or changes in actuarial assumptions or methods that create a change in the UAL will be amortized over a demographically appropriate period selected by the Investment Board at the time that the change is incurred.
6. The dollar amount of the UAL payment for purposes of computing the UAL component of the actuarial and required contribution rates will be the sum of the amortization payments for each amortization schedule divided by the total projected payroll. Unless the plan has been 110 percent funded for the current and prior two years, a negative amortization payment shall be ignored.
7. If the valuation shows that the group has a surplus, the prior amortization bases will be eliminated and one base equal to the amount of the surplus shall be established. The amortization period of a surplus shall be a 30-year open period for all groups.

ACTUARIAL VALUE OF ASSETS SMOOTHING METHOD (adopted 2007)

The market value of assets, representing a fair value of System assets, may not necessarily be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens volatility in the market value while still indirectly recognizing market value. The specific technique follows:

Step 1: Determine the expected value of plan assets at the current valuation date using the actuarial assumption for investment return applied to the prior actuarial value and the actual receipts and disbursements of the fund for the previous 12 months.

Step 2: Subtract the expected value determined in Step 1 from the total market value of the Fund at the current valuation date.

Step 3: Multiply the difference between market and expected values determined in Step 2 by 25%.

Step 4: Add the expected value of Step 1 and the product of Step 3 to determine the actuarial value of assets.

Step 5: Verify the preliminary actuarial value of assets in Step 4 is not more than 120% of the market value of assets nor less than 80% of the market value. If it is, adjust the actuarial value of assets so it falls within the 80% - 120% corridor.

CONTRIBUTION RATE FUNDING POLICY

Background:

IPERS is charged with setting a "Required Contribution Rate" for each membership category within IPERS that will discharge its liabilities. Iowa Code §97B.11(3)(d) provides the basic framework for implementing this charge by stating:

> The Required Contribution Rate that is set by the system for a membership category shall be the contribution rate the system actuarially determines, based upon the most recent actuarial valuation of the system and using the actuarial methods, assumptions, and funding policy approved by the Investment Board, is the rate required by the system to discharge its liabilities as a percentage of the covered wages of members in that membership category. However, the Required Contribution Rate set by the system for members in regular service for a fiscal year shall not vary by more than one percentage point from the Required Contribution Rate for the prior fiscal year.

Goal:

To establish policy and procedures in setting contribution rates that combined with investment income will fund the benefits specified in Chapter 97B of the Iowa Code.

To move towards fully funding the benefits (100% or greater funded ratio) in as expeditious manner as is reasonable within the guidelines acknowledged herein.

Procedure:

The Investment Board shall retain a consulting actuary to conduct an annual actuarial valuation of assets and liabilities. The consulting actuary shall use the entry age normal cost method and all other actuarial assumptions and methods approved by the Investment Board.

In the annual valuation process, the consulting actuary shall calculate an Actuarial Contribution Rate and a Required Contribution Rate pursuant to this policy. Each shall be calculated as a level percent of pay.

There is a one year lag between the completion of an annual actuarial valuation report and the fiscal year to which the contribution rates calculated therein are applied. Therefore, the Actuarial Contribution Rate and the Required Contribution Rate declared in the annual valuation process are applicable to the fiscal year immediately following the completion of the valuation report (for example the rates declared in the report presented to the Investment Board in December, 2014 are applicable to the rates for the fiscal year beginning July 1, 2015).

Actuarial Contribution Rate (ACR):

1. ACR is the combined employer and employee contribution rate that is the minimum rate necessary to fund the benefits using the actuarial assumptions and methods approved by the Investment Board.

2. A separate ACR shall be determined for each membership group within IPERS according to this policy.

3. The ACR shall consist of:
    a. Normal cost and an amortization payment (not less than zero) of any unfunded actuarial liability.
    b. Normal cost may only be offset by a negative amortization payment after a membership group has attained a funded ratio of 110 percent or greater for 3 consecutive years.

Required Contribution Rate:

1. The Required Contribution Rate is the combined employer and employee rate payable pursuant to this policy and Iowa Code §97B.11(3)(d).

2. The Required Contribution Rate shall be determined by comparing the ACR determined in the annual valuation process to the Required Contribution Rate of the previous year.
    a. If the ACR is less than the previous Required Contribution Rate by fewer than 50 basis points, then the Required Contribution Rate shall remain unchanged from the previous year.
    b. If the ACR is less than the previous Required Contribution Rate by 50 basis points or more, then the Required Contribution Rate shall be lowered by 50 basis points provided the funded ratio of the membership group is 95% or higher.
    c. If the ACR is greater than the Required Contribution Rate of the previous year, then the Required Contribution Rate shall be:
        i. Increased to be equal to ACR for Sheriffs and Deputies.
        ii. Increased to be equal to ACR for Protection Occupation.
        iii. Increased to be equal to ACR for Regular membership, or one percentage point greater than the prior year's Required Contribution Rate, whichever is smaller.

Policy Guidelines:

In adopting actuarial assumptions and methods to be used in setting contributions, the Investment Board shall strive to provide a balance among the following:

1. Stability in contributions (such as use of smoothing and amortization schedules that do not produce dramatic swings in the required contributions from year to year).

2. Disciplined funding approach (such as requiring full payment of normal cost and an amortization payment towards the unfunded actuarial liability and deferring decreases in contribution rates until strong funded ratios are attained).

3. Interperiod equity (such as shortening the amortization schedule when reasonable and amortization of retroactive benefit enhancements over a reasonable time period such as the average working lifetime for active members and the average life expectancy of retired members).

4. Support an affordable, sustainable plan (in consultation with the BAC review affordability of required contribution rates and/or the benefit provisions).

5. At a minimum, this policy will be reviewed in conjunction with the quadrennial experience study.

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June 15, 2015

Investment Board
Iowa Public Employees' Retirement System
7401 Register Drive
Des Moines, IA 50321-2953

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) is pleased to present this report of an Audit of the June 30, 2014 Actuarial Valuation and GASB Statement No. 67 Valuation of the Iowa Public Employees' Retirement System (IPERS). We are grateful to IPERS Staff for their cooperation throughout the Audit process. In addition, we wish to thank Patrice Beckham and Brent Banister of Cavanaugh Macdonald for their assistance with this project.

The Actuarial Audit has several related objectives:

- Review the appropriateness of the actuarial assumptions,
- Review assumptions and methods for compliance with Professional Standards, State Law, and Board Regulations,
- Verify the demographic data through independent collection and processing, and
- Express an actuarial opinion regarding the reasonableness and/or accuracy of valuation results based upon a test using a mathematical model of plan activity or sampling.

In our opinion, the retained actuary's work provides a fair and reasonable assessment of the financial position of IPERS. We are pleased to report that we have found no substantial errors or omissions in the retained actuary's work.

Throughout this report, the reader will note items where GRS sees things differently than the retained actuary. Indeed, our mission is to point out such items. In interpreting our comments, Trustees should be aware that while we are pointing out sources of difference, we are in agreement with Cavanaugh Macdonald on the vast majority of items reviewed.

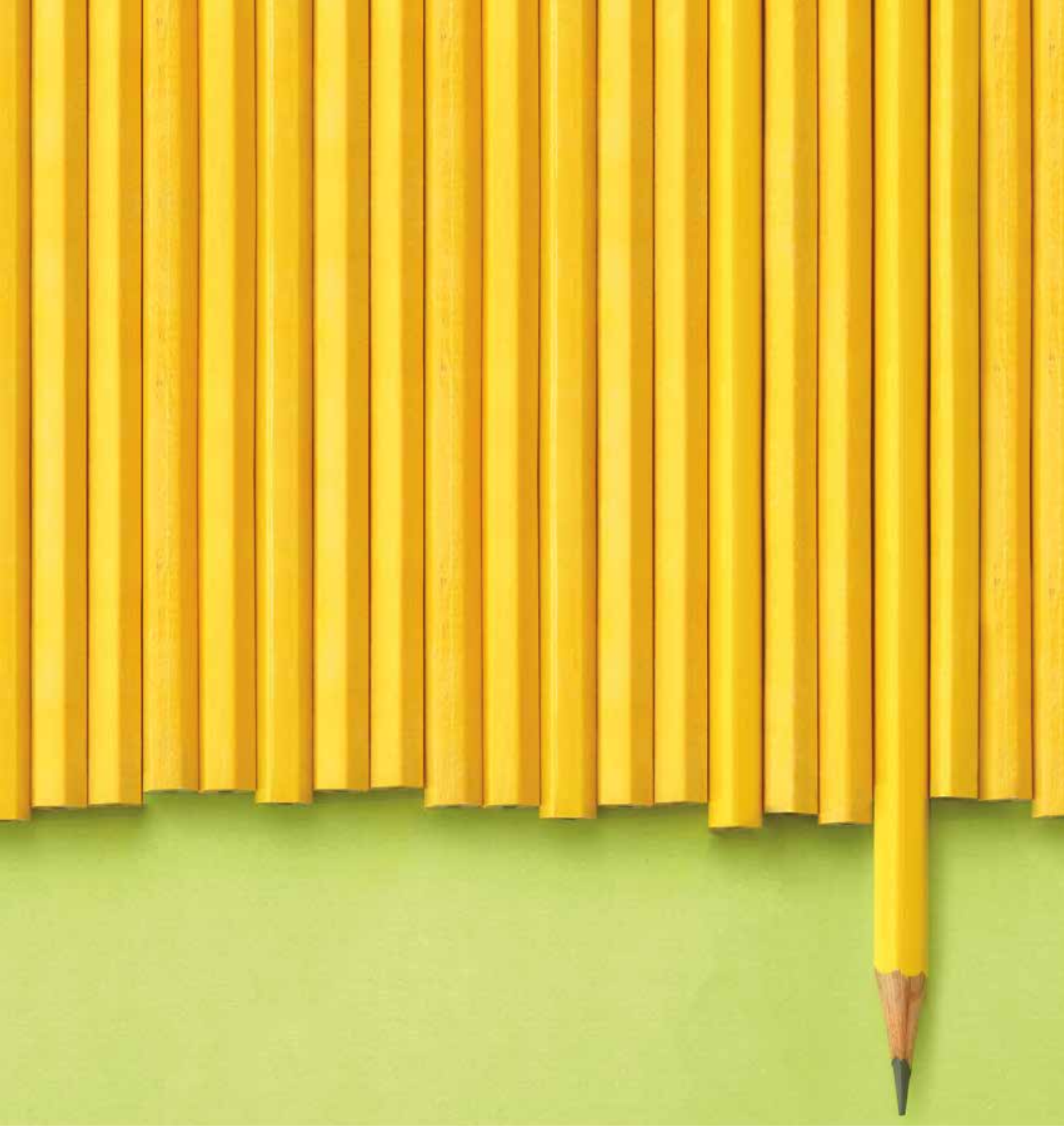
Respectfully submitted,

Brian B. Murphy, FSA, EA, MAAA

David T. Kausch, FSA, EA, MAAA

Mita D. Drazilov, ASA, MAAA

BBM:DTK:MDD:sc



INTRODUCTION FINANCIAL INVESTMENTS ACTUARIAL **STATISTICAL**

STATISTICAL OVERVIEW

MEMBERSHIP AND BENEFIT PAYMENT SUMMARY

INVESTMENT STATISTICS

STATISTICAL

STATISTICAL OVERVIEW

Objectives

The objective of the Statistical section is to provide the detail and historical context needed for a thorough assessment and understanding of IPERS' financial condition. Data in this section are presented in multiple-year format to show previous and emerging trends.

Contents

The Statistical section provides financial, demographic, operating, and investment trend information. The financial trend information presented on pages 102–103 is intended to help explain how the System's financial position has changed over time.

The demographic and operating information presented on pages 104–115 provides data on IPERS' membership, including years of service, benefits, benefit options, active membership statistics, and principal participating employers.

The investment information presented on page 116 shows the growth of net investment portfolio assets and investment returns since 1986.

Tables related to types of refunds are not included in the Statistical section because IPERS pays only one type of refund—termination refunds.

Data Sources

Data for the Statistical section are derived from financial statements, an actuary member file, and an actuary retirement file, all prepared by IPERS. The data in the actuary files are also used by IPERS' actuaries to prepare the annual actuarial valuation. The investment data in the Statistical section are provided by Wilshire Associates.

Methods

IPERS uses several data extraction and statistical tools to produce the information for the Statistical section. In some cases, data are imported into Microsoft Excel for further analysis and calculations.

Assumptions

Active members are defined as those with wages reported for the last quarter of the fiscal year. Retired members and beneficiaries are those who were paid benefits in the last month of the fiscal year.

Changes in Fiduciary Net Position

(Dollar Values Expressed in Thousands)
Fiscal Years Ended June 30

	2015	2014	2013	2012	2011
Additions					
Employee contributions	$ 441,213	$ 429,196	$ 404,654	$ 366,377	$ 306,472
Employer contributions	656,908	638,996	601,945	557,930	467,633
QBA Fund contributions[1]	3	5	7	9	8
Service purchases	17,476	14,324	12,011	17,611	14,847
Net investment income/(loss)	1,080,045	3,904,374	2,338,201	823,983	3,922,569
QBA Fund income	---	---	---	---	---
Miscellaneous noninvestment income	---	---	---	500	---
Total additions	***2,195,645***	***4,986,895***	***3,356,818***	***1,766,410***	***4,711,529***
Deductions					
Trust Fund benefits[2]	1,744,598	1,764,059	1,667,462	1,549,167	1,456,998
QBA Fund benefits[3]	3	5	7	9	7
Refunds	47,167	48,121	42,597	43,328	41,215
Trust Fund administrative expenses	12,592	14,866	11,587	12,498	9,256
QBA Fund administrative expenses	---	---	---	---	1
Total deductions	***1,804,360***	***1,827,051***	***1,721,653***	***1,605,002***	***1,507,477***
Change in net position	**$ 391,285**	**$3,159,844**	**$1,635,165**	**$ 161,408**	**$3,204,052**

Continued on page 103

[1] IPERS began collecting QBA contributions in FY2006 (see Note 8, page 39).
[2] A Schedule of Benefit Payments by Type of Benefit is found on page 108.
[3] IPERS began paying QBA benefits in FY2006 (see Note 8, page 39).

Changes in Fiduciary Net Position

(Dollar Values Expressed in Thousands)

Fiscal Years Ended June 30

Continued from page 102

	2010	2009	2008	2007	2006
Additions					
Employee contributions	$ 293,472	$ 270,934	$ 245,898	$ 223,515	$ 211,522
Employer contributions	448,765	414,966	377,080	342,769	324,368
QBA Fund contributions[1]	5	23	20	---	35
Service purchases	12,614	9,301	10,875	8,026	11,275
Net investment income/(loss)	2,477,824	(3,863,761)	(338,575)	3,298,842	2,065,520
QBA Fund income	---	---	---	1	1
Miscellaneous noninvestment income	---	---	---	---	---
Total additions	***3,232,680***	***(3,168,537)***	***295,298***	***3,873,153***	***2,612,721***
Deductions					
Trust Fund benefits[2]	1,278,550	1,183,098	1,096,078	1,013,956	924,361
QBA Fund benefits[3]	6	21	20	17	17
Refunds	41,470	34,337	36,205	38,116	41,668
Trust Fund administrative expenses	8,613	10,560	9,567	8,766	9,033
QBA Fund administrative expenses	1	1	1	1	---
Total deductions	***1,328,640***	***1,228,017***	***1,141,871***	***1,060,856***	***975,079***
Change in net position	**$1,904,040**	**$(4,396,554)**	**$(846,573)**	**$2,812,297**	**$1,637,642**

[1]IPERS began collecting QBA contributions in FY2006 (see Note 8, page 39).
[2]A Schedule of Benefit Payments by Type of Benefit is found on page 108.
[3]IPERS began paying QBA benefits in FY2006 (see Note 8, page 39).

Special Statistics

Fiscal Years Ended June 30

Fiscal Year	Retired Members	Active Members	Total Additions	Total Deductions	Total Investments	Total Net Position
2015	111,368	167,367	$2,195,645,133	$1,804,360,197	$28,806,868,252	$28,429,834,829
2014	108,233	165,913	4,986,894,852	1,827,050,988	28,186,974,092	28,038,549,893
2013	104,933	165,095	3,356,818,792	1,721,653,271	25,136,870,851	24,878,706,029
2012	101,948	164,200	1,766,410,045	1,605,002,472	23,508,268,276	23,243,540,508
2011	98,540	164,467	4,711,529,286	1,507,476,979	24,064,559,555	23,082,132,935
2010	93,692	165,660	3,232,679,640	1,328,639,663	20,432,970,506	19,878,080,628
2009	89,852	167,717	(3,168,536,719)	1,228,017,619	18,715,729,776	17,974,040,651
2008	87,490	167,850	295,298,357	1,141,871,314	24,454,328,362	22,370,594,989
2007	84,949	165,241	3,873,152,655	1,060,855,755	26,605,342,485	23,217,167,946
2006	82,204	163,091	2,612,721,572	975,079,305	22,623,903,421	20,404,871,046

Note: Total investments in this table include the securities lending collateral pool.

Membership by Group

Fiscal Years Ended June 30

Fiscal Year		Regular Members	Sheriffs and Deputies	Protection Occupation Members	Total
2015	Active members	158,808	1,552	7,007	167,367
	Inactive members	65,625	125	1,624	67,374
	Retired members	108,220	849	2,299	111,368
	Total	**332,653**	**2,526**	**10,930**	**346,109**
2014	Active members	157,349	1,538	7,026	165,913
	Inactive members	70,557	122	1,588	72,267
	Retired members	105,298	795	2,140	108,233
	Total	**333,204**	**2,455**	**10,754**	**346,413**
2013	Active members	156,679	1,527	6,889	165,095
	Inactive members	71,071	121	1,432	72,624
	Retired members	102,235	754	1,944	104,933
	Total	**329,985**	**2,402**	**10,265**	**342,652**
2012	Active members	155,800	1,530	6,870	164,200
	Inactive members	67,566	123	1,261	68,950
	Retired members	99,519	674	1,755	101,948
	Total	**322,885**	**2,327**	**9,886**	**335,098**
2011	Active members	156,011	1,524	6,932	164,467
	Inactive members	64,712	126	1,130	65,968
	Retired members	96,252	657	1,631	98,540
	Total	**316,975**	**2,307**	**9,693**	**328,975**
2010	Active members	157,118	1,546	6,996	165,660
	Inactive members	64,415	114	992	65,521
	Retired members	91,657	616	1,419	93,692
	Total	**313,190**	**2,276**	**9,407**	**324,873**
2009	Active members	159,113	1,492	7,112	167,717
	Inactive members	65,855	113	874	66,842
	Retired members	88,074	585	1,193	89,852
	Total	**313,042**	**2,190**	**9,179**	**324,411**
2008	Active members	161,583	1,520	4,747	167,850
	Inactive members	63,534	108	655	64,297
	Retired members	86,072	442	976	87,490
	Total	**311,189**	**2,070**	**6,378**	**319,637**
2007	Active members	159,092	1,470	4,679	165,241
	Inactive members	61,501	108	633	62,242
	Retired members	83,666	397	886	84,949
	Total	**304,259**	**1,975**	**6,198**	**312,432**
2006	Active members	157,117	1,478	4,496	163,091
	Inactive members	60,941	114	605	61,660
	Retired members	81,083	345	776	82,204
	Total	**299,141**	**1,937**	**5,877**	**306,955**

Average Benefit Payments for Retirees

Fiscal Years Ended June 30

Fiscal Year		Years of Service							
		0–5	6–10	11–15	16–20	21–25	26–30	>30	Total
2015	Number of retirees	5,674	14,365	14,804	14,863	14,867	13,529	33,266	111,368
	Average monthly benefit	$138	$261	$483	$798	$1,221	$1,765	$2,431	$1,315
	Average high average salary	$1,305	$1,637	$1,961	$2,383	$2,873	$3,431	$4,200	$2,911
	Average years of service	4.47	8.45	13.33	18.45	23.30	28.22	34.56	22.41
2014	Number of retirees	5,527	13,966	14,425	14,513	14,448	13,160	32,194	108,233
	Average monthly benefit	$144	$270	$507	$824	$1,265	$1,850	$2,552	$1,373
	Average high average salary	$1,294	$1,581	$1,899	$2,321	$2,820	$3,393	$4,178	$2,866
	Average years of service	4.47	8.45	13.33	18.45	23.30	28.22	34.52	22.38
2013	Number of retirees	5,332	13,532	13,945	14,153	14,080	12,802	31,089	104,933
	Average monthly benefit	$140	$261	$485	$800	$1,228	$1,799	$2,490	$1,335
	Average high average salary	$1,263	$1,506	$1,821	$2,257	$2,796	$3,411	$4,173	$2,832
	Average years of service	4.47	8.46	13.32	18.45	23.30	28.22	34.47	22.36
2012	Number of retirees	5,180	13,181	13,605	13,864	13,711	12,419	29,986	101,946
	Average monthly benefit	$136	$251	$467	$775	$1,184	$1,739	$2,418	$1,289
	Average high average salary	$1,213	$1,436	$1,742	$2,181	$2,706	$3,320	$4,094	$2,749
	Average years of service	4.47	8.46	13.33	18.45	23.29	28.22	34.43	22.31
2011	Number of retirees	4,924	12,762	13,210	13,512	13,287	12,014	28,828	98,537
	Average monthly benefit	$123	$235	$441	$731	$1,124	$1,667	$2,337	$1,234
	Average high average salary	$1,372	$1,296	$1,462	$1,763	$2,162	$2,679	$3,388	$2,284
	Average years of service	4.49	8.46	13.33	18.45	23.28	28.24	34.39	22.28
2010	Number of retirees	4,732	12,428	12,777	13,073	12,593	11,372	26,712	93,687
	Average monthly benefit	$110	$210	$390	$643	$982	$1,478	$2,094	$1,085
	Average high average salary	$1,280	$1,212	$1,349	$1,631	$1,978	$2,502	$3,198	$2,118
	Average years of service	4.49	8.47	13.34	18.44	23.29	28.25	34.36	22.10
2009	Number of retirees	4,549	12,061	12,547	12,685	12,191	10,893	24,921	89,847
	Average monthly benefit	$108	$209	$392	$644	$973	$1,471	$2,071	$1,064
	Average high average salary	$1,203	$1,130	$1,252	$1,521	$1,834	$2,318	$2,943	$1,948
	Average years of service	4.50	8.47	13.34	18.43	23.27	28.24	34.33	21.93
2008	Number of retirees	4,484	11,850	12,376	12,513	11,889	10,569	23,804	87,485
	Average monthly benefit	$103	$201	$380	$621	$932	$1,415	$1,993	$1,015
	Average high average salary	$1,124	$1,050	$1,170	$1,425	$1,713	$2,198	$2,797	$1,828
	Average years of service	4.49	8.46	13.34	18.42	23.27	28.23	34.33	21.81
2007	Number of retirees	4,421	11,666	12,149	12,331	11,586	10,132	22,658	84,943
	Average monthly benefit	$97	$194	$369	$598	$895	$1,357	$1,917	$967
	Average high average salary	$1,077	$1,080	$1,335	$1,671	$2,029	$2,563	$3,241	$2,085
	Average years of service	4.48	8.46	13.33	18.41	23.27	28.21	34.33	21.67
2006	Number of retirees	4,355	11,428	12,003	12,083	11,288	9,658	21,378	82,193
	Average monthly benefit	$92	$185	$360	$573	$858	$1,297	$1,832	$914
	Average high average salary	$993	$1,000	$1,277	$1,590	$1,944	$2,472	$3,131	$1,983
	Average years of service	4.47	8.47	13.34	18.39	23.28	28.20	34.36	21.51

Note: The data reported for average high average salary takes into account the statutory rules that govern how the wage component of the benefit formula is determined. These rules have changed over time. For most of the 2000s, the highest 3-year average salary was used. A spiking control was incorporated starting in FY2008. The wage component of the formula for Regular members was frozen as of June 30, 2012, until those members' highest 5-year average surpasses their 3-year average as of that date. A spiking control is incorporated into the highest 5-year average salary calculation as well.

Where data were available, the average monthly wages used to calculate members' retirement benefits were calculated by dividing the high average salary by the applicable number of months (36 for the highest 3-year average salary, or 60 for the highest 5-year average salary). This table does not include retirees under the Iowa Old-Age and Survivors' Insurance System.

New Retirees by Employer Type

Fiscal Years Ended June 30

Fiscal Year		City	County	Education	State	Utility	Health	28E Agency	Township & Cemetery	Other	Total
2015	Number of retirees	657	637	3,102	899	52	528	---	---	95	5,970
	Average monthly benefit	$1,750	$1,737	$1,580	$2,422	$1,833	$1,369	---	---	$893	$1,715
	Average years of service	21.90	22.21	21.48	23.72	19.71	18.28	---	---	14.17	21.53
2014	Number of retirees	810	608	3,064	986	62	426	---	---	120	6,076
	Average monthly benefit	$1,550	$1,566	$1,642	$2,170	$1,739	$1,232	---	---	$760	$1,663
	Average years of service	20.61	21.30	21.70	22.24	19.78	17.46	---	---	12.73	21.11
2013	Number of retirees	665	673	3,011	809	50	473	---	---	133	5,814
	Average monthly benefit	$1,655	$1,593	$1,685	$2,327	$1,833	$1,271	---	---	$849	$1,709
	Average years of service	21.78	21.66	22.11	23.46	21.66	17.47	---	---	14.10	21.64
2012	Number of retirees	671	617	3,487	618	53	463	---	---	112	6,021
	Average monthly benefit	$1,547	$1,549	$1,728	$2,253	$1,754	$1,378	---	---	$1,024	$1,703
	Average years of service	21.63	21.47	22.45	21.22	21.78	18.28	---	---	15.57	21.68
2011	Number of retirees	776	859	3,822	1,728	55	---	82	---	38	7,360
	Average monthly benefit	$1,387	$1,397	$1,799	$2,285	$1,741	---	$655	---	$544	$1,803
	Average years of service	20.51	20.80	23.95	25.85	23.00	---	13.11	---	11.93	23.48
2010	Number of retirees	786	811	3,186	1,476	31	---	58	3	34	6,385
	Average monthly benefit	$1,274	$1,317	$1,739	$2,119	$1,471	---	$620	$1,098	$606	$1,698
	Average years of service	20.25	20.40	23.92	25.14	19.70	---	12.12	20.50	11.62	23.11
2009	Number of retirees	620	800	2,571	765	44	---	49	---	28	4,877
	Average monthly benefit	$1,226	$1,241	$1,610	$2,067	$1,586	---	$881	---	$467	$1,558
	Average years of service	20.62	19.69	23.34	24.40	21.46	---	14.51	---	11.75	22.39
2008	Number of retirees	697	738	2,730	777	35	---	52	1	31	5,061
	Average monthly benefit	$1,261	$1,119	$1,552	$1,901	$1,872	---	$617	$112	$578	$1,489
	Average years of service	20.66	19.76	23.25	23.71	24.74	---	13.61	6.25	12.61	22.29
2007	Number of retirees	620	809	2,697	965	32	---	50	2	26	5,201
	Average monthly benefit	$1,108	$1,190	$1,570	$1,936	$1,057	---	$752	$314	$376	$1,506
	Average years of service	19.71	20.04	23.72	24.85	18.94	---	14.54	6.75	8.03	22.67
2006	Number of retirees	591	699	2,920	568	24	---	66	2	22	4,892
	Average monthly benefit	$1,051	$1,057	$1,445	$1,463	$1,160	---	$633	$1,985	$465	$1,328
	Average years of service	19.32	19.14	23.33	21.04	19.26	---	13.84	29.50	11.22	21.78

Note: With the implementation of I-Que, revised employer classifications are being used for FY2012 and forward.

Schedule of Benefit Payments by Type of Benefit

Fiscal Years Ended June 30

Fiscal Year	Number of Retirees	Normal Retirement Benefit	Early Retirement Benefit	Death Benefit (Normal, Early, or Disability Retirement)	Preretirement Death Benefit	Disability Benefit	Special Service In-Service Disability Benefit	Special Service Ordinary Disability Benefit	Total
2015	111,368	$1,280,932,627	$318,701,798	$50,655,108	$4,815,714	$41,345,123	$1,206,633	$415,647	$1,698,072,650
2014	108,233	1,291,948,738	328,584,720	50,993,939	4,569,515	43,468,128	1,080,553	409,438	1,721,055,031
2013	104,933	1,215,721,455	312,460,044	46,566,814	4,155,084	41,507,779	902,784	372,139	1,621,686,099
2012	101,948	1,134,393,596	290,216,887	43,180,523	3,595,564	39,968,472	801,062	362,184	1,512,518,288
2011	98,540	1,088,085,798	253,413,138	39,533,700	3,096,481	28,381,456	771,831	376,798	1,413,659,202
2010	93,692	951,375,232	220,803,713	36,386,690	2,653,287	27,960,711	624,888	330,890	1,240,135,411
2009	89,852	882,890,118	197,219,959	33,554,573	2,323,743	28,042,167	584,892	304,352	1,144,919,804
2008	87,490	818,804,704	180,411,922	30,892,964	1,919,799	28,284,772	563,314	303,042	1,061,180,517
2007	84,949	758,739,140	159,904,983	28,429,483	1,637,857	27,449,602	489,088	287,504	976,937,657
2006	82,204	701,149,558	141,860,569	26,228,650	1,382,098	25,540,886	433,669	269,095	896,864,525

Note: This table does not include lump-sum payments.

Schedule of Retired Members by Type of Benefit

As of June 30, 2015

Amount of Monthly Benefit	Number of Retirees	Normal Retirement Benefit	Early Retirement Benefit	Death Benefit (Normal, Early, or Disability Retirement)	Preretirement Death Benefit	Disability Benefit	Special Service In-Service Disability Benefit	Special Service Ordinary Disability Benefit
$ <250	20,186	9,040	9,457	831	101	756	1	---
250–499	16,467	7,231	7,273	1,033	79	850	---	1
500–749	11,307	5,055	4,748	828	66	610	---	---
750–999	8,545	4,167	3,184	694	38	462	---	---
1,000–1,249	7,980	4,573	2,465	525	27	389	1	---
1,250–1,499	6,263	3,679	1,921	346	37	274	2	4
1,500–1,749	5,650	3,706	1,451	254	20	210	3	6
1,750–1,999	5,617	4,177	1,077	171	23	154	12	3
2,000–2,249	5,576	4,424	899	129	16	99	6	3
2,250–2,499	5,171	4,338	636	97	11	81	6	2
2,500–2,749	4,513	3,927	459	70	11	46	---	---
2,750–2,999	3,729	3,312	350	18	5	36	8	---
3,000–3,249	2,894	2,665	172	28	3	24	2	---
3,250–3,499	2,145	1,989	115	23	---	15	2	1
3,500–3,749	1,516	1,404	87	12	2	9	2	---
3,750–3,999	1,050	973	55	12	2	8	---	---
4,000+	2,759	2,553	152	15	4	35	---	---
Total	**111,368**	**67,213**	**34,501**	**5,086**	**445**	**4,058**	**45**	**20**

Note: The above tables do not include types of refunds because IPERS pays only one type of refund (termination refunds).

Retired Members by Benefit Option

As of June 30, 2015

Amount of Monthly Benefit	Number of Retirees	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Misc.
$ <250	20,186	6,129	4,803	3,862	1,998	2,232	1,152	10
250–499	16,467	5,124	3,944	2,230	2,191	1,716	1,255	7
500–749	11,307	3,340	2,656	1,297	1,759	1,098	1,157	---
750–999	8,545	2,256	1,940	952	1,546	767	1,084	---
1,000–1,249	7,980	2,014	1,785	803	1,575	692	1,111	---
1,250–1,499	6,263	1,438	1,398	594	1,210	543	1,080	---
1,500–1,749	5,650	1,302	1,085	526	1,088	551	1,098	---
1,750–1,999	5,617	1,069	1,151	563	1,010	579	1,245	---
2,000–2,249	5,576	1,101	1,042	579	832	572	1,450	---
2,250–2,499	5,171	894	1,021	558	718	506	1,474	---
2,500–2,749	4,513	755	895	548	487	433	1,395	---
2,750–2,999	3,729	640	793	439	306	386	1,165	---
3,000–3,249	2,894	460	589	362	268	248	967	---
3,250–3,499	2,145	323	469	233	218	173	729	---
3,500–3,749	1,516	208	322	195	152	111	528	---
3,750–3,999	1,050	154	219	119	95	94	369	---
4,000+	2,759	359	496	319	333	279	973	---
Total	**111,368**	**27,566**	**24,608**	**14,179**	**15,786**	**10,980**	**18,232**	**17**

See definitions of benefit options beginning on page 34.
Note: Miscellaneous column consists of survivor death benefits based upon law provisions no longer available.

Benefit Payments by Iowa County

Fiscal Year 2015

County	Amount	Annual Average	Payees
Adair	$ 4,589,893	$12,857	357
Adams	2,594,609	12,124	214
Allamakee	7,436,776	13,186	564
Appanoose	7,235,701	14,244	508
Audubon	3,482,798	11,887	293
Benton	11,953,714	14,197	842
Black Hawk	59,578,120	15,960	3,733
Boone	18,674,688	15,195	1,229
Bremer	15,686,293	15,941	984
Buchanan	13,676,998	15,649	874
Buena Vista	9,625,489	13,810	697
Butler	8,409,910	13,182	638
Calhoun	6,774,388	13,231	512
Carroll	8,529,833	12,362	690
Cass	10,723,727	15,061	712
Cedar	8,781,667	14,096	623
Cerro Gordo	24,575,404	15,236	1,613
Cherokee	9,692,071	14,232	681
Chickasaw	6,878,032	14,329	480
Clarke	4,534,606	12,631	359
Clay	10,301,116	13,958	738
Clayton	11,000,431	13,942	789
Clinton	18,992,863	13,537	1,403
Crawford	7,871,566	13,252	594
Dallas	33,713,971	16,740	2,014
Davis	5,791,958	13,315	435
Decatur	4,282,662	11,766	364
Delaware	10,388,569	15,413	674
Des Moines	21,208,113	15,698	1,351
Dickinson	14,875,733	15,825	940
Dubuque	36,284,065	15,407	2,355
Emmet	5,914,498	13,982	423
Fayette	10,995,890	13,676	804
Floyd	9,516,231	13,913	684
Franklin	5,765,978	12,562	459
Fremont	4,313,995	13,033	331
Greene	6,890,490	12,153	567
Grundy	7,342,684	13,135	559
Guthrie	8,257,406	13,832	597
Hamilton	10,784,163	14,753	731
Hancock	4,978,923	11,743	424
Hardin	13,209,608	13,847	954
Harrison	6,358,074	12,691	501
Henry	14,727,971	15,803	932
Howard	5,873,152	12,060	487
Humboldt	6,020,920	12,729	473
Ida	3,517,934	13,275	265
Iowa	8,276,268	14,545	569
Jackson	9,804,638	13,655	718
Jasper	19,905,931	14,456	1,377
Jefferson	7,968,398	14,383	554

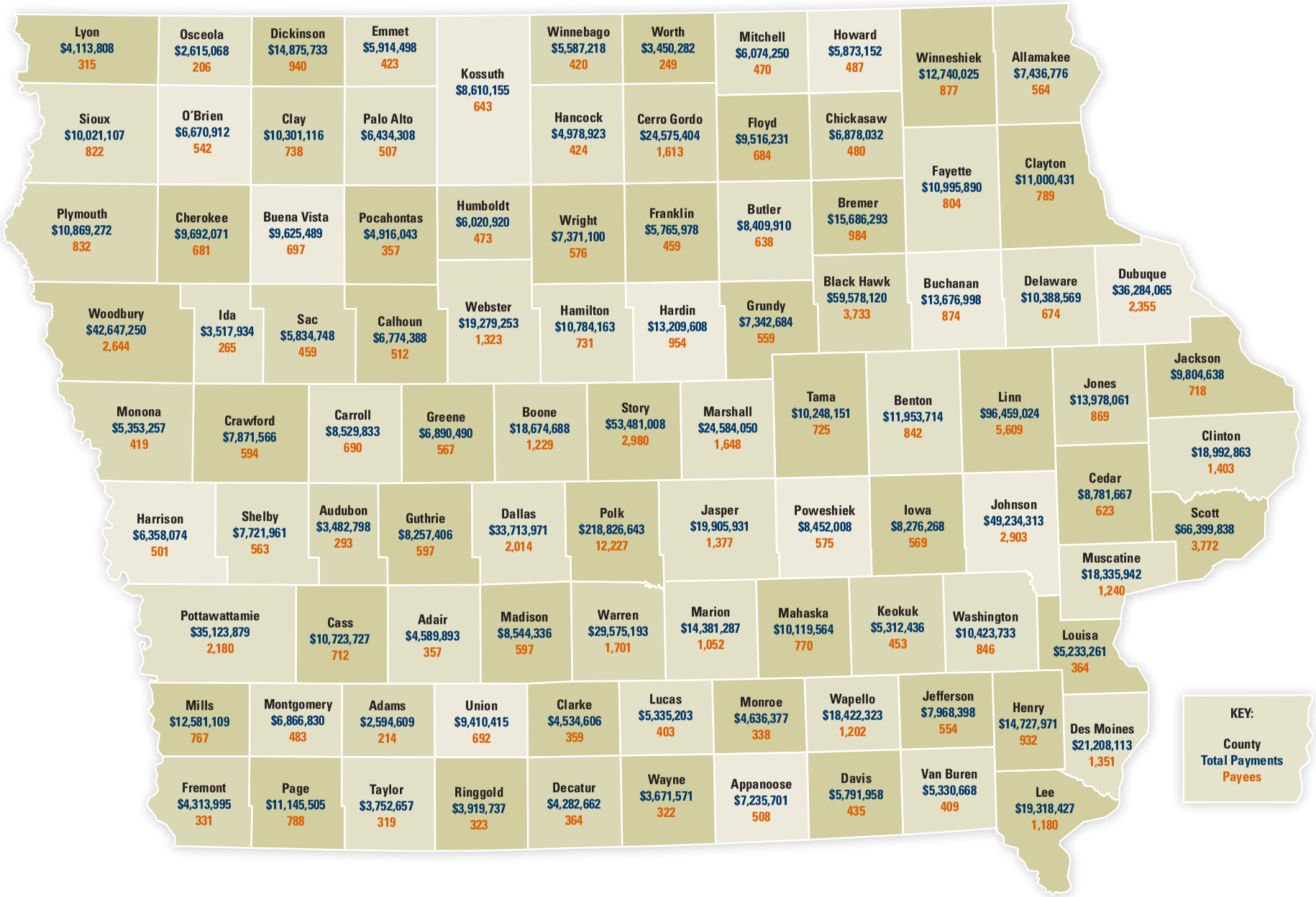
Note: Payments determined by zip code.

County	Amount	Annual Average	Payees
Johnson	$ 49,234,313	$16,960	2,903
Jones	13,978,061	16,085	869
Keokuk	5,312,436	11,727	453
Kossuth	8,610,155	13,391	643
Lee	19,318,427	16,372	1,180
Linn	96,459,024	17,197	5,609
Louisa	5,233,261	14,377	364
Lucas	5,335,203	13,239	403
Lyon	4,113,808	13,060	315
Madison	8,544,336	14,312	597
Mahaska	10,119,564	13,142	770
Marion	14,381,287	13,670	1,052
Marshall	24,584,050	14,918	1,648
Mills	12,581,109	16,403	767
Mitchell	6,074,250	12,924	470
Monona	5,353,257	12,776	419
Monroe	4,636,377	13,717	338
Montgomery	6,866,830	14,217	483
Muscatine	18,335,942	14,787	1,240
O'Brien	6,670,912	12,308	542
Osceola	2,615,068	12,695	206
Page	11,145,505	14,144	788
Palo Alto	6,434,308	12,691	507
Plymouth	10,869,272	13,064	832
Pocahontas	4,916,043	13,770	357
Polk	218,826,643	17,897	12,227
Pottawattamie	35,123,879	16,112	2,180
Poweshiek	8,452,008	14,699	575
Ringgold	3,919,737	12,135	323
Sac	5,834,748	12,712	459
Scott	66,399,838	17,603	3,772
Shelby	7,721,961	13,716	563
Sioux	10,021,107	12,191	822
Story	53,481,008	17,947	2,980
Tama	10,248,151	14,135	725
Taylor	3,752,657	11,764	319
Union	9,410,415	13,599	692
Van Buren	5,330,668	13,033	409
Wapello	18,422,323	15,326	1,202
Warren	29,575,193	17,387	1,701
Washington	10,423,733	12,321	846
Wayne	3,671,571	11,402	322
Webster	19,279,253	14,572	1,323
Winnebago	5,587,218	13,303	420
Winneshiek	12,740,025	14,527	877
Woodbury	42,647,250	16,130	2,644
Worth	3,450,282	13,857	249
Wright	7,371,100	12,797	576

Total Iowa Benefit Payments: $1,541,982,482

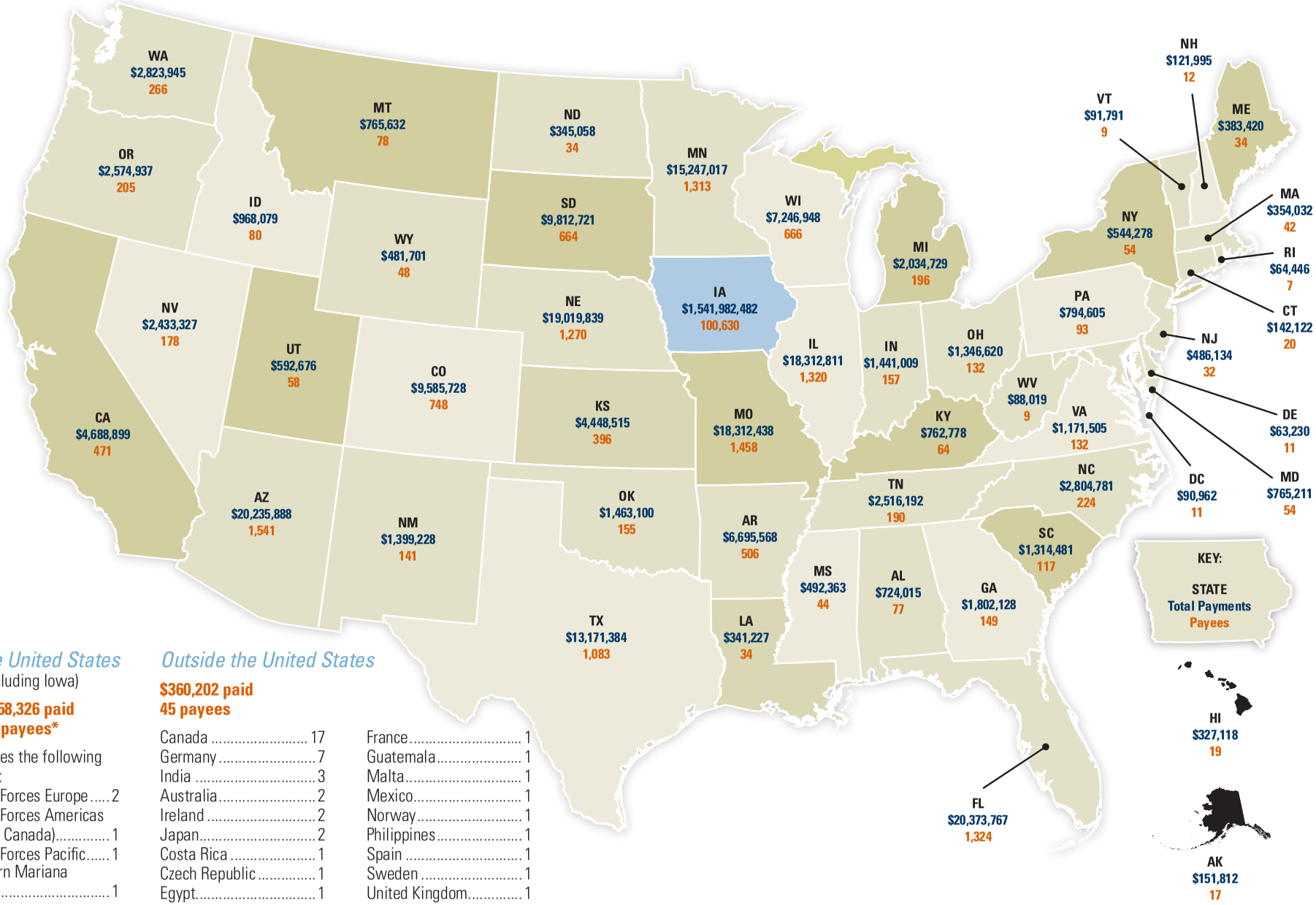
Benefit Payments by Iowa County

Fiscal Year 2015



Benefit Payments by State

Fiscal Year 2015



In the United States

(not including Iowa)

$202,258,326 paid
15,948 payees*

*Includes the following payees:

Armed Forces Europe	2
Armed Forces Americas (except Canada)	1
Armed Forces Pacific	1
Northern Mariana Islands	1

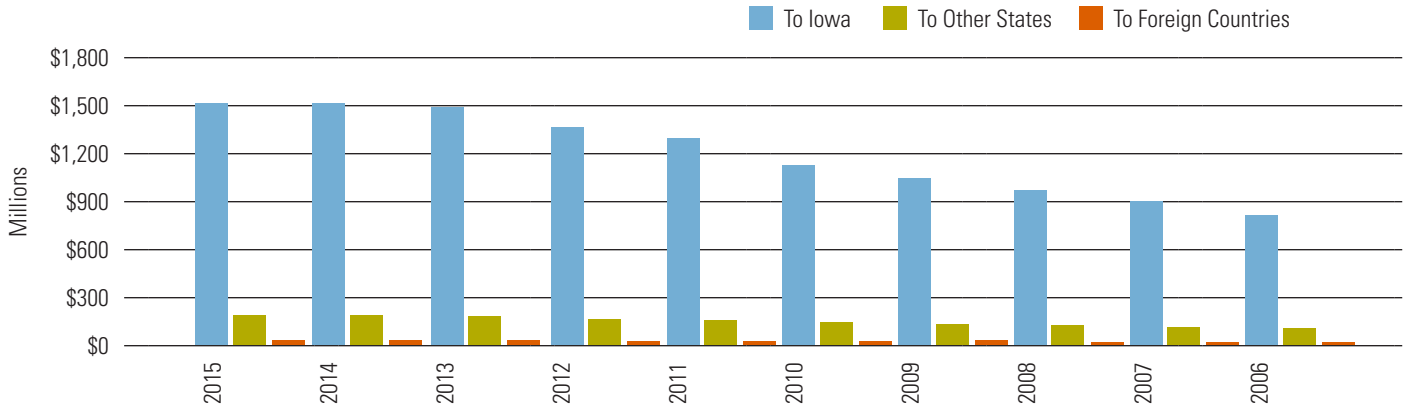
Outside the United States

$360,202 paid
45 payees

Canada	17	France	1
Germany	7	Guatemala	1
India	3	Malta	1
Australia	2	Mexico	1
Ireland	2	Norway	1
Japan	2	Philippines	1
Costa Rica	1	Spain	1
Czech Republic	1	Sweden	1
Egypt	1	United Kingdom	1

Benefit Payment Summary

Fiscal Years Ended June 30



Fiscal Year	To Iowa	To Other States	To Foreign Countries
2015	$1,541,982,482	$202,258,326	$360,202
2014	1,556,861,335	206,805,339	397,590
2013	1,476,219,393	190,938,237	311,229
2012	1,376,422,791	172,458,343	295,502
2011	1,295,324,198	161,447,515	233,918
2010	1,129,876,718	148,444,926	234,200
2009	1,044,257,972	138,540,110	320,734
2008	967,877,579	128,025,532	194,748
2007	894,585,954	119,150,133	236,900
2006	816,238,695	107,935,285	204,336

Active Membership Statistics

Fiscal Years Ended June 30

Fiscal Year	Active Members	Percentage Change	Annual Average Pay	Average Age (Years)	Average Service Credit (Years)
2015	167,367	0.9	$43,774	45.6	11.5
2014	165,913	0.5	42,789	45.6	11.5
2013	165,095	0.5	41,674	45.7	11.6
2012	164,200	(0.2)	41,329	45.8	11.6
2011	164,467	(0.7)	39,977	45.0	11.6
2010	165,660	(1.2)	39,667	46.0	11.5
2009	167,717	(0.1)	38,390	41.4	11.7
2008	167,850	1.6	36,529	42.2	11.5
2007	165,241	1.3	34,990	43.2	11.5
2006	163,091	1.4	33,870	44.2	11.6

Analysis of Change in Active Membership

Fiscal Years Ended June 30

Fiscal Year	Beginning Members	Additions	Retired	Died	Other Terminations	Ending Members
2015	165,913	19,236	4,840	219	12,723	167,367
2014	165,095	18,616	4,787	205	12,806	165,913
2013	164,200	17,862	4,719	219	12,029	165,095
2012	164,467	16,878	4,928	193	12,024	164,200
2011	165,660	17,236	6,368	237	11,824	164,467
2010	167,717	14,663	5,277	244	11,199	165,660
2009	167,850	16,565	4,013	246	12,439	167,717
2008	165,241	19,943	4,237	227	12,870	167,850
2007	163,091	19,111	4,344	246	12,371	165,241
2006	160,905	18,885	3,883	154	12,662	163,091

Principal Participating Employers

Fiscal Years Ended June 30

	2015		
Participating Employer	**Covered Employees**	**Rank**	**Percentage of Total System**
State of Iowa	25,107	1	15.00
Des Moines Independent Community School District (CSD)	4,773	2	2.85
Cedar Rapids CSD	2,841	3	1.70
Davenport CSD	2,524	4	1.51
Sioux City CSD	1,992	5	1.19
Iowa City CSD	1,959	6	1.17
Dubuque CSD	1,929	7	1.15
Waterloo CSD	1,746	8	1.04
Ankeny CSD	1,514	9	0.91
West Des Moines CSD	1,406	10	0.84
All other employers*	121,576		72.64
Total (1,845 employers)	**167,367**		**100.00**

	2006		
Participating Employer	**Covered Employees**	**Rank**	**Percentage of Total System**
State of Iowa	19,052	1	11.68
Des Moines Independent CSD	4,665	2	2.86
Cedar Rapids CSD	3,245	3	1.99
Iowa Department of Transportation	3,052	4	1.87
Davenport CSD	2,612	5	1.60
Sioux City CSD	2,050	6	1.26
Dubuque CSD	1,945	7	1.19
Iowa City CSD	1,725	8	1.06
Waterloo CSD	1,605	9	0.98
West Des Moines CSD	1,500	10	0.92
All other employers	121,640		74.59
Total (2,363 employers)	**163,091**		**100.00**

***All other employers for FY2015**

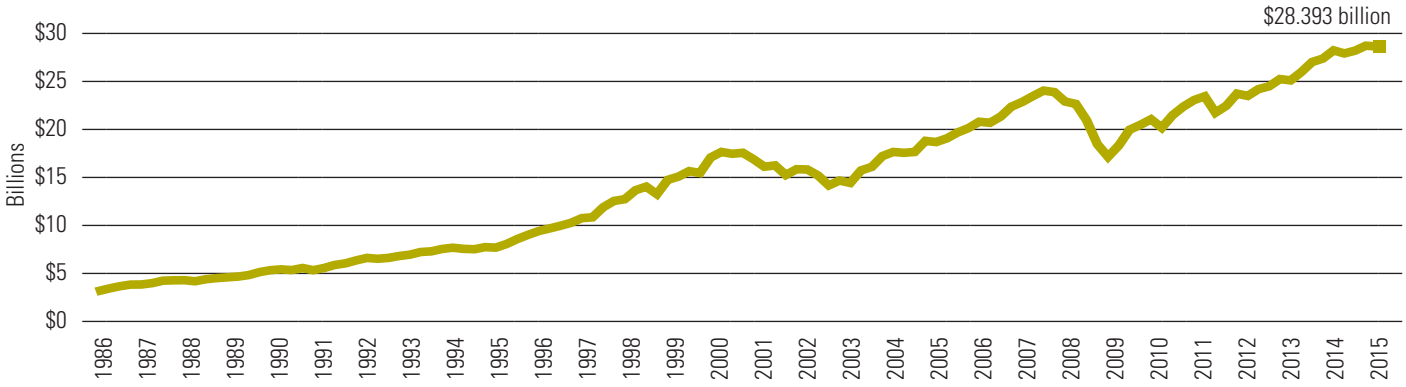
Type	**Number**	**Covered Employees**
City	876	18,380
Education	353	66,162
County	272	16,292
Other	137	3,467
Utilities	131	1,844
Health	66	15,431
Total	**1,835**	**121,576**

Note: In compliance with GASB Statement No. 67, the 2015 employer counts have been adjusted.

INVESTMENT STATISTICS

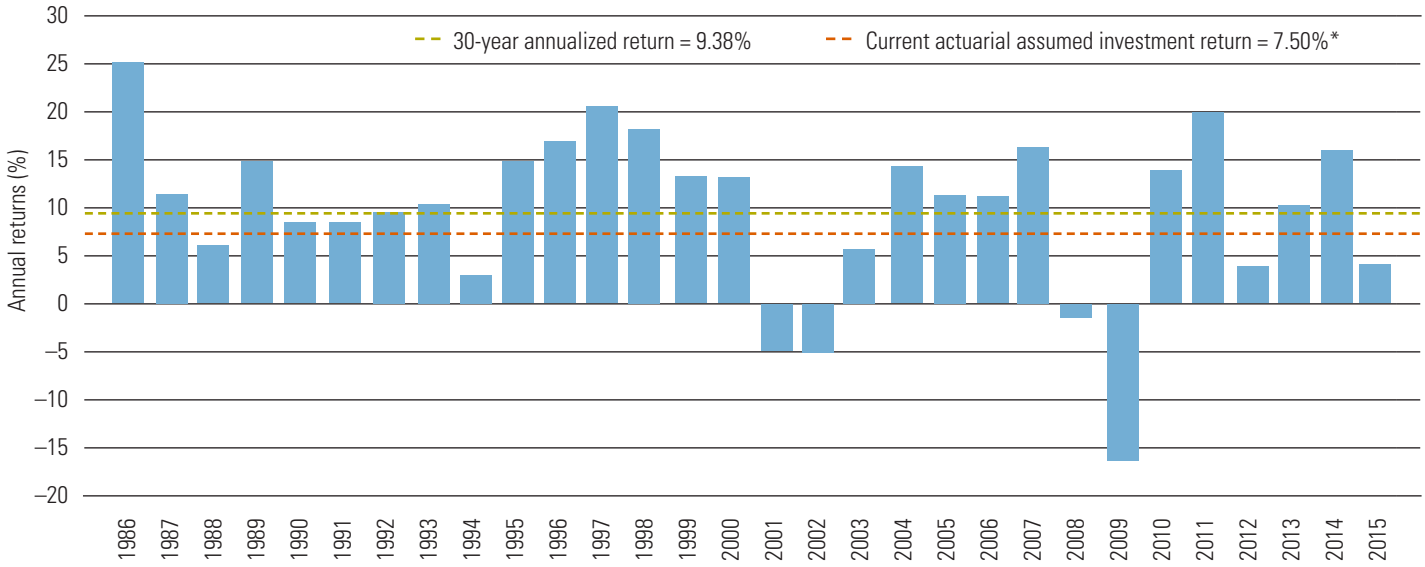
Growth of Net Investment Portfolio Assets

Fiscal Years Ended June 30



Investment Returns

Fiscal Years Ended June 30



*Actuarial assumed investment return:

1953–1993:	6.50%
1994–1995:	6.75%
1996–present:	7.50%

Annualized returns for periods ended June 30, 2015

1-year return:	3.96%	**15-year return:**	6.12%
3-year return:	9.89%	**20-year return:**	8.58%
5-year return:	10.55%	**25-year return:**	8.68%
10-year return:	7.21%	**30-year return:**	9.38%

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Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

To the Members of the Iowa Public Employees' Retirement System Investment Board:

We have audited in accordance with U.S. generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, the financial statements of the Iowa Public Employees' Retirement System (IPERS) as of and for the year ended June 30, 2015, and the related Notes to Financial Statements, which collectively comprise IPERS' basic financial statements, and have issued our report thereon dated December 9, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered IPERS' internal control over financial reporting to determine the audit procedures appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of IPERS' internal control. Accordingly, we do not express an opinion on the effectiveness of IPERS' internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility a material misstatement of IPERS' financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control which is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control we consider to be material weaknesses. However, material weaknesses may exist which have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether IPERS' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing and not to provide an opinion on the effectiveness of IPERS' internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering IPERS' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

We would like to acknowledge the many courtesies and assistance extended to us by personnel of IPERS during the course of our audit. Should you have any questions concerning any of the above matters, we shall be pleased to discuss them with you at your convenience.

Mary Mosiman
MARY MOSIMAN, CPA
Auditor of State

Warren Jenkins
WARREN G. JENKINS, CPA
Chief Deputy Auditor of State

December 9, 2015