

FY2024 Annual Comprehensive Financial Report

A Pension Trust Fund of the State of Iowa for the Fiscal Year Ended June 30, 2024





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Prepared by Iowa Public Employees' Retirement System Gregory S. Samorajski, Chief Executive Officer

Fiscal Year 2024 Highlights

Membership

Active Members	183,389
Inactive Members	94,723
Retired Members*	136,060
Total	414,172

Contributions

Employee	\$633,294,030
Employer	\$942,935,006
Service Purchases	\$2,120,730

Distributions

Benefits Paid	\$2,659,459,458
Refunds Paid	\$79,714,549

Investments

Net Investment and Securities Lending Income	\$3,632,024,775
Investment Rate of Return	9.07 %

Financial

Total Pension Liability	\$47,302,619,657
Fiduciary Net Position	\$43,661,123,300
Net Pension Liability	\$3,641,496,357
Ratio of Fiduciary Net Position to Total Pension Liability	92.30%

Funding

Ratio of Actuarial Assets to Actuarial Liabilities	90.75%
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*Unless specifically noted, references to retirees throughout this report include beneficiaries and retired reemployed members.

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INTRODUCTION



Introduction

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Letter of Transmittal



December 19, 2024

To Governor Kim Reynolds, the General Assembly of the State of Iowa and IPERS members:

Kim Reynolds GOVERNOR

Chris Cournoyer GOVERNOR

We are pleased to submit the Annual Comprehensive Financial Report (ACFR) of the Iowa Public Employees' Retirement System (IPERS, System or plan) for the fiscal year ended June 30, 2024 (FY2024). 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 the financial statements are free of any material misstatements because 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, Government Auditing Standards and an unmodified opinion was issued. 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 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 cost-sharing, contributory defined benefit plan with benefits based on a formula using a member's years of service, average salary and a multiplier. IPERS is diligent in maintaining its tax qualification under the Internal Revenue Code. IPERS benefits are designed to provide an adequate retirement income when combined with Social Security benefits and individual savings.

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM | 7401 Register Drive | PO Box 9117 | Des Moines, IA 50306-9117 800-622-3849 | PHONE: 515-281-0020 | Fax: 515-281-0053 | www.ipers.org | info@ipers.org 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 414,172 members, IPERS is the largest public pension system in Iowa. In FY2024, the IPERS Trust Fund paid \$2.659 billion in benefits. Of that, \$2.351 billion was paid to members living in Iowa. One in 10 Iowans is an IPERS member.

Major Initiatives

In late FY2024, IPERS introduced a new strategic plan that will guide its path toward modernization over the next five years. IPERS is committed to modernizing its work processes, the tools members use to interact with it and its organizational structure. A newly formed Strategy Division will hold IPERS accountable to implementing the strategic plan.

Throughout the fiscal year, IPERS coordinated several efforts to support its goals:

- 1. IPERS worked with Linea Solutions, Inc. to explore the pension administration system (PAS) marketplace in anticipation of IPERS' search for the provider of a more robust, state-of-the-art PAS. The new PAS will offer enhanced tools to facilitate the more efficient execution of IPERS' internal business processes and external member services.
- 2. In March 2024, IPERS announced its transition to digital delivery. Over the following months IPERS built up its business practices to enable members to receive all documents via their online account rather than by mail.
- 3. At the end of FY2024, IPERS finished the creation of an online retirement application for Regular members. This effort marks IPERS' first steps toward digitizing its various transactions with members.

Membership Services

Members and employers have access to information online, over the phone and in print. IPERS' website contains news and announcements, publications, forms and videos. Members have secure online access to their benefits statements, which are updated quarterly, and other information. Members and employers can stay in touch with IPERS and learn about benefits on IPERS' Facebook page.

Fiscal Year 2024

Preretirement counseling sessions	8,308
Phone inquiries	68,889
E-mail replies	16,617
Benefit estimates prepared	25,678
Service purchase cost quotes prepared	223
Service purchases made	34

IPERS publishes easy-to-read booklets to explain benefits at various career stages as well as a comprehensive Member Handbook. IPERS also offers one-on-one retirement counseling to members preparing to retire.

IPERS' 1,945 employers receive training and assistance to comply with IPERS' requirements. Employers also receive newsletters, a handbook of procedures and reporting requirements and a help guide about the online employer reporting system. IPERS' compliance officers conduct frequent employer audits.

Investments

IPERS manages a large and diversified investment portfolio using external and internal investment advisors. 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) 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. For more information, see the Investment Policy and Goal Statement beginning on page <u>64</u>.

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 <u>48</u> in the Financial section for information on expenses related to these investment management firms and page <u>63</u> in the Investments section for the Schedule of Investment Fees and the Schedule of Brokerage Commissions Paid.

Financial Highlights

Total Net Position

Total net position restricted for pensions increased from \$41.206 billion on June 30, 2023, to \$43.661 billion on June 30, 2024. These assets consist of capital assets (see page <u>33</u>) owned by IPERS and net investment portfolio assets. An overview and analysis of IPERS' financial activities for FY2024 is in Management's Discussion and Analysis, which begins on page <u>18</u> in the Financial section of this report.

In FY2024, employee and employer contributions, including service purchases, totaled \$1.578 billion, while total member benefits equaled \$2.739 billion (monthly benefits, lump-sum retirement benefits, death benefits, refunds and dividend payments). The resulting \$1.161 billion contribution shortfall was funded with earnings and sales proceeds from the investment portfolio.

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 Statement No. 67, *Financial Reporting for Pension Plans,* which reports the investments at fair value as shown in the Financial section of this report. In FY2024, IPERS' investment expenses were 0.21 percent of the portfolio's total quarterly average fair value.

At the close of FY2024, IPERS' net investment portfolio assets had a fair value of \$43.612 billion. The change in fair value represents an increase of \$2.483 billion from the \$41.129 billion investment asset fair value as of June 30, 2023. IPERS' 9.07 percent net investment return for the fiscal year was the main reason for the increase in fair value.

IPERS' 9.07 percent investment return for the fiscal year beat the policy benchmark return of 8.80 percent, the actuarial assumed investment return of 7 percent and the fiscal year's Consumer Price Index (CPI) return of 3.06 percent.

Funding

The ultimate test of any pension system's financial soundness is whether it is funding all its promised benefits payable today and in the decades ahead. Funding progress is typically expressed as a funded ratio of actuarial assets to actuarial liabilities. The goal of a funding plan is to steer toward a funded ratio of 100 percent or more. However, because a funding plan utilizes assumptions of future performance and experience, the plan's actual experience is annually reviewed and variances from assumptions are taken into account in the annual valuation process. As a result, the funded ratio will vary from year to year. In addition to determining the funded ratio as a measurement of progress toward full funding, the annual valuation process also determines the required contribution rates that, together with investment earnings, will keep the funding plan on track.

Periodically, the Investment Board engages the System's actuary to review the assumptions used in the valuation process and adjust as needed. In FY2022, IPERS completed its regularly scheduled quadrennial experience study, covering the four year period ending June 30, 2021. Based on the findings in the experience study, the System's actuary recommended changes to the actuarial assumptions that were then adopted by the Investment Board. In FY2024, the Iowa Legislature passed House File 2661 that provided benefit enhancements for Sheriffs and Deputies. The enhancements increased the benefit multiplier for years of service and granted an automatic cost of living adjustment. As shown in the 2024 valuation report, IPERS experienced a \$245 million actuarial gain on the actuarial value of assets and a net actuarial loss of \$23 million from demographic experience that was less favorable than anticipated by the actuarial assumptions. In addition to the actuarial gain from favorable experience, the required contribution rates for FY2024 were higher than the actuarial contribution rates which further decreased the unfunded actuarial liability by \$174 million. The overall funded ratio increased to 90.75 percent from 89.70 percent.

The annual valuation also determines a minimum actuarial contribution rate for each membership group for the fiscal year following the presentation of the valuation; in the present case, for FY2026. Applying the System's Contribution Rate Funding Policy, the required contributions for Regular and Protection Occupation members will not change and continue to be above the minimum actuarial contribution rates. The required contribution rates for Sheriffs and Deputies increased 7.16 percent to equal the actuarial contribution rate. This supports staying on the path to full funding and provides stability in contribution rates. IPERS remains on schedule to be 100 percent funded in 20 years or less.

Independent Performance Evaluations

To maintain a focus on effectively administering the plan, IPERS completed voluntary reviews of its performance during FY2024. CEM Benchmarking Inc., an independent company that reviews pension systems worldwide, conducted a benchmarking study on IPERS' benefits administration for the previous year. For the 16th consecutive year, IPERS was lowest in costs when compared to its peers, while continuing to receive acceptable ratings for its services.

CEM also conducted a benchmarking study of IPERS' investment program that compared the 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, 2023, and employs CEM's proprietary calculation methodology to compare equitably across a multitude of investment programs in the country. IPERS' investment program was rated by CEM as a low-cost program, and IPERS' net value added was 1.6 percent for the 5-year period, which was 0.5 percent greater than peer public pension funds.

Wilshire, IPERS' investment consultant, reviews IPERS' investment performance against a peer group of U.S. public pension funds. IPERS' one-year investment return for FY2024 ranked in the third quartile of funds in the Investment Metrics' Universe of All Public Funds > \$1 Billion Index, while IPERS' 10-year return ranked in the 10th percentile. However, investment returns alone do not tell the whole story because they do not account for how much risk was taken in pursuit of those returns. Wilshire's data shows that IPERS' Sharpe ratio (a risk-adjusted measure of return used to evaluate a portfolio's performance) ranked in the top 12th percentile versus its peers in the Investment Metrics' Universe of All Public Funds > \$1 Billion Index for the 10-year period ended June 30, 2024.

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 Annual Comprehensive Financial Report for the fiscal year ended June 30, 2023. A Certificate of Achievement is valid for only one year; this was the 31th 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 ACFR that satisfies both generally accepted accounting principles and applicable legal requirements. We believe this ACFR meets the Certificate of Achievement program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

In addition, IPERS' Summary Annual Financial Report for FY2023 earned the GFOA's Award for Outstanding Achievement in Popular Annual Financial Reporting. This was the seventh consecutive year IPERS received the award, which is valid for a period of one year only. We are preparing our current summary report in alignment with the award requirements and intend to apply for the award again this year.

Lastly, IPERS has proudly earned the Public Pension Standards Award for the fiscal year ending June 30, 2024, from the Public Pension Coordinating Council (PPCC). This achievement highlights our dedication to upholding professional standards for plan funding and administration for the 16th consecutive year. The PPCC is a coalition comprising 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. A hard copy is available by request. It is provided to the Governor, legislators, 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,

Diegy Samoryl

Gregory S. Samorajski Chief Executive Officer

And Sum

Amanda Schwarz Chief Financial and Administrative Officer

Professional Awards

Government Finance Officers Association (GFOA) 2023 Certificate of Achievement for Excellence in Financial Reporting ce Officers Association **Public Pension Coordinating** Certificate of Council (PPCC) Achievement for Excellence 2024 Public Pension Standards in Financial **Award for Funding and** Reporting Administration Presented to Iowa Public Employees' Retirement System For its Annual Comprehensive Financial Report For the Fiscal Year Ended **Government Finance Officers** June 30, 2023 Association (GFOA) 2023 Award for Outstanding Christopher P. Monill Executive Director/CEO Achievement in Popular Annual **Financial Reporting** ₽¢ Public Pension Coordinating Council Public Pension Standards Award For Funding and Administration 2024 Presented to IPERS In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards. Government Finance Officers Association nd by the Public Pension Coordinating Cauncil, a confederation of Award for National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR) Outstanding Achievement in Popular Annual alan Helinkle **Financial Reporting** Alan H. Wakle Program Administrativ Presented to Iowa Public Employees' Retirement System For its Annual Financial Report For the Fiscal Year Ended June 30, 2023 Christopher P. Morrill Executive Director/CEO

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:

- Offering counseling services and retirement information to active and retired members.
- Paying 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.
- Making 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.

IPERS Leadership Team

As of Publication

Gregory S. Samorajski, Chief Executive Officer Rick Hindman, Deputy Executive Director David Martin, Chief Benefits Officer

Finance and Administration Division

Amanda Schwarz, Chief Financial and Administrative Officer

Legal Division Elizabeth Hennessey, General Counsel

Investments Division Sriram Lakshminarayanan, Chief Investment Officer

Project Management Office

Sharon Stilwell, Public Service Manager

Risk and Compliance Division

Linda Guffey, Chief Risk and Compliance Officer

Strategy Division

Shawna Lode, Chief Strategy Officer

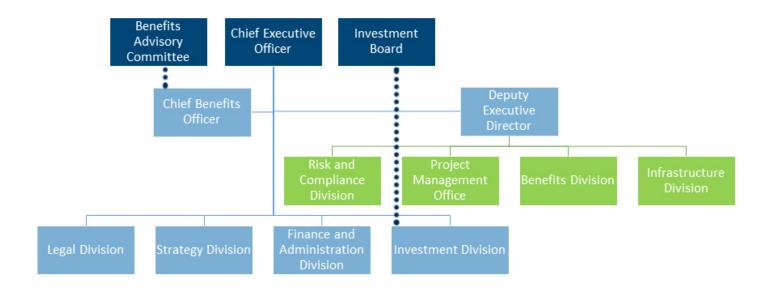


Table of Organization

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 an ex officio voting member. The nonvoting members include two state representatives and two state senators.

APPOINTED BY THE GOVERNOR:

Justin Kirchhoff, Chairperson Public Member *Term Ends: April 30, 2025*

William (Bill) Bemis, Vice Chairperson Public Member

Term Ends: April 30, 2027

Tami Loge Retired IPERS Member *Term Ends: April 30, 2028*

Kris Rowley Active IPERS Member *Term Ends: April 30, 2025*

Matthew Watters Public Member *Term Ends: April 30, 2029*

Vacant Active Educational Member

EX OFFICIO MEMBER:

Roby Smith State Treasurer

APPOINTED BY THE HOUSE SPEAKER AND MINORITY LEADER:

Representative Martin Graber State Representative *Term Ends: January 12, 2025*

Representative Amy Nielsen State Representative *Term Ends: January 12, 2025*

APPOINTED BY THE SENATE MAJORITY AND MINORITY LEADERS:

Senator Molly Donahue State Senator *Term Ends: January 12, 2025*

Senator Mark Lofgren State Senator *Term Ends: January 12, 2025*

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

Lowell Dauenbaugh, Vice Chairperson Public Member

Matt Carver Member Representative School Administrators of Iowa

Susanna Cave Member Representative State Police Officers Council

Todd Copley Member Representative American Federation of State, County and Municipal Employees

Andrew Hennesy Member Representative IPERS Improvement Association

John Hieronymus Member Representative Retired School Personnel Association **Richard Hoffman** Member Representative International Brotherhood of Teamsters

Steve Hoffman Member Representative Iowa State Sheriffs and Deputies Association

Connie Kuennen Employer Representative Iowa Association of Community College Trustees

Brian McDonough Employer Representative Iowa State Association of Counties

Erin Mullenix Employer Representative Iowa League of Cities

Melissa Peterson Member Representative Iowa State Education Association

Adam Steen, Director Ex Officio Employer Representative Iowa Department of Administrative Services

Professional and Consulting Services

Actuary

Cavanaugh Macdonald Consulting LLC

Legal Counsel

- BrownWinick Law Firm
- Foster Garvey PC
- Ice Miller LLP

Securities Litigation Monitoring Counsel

- Barrack, Rodos & Bacine
- Cohen Milstein Sellers & Toll PLLC
- Kessler Topaz Meltzer Check, LLP
- Robbins Geller Rudman & Dowd LLP

Investment Management Consultant

Wilshire

Investment Managers

Domestic Equity

- BlackRock Institutional Trust Company NA
- · Mellon Investments Corporation

International Equity

- BlackRock Institutional Trust Company NA
- Mellon Investments Corporation
- PanAgora Asset Management Inc.
- · Wellington Management Company LLP

Global Smart Beta Equity

• UBS Asset Management (Americas) Inc.

Core Fixed Income

- · BlackRock Institutional Trust Company NA
- · Man Solutions Limited
- Mellon Investments Corporation
- Mesirow Financial Investment Management, Inc.
- · PGIM Inc.

Public Credit

- · Aegon USA Investment Management LLC
- PGIM Inc.

Private Credit

- Ares Management LLC
- ArrowMark Asset Management LLC
- Audax Management Company (NY) LLC
- Crestline Management LP
- · Heitman Core Real Estate Debt Income Trust LP
- · IFM USIDF (US) A, LP
- ITE Rail Fund-IA, LP
- JP Morgan Asset Management (Europe) SAR
- Kayne Anderson Capital Advisors LP
- KKR Goldfinch LP
- Marathon Asset Management LP
- Monroe Capital Private Credit Fund I LP
- · Oaktree Capital Management LP
- · Pathway Capital Management LP
- PGIM Real Estate Global Debt LP
- Principal Real Estate Debt Fund II LP
- Tennenbaum Capital Partners LLC

Master Custodian

· The Bank of New York Mellon

Securities Lending Agent

Deutsche Bank AG

Overlay Management Services

Parametric Portfolio Associates LLC

Liquid Absolute Return Strategies Administrator (LARS)

· New Hyde Park Alternative Funds LLC

Information Technology Consultant

- Linea Solutions Inc.
- · Vitech Systems Group Inc.

Benchmarking Consultant

CEM Benchmarking Inc.

Private Equity

· Pathway Capital Management LP

Private Real Assets

- · Brookfield Asset Management Private Credit Adviser (Canada) LP
- Clarion Partners LLC
- · Forest Investment Associates LP
- INVESCO Advisers Inc.
- RREEF America LLC
- · UBS Farmland Investors LLC
- UBS Realty Investors LLC

Liquid Absolute Return Strategies

- Aspect Capital Limited
- · Graham Capital Management LP
- Pacific Investment Management Company LLC
- P/E Global LLC
- · Welton Investment Partners LLC

Transition Management Services

- · BlackRock Institutional Trust Company NA
- Northern Trust Investments Inc.
- · Russell Investments Implementation Services LLC







Financial

Independent Auditor's Report Management's Discussion and Analysis Basic Financial Statements

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

Required Supplementary Information Supplementary Information



OFFICE OF AUDITOR OF STATE

STATE OF IOWA

State Capitol Building Des Moines, Iowa 50319-0006 Telephone (515) 281-5834 Rob Sand Auditor of State

Independent Auditor's Report

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

Report on the Audit of the Financial Statements

<u>Opinion</u>

We have audited the accompanying Statement of Fiduciary Net Position of the Iowa Public Employees' Retirement System (IPERS) as of June 30, 2024, 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 IPERS' basic financial statements listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective fiduciary net position of IPERS as of June 30, 2024 and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in <u>Government Auditing</u> <u>Standards</u> issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report. We are required to be independent of IPERS, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matters

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, 2024 and the changes in its financial position and its cash flows, where applicable, for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the financial statements of IPERS for the year ended June 30, 2023, and we expressed an unmodified audit opinion on those audited financial statements in our report dated December 19, 2023. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2023 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about IPERS' ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

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

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

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of IPERS' internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgement, there are conditions or events, considered in the aggregate, that raise substantial doubt about IPERS' ability to continue as a going concern for a reasonable period of time.

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

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Schedule of Changes in the Employer's Net Pension Liability and Related Ratios, the Schedule of Employer's Contributions, the Schedule of Investment Returns and the Schedule of IPERS' Proportionate Share of the Total OPEB Liability and Notes on pages 18 through 20 and 42 through 46 be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by

the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing 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 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. Supplementary information included on pages 47 and 48, 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 GAAS. 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

Management is responsible for the other information included in the annual report. The other information comprises the Introduction, Investments, Actuarial and Statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

Our report on IPERS' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters required by <u>Government Auditing Standards</u> will be issued under separate cover. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the effectiveness of IPERS' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with <u>Government Auditing Standards</u> in considering IPERS' internal control over financial reporting and compliance.

Pri RAS

Brian R. Brustkern, CPA Deputy Auditor of State

December 18, 2024

Management's Discussion and Analysis

This discussion and analysis of the Iowa Public Employees' Retirement System provides an overview of the System's financial activities for the fiscal year ended June 30, 2024. It is intended to be used in conjunction with the transmittal letter and IPERS' financial statements and notes, which begins on page <u>21</u> of this report.

Using This Financial Report

This Annual Comprehensive 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 Fund activities as incurred. The Notes to Financial Statements are an integral part of the financial statements and include additional information essential to understanding the basic financial statements. 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 ratio.

Financial Highlights

IPERS' net position restricted for pensions increased by \$2.455 billion during FY2024. On June 30, 2024, total plan assets (including capital assets of \$14.3 million) were \$46.372 billion. These assets, along with deferred outflows of resources of \$346,869, exceeded total liabilities of \$2.711 billion and deferred inflows of resources of \$587,011, resulting in a net position restricted for pensions of \$43.661 billion.

- FY2024 covered wages, from which both employee and employer contributions are calculated, increased \$413.7 million, or 4.31 percent, over the last fiscal year and totaled \$10.002 billion. In comparison, FY2023 wages totaled \$9.588 billion, a 6.32 percent increase over the prior fiscal year's wages of \$9.018 billion.
- Additions from employee and employer contributions totaled \$1.576 billion in FY2024, an increase of 4.65 percent. In comparison, FY2023 saw a 5.60 percent increase in contributions. Growth in covered payroll increased contributions in both years. But while the contribution rates for Regular members have held steady since FY2019, the rates

for each Special Service group decreased in each of those years.

- Service purchase contributions for FY2024 were \$2.1 million, a 59.72 percent decrease from FY2023 service purchase contributions of \$5.3 million. FY2023 saw a 14.21 percent increase from the FY2022 amount of \$4.6 million.
- Net investment and securities lending income, after all investment-related expenses, saw a gain of \$3.632 billion in FY2024, and \$2.151 billion in FY2023 and a loss of \$1.584 billion in FY2022. These differences are explained by the disparity in IPERS' investment returns — the FY2024 return was 9.07 percent, while the returns for FY2023 and FY2022 were 5.41 percent and -3.90 percent, respectively.
- Investment management expenses were \$92.9 million for FY2024. In comparison, investment management expenses were \$69.1 million for FY2023 and \$70.3 million for FY2022. The System's ratio of investment management expenses to the portfolio's quarterly average fair value of assets under management was 0.21 percent for FY2024, up from a ratio of 0.17 percent for FY2023, and more than the ratio of 0.16 percent for FY2022.
- Total contributions, investments and other income resulted in a increase to the Fund of \$5.210 billion in FY2024. This compares to an increase of \$3.663 billion in FY2023 and a decrease of \$152.7 million in FY2022.
- FY2024 benefit payments increased \$97.7 million and refunds increased \$7.6 million. Benefit payments increased due to an increased number of retirees, as well as higher average monthly payments to new retirees. Benefit and refund payments increased from \$2.532 billion in FY2022, to \$2.634 billion in FY2023, to \$2.739 billion in FY2024.
- Capital assets were \$14.3 million in FY2024, up from \$14.1 million in FY2023 and below \$15.3 million in FY2022 mainly due to depreciation. See page <u>33</u> in the Financial section for more detailed information on capital assets.

Analysis of Net Position

The investment rates of return for the current and preceding two fiscal years were 9.07 percent, 5.41 percent and -3.90 percent, respectively. IPERS' total net position increased 5.96 percent in FY2024 after increasing by 2.52 percent in FY2023 and decreasing 6.29 percent in FY2022. The increase in FY2024 and FY2023 were both driven by market conditions. The following table contains the FY2024 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 fair value at June 30, 2024.

(See also the Investments section of this report beginning on page $\underline{49}$ for more information on rates of return.)

Investment Returns and Allocations

Fiscal Year Ended June 30, 2024

	Return	Benchmark	Allocation
Asset Class	(%)	(%)	(%)
Domestic equity	24.22	23.12	21.23
International equity	12.72	11.62	13.02
Global smart beta equity	13.38	13.65	4.92
Core fixed income	2.37	2.63	25.26
Public credit	10.65	9.75	3.01
Cash	6.16	5.40	1.18
Private equity	6.33	6.33	18.38
Private real assets	-8.37	-8.37	7.07
Private credit	8.52	8.52	5.93
Total Fund	9.07	8.80	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, 94 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 6 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 increased \$2.172 billion from FY2023 to FY2024. In comparison, liabilities decreased by \$1.693 billion between FY2022 and FY2023. These fluctuations are primarily related to investment payables.

Benefits paid out exceeded contributions received by \$1.161 billion, \$1.122 billion and \$1.101 billion for FY2024, FY2023 and FY2022, 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

			2024/2023 Percentage		2023/2022 Percentage
	2024	2023	Change	2022	Change
Cash and investments at fair value	\$43,937,030	\$41,275,627	6.4	\$41,283,685	(0.02)
Receivables	2,420,119	454,280	432.7	1,123,264	(59.6)
Capital assets	14,324	14,103	1.6	15,305	(7.9)
Other assets	731	1,282	(43.0)	1,071	19.7
Total assets	46,372,204	41,745,292	11.1	42,423,325	(1.6)
Deferred outflows of resources	347	264	31.4	322	(18.0)
Total liabilities	2,710,841	538,760	403.2	2,231,761	(75.9)
Deferred inflows of resources	587	483	21.5	344	40.4
Total net position	\$43,661,123	\$41,206,314	6.0	\$40,191,542	2.5

Changes in Fiduciary Net Position

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

			2024/2023 Percentage		2023/2022 Percentage
	2024	2023	Change	2022	Change
Additions				Restated	
Contributions and service purchases	\$1,578,350	\$1,511,423	4.4	\$1,430,839	5.6
Net investment and securities lending income	3,632,025	2,151,173	68.8	(1,583,546)	(235.8)
Total additions	5,210,375	3,662,596	42.3	(152,707)	(2,498.4)
Deductions					
Benefits and refunds	2,739,174	2,633,902	4.0	2,532,040	4.0
Administrative expenses	16,391	13,922	17.7	13,587	2.5
Total deductions	2,755,565	2,647,824	4.1	2,545,627	4.0
Increase/(decrease) in net position	\$2,454,810	\$1,014,772	141.9	(\$2,698,334)	(137.6)

Request for Information

This financial report is designed to provide the Governor and Iowa Legislature (plan sponsors), the Investment Board, the Benefits Advisory Committee, as well as the System's members, 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 800-622-3849 or by mail at P.O. Box 9117, Des Moines, IA 50306-9117.

Basic Financial Statements

Statement of Fiduciary Net Position

As of June 30, 2024, with Comparative Totals as of June 30, 2023

As of Julie 30, 2024, with Comparative Totals as of Julie 30, 2023	2024	2023
ASSETS	2024	2023
Cash and cash equivalents	\$538,102,730	\$495,504,721
Receivables	\$ 556,102,750	3493,304,721
Contributions	93,867,885	97,568,077
Accrued interest and dividends	51,331,284	52,319,701
Investment sales	398,773,894	156,931,476
Foreign exchange contracts	1,876,145,982	147,460,486
Miscellaneous	1,070,140,982	408
Total receivables	2,420,119,143	408
Investments at fair value	2,420,119,143	434,200,140
Core fixed income	11,133,936,975	9,026,260,722
Public credit	1,285,040,222	1,164,623,856
Domestic equity	9,256,517,088	8,555,227,526
International equity	5,663,339,838	6,586,007,837
Global smart beta equity	2,126,783,907	2,024,010,159
Private real assets		3,256,660,973
Private redit	3,085,008,935	2,178,537,557
Private equity	2,578,425,525 8,015,118,674	7,864,766,374
Total investments at fair value	43,144,171,164	
	254,756,519	40,656,095,004
Securities lending collateral pool Capital assets	234,730,319	124,027,133
Depreciable assets, net of accumulated depreciation/amortization	13,823,707	12 602 040
Nondepreciable assets: land	500,000	13,602,948 500,000
Total capital assets	14,323,707	14,102,948
Other assets	731,273	1,282,410
Total assets	46,372,204,536	41,745,292,364
DEFERRED OUTFLOWS OF RESOURCES	40,372,204,330	41,/43,292,304
Other postemployment benefits	246 960	264 102
LIABILITIES	346,869	264,182
Accounts payable and accrued expenses	66,815,943	34,250,294
Investment purchases payable	513,207,121	231,237,246
Rebates and collateral payable	254,653,603	123,876,805
Foreign exchange contracts payable Total liabilities	1,876,164,427 2,710,841,094	149,395,287 538,759,632
DEFERRED INFLOWS OF RESOURCES	2,710,041,094	330,739,032
Other postemployment benefits	587,011	482,653
	567,011	402,033
Net position restricted for pensions (Note 7, page <u>41</u>)	\$43,661,123,300	\$41,206,314,261
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Notes to Financial Statements begin on page <u>23</u>.

Statement of Changes in Fiduciary Net Position

For the Fiscal Year Ended June 30, 2024, with Comparative Totals for the Fiscal Year Ended June 30, 2023

	2024	2023
ADDITIONS		
Contributions		
Employer contributions	\$942,935,006	\$901,016,540
Employee contributions	633,294,030	605,140,748
Service purchases	2,120,730	5,265,391
Total contributions	1,578,349,766	1,511,422,679
Investments		
Interest	393,771,060	472,556,243
Dividends ¹	74,670,642	123,824,316
Real assets and private equity	108,245,705	118,179,067
Net appreciation in fair value of investments	3,147,312,861	1,503,873,968
Recaptured commissions	791	1,899
Investment management expenses	(92,867,872)	(69,104,711)
Net investment income	3,631,133,187	2,149,330,782
Securities lending		
Securities lending income	16,312,113	5,628,474
Securities lending expenses	(15,420,525)	(3,786,342)
Net securities lending income	891,588	1,842,132
Total net investment income	3,632,024,775	2,151,172,914
Total additions	5,210,374,541	3,662,595,593
DEDUCTIONS		
Benefit payments	2,659,459,458	2,561,787,336
Member refunds	79,714,549	72,114,154
Administrative expenses	16,391,495	13,921,915
Total deductions	2,755,565,502	2,647,823,405
Net increase	2,454,809,039	1,014,772,188
Net position restricted for pensions, beginning of year	41,206,314,261	40,191,542,073
Net position restricted for pensions		
(Note 7, page <u>41</u>)	\$43,661,123,300	\$41,206,314,261

¹Dividends earned by commingled funds from their underlying investments are reinvested and are, therefore, reported as increases to the net asset value of the funds, and reflected in "net appreciation in fair value of investments" rather than as dividends.

Notes to Financial Statements begin on page 23.

Notes to Financial Statements

June 30, 2024 and 2023

(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, is included as a pension trust fund in the Iowa Annual Comprehensive Financial Report and has its own stand-alone ACFR. The state's ACFR 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. The 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 according to 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 are 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 all private credit investments 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.

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 requires the IPERS Investment Board to establish investment policies. These policies are documented in the Investment Policy and Goal Statement and reviewed at least annually by the Investment Board. The Investment Policy and Goal Statement in effect on June 30, 2024, begins on page <u>64</u>.

On September 28, 2023, the Investment Board revised the Investment Policy and Goal Statement to change the asset allocation by reducing the target weight to international equity by 3.5 percent and increasing the core fixed-income weights by 3.5 percent. On December 7, 2023, the Investment Board revised investment policies for public and private markets by reducing verbiage and providing consent to move procedural elements of the policy into an investment procedure document to be overseen by the investment staff.

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.

Maintaining adequate funding to provide for the payment of the plan's benefits over time is of primary consideration. The following are the Investment Board's adopted long term, asset allocation targets as of June 30, 2024.

Target Allocations

As of June 30, 2024

Asset Class	Target Allocation
Domestic equity	21.0%
International equity	13.0%
Global smart beta equity	5.0%
Core fixed income	25.5%
Public credit	3.0%
Cash	1.0%
Private equity	17.0%
Private real assets	9.0%
Private credit	5.5%

For the fiscal year ended June 30, 2024, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 8.85 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 bank rated AA by Fitch Ratings, to serve as the custodian bank for IPERS.

Consistent with the System's investment policy, all of IPERS' investment securities are held by the System's custodial bank in the System's name, except for securities and cash held at brokers as collateral for derivative instruments, investment securities on loan with brokers for cash collateral, investments in mutual and commingled funds, real estate properties and limited partnerships. 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.

IPERS has categorized its fair value measurements within the fair value hierarchy established by generally accepted accounting principles.

Fair Value Hierarchy Levels

Level 1	Unadjusted quoted prices for identical instruments in active markets.
Level 2	Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
Level 3	Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

Where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest-level input that is significant to the valuation. The System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The table on page <u>25</u> shows the fair value level of the investments for the System.

Short-term securities generally include investments in money market-type securities reported at cost plus accrued interest, which approximates fair value. Debt, equity and derivative instrument securities classified in Level 1 are valued using prices quoted in active markets for those securities. Derivative instrument securities classified in Level 2 are securities whose values are either derived daily from associated traded securities or are determined by using a market approach that considers benchmark interest rates.

Debt and debt derivative instrument securities classified in Level 2 and Level 3 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Level 2 debt securities have nonproprietary information that is readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. Level 3 debt securities are solely composed of bank loans and these investments use proprietary information or single-source pricing.

Other real assets and private real estate separate accounts classified in Level 3 are investments generally valued using one or a combination of the following accepted valuation approaches: market, cost or income. Independent third-party appraisals are required every three years. Annual appraisals are done internally by the advisors, and all portfolios have audited financials completed at fiscal year-end.

Investments and Derivative Instruments Measured at Fair Value

(Dollar Values Expressed in Thousands) June 30, 2024

		Fair Value Measurements Using					
Investment Type	Total Fair Value	Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)			
Collateral at broker	\$58,781	(200017) -	\$58,781	(200010)			
Cash equivalents	(95)	_	(95)	-			
Equity investments	· · · ·		. ,				
Common stocks	2,693,859	\$2,693,175	684	-			
Real estate investment trusts	50,403	50,403	-	-			
Preferred stock	17,229	9,274	5,301	\$2,654			
Other equities	616	616	-	-			
Total equity investments	2,762,107	2,753,468	5,985	2,654			
Fixed-income investments							
U.S. Treasuries	37,281	37,281	-	-			
Agencies	119,934	-	119,934	-			
Collateralized mortgage-backed securities	8,136	-	8,136	-			
Other government fixed income	244,030	-	244,030	-			
Corporate bonds	357,913	-	333,333	24,580			
Corporate asset-backed securities	65	_	65	-			
Private placements	743,079	-	743,079	-			
State and local obligations	1,868	-	1,868	-			
Other fixed income	724,477		-	724,477			
Total fixed-income investments	2,236,783	37,281	1,450,445	749,057			
Other investments	0 414 554						
Private real estate separate accounts	2,411,554	-	-	2,411,554			
Other real assets	673,455			673,455			
Total other investments	3,085,009	-	-	3,085,009			
Total investments by fair value level	\$8,142,585	\$2,790,749	\$1,515,116	\$3,836,720			
Investments measured at the net asset value							
Equity commingled funds	\$10 001 1 7 5						
Developed markets	\$12,881,175						
Emerging markets	1,316,418						
Invested securities lending collateral							
Money market funds	5,000						
Overnight repurchase agreements	249,642						
Fixed-income commingled funds	9,772,628						
Pooled funds and mutual funds Private equity funds	954,334 8,012,045						
Private credit funds	2,578,426						
Total investments measured at the NAV	\$35,769,668						
Total investments measured at fair value	\$43,912,253						
	343,912,233						
Investment derivative instruments	0.014	00.014					
Futures	\$3,214	\$3,214	- (01 1 40)	-			
Options Swaps	(1,149)	_	(\$1,149)	_			
Swaps Credit default	594	_	594				
Interest rate	1,367	_	1,367				
Total investment derivative instruments	\$4,026	\$3,214	\$812	_			
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The valuation method for investments measured at the net asset value per share, or equivalent, is presented in the table below.

Investments Measured at the Net Asset Value

(Dollar Values Expressed in Thousands) June 30, 2024

		Unfunded	Redemption Frequency (If	Redemption Notice
Investment Type	Fair Value	Commitments	Currently Eligible)	Period
Equity commingled funds				
Developed markets ¹	\$12,881,175		Daily	2 days
Emerging markets ¹	1,316,418		Daily, Monthly	2-3 days
Invested securities lending collateral				
Money market funds	5,000		Daily	NA
Overnight repurchase agreements	249,642		NA	NA
Fixed-income commingled funds ¹	9,772,628		Daily, Monthly	2 days
Pooled funds and mutual funds	954,334		Daily	NA
Private equity funds ²	8,012,045	\$2,434,616		
Private credit funds ³	2,578,426	960,356		
Total investments measured at the NAV	\$35,769,668	\$3,394,972		

¹Consists of various collective trust funds where assets are commingled for investment purposes. Each are valued at the net asset value of the units held at the end of the period based upon the fair value of the underlying investments. ²IPERS' private equity portfolio consists of 111 active partnerships within a legacy program and a fund-of-one investment that invests primarily in buyout,

²IPERS' private equity portfolio consists of 111 active partnerships within a legacy program and a fund-of-one investment that invests primarily in buyout, venture capital, special situations and distressed debt funds. The fair values of these funds and the fund-of-one have been determined using net assets valued one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. As underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years, distributions are received.

³IPERS' private credit portfolio consists of 17 partnerships. All of the funds determine fair value by utilizing net asset values from one quarter in arrears plus current quarter cash flows. None of the private credit funds are eligible for redemption. As underlying investments within the funds are liquidated, which on average can occur over the span of 3 to 7 years, distributions are received.

Invested Assets

(Dollar Values Expressed in Thousands) June 30, 2024

Investment Type	Total Fair Value	Fair Value on Loan
Cash	\$17,991	-
Cash collateral at broker	60,336	_
Pooled funds and mutual funds	954,334	_
Short-term investments	954,334	_
Common stocks	2,693,859	\$105,917
Real estate investment trusts	50,403	5,849
Preferred stock	17,229	_
Other equities	616	551
Equity investments	2,762,107	112,317
U.S. Treasury notes	22,538	-
U.S. Treasury bonds	14,742	-
Ginnie Mae	22,419	-
Fannie Mae	97,516	-
Collateralized mortgage-backed securities	8,136	-
Other government fixed income	244,030	7,806
Corporate bonds	357,913	40,440
Corporate asset-backed securities	65	-
Private placements	743,079	149,730
State and local obligations	1,868	-
Other fixed income	724,477	_
Fixed-income investments	2,236,783	197,976
Derivative Instruments	4,027	-
Equity commingled funds	14,197,593	-
Fixed-income commingled funds	9,772,628	—
Commingled funds	23,970,221	-
Special equity	7,638,600	-
Venture capital	373,445	_
Private equity	8,012,045	-
Private real assets	3,085,009	-
Private credit	2,578,426	-
Total	\$43,681,279	\$310,293
Total from above	\$43,681,279	
Cash in managers' accounts	(537,108)	
Investments on Statement of Fiduciary Net Position	\$43,144,171	

GASB Statement No. 40, *Deposit and Investment Risk Disclosures*, 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 specific to 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.

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, is included in this report.

The tables summarize IPERS' fixed-income portfolio exposure levels and credit quality ratings. The following table includes \$4.258 billion of U.S. Treasury obligations and \$22.4 million of Ginnie Mae obligations. These securities are explicitly guaranteed by the U.S. government and represent 33.0 percent of the total Fund's fixed-income exposure. Therefore, as of June 30, 2024, IPERS' fixed-income assets that are not explicitly government-guaranteed represented 67.0 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 portfolio is managed in accordance with an investment contract that is specific about permissible credit quality ranges and the average credit quality of the overall portfolios. In circumstances where downgrades occurred after the 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 derivative instruments is found under the derivative instrument disclosures beginning on page 30. Policies related to credit risk pertaining to IPERS' securities lending program are found under the securities lending disclosures on page 32.

Credit Risk: S&P Quality Ratings

(Dollar Values Expressed in Thousands) June 30, 2024

Investment Type	Total	TSY	AGY	AAA	AA	Α	BBB	BB	В	CCC & Below	NR
Pooled and mutual funds	\$954,334	-	-	-	-	\$369	-	-	-	-	\$953,965
Short-term investments	954,334	-	-	-	-	369	-	-	-	-	953,965
U.S. Treasury notes	22,538	\$22,538	-	-	-	-	-	-	-	-	-
U.S. Treasury bonds	14,742	14,742	-	-	-	-	-	-	-	-	-
Ginnie Mae	22,419	-	\$22,419	-	-	-	-	-	-	-	-
Fannie Mae*	97,516	-	-	-	-	-	-	-	-	-	97,516
Collateralized mortgage- backed securities	8,136	-	-	-	-	-	-	-	-	-	8,136
Other govt fixed income	244,030	-	-	-	\$10,294	4,587	\$65,892	\$63,862	\$18,291	\$20,942	60,162
Corporate bonds	357,913	-	-	\$1,061	8,292	45,713	122,830	90,634	43,497	11,851	34,035
Corporate asset-backed securities	65	-	-	-	33	32	-	-	-	-	-
Private placements	743,079	-	-	15,719	7,095	6,179	48,311	292,310	254,639	68,837	49,989
State & local obligations	1,868	-	-	208	1,596	64	-	-	-	-	-
Other fixed income	724,477	-	-	-	-	573,878	87,229	63,370	-	-	-
Fixed-income investments	2,236,783	37,280	22,419	16,988	27,310	630,453	324,262	510,176	316,427	101,630	249,838
Commingled bond funds	9,772,628		-	356,701	2,868,266	1,133,625	1,193,238	-	-	_	-
Total	\$12,963,745	\$4,258,078	\$22,419	\$373,689	\$2,895,576	\$1,764,447	\$1,517,500	\$510,176	\$316,427	\$101,630	\$1,203,803

*Fannie Mae mortgage pools consist of thousands of mortgages. Because of the complexity of these pools, hiring ratings agencies to rate each pool is costprohibitive. 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 are reported as such in this table.

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 IPERS' name and are held by either the counterparty or the counterparty's trust department or agent. IPERS' cash investments are required to be collateralized under Iowa law. Securities lent are also required to be fully collateralized. See securities lending section on page <u>32</u>.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of a fixedincome 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.

There are no organization-wide policies for interest rate risk exposure within the overall fixed-income portfolio. The System's core fixed-income investment contracts generally require the effective duration of the manager's portfolio to remain between 80 and 120 percent of the effective duration measure of a specific fixed-income index. However, all of IPERS' core fixed income managers have authority under their contracts to reduce the interest rate sensitivity of their portfolios to less than 80 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 and 125 percent of the benchmark's effective duration. The reporting of effective duration found in the following 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 instruments are found in the derivative instrument disclosures beginning on page 30. No interest rate futures or options positions

will be established that affect the duration or weighted average maturity of a fixed-income managed account by more than one year.

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Effective Duration

(Dollar Values Expressed in Thousands) June 30, 2024

		Effective Duration in
Investment Type	Fair Value	Years
Pooled funds and mutual funds	\$954,334	0.08
Short-term investments	954,334	0.08
U.S. Treasury notes	22,538	3.09
U.S. Treasury bonds	14,742	15.82
Ginnie Mae	22,419	6.97
Fannie Mae	97,516	6.14
Collateralized mortbacked secs.	8,136	3.90
Other government fixed income	244,030	7.11
Corporate bonds	357,913	4.70
Corporate asset-backed securities	65	1.91
Private placements	743,079	3.59
State and local obligations	1,868	11.61
Other fixed income	724,477	(0.55)
Fixed-income investments	2,236,783	4.66
Commingled bond funds	9,772,628	6.07
Total	\$12,963,745	5.11

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of investments. IPERS' currency policy allows its investment managers the discretion to hedge their foreign currency exposures. IPERS generally does not allow its managers to enter into currency positions greater than 100 percent or less than 0 percent of the underlying asset exposure in their respective portfolios. Exceptions are (1) as it relates to specific cross-hedging activity, which may be permitted in certain investment manager contracts, and (2) in liquid absolute return strategies (LARS) where the managers are permitted to tactically allocate across several asset classes and strategies, including currency. The net foreign currency exposure of the LARS managers was less than one percent of the System's total foreign currency exposure on June 30, 2024.

Foreign Currency Risk by Investment Type

(Dollar Values Expressed in Thousands) June 30, 2024

	*	Cash & Cash	Derivative	- ··	
Currency	Total	Equivalents	Instruments	Equity	Fixed Income
Australian Dollar	\$80,467	\$480	(\$1,478)	\$81,465	- (0000)
Brazilian Real	11,732	(13,517)	-	25,449	(\$200)
British Pound	134,288	2,687	(1,591)	133,192	-
Canadian Dollar	33,201	273	(563)	33,491	-
Chilean Peso	17,366	10,422	-	6,929	15
Chinese Yuan Renminbi	27,439	6,717	-	20,722	-
Chinese Yuan	(142,533)	(142,533)	-	_	-
Colombian Peso	(1,175)	(1,664)	-	525	(36)
Czech Koruna	(8,646)	(8,822)	-	176	-
Danish Krone	25,315	2,230	-	23,085	-
Egyptian Pound	600	6	-	594	-
Euro	339,506	(13,812)	(35)	332,168	21,185
Hong Kong Dollar	62,310	801	(1,726)	63,235	-
Hungarian Forint	(19,300)	(27,138)	-	7,793	45
Indian Rupee	282,834	192,554	-	90,280	-
Indonesian Rupiah	(27,993)	(35,839)	-	7,846	-
Israeli Shekel	(4,377)	(10,941)	-	6,564	-
Japanese Yen	285,153	5,267	79	279,807	-
Kuwaiti Dinar	935	2	-	933	-
Malaysian Ringgit	9,751	11	(13)	9,747	6
Mexican Peso	(18,556)	(30,719)	-	12,313	(150)
New Zealand Dollar	6,763	21	-	6,742	-
Norwegian Krone	7,102	114	-	6,988	-
Philippine Peso	(9,614)	(14,505)	-	4,891	-
Polish Zloty	100,587	93,055	-	7,809	(277)
Qatari Riyal	3,530	-	_	3,530	-
Romanian Leu	(103,847)	(103,847)	_	-	-
Russian Ruble	18	18	-	-	-
Saudi Arabian Riyal	15,934	25	-	15,909	-
Singapore Dollar	(121,174)	(147,874)	-	26,700	-
South African Rand	1,006	(20,097)	(3)	21,004	102
South Korean Won	21,419	(40,010)	363	61,020	46
Swedish Krona	55,295	1,471	185	53,639	-
Swiss Franc	66,939	2,819	_	64,120	_
Taiwanese Dollar	120,141	34,462	_	85,679	_
Thai Baht	49,769	40,337	(51)	9,482	1
Turkish Lira	9,916	_	-	9,916	_
United Arab Emirates Dirham	7,774	_	_	7,774	_
Total	\$1,319,875	(\$217,546)	(\$4,833)	\$1,521,517	\$20,737

Derivative Instruments

GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments,* requires the fair value of financial arrangements called "derivative instruments" to be reported in the financial statements of state and local governments. The statement further requires derivative instruments to be categorized as either hedging derivative instruments or investment derivative instruments. All of the System's derivative instrument exposures at June 30, 2024, are categorized as investment derivative instruments, and therefore the hedge accounting provisions of GASB 53 are not applicable. Additionally, no derivatives held by IPERS contain contingent features as defined by GASB 53.

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 instruments policy contained in its Investment Policy and Goal Statement. Derivative instruments are contracts or securities whose returns are derived from the returns of other securities, indexes or derivative instruments. This definition includes the most common type of derivative instrument, collateralized mortgage obligations (which typically make up a portion of the System's fixedincome portfolio), it also includes (but is not limited to) futures, forwards, options, options on futures, swaps and swaptions. The System's managers are not permitted to utilize derivative instruments 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 instrument 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, including liquid absolute return strategies.

The various derivative instruments 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 occasionally utilize derivative instruments for hedging purposes; however, any derivative instruments held by these types of investment vehicles are not included in this Note. IPERS could be exposed to risk if the counterparties to derivative instrument contracts are unable to meet the terms of the contracts (credit risk). 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 derivative instruments for hedging purposes.

Futures and Options Contracts

IPERS had investments in various futures and options in FY2024. The Statement of Fiduciary Net Position reports these contracts at fair value. A summary of contracts by sector that were outstanding at June 30, 2024, follows. Futures and options can potentially offer lower-cost, more efficient alternatives to buying the underlying securities or currency. They 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 IPERS had owned the underlying securities or currency.

Futures Exposure Summary

(Dollar Values Expressed in Thousands)	
June 30, 2024	

oune 00, 202	June 30, 2024			
	Number of	Notional	Fair	% of Total
	Contracts	Value	Value	Fund NAV
Long				
Futures				
Agriculture	1,394	\$63,293	(\$2,952)	(0.00677)
Currency	1,016	38,773	(62)	(0.00014)
Energy	5,118	209,544	1,819	0.00417
Index	1,878	208,857	24	0.00006
Interest	3,894	469,670	2,032	0.00466
Metal	1,714	157,501	(3,591)	(0.00823)
Total	15,014	\$1,147,638	(\$2,730)	(0.00625)
Short				
Futures				
Agriculture	(2,997)	(\$92,034)	\$4,918	0.01128
Currency	(3,730)	(340,344)	1,177	0.00270
Energy	(3,575)	(180,475)	(639)	(0.00147)
Index	(829)	(183,678)	(111)	(0.00025)
Interest	(3,529)	(659,810)	(1,699)	(0.00390)
Metal	(1,232)	(127,990)	2,298	0.00527
Total	(15,892)	(\$1,584,331)	\$5,944	0.01363

Options Exposure Summary

(Dollar Values Expressed in Thousands) June 30, 2024

	Fair Value	% of Total Fund NAV
Options Written		
Agriculture	(\$2)	-
Energy	(1,049)	(0.00241)
Metal	(122)	(0.00028)
Total	(\$1,173)	(0.00269)
Options Purchased		
Agriculture	24	0.00006
Total	\$24	0.00006

Credit Default Swaps

The System had investments in credit default swaps during the year. These credit default swaps are derivative instruments 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, 2024, the net notional value of the credit default swaps held in the System's fixed-income portfolio was \$23.2 million. The credit default swaps are reported at a fair value of \$1.4 million 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 vice versa. By utilizing interest rate swaps, IPERS' 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, 2024, the net notional value of the interest rate swaps held in the System's fixed-income portfolio was -\$376.3 million. All interest rate swaps held by the System are reported at a fair value of \$594,155 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 page <u>29</u>.

Securities Lending

IPERS participates in the securities lending program administered by the Treasurer of State, as authorized by Iowa Code section 12.8. Deutsche Bank serves as the lending agent for IPERS' securities lending program. In this capacity, 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 or 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 did not have any exposure, where the amount on loan by IPERS exceeds the amount owed to IPERS. 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.

The securities lending contract does not allow IPERS to pledge or sell any collateral securities unless the borrower defaults. As of June 30, 2024, IPERS had securities on loan, including accrued interest income, with a fair value (carrying value) of \$310.3 million. Cash and non-cash collateral for said securities, including borrower rebate, have total fair values (carrying values) of \$254.6 million and \$73.4 million respectively.

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, 2024, was 0.00. Credit quality and years-to-maturity statistics for the cash collateral account at June 30, 2024, are shown in the following table.

Securities Lending Cash Collateral Account

(Dollar Values Expressed in Thousands) June 30, 2024

		Credit Risk: S&P Quality Rating			Investment Maturity
Investment Type	Fair Value	AAA	AA	Not Rated	(Years)
Money market funds	\$5,000	\$5,000	-	_	Less than 1
Overnight repurchase agreements	\$249,642	-	_	\$249,642	Less than 1
Total	\$254,642	5,000	_	\$249,642	

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. IPERS has set a capitalization threshold of \$5,000 to determine if purchases should be capitalized and depreciated over their useful lives or expensed as incurred. The building is being depreciated using the straight-line method and a useful life of 39 years. Land, a nonexhaustible asset, is not depreciated. The capitalization threshold for land improvements is \$50,000. Other capital assets consist primarily of office equipment, data processing equipment and software. All purchased equipment is recorded at cost with capitalization thresholds of \$5,000 for equipment and \$500,000 for intangible assets such as software. 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 to 25 years.

Total depreciation/amortization expense for the year ended June 30, 2024, was \$2.8 million. Of that amount, \$211,898 was reclassified as an investment-related expense on the Schedule of Investment-Related Expenses on page <u>48</u>. In FY2024, capital asset additions of \$3.1 million were capitalized.

Summary of Capital Assets

As of June 30, 2024 and 2023

		Building and	Land	Furniture, Equipment and	Right-to-Use	Total Capital
Capital Assets	Land	Improvements	Improvements	Software	Assets	Assets
Balances as of June 30, 2023	\$500,000	\$7,177,607	\$413,226	\$29,229,965	\$5,169,926	\$42,490,724
Additions	-	561,117	72,471	2,418,730	-	3,052,318
Deletions	-		-	(136,584)	-	(136,584)
Balances as of June 30, 2024	500,000	7,738,724	485,697	31,512,111	5,169,926	45,406,458
Accumulated Depreciation/Amortization						
Balances as of June 30, 2023	-	3,790,774	144,628	22,511,753	1,940,621	28,387,776
Depreciation/amortization expense	-	218,633	13,775	1,522,716	1,076,435	2,831,559
Deletions	-	-	-	(136,584)	-	(136,584)
Balances as of June 30, 2024	_	4,009,407	158,403	23,897,885	3,017,056	31,082,751
Net capital assets as of June 30, 2024	\$500,000	\$3,729,317	\$327,294	\$7,614,226	\$2,152,870	\$14,323,707

Right-to-Use Assets

Right-to-use assets consist of subscription-based software. The intangible right-to-use assets and related liabilities are recorded under GASB Statement No. 96, *Subscription-Based Information Technology Arrangement*. The capitalized value of right-to-use assets and subscription liabilities has been calculated based on the future subscription payments, discounted to present value.

Accounting standards require organizations to determine their discount rate based on their incremental borrowing costs. As an institutional investor, treasury rates were the primary factor IPERS used to determine a discount rate for measuring present value of the right-to-use assets and subscriptions liabilities. IPERS used the Incremental Borrowing Rate of 1.76 percent as a discount rate to calculate the present value of the subscription liabilities recognized during the fiscal year June 30, 2023. IPERS did not have any new right-to-use assets or subscription liabilities in FY2024. The difference between the liability booked to record the present value of these future payment obligations, and the actual subscription payments, is reported as interest expense. The recording of these liabilities resulted in a future minimum subscription commitment, as follows:

Schedule of Minimum Commitments

Fiscal Year	Principal	Imputed Interest	Total
2025	1,166,803	41,702	1,208,505
2026	1,202,636	21,166	1,223,802

F. Compensated Absences

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 \$894,612 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.

G. Other Postemployment Benefits (OPEB)

IPERS has recorded liabilities for OPEB provided through the State of Iowa OPEB Plan (State OPEB Plan). These accrued liabilities are included in accounts payable and accrued expenses in the Statement of Fiduciary Net Position on page <u>21</u>.

Plan Description

The State OPEB Plan is a cost-sharing, multipleemployer defined benefit plan administered by the state of Iowa. At June 30, 2024, there were 88 active and six retired IPERS participants in the plan.

The state of Iowa provides access to postretirement medical benefits to all retirees as required by Iowa Code section 509A.13. Although the retirees generally must pay 100 percent of the premium rate, GASB 75 requires that employers recognize the implicit rate subsidy that exists in postretirement medical plans provided by governmental employers.

Implicit rate subsidy refers to the concept that retirees under the age of 65, who are not eligible for Medicare, generate higher claims on average than active participants. When a medical plan is selfinsured or fully insured through a third-party administrator, a premium is usually determined by analyzing the claims of the entire population in the plan and adjusting for administrative costs. The resulting premium is called a blended premium because it blends the claims of active and retired participants. Since individuals generally have more and higher claims as they age, the blended premium paid for retirees is lower than their expected claims. Another way of considering this is if the retirees were removed from the plan, the premium for the active group would be lower; therefore, the retirees' premiums are being subsidized by the active group. Since the employer generally pays a large portion or all of the premiums for the active group, this subsidy creates a liability for the employer. The difference between the expected claims for the retiree group and the blended premium is called the implicit rate subsidy.

The State OPEB Plan currently offers three plans to participants: the Iowa Choice Plan, the National Choice Plan and the State Police Officers Council Plan.

The contribution requirements of the plan participants are established and may be amended by the Iowa Legislature. The state currently finances the retiree benefit plan on a pay-as-you-go basis.

Liability, Expense, Deferred Outflows and Deferred Inflows of Resources

At June 30, 2024, IPERS reported a liability of \$837,366 for its proportionate share of the total OPEB liability. The total OPEB liability was measured as of June 30, 2024, determined by an actuarial valuation, using generally accepted actuarial principles and a modified roll-forward approach. IPERS' proportion of the total OPEB liability was based on the ratio of IPERS' active employees in relation to all active employees of the state of Iowa OPEB Plan. At June 30, 2024, IPERS' proportion was 0.45 percent.

For the year ended June 30, 2024, IPERS' proportionate share of the total OPEB expense was \$75,372. At June 30, 2023, IPERS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

Differences between expected and actual experience	Deferred Outflows of Resources (\$000) \$200	Deferred Inflows of Resources (\$000) \$86
Changes in proportion and differences in employer contributions and IPERS' proportionate share of contributions	116	126
Assumption changes	31	375
Total	\$347	\$587

The net -\$240,143 reported as deferred outflows and deferred inflows of resources related to OPEB will be recognized in pension expense, with -\$26,266 recognized in FY2025, -\$26,842 recognized in FY2026, -\$29,600 recognized in FY2027, -\$29,189 recognized in FY2028, -\$30,664 recognized in FY2029, and the remaining -\$97,582 recognized thereafter.

Actuarial Methods and Assumptions

The total OPEB liability in the June 30, 2024, measurement was determined using the following actuarial assumptions and inputs, applied to all periods included in the measurement.

Actuarial cost method	Entry age normal
Discount rate	3.93%
Inflation rate	3.25%
Healthcare cost trend rates	Medical: 7.00%, trending down to
	4.50% over 10 years; Rx: 9.00%,
	trending down to 4.50% over 18 years

The discount rate is based on the Bond Buyer 20-Bond Municipal Index as of the end of June 2024.

The majority of state of Iowa employees are participants in IPERS. For this reason, the economic and demographic assumptions used in the OPEB valuation were based on the results of an actuarial experience study prepared for IPERS covering the period of July 1, 2017 – June 30, 2021. Other assumptions were determined by the actuary.

Changes in the Total OPEB Liability

There are no assets accumulated in a trust that meet the criteria in paragraph 4 of GASB 75.

	Increase/(Decrease) (\$000)
Total OPEB liability at June 30, 2023	\$820
Service cost	66
Interest	35
Differences between expected and actual experience	(6)
Assumption changes	(42)
Implicit employer contributions	(36)
Net changes in total OPEB liability	17
Total OPEB liability at June 30, 2024	\$837

Sensitivity of IPERS' Total OPEB Liability to Changes in the Discount Rate

GASB 75 requires the disclosure of the sensitivity of the total OPEB liability to changes in the discount rate. The table below shows the total OPEB liability if it were calculated using discount rates of 2.93 percent and 4.93 percent, which are 1 percentage point lower and 1 percentage point higher than the current discount rate.

1% Decrease:	Current Discount Rate:	1% Increase:
2.93%	3.93%	4.93%
(\$000)	(\$000)	(\$000)
\$897	\$837	\$781

Sensitivity of IPERS' Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The proportionate share of the total OPEB liability was calculated using healthcare cost trend rates of Medical: 7.00%, trending down to 4.50% over 10 years and Rx: 9.00%, trending down to 4.50% over 18 years. The sensitivity of the proportionate share of the total OPEB liability to changes in the healthcare cost trend rates is shown in the table below.

1% Decrease in Healthcare Cost Trend Rates: (\$000)	Current Healthcare Cost Trend Rates: (\$000)	1% Increase in Healthcare Cost Trend Rates: (\$000)
\$751	\$837	\$938

Payables to the OPEB Plan

There were no amounts due to the State OPEB Plan at June 30, 2024.

(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 Governor and Iowa Legislature are the plan sponsors and have the authority to establish and amend IPERS' benefit provisions.

The IPERS Investment Board is designated as the Fund's trustee. It sets investment policies and oversees the System's actuarial program. The 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. *The voting members include:*

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

Gubernatorial appointees serve six-year terms and must be confirmed 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

IPERS participation is mandatory for most employees of the state of Iowa and its political subdivisions, including public school systems. Exceptions include those employees covered by a retirement system at least partially supported by public contributions, other than Social Security. Membership is optional for the members of the Iowa General Assembly and certain other individuals.

At June 30, 2024, IPERS had 183,389 contributing (active) members, employed by 1,945 public employers. The number of active members increased by 1.94 percent in FY2024. The Plan Membership tables and pie charts on the following page provide further information.

Plan Membership

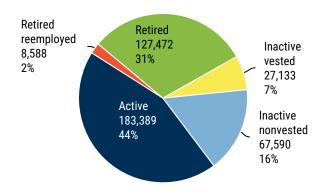
Fiscal Years Ended June 30

Members	2024	2023
Retirees and beneficiaries	136,060	133,847
Active vested	103,175	102,591
Inactive vested	27,133	26,857
Active nonvested	80,214	77,312
Inactive nonvested	67,590	63,517
Total	414,172	404,124

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.

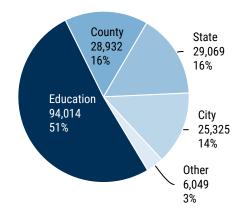
		2024	2023		
Employer	Number of		Number of	Covered	
Туре	Entities	Covered Wages	Entities	Wages	
City	958	\$1,361,960,300	960	\$1,306,251,500	
Education	351	5,056,474,936	352	4,841,701,824	
County	351	1,853,491,318	350	1,731,986,185	
Other	154	180,991,358	154	172,969,559	
Utilities	130	144,076,379	130	136,803,602	
State	1	1,405,040,683	1	1,398,626,331	
Total	1,945	\$10,002,034,974	1,947	\$9,588,339,001	

Membership Status



Note: Due to rounding, chart may not equal 100%

Active Members by Major Employer Type



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 for general informational purposes only. The plan documents contain more information.

Vesting

Regular members who complete seven years of covered service or reach the age of 65 while in IPERScovered employment become vested. Special Service members who complete four years of covered service or reach the age of 55 while in IPERS-covered employment become vested.

Service Purchases

At retirement, members who have reached the yearsof-service requirement for vesting may purchase service. These 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.

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 receive retirement benefits when the member is vested, is no longer working for an IPERS-covered employer, is at least 55 years old and has reached a normal retirement age.

Normal retirement age, when a permanent earlyretirement reduction no longer applies, is one of the following, whichever comes first:

- Years of service plus age equals at least 88
- Age 62 with 20 or more years of service
- Age 65

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

Protection Occupation members are eligible for retirement benefits when the member is vested, is no

longer working for an IPERS-covered employer and is at least 55 years old.

Sheriffs and Deputies are eligible for retirement benefits when the member is vested, is no longer working for an IPERS-covered employer and is at least 50 years old with 22 years of service. Members with fewer than 22 years of service are not eligible for retirement benefits before age 55.

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 first benefit is 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 3 percent a year is applied for each year the benefit is paid before normal retirement age. For service earned after June 30, 2012, the reduction is 6 percent for each year of retirement 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 is limited if the contingent annuitant is not the member's spouse and is more than 10 years younger than the member.

Option 5

A member receives a lifetime benefit with a 10-year guarantee. If the member dies before 10 full years have passed (120 monthly payments are made), the member's designated beneficiary will receive a monthly benefit for the remainder of the 10 years. If the beneficiary dies before the 10 years expire, the beneficiary's estate will receive a commuted lumpsum settlement. If the member designates more than one beneficiary, payments will be made in a lump sum only. Members who are 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 life.

However, for retirees who began receiving benefits prior to July 1990, a guaranteed dividend is included with the 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, established 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 3 percent.

For retirees who began receiving benefits after June 30, 1990, a Favorable Experience Dividend (FED) may be paid if there are funds in the FED reserve account. There are currently no funds in the FED reserve account. Pursuant to Iowa Code section 97B.49F(2)(c)(5), IPERS cannot transfer additional funds to the FED reserve account until the Fund is fully funded and would remain so after the transfer.

Disability Benefits

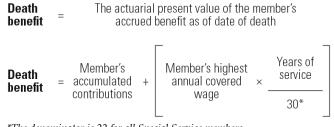
Vested members who are awarded federal Social Security disability or Railroad Retirement disability benefits are eligible for IPERS disability benefits. Disability benefits are not reduced for early retirement.

Special Service members who retire because of a disability may meet the requirements for IPERS Regular or Special Service disability benefits.

Death Benefits

Preretirement Death Benefits

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



*The denominator is 22 for all Special Service members.

If the member's designated beneficiary is a sole individual, the beneficiary will be offered a choice between 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 the actuarial contribution rate be determined using the entry age normal actuarial cost method and the actuarial assumptions and methods approved by the Investment Board. The actuarial contribution rate covers normal cost plus an unfunded actuarial liability payment. 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 are 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 FY2014 and FY2019, the contribution rate for Regular members equaled the actuarial rate and in FY2015 – FY2018 and FY2020 – FY2023, it exceeded the actuarial rate. According to the Contribution Rate Funding Policy, the contributions paid will not decline to a lowered actuarial contribution rate unless two conditions are met: the funded ratio is at least 95 percent, and the actuarial contribution rate is at least 50 basis points lower than the contribution rate paid in the previous year.

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 and again in FY2019. In FY2015 – FY2018 and FY2020 – FY2023, the rates for the Special Service members exceeded the actuarial rates.

Contribution Rates

Fiscal Year 2024

	Employee	Employer	Total
Regular members	6.29%	9.44%	15.73%
Sheriffs and Deputies	8.51%	8.51%	17.02%
Protection Occupation members	6.21%	9.31%	15.52%

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 \$330,000 for calendar year 2023 and \$345,000 for calendar year 2024. A detailed Schedule of Employers' Contributions encompassing 10 years can be found on page <u>44</u> in the Required Supplementary Information following these notes.

(4) NET PENSION LIABILITY

As a result of IPERS' 9.07 percent investment return for FY2024, the plan fiduciary net position was less than the total pension liability, resulting in a net pension liability at June 30, 2024. The calculation of the net pension liability (NPL) is shown in the following table:

Total pension liability	\$47,302,619,657
Plan fiduciary net position	\$43,661,123,300
Employers' net pension liability	\$3,641,496,357
Plan fiduciary net position as a percentage of the total pension liability	92.30%

The total pension liability (TPL) was determined by an actuarial valuation as of June 30, 2024. 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. An actuarial experience study covering the period of July 1, 2017 – June 30, 2021, was presented to the Investment Board in June 2022.

Several factors are considered in evaluating the actuarial assumed investment return including longterm historical data, estimates inherent in current market data, along with estimates of variability and correlations for each asset class, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) were developed by the System's investment consultant. These ranges were combined to develop the actuarial assumed investment return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The actuarial assumed investment return reflects the anticipated returns on current and future plan assets and provides a discount rate to determine the present value of future benefit payments.

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%
Projected salary increases	3.25% – 16.25%, including inflation, depending on years of service
Mortality tables	PubG-2010 Employee and Healthy Annuitant Tables using MP-2021 generational adjustments
Inflation rate	2.6%
Payroll increase	3.25%

Best estimates of geometric real rates of return for each major asset class included in IPERS' target asset allocation as of June 30, 2024, are shown in the following table.

Target Allocations and Long-Term Expected Real Rates of Return

As of June 30, 2024

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	21.0%	3.52%
International equity	13.0%	5.18%
Global smart beta equity	5.0%	4.12%
Core fixed income	25.5%	3.04%
Public credit	3.0%	4.53%
Cash	1.0%	1.69%
Private equity	17.0%	8.89%
Private real assets	9.0%	4.25%
Private credit	5.5%	6.62%

A. Discount Rate

The discount rate used to calculate the TPL is 7 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 is 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 1 percentage point lower and 1 percentage point higher than the actuarial assumed investment return of 7 percent.

1% Decrease: 6%	Current Discount Rate: 7%	1% Increase: 8%
\$9,438,183,241	\$3,641,496,357	(\$1,212,589,404)

C. Proportioning the Net Pension Liability

Many of IPERS-covered employers implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, in FY2015. This standard requires employers following U.S. generally accepted accounting principles (GAAP) to record, on their financial statements, several measures related to IPERS and any other defined benefit pension plans administered through trusts in which they participate.

GASB 68 requires employers to report their proportionate share of IPERS' NPL, a measure of pension expense, deferred inflows of resources and deferred outflows of resources. GASB 68 also requires additional note disclosures, as well as tables and related notes in the Required Supplementary Information. Previously, employers reported only their pension plan contributions paid.

IPERS, in association with the Auditor of State, provides information necessary for employers to comply with GASB 68. Employers with a June 30 fiscal year-end employ a one-year lag by using IPERS' June 30, 2023, information for their June 30, 2024, reporting, as allowed by the GASB. The FY2024 NPL of \$3.641 billion will be apportioned to employers for their FY2025 financial reporting. The NPL is apportioned based on the amount of contributions paid by each employer in FY2024, expressed as a percentage of the total amount of employer contributions received by IPERS during the 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 Iowa's Office of the Attorney General 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, a named plaintiff or a member of the class action. In FY2024, IPERS made 55 recoveries benefiting the Trust Fund in the amount of \$836,052. The recoveries are reflected in the financial statements for the year ended June 30, 2024.

(6) COMMITMENTS

At June 30, 2024, IPERS had commitments to fund an additional \$2.435 billion to various private equity/ debt partnerships, \$265.6 million to real estate debt, \$176.8 million to corporate debt and \$518.0 million to opportunistic credit 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.

Allocation of Net Position Restricted for Pensions

Fiscal Year Ended June 30, 2024

		Sheriffs and	Protection Occupation	
	Regular Members	Deputies	Members	Total
Net position as of June 30, 2023	\$38,035,644,590	\$931,689,355	\$2,238,980,316	\$41,206,314,261
Additions				
Contributions	1,475,016,235	26,615,621	74,597,180	1,576,229,036
Service purchases	1,871,884	103,879	144,967	2,120,730
Investment and miscellaneous income	3,437,293,128	84,487,249	203,112,270	3,724,892,647
Total additions	4,914,181,247	111,206,749	277,854,417	5,303,242,413
Deductions				
Benefit payments	2,497,764,693	46,117,180	115,577,585	2,659,459,458
Member refunds	71,538,955	1,286,807	6,888,787	79,714,549
Administrative expenses	15,659,250	129,296	602,949	16,391,495
Investment expenses	85,697,530	2,106,410	5,063,932	92,867,872
Total deductions	2,670,660,428	49,639,693	128,133,253	2,848,433,374
Preliminary net position	40,279,165,409	993,256,411	2,388,701,480	43,661,123,300
Transfers between groups	(912,379)	486,557	425,822	_
Adjusted net position as of June 30, 2024	\$40,278,253,030	\$993,742,968	\$2,389,127,302	\$43,661,123,300

Required Supplementary Information

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

Last 10 Fiscal Years

	2024	2023	2022	2021	2020
Total pension liability					
Service cost	\$1,081,890,679	\$1,011,777,571	\$962,108,032	\$930,439,635	\$906,211,617
Interest	3,106,148,943	2,987,252,626	2,891,002,885	2,791,843,382	2,706,296,570
Benefit term changes	108,974,885	-	-	_	-
Differences between expected and actual experience	24,799,715	385,136,127	146,527,929	168,748,951	(22,277,226)
Assumption changes	-	-	(42,533,419)	_	-
Benefit payments, including member refunds	(2,739,174,007)	(2,633,901,493)	(2,532,039,573)	(2,418,810,758)	(2,319,142,218)
Net change in total pension liability	1,582,640,215	1,750,264,831	1,425,065,856	1,472,221,210	1,271,088,743
Total pension liability – beginning	45,719,979,439	43,969,714,606	42,544,648,750	41,072,427,540	39,801,338,797
Total pension liability – ending	\$47,302,619,657	\$45,719,979,439	\$43,969,714,606	\$42,544,648,750	\$41,072,427,540
Plan fiduciary net position					
Employer contributions	\$942,935,006	\$901,016,540	\$853,201,521	\$817,561,450	\$792,016,980
Employee contributions	633,294,030	605,140,748	573,027,225	549,090,640	531,934,462
Service purchases	2,120,730	5,265,391	4,610,315	5,220,222	3,913,118
Net investment income, including net securities lending income ¹	3,632,024,775	2,151,172,914	(1,583,545,876)	9,902,973,985	1,041,873,426
Benefit payments, including member refunds	(2,739,174,007)	(2,633,901,490)	(2,532,039,573)	(2,418,810,758)	(2,319,142,218)
Administrative expenses	(16,391,495)	(13,921,915)	(13,587,221)	(13,851,969)	(13,584,387)
Net change in plan fiduciary net position	2,454,809,039	1,014,772,188	(2,698,333,609)	8,842,183,570	37,011,381
Plan fiduciary net position – beginning ²	41,206,314,261	40,191,542,073	42,889,875,682	34,047,692,112	34,010,680,731
Plan fiduciary net position – ending	\$43,661,123,300	\$41,206,314,261	\$40,191,542,073	\$42,889,875,682	\$34,047,692,112
Net pension liability/(asset) – ending ³	\$3,641,496,357	\$4,513,665,180	\$3,778,148,347	(\$345,226,932)	\$7,024,735,428
Plan fiduciary net position as a percentage of the total pension liability	92.30%		91.40%	100.81%	82.90%
Covered payroll	\$10,002,034,975	\$9,588,339,001	\$9,018,019,950	\$8,648,783,536	\$8,391,856,350
Employers' net pension liability/(asset) as a percentage of covered payroll	36.41%	47.07%	41.90%	(3.99%)	83.71%

Continued on page 43

¹IPERS received the final settlement payment from the Westridge Capital fraud case, CFTC / SEC v. WG, in FY2021. This payment resulted in an extraordinary item that is included in the net investment income, including net securities lending income line for purposes of this schedule.

²Due to implementing GASB 75 requirements, the beginning net position for FY2018 has been restated by -\$178,615.

³ Due to implementing GASB 96 requirements, the ending net position for FY2022 has been restated by \$24,186.

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

Last 10 Fiscal Years Continued from page 42

	2019	2018	2017	2016	2015
Total pension liability					
Service cost	\$882,446,881	\$862,716,803	\$822,363,095	\$801,587,441	\$775,968,193
Interest	2,628,521,116	2,548,179,239	2,523,074,401	2,433,180,831	2,334,357,588
Benefit term changes	-	-	-	-	-
Differences between expected and actual experience	(129,806,972)	(131,727,462)	36,106,061	(95,355,071)	47,305,303
Assumption changes	-	34,635,401	1,432,643,482	-	-
Benefit payments, including member refunds	(2,222,655,881)	(2,111,352,357)	(1,993,554,157)	(1,889,982,785)	(1,791,768,441)
Net change in total pension liability	1,158,505,144	1,202,451,624	2,820,632,882	1,249,430,416	1,365,862,643
Total pension liability – beginning	38,642,833,653	37,440,382,029	34,619,749,147	33,370,318,731	32,004,456,088
Total pension liability – ending	\$39,801,338,797	\$38,642,833,653	\$37,440,382,029	\$34,619,749,147	\$33,370,318,731
Plan fiduciary net position					
Employer contributions	\$771,782,308	\$716,752,781	\$704,766,114	\$684,664,998	\$656,911,160
Employee contributions	518,344,451	481,405,756	473,354,932	459,854,052	441,213,236
Service purchases	4,311,722	4,629,646	4,271,054	32,147,862	17,475,633
Net investment income, including net securities lending income ¹	2,640,007,063	2,458,968,900	3,279,743,723	624,853,651	1,080,045,104
Benefit payments, including member refunds	(2,222,655,881)	(2,111,352,357)	(1,993,554,157)	(1,889,982,785)	(1,791,768,441)
Administrative expenses	(15,697,527)	(14,753,842)	(15,898,996)	(14,938,951)	(12,591,756)
Net change in plan fiduciary net position	1,696,092,136	1,535,650,884	2,452,682,670	(103,401,173)	391,284,936
Plan fiduciary net position – beginning ²	32,314,588,595	30,778,937,711	28,326,433,656	28,429,834,829	28,038,549,893
Plan fiduciary net position – ending	\$34,010,680,731	\$32,314,588,595	\$30,779,116,326	\$28,326,433,656	\$28,429,834,829
Net pension liability/(asset) – ending	\$5,790,658,066	\$6,328,245,058	\$6,661,265,703	\$6,293,315,491	\$4,940,483,902
Plan fiduciary net position as a percentage of the total pension liability	85.45%	83.62%	82.21%	81.82%	85.19%
Covered payroll	\$8,151,043,468	\$7,983,219,527	\$7,863,160,443	\$7,556,515,720	\$7,326,348,141
Employers' net pension liability/(asset) as a percentage of covered payroll	71.04%	79.27%	84.71%	83.28%	67.43%

¹IPERS received the final settlement payment from the Westridge Capital fraud case, CFTC / SEC v. WG, in FY2021. This payment resulted in an extraordinary item that is included in the net investment income, including net securities lending income line for purposes of this schedule.

²Due to implementing GASB 75 requirements, the beginning net position for FY2018 has been restated by -\$178,615.

³ Due to implementing GASB 96 requirements, the ending net position for FY2022 has been restated by \$24,186.

Schedule of Employers' Contributions

Last 10 Fiscal Years

Fiscal		Actuarial	Contributions	Contribution Deficiency		Contributions Paid as a Percentage of Covered-
Year	Membership Group	Contributions	Paid*	(Excess)	Covered Payroll	Employee Payroll
2024	Regular members	\$785,425,047	\$884,878,205	(\$99,453,158)	\$9,365,735,167	9.45%
	Sheriffs and Deputies	13,120,156	13,308,541	(188,385)	156,014,073	8.53%
	Protection Occupation members	44,152,687	44,748,260	(595,573)	480,285,735	9.32%
	Total	\$842,697,890	\$942,935,006	(\$100,237,116)	\$10,002,034,975	9.43%
2023	Regular members	\$760,252,955	\$845,637,735	(\$85,384,780)	\$8,985,128,672	9.41%
2023	Sheriffs and Deputies	12,391,207	12,822,804	(383,384,780) (431,597)	146,213,713	8.77%
	Protection Occupation members	41,962,267	42,556,001	(593,734)	456,996,615	9.31%
	Total	\$814,606,429	\$901,016,540	(\$86,410,111)	\$9,588,339,000	9.40%
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2022	Regular members	\$791,572,690	\$802,174,389	(\$10,601,699)	\$8,468,458,536	9.47%
	Sheriffs and Deputies	11,352,563	12,090,552	(737,989)	132,983,997	9.09%
	Protection Occupation members	38,794,548	38,936,580	(142,032)	416,577,417	9.35%
	Total	\$841,719,801	\$853,201,521	(\$11,481,720)	\$9,018,019,950	9.46%
2021	Regular members	\$753,395,571	\$767,476,814	(\$14,081,243)	\$8,123,447,535	9.45%
2021	Sheriffs and Deputies	10,720,930	11,762,537	(314,081,243) (1,041,607)	126,886,204	9.43%
	Protection Occupation members	36,727,006	38,322,099	(1,595,093)	398,449,797	9.62%
	•					
	Total	\$800,843,507	\$817,561,450	(\$16,717,943)	\$8,648,783,536	9.45%
2020	Regular members	\$741,160,205	\$742,552,855	(\$1,392,650)	\$7,887,362,749	9.41%
	Sheriffs and Deputies	10,570,255	11,614,457	(1,044,202)	122,072,903	9.51%
	Protection Occupation members	35,771,734	37,849,668	(2,077,934)	382,420,698	9.90%
	Total	\$787,502,194	\$792,016,980	(\$4,514,786)	\$8,391,856,350	9.44%
		4				
2019	Regular members	\$722,765,827	\$722,765,827	-	\$7,667,747,786	9.43%
	Sheriffs and Deputies	11,468,737	11,468,737	-	117,564,234	9.76%
	Protection Occupation members	37,547,744	37,547,744	-	365,731,448	10.27%
	Total	\$771,782,308	\$771,782,308	-	\$8,151,043,468	9.47%
2018	Regular members	\$641,386,156	\$671,598,096	(\$30,211,940)	\$7,519,889,472	8.93%
	Sheriffs and Deputies	9,753,998	10,564,954	(810,956)	112,757,464	9.37%
	Protection Occupation members	33,724,988	34,589,731	(864,743)	350,572,591	9.87%
	Total	\$684,865,142	\$716,752,781	(\$31,887,639)	\$7,983,219,527	8.98%
2017	Regular members	\$628,387,062	\$659,859,251	(\$31,472,189)	\$7,403,850,371	8.91%
2017	Sheriffs and Deputies	9,507,927	10,464,153	(956,226)	108,818,023	9.62%
	Protection Occupation members	33,623,646	34,442,710	(819,064)	350,492,049	9.83%
	Total	\$671,518,635	\$704,766,114	(\$33,247,479)	\$7,863,160,443	8.96%
		, , , , , , , , , , , , , , , , , , , ,			,,,	
2016	Regular members	\$618,051,508	\$640,913,485	(\$22,861,977)	\$7,117,418,476	9.00%
	Sheriffs and Deputies	9,427,481	10,407,096	(979,615)	104,042,502	10.00%
	Protection Occupation members	32,612,466	33,344,417	(731,951)	335,054,742	9.95%
	Total	\$660,091,455	\$684,664,998	(\$24,573,543)	\$7,556,515,720	9.06%
2015	Regular members	\$602,423,393	\$613,976,718	(\$11,553,325)	\$6,899,669,544	8.90%
2013	Sheriffs and Deputies	9,588,844	9,817,386	(228,542)	\$0,899,009,544 99,568,974	9.86%
		9,588,844 32,548,775	33,117,056	(568,281)	327,109,623	10.12%
	Protection Occupation members	37.346 773	JJ. 117 U.M.			

*Contributions paid and recognized by the System are the same as the contractually required contributions.

Schedule of Investment Returns

Last 10 Fiscal Years

Fiscal Year	Annual money-weighted rate of return, net of investment expense
2024	8.85%
2023	5.44%
2022	-3.74%
2021	29.56%
2020	3.11%
2019	8.30%
2018	8.12%
2017	11.77%
2016	2.23%
2015	3.91%

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

Schedule of IPERS' Proportionate Share of the Total OPEB Liability

(Dollar Values Expressed in Thousands) Last 7 Fiscal Years

Fiscal Year	Proportion of total OPEB liability	Share of total OPEB liability	Covered payroll	Share of total OPEB liability as a % of covered payroll
2024	0.45%	837	\$7,931	10.56%
2023	0.40%	820	7,329	11.19%
2022	0.43%	963	7,473	12.89%
2021	0.44%	939	7,109	13.21%
2020	0.41%	875	6,531	13.40%
2019	0.41%	820	6,242	13.14%
2018	0.42%	790	6,207	12.73%

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 10 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 2024 modified benefit terms for current Sheriffs and Deputies. The benefit enhancements:

• Increased the benefit multiplier from 1.5 percent to 2.5 percent for years of service between 22 and 30,

thereby increasing the maximum benefit from 72 percent to 80 percent of average salary.

• Granted an automatic 1.5 percent compound cost-ofliving adjustment (COLA) for members who retire on or after July 1, 2024, who are at least age 50 when they terminate employment and have at least 22 years of Special Service. This COLA is provided in lieu of any Favorable Experience Dividend that future retirees would have otherwise been eligible for.

(2) CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS

The 2022 valuation incorporated the following refinements after a quadrennial experience study:

- Changed mortality assumptions to the PubG-2010 mortality tables with mortality improvements modeled using Scale MP-2021.
- Adjusted retirement rates for Regular members.
- Lowered disability rates for Regular members.
- Adjusted termination rates for all membership groups.

The 2018 valuation incorporated the following refinements after a demographic assumption study:

- Changed mortality assumptions to the RP-2014 mortality tables with mortality improvements modeled using Scale MP-2017.
- Adjusted retirement rates.
- Lowered disability rates.
- Adjusted the probability of a vested Regular member electing to receive a deferred benefit.
- Adjusted the merit component of the salary increase assumption.

The 2017 valuation incorporated the following refinements after an economic assumption study:

- Decreased the inflation assumption from 3.00 percent to 2.60 percent per year.
- Decreased the assumed rate of interest on member accounts from 3.75 percent to 3.50 percent per year.
- Decreased the investment return assumption from 7.50 percent to 7.00 percent.
- Decreased the wage growth assumption from 4.00 percent to 3.25 percent.
- Decreased the payroll growth assumption from 4.00 percent to 3.25 percent.

(3) FUNDING POLICIES

The difference between the actuarial contribution rates and contributions paid through FY2013 was due entirely to statutorily set contributions that 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. In FY2014 and FY2019, the contribution rate for Regular members equaled the actuarial contribution rate and in FY2015 – FY2018 and FY2020 – FY2024, the 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, 2022, actuarial valuation, which established the actuarially determined employer contributions for FY2024.

FY2022 Actuarial Methods and Assumptions

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, closed
Amortization period	2015 experience: 13 years 2016 experience: 14 years 2017 experience: 15 years 2018 experience: 16 years 2019 experience: 17 years 2020 experience: 18 years 2021 experience: 19 years 2022 experience: 20 years
Asset valuation method	Expected value plus 25% of difference between fair value and expected value
Inflation rate	2.6%
Payroll increase	3.25%
Projected salary increases	3.25% – 16.25%, including inflation, depending on years of service
Assumed investment return	7% compounded annually, net of investment expense and including inflation
Mortality tables	PubG-2010 Employee and Healthy Annuitant Tables with MP-2021 generational adjustments, 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.

(4) OPEB IMPLICIT RATE SUBSIDY

There are no assets accumulated in a trust that meets the criteria in paragraph 4 of GASB 75 to pay the related benefits.

Changes in assumptions and other inputs reflect the effects of changes in the discount rate each period. Discount rates of 3.93 percent, 3.65 percent and 3.54 percent, were used for the years ended June 30, 2024, 2023 and 2022, respectively.

Supplementary Information

Schedule of Administrative Expenses

Fiscal Years Ended June 30, 2024 and 2023

	2024	2023
Personnel		
Salaries and wages	\$8,446,311	\$6,650,766
Travel	69,902	69,849
Professional and technical services		
Professional	928,680	714,423
Actuary	192,370	188,562
Computer support services	2,600,352	2,414,036
Auditing	201,689	171,210
Communications		
Telephone	165,248	167,133
Printing	197,579	190,241
Other expenses		
Supplies	724,793	469,770
Utilities	57,763	62,490
Depreciation/Amortization	2,619,660	2,738,326
Miscellaneous	187,148	85,109
Total administrative expenses	\$16,391,495	\$13,921,915

Note: Administrative expenses related to investments do not appear in the table above but are included in the investment expenses reported in the Schedule of Investment-Related Expenses on the next page.

Schedule of Professional Services Payments

Fiscal Years Ended June 30, 2024 and 2023

	2024	2023
BrownWinnick Law Firm	\$27,914	-
Cavanaugh Macdonald Consulting LLC	192,370	\$188,562
CEM Benchmarking Inc.	85,175	85,175
Foster Garvey PC	115,086	161,175
Gartner, Inc	88,137	-
Ice Miller LLP	50,673	41,541
Linea Secure, Inc.	-	215,242
Linea Solutions, Inc.	344,972	-
State of Iowa Office of Auditor	201,689	171,210
Total Professional Fees	\$1,106,016	\$862,905

Note: The table above includes both Administrative and Investment-Related professional services payments.

Schedule of Investment-Related Expenses

Fiscal Years Ended June 30, 2024 and 2023

2024 2023 Acepon USA Investment Management LLC – Private credit \$490,853 \$487,313 Ares Management Company (N) LLC – Private credit \$55,860 \$613,703 BlackRock Institutional Trust Company NA – Doresite equity \$22,77,988 \$416,836,466 BlackRock Institutional Trust Company NA – Doresite equity \$22,79,88 \$452,807 BlackRock Institutional Trust Company NA – International equity \$77,320 \$452,993 Columbia Mgm Investment Advisers LLC – International equity \$74,392 \$2,594,951 Columbia Mgm Investment Advisers LLC – International equity \$74,392 \$2,594,951 Forest Investment Associates LP – Private real assets \$1,475,977 \$1,382,189 Heitman Core Real Estate Debt Income Trust LP – Private credit \$74,9461 \$76,97718 \$78,977,186 \$78,977,186 \$76,97718 \$78,977,186 \$76,977,187	Fiscal Years Ended June 30, 2024 and 2023		
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Audax Management Company (NY) LLC – Private credit 555,860 613,703 BlackRock Institutional Trust Company NA – Dorrestic equity 12,277,988 4,163,646 BlackRock Institutional Trust Company NA – Dorrestic equity 9,677,320 4,652,993 Brockfield Asset Management Adviser LP – Private real assets 714,392 2,549,951 Columbia Magnit Investment Adviser LP – Private real assets 714,392 2,549,951 Columbia Magnit Investment Adviser LP – Private credit 612,553 87,861 Fer Bal Estate Debt Income Trust LP – Private credit 714,392 446,871 IFE Ral Fund Abd LP – Private credit 714,392 469,719 IFE Ral Fund Abd LP – Private credit 737,861 - IFE Ral Fund Abd Soulter eredit 757,916 - NVESCO Advisers Inc. – Private credit 734,941 4,029,178 JP Morgan Asset Management (Europe) SARL – Private credit 761,402 - KXPa oAnderson Capital Advises LP – Private credit 761,402 - VAgne Anderson Capital Advises LP – Private credit 761,402 - LASs officit LP – Private credit 761,402 - - <td< td=""><td></td><td></td><td></td></td<>			
BlackRock Institutional Trust Company NA – Core fixed income 3,570,160 517,027 BlackRock Institutional Trust Company NA – Domestic equity 12,277,988 4,163,646 BlackRock Institutional Trust Company NA – International equity 9,677,320 4,632,993 Brockfield Asset Management Adviser LP – Private real assets 3,102,302 2,188,773 Calrion Partners LLC – Private real assets 7,14,392 2,594,951 Columbia Mgmt Investment Advisers LLC – International equity - 64,517 Crest Investment Associates LP – Private real assets 1,475,977 1,382,189 Heitman Core Real Estate Debt Income Trust LP – Private credit 574,961 - IFW USIDF (US) A LP – Private credit 7,14,022 - TASSE Management (Europe) SARL – Private credit 7,14,02 - TASSE Management (Europe) SARL – Private credit 7,41,02 - KR Goldfinch LP – Private credit 2,300,065 2,379,782 LARS Investments – Liquid absolute return strategies 4,735,607 3,967,718 Marathon Asset Management LP – Private credit 1,240,444 830,785 Mellon Investments Corporation – Core fixed income 74 <td< td=""><td></td><td></td><td></td></td<>			
BlackRock Institutional Trust Company NA – Domestic equity 12,277,988 4,163,264 BlackRock Institutional Trust Company NA – International equity 9,677,320 4,632,993 Brookfield Asset Management Adviser LP – Private real assets 3,102,302 2,188,773 Clarion Partners LC – Private real assets 7,14,392 2,594,551 Columbia Management LP – Private real assets 1,475,977 1,332,189 Forest Investment Associates LP – Private credit 612,563 8,7661 IFR all Fund LP – Private credit 514,961 - IFW USIDF (US) A LP – Private credit 761,402 - JP Morgan Asset Management (Europe) SARL – Private credit 761,402 - KAR Advisers LP – Private credit 761,402 - KAyne Anderson Capital Advisers LP – Private credit 2,300,065 2,379,782 LARS Investments - Liquid absolute return strategies 4,735,607 3,967,718 Marathon Asset Management LP – Private credit 1,240,444 830,785 Melon Investments Corporation – Core fixed income 4(433,715) (61,442) Melon Investments Corporation – Domestic equity (182,198) (60,399)			
BlackRock Institutional Trust Company NA – International equity $9,677,320$ $4,632,993$ Brookfield Asset Management LP – Private real assets $3,102,302$ $2,188,773$ Columbia Mgmt Investment Advisers LLC – International equity $ 64,517$ Crestline Management LP – Private real assets $1,475,977$ $1,213,510$ Forest Investment Associates LP – Private real assets $1,475,977$ $1,382,189$ Heitman Core Real Estate Debt Income Trust LP – Private credit $512,563$ $87,861$ IFM USIDF (US) ALP – Private credit $574,961$ $-$ IVVSEOC Advisers Inc. – Private readi $3,035$ $440,029,178$ JP Morgan Asset Management (Europe) SARL – Private credit $761,402$ $-$ KR Goldfinch LP – Private credit $2,300,055$ $2,379,782$ LARS Investments - Liquid absolute return strategies $4,735,607$ $3,967,718$ MacKay Shields LLC – Core fixed income 74 $196,588$ Marathon Asset Management LP – Private credit $1,240,444$ $830,785$ Mellon Investments Corporation – Domestic equity $(182,986)$ $(183,254)$ Morgan Asset Management LP – Private credit $3,848,456$ $1,832,544$ Oaktree Capital Management LP – Private credit $1,240,444$ $830,785$ Mellon Investments Corporation – Domestic equity $(182,986)$ $(183,254)$ Morgan Asset Management LP – Private credit $3,848,456$ $1,832,544$ Oaktree Capital Management LP – Private credit $3,848,456$ $1,832,544$ Oaktree Capital Management LP – Private credit $3,900,668$ <t< td=""><td></td><td></td><td></td></t<>			
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Clarion Partners LLC – Private real assets 714,392 2,594,951 Columbia Mgmt Investment Advisers LLC – International equity - 64,517 Crestline Management LP – Private credit 1,475,977 1,213,510 Heitman Core Real Estate Debt Income Trust LP – Private credit 319,254 69,719 ITE Kail Fund-IA LP – Private credit 574,961 - - IVXESCO Advisers Inc. – Private real assets 3,739,416 4,029,178 JP Morgan Asset Management (Europe) SARL – Private credit 761,402 - KR Goldinn, LP – Private credit 2,300,065 2,379,782 LARS Shirels LLC – Core fixed income 74 196,588 Marathon Asset Management LP – Private credit 1,240,444 830,785 Mellon Investments Corporation – Domestic equity (182,198) (195,723) Mellon Investments Corporation – Domestic equity (182,198) (195,723) Mellon Investments Corporation – International equity (122,616,60,399) 00000 Oaktree Capital Management LP – Private credit 3,484,456 1,430,751 PanAgora Asset Management LP – Private credit 1,400,736 47,511 PanAgora Asset Management LP – Private credit 1,400,736	BlackRock Institutional Trust Company NA – International equity	9,677,320	4,632,993
Columbia Mgmt Investment Advisers LLC – International equity64,517Crestline Management LP – Private credit2,371,7801,213,510Forest Investment Associates LP – Private real assets1,475,9771,382,189Heltman Core Real Estate Debt Income Trust LP – Private credit612,56387,861IF M USIDF (US) A LP – Private credit57,4961-IR Rail Fund-IA LP – Private credit74,4961-INVESCO Advisers Inc. – Private credit74,4961-Zyme Anderson Capital Advisers LP – Private credit883,035464,053KKR Goldfinch LP – Private credit2,300,0652,379,782LARS Investments – Liquid absolute return strategies4,735,5073,967,718Marathon Asset Management LP – Private credit1,240,444830,785Marathon Asset Management LP – Private credit1,240,44480,785Mellon Investments Corporation – Domestic equity(182,198)(195,723)Mellon Investments Corporation – International equity(12,896)(60,399)Monroe Capital Private Credit Fund I LP – Private credit3,848,4561,832,544Oaktree Capital Management LP – Private credit142,531193,606Parhayora Asset Management LP – Private credit142,631193,606Pathway Capital Management LP – Private credit1,400,736476,649Principal Global Investors LLC – Core fixed income-209,722Principal Global Investors LLC – Core fixed income-427,215Primcipal Real Estate Global Det LP – Private credit3,300,8683,	Brookfield Asset Management Adviser LP – Private real assets	3,102,302	2,188,773
Crestline Management LP – Private credit 2,371,780 1,213,510 Forest Investment Associates LP – Private credit 612,563 87,861 IFM USDF (US) A LP – Private credit 319,254 69,719 ITE Rail Fund-IA LP – Private credit 574,961 - IVVESCO Advisers Inc. – Private credit 574,961 - IVVESCO Advisers Inc. – Private credit 83,394,16 4.029,178 JP Morgan Asset Management (Europe) SARL – Private credit 761,402 - KR Goldfinch LP – Private credit 2,300,065 2,379,782 LARS Investments - Liquid absolute return strategies 4,735,607 3,967,718 MacKay Shields LLC – Core fixed income 74 196,588 Marathon Asset Management LP – Private credit 1,240,444 830,785 Mellon Investments Corporation – Omestic equity (18,284) (18,142) Mellon Investments Corporation – Omestic equity (12,286) (16,399) Mornoc Capital Management LP – Private credit 2,585 - PanAgora Asset Management LP – Private credit 3,848,456 1,823,544 Oaktree Capital Management LP – Private credit 1,400,736 476,649 PGIM Real Estate Obtol Det LP – Pri	Clarion Partners LLC – Private real assets	714,392	2,594,951
Forest Investment Associates LP – Private real assets $1,475,977$ $1,382,189$ Heitman Core Real Estate Debt Income Trust LP – Private credit $612,563$ $87,861$ IFW USIDF (US) A LP – Private credit $574,961$ $-$ INVESCO Advisers Inc. – Private credit $574,961$ $-$ INVESCO Advisers Inc. – Private real assets $3,739,416$ $4,029,178$ JP Morgan Asset Management (Europe) SARL – Private credit $761,402$ $-$ Kayne Anderson Capital Advisers LP – Private credit $2,300,065$ $2,379,782$ LARS Investments – Liquid absolute return strategies $4,735,507$ $3,967,718$ Marathon Asset Management LP – Private credit $1,240,444$ $830,785$ Mellon Investments Corporation – Oome fixed income $(403,715)$ $(81,442)$ Mellon Investments Corporation – Domestic equity $(12,896)$ $(60,399)$ Monroe Capital Private Credit Eurol LP – Private credit $25,885$ $-$ PanAgora Asset Management LP – Private credit $3,248,456$ $1,832,544$ Oaktree Capital Management LP – Private credit $3,382,154$ $3,322,121$ Parametric Portfolio Associates LLC – Overlay management services $142,531$ $193,606$ Pathway Capital Management LP – Private credit $1,400,736$ $476,649$ Pfinicipal Clobal Investores LLC – Core fixed income $ 229,722$ Principal Clobal Investores LLC – Core fixed income $ 229,722$ Principal Clabal Investores LLC – Private credit $9,30,868$ $3,295,014$ UBS Farmland Investores LLC – Private credit $9,300,86$	Columbia Mgmt Investment Advisers LLC – International equity	-	64,517
Heitman Core Real Estate Debt Income Trust LP – Private credit 612,563 87,861 IFM USIDF (US) A LP – Private credit 319,254 69,719 ITE Rail Fund LP – Private credit 57,49,61 – INVESCO Advisers Inc. – Private credit 3,739,416 4,029,178 JP Morgan Asset Management (Europe) SARL – Private credit 88,035 646,053 KKR Goldfinch LP – Private credit 2,300,065 2,379,782 LARS Investments – Liquid absolute return strategies 4,735,607 3,967,718 MacKay Shields LLC – Core fixed income 74 196,588 Marathon Asset Management LP – Private credit 1,240,444 830,75 Mellon Investments Corporation – Domestic equity (182,198) (195,723) Mellon Investments Corporation – International equity (12,896) (-0,399) Morroe Capital Private Credit 25,885 - PanAgora Asset Management LP – Private credit 25,881 - PanAgora Asset Management LP – Private credit 142,531 193,606 Pathway Capital Management LP – Private credit 11,568,888 11,755,886 Porincipal Golal Investors LL C – Core fixed income	Crestline Management LP – Private credit	2,371,780	1,213,510
IFM USIDF (US) A LP - Private credit 319,254 69,719 ITE Rail Fund-IA LP - Private credit 574,961 - INVESCO Advisers Inc Private credit 3739,416 4,029,178 JP Morgan Asset Management (Europe) SARL - Private credit 761,402 - KR 6 odlifich LP - Private credit 2300,065 2,379,782 LARS Investments - Liquid absolute return strategies 4,735,607 3,967,718 MacKay Shields LLC - Core fixed income 74 196,588 Marathon Asset Management LP - Private credit 1,240,444 830,785 Mellon Investments Corporation - Domestic equity (182,198) (195,723) Mellon Investments Corporation - International equity (122,896) 60,399) Monroe Capital Private Credit Fund I LP - Private credit 3,848,456 1,832,544 Oaktree Capital Management Inc - International equity 3,322,121 322,855 - PanAgora Asset Management Inc - International equity 1,568,888 1,175,588 Pathaya Capital Management Inc - International equity 1,568,888 1,175,588 Pathaya Capital Management LP - Private credit 1,400,736 476,649	Forest Investment Associates LP – Private real assets	1,475,977	1,382,189
ITE Rail Fund-IA LP – Private credit 574,961 - INVESCO Advisers Inc. – Private credit 3,739,416 4,029,178 JP Morgan Asset Management (Europe) SARL – Private credit 883,035 464,053 KKR Goldfinch LP – Private credit 2,300,065 2,379,782 LARS Investments – Liquid absolute return strategies 4,735,607 3,967,718 MacKay Shields LLC – Core fixed income 74 196,588 Marathon Asset Management LP – Private credit 1,240,444 830,785 Mellon Investments Corporation – Dorestic equity (162,198) (195,723) Mellon Investments Corporation – International equity (12,286) (60,399) Monroe Capital Management LP – Private credit 2,848,456 1,832,544 Oaktree Capital Management LP – Private credit 2,848,456 1,832,544 Oaktree Capital Management LP – Private credit 11,568,88 11,755,586 Parametic Portfolio Associates LLC – Overlay management services 142,51 193,606 Pathway Capital Management LP – Private credit 1,400,736 476,649 PGIM Real Estate Global Debt LP – Private credit 1,400,736 476,649 PGIM Real Estate Global Nebet LC – Core fixed income –	Heitman Core Real Estate Debt Income Trust LP – Private credit	612,563	87,861
INVESCO Advisers Inc. – Private real assets 3,739,416 4,029,178 JP Morgan Asset Management (Europe) SARL – Private credit 761,402 – Kayne Anderson Capital Advisers LP – Private credit 2,300,065 2,379,782 LARS Investments – Liquid absolute return strategies 4,735,607 3,967,718 Mackay Shields LLC – Core fixed income 74 196,588 Marathon Asset Management LP – Private credit 1,240,444 830,785 Mellon Investments Corporation – Core fixed income (403,715) (81,442) Mellon Investments Corporation – International equity (182,198) (60,399) Moroce Capital Private Credit Fund I LP – Private credit 28,885 – PanAgora Asset Management LP – Private credit 28,885 – PanAgora Asset Management LP – Private credit 142,531 193,006 Pathway Capital Management LP – Private credit 144,521 487,511 Pathway Capital Management LP – Private credit 144,007,36 476,649 PGIM Inc. – Public credit 561,981 – – Principal Global Investors LLC – Core fixed income – 209,722 –	IFM USIDF (US) A LP – Private credit	319,254	69,719
JP Morgan Asset Management (Europe) SARL - Private credit761,402-Kayne Anderson Capital Advisers LP - Private credit883,035464,053KKR Goldinch LP - Private credit2,300,0652,379,782LARS Investments - Liquid absolute return strategies4,735,6073,967,718MacKay Shields LLC - Core fixed income74196,588Marathon Asset Management LP - Private credit1,240,444830,785Mellon Investments Corporation - Domestic equity(182,198)(195,723)Mellon Investments Corporation - International equity(12,896)(60,399)Monroe Capital Private Credit Fund ILP - Private credit25,885-PanAgora Asset Management LP - Private credit3,322,121321,855Parametric Portfolio Associates LLC - Overlay management services142,531193,606Pathway Capital Management LP - Private credit1,400,736476,649PGIM Real Estate Elobal Det LP - Private credit1,400,736476,649PGIM Real Estate Elobal Det LP - Private credit91,11583,582REEF America LLC - Private real assets3,338,1543,540,382TCW Asset Management Company LLC - Core fixed income-422,215Tennenbaum Capital Partners LLC - Private credit3,300,6883,229,014UBS Asset Management Company LLC - Core fixed income-226,957Western Asset Management Company LLC - Core fixed income-258,957Tennenbaum Capital Partners LLC - Private credit3,300,6883,229,014UBS Asset Management Company LLP - International equity <td< td=""><td>ITE Rail Fund-IA LP – Private credit</td><td>574,961</td><td>-</td></td<>	ITE Rail Fund-IA LP – Private credit	574,961	-
Kayne Anderson Capital Advisers LP - Private credit883,035464,053KKR Goldfinch LP - Private credit2,300,0652,379,782LARS Investments - Liquid absolute return strategies4,735,6073,967,718MacKay Shields LLC - Core fixed income74196,588Marathon Asset Management LP - Private credit1,240,444830,785Mellon Investments Corporation - Domestic equity(182,198)(195,723)Mellon Investments Corporation - International equity3,248,4561,832,544Oaktree Capital Management LP - Private credit25,885-PanAgora Asset Management LP - Private credit3,484,4561,832,544Oaktree Capital Management LP - Private credit25,885-PanAgora Asset Management LP - Private credit615,821487,511Pathway Capital Management LP - Private credit142,531193,606Pathway Capital Management LP - Private credit14,00,736476,649PGIM Inc Public credit1,400,736476,649Principal Global Investors LLC - Core fixed income-209,722Principal Global Investors LLC - Core fixed income-427,215Tennenbaum Capital Partners LLC - Private credit3,300,8683,295,014UBS Asset Management (Americas) Inc Global smart beta equity681,880654,362UBS Farmland Investors LLC - Private real assets2,104,8302,053,427Western Asset Management Company LLP - International equity2,245,5481,611,755Total investment management fees3,374,8175,804,870	INVESCO Advisers Inc. – Private real assets	3,739,416	4,029,178
KKR Goldfinch LP - Private credit2,300,0652,379,782LARS Investments - Liquid absolute return strategies $4,735,607$ 3,967,718Mackay Shields LLC - Core fixed income74196,588Marathon Asset Management LP - Private credit1,240,444830,785Mellon Investments Corporation - Core fixed income(403,715)(81,442)Mellon Investments Corporation - International equity(12,896)(60,399)Monce Capital Private Credit Toul LP - Private credit2,848,4561,832,544Oaktree Capital Management LP - Private credit2,585-PanAgora Asset Management LP - Private credit2,585-Pathway Capital Management LP - Private credit11,568,88811,75,586Pathway Capital Management LP - Private credit142,531193,606Pathway Capital Management LP - Private credit1,400,736476,649PGIM Real Estate Global Debt LP - Private credit91,11583,582Principal Global Investors LLC - Core fixed income-209,722Principal Global Investors LLC - Core fixed income-427,215Tennenbaum Capital Partners LLC - Private credit3,338,1543,540,382UBS Really Investors LLC - Private real assets2,714,830654,362UBS Really Investors LLC - Private real assets2,714,8302,955,427Western Asset Management Company - Core fixed income-258,957UBS Really Investors LLC - Private real assets2,714,830654,362UBS Really Investors LLC - Private real assets2,714,8302,955,427 <td>JP Morgan Asset Management (Europe) SARL – Private credit</td> <td>761,402</td> <td>-</td>	JP Morgan Asset Management (Europe) SARL – Private credit	761,402	-
LARS Investments - Liquid absolute return strategies $4,735,607$ $3,967,718$ Mackay Shields LLC - Core fixed income 74 $196,588$ Marathon Asset Management LP - Private credit $1,240,444$ $830,785$ Mellon Investments Corporation - Domestic equity($182,198$)($195,723$)Mellon Investments Corporation - International equity($12,896$)($66,399$)Monroc Capital Private Credit Fund ILP - Private credit $3,848,456$ $1,832,544$ Oaktree Capital Management LP - Private credit $25,885$ -PanAgora Asset Management LP - Private credit $3,322,121$ $321,855$ Parametric Portfolio Associates LLC - Overlay management services $142,531$ $193,606$ Pathway Capital Management LP - Private credit $1,568,888$ $11,175,586$ PGIM Real Estate Global Debt LP - Private credit $1,00,736$ $476,649$ PGIM Real Estate Debt Fund II LP - Private credit $91,115$ $83,581,54$ Principal Global Investors LLC - Core fixed income- $2209,722$ Principal Global Investors LLC - Private credit $91,115$ $83,581,54$ UBS Asset Management Company LLC - Core fixed income- $422,215$ Tennenbaum Capital Partners LLC - Private credit $3,300,868$ $3,295,014$ UBS Asset Management Company LLC - Core fixed income- $258,957$ Total Investors LLC - Private real assets $879,120$ $716,358$ UBS Famland Investors LLC - Private real assets $2,104,830$ $2,053,427$ Western Asset Management Company LD - International equity $2,245,548$ <	Kayne Anderson Capital Advisers LP – Private credit	883,035	464,053
MacKay Shields LLC - Core fixed income74196,588Marathon Asset Management LP - Private credit1,240,444830,785Mellon Investments Corporation - Core fixed income(403,715)(81,442)Mellon Investments Corporation - International equity(12,198)(195,723)Mellon Investments Corporation - International equity(12,896)(60,399)Monroe Capital Private Credit3,848,4561,832,544Oaktree Capital Management LP - Private credit3,848,4561,832,544Oaktree Capital Management LP - Private credit3,322,121321,855Parametric Portfolio Associates LLC - Overlay management services142,531193,606Pathway Capital Management LP - Private credit615,821487,511Pathway Capital Management LP - Private credit1,400,736476,649PGIM Inc Public credit561,981-209,722Principal Real Estate Bobal Debt LP - Private credit91,11583,582RREEF America LLC - Private real assets3,338,1543,540,382TCW Asset Management Company LLC - Core fixed income-427,215UBS Asset Management Company LLC - Core fixed income-258,957UBS Farmland Investors LLC - Private real assets2,104,8302,053,427Western Asset Management Company LLC - Core fixed income-258,957UBS Asset Management Company LLC - Core fixed income-258,957Western Asset Management Company LC - Core fixed income-258,957Western Asset Management Company - Core fixed income-258,957	KKR Goldfinch LP – Private credit	2,300,065	2,379,782
Marathon Asset Management LP - Private credit1,240,444830,785Mellon Investments Corporation - Core fixed income(403,715)(81,442)Mellon Investments Corporation - Domestic equity(182,715)(81,442)Mellon Investments Corporation - International equity(12,896)(60,399)Monce Capital Private Credit Fund I LP - Private credit3,848,4561,832,544Oaktree Capital Management LP - Private credit25,885-Parançora Asset Management LC - Overlay management services142,531193,606Pathway Capital Management LP - Private credit615,821487,511Pathway Capital Management LP - Private credit1,400,736476,649PGIM Real Estate Global Debt LP - Private credit91,11583,582Principal Global Investors LLC - Core fixed income-209,722Principal Real Estate Debt Fund II LP - Private credit91,11583,582TCW Asset Management Company LLC - Core fixed income-427,215Tennenbaum Capital Partners LLC - Private credit3,300,8683,295,014UBS Asset Management Company LLC - Core fixed income-258,957Total Investors LLC - Private real assets2,104,8302,053,427Western Asset Management fees83,911,30257,709,715Wilshire - Investment consultant365,000480,000The Bank of New York Mellon - Custodian613,938663,575Treasure of State - Custodian217,911207,809Commission expenses3,8542,654,872\$643,575Total investment tre	LARS Investments – Liquid absolute return strategies	4,735,607	3,967,718
Mellon Investments Corporation - Core fixed income(403,715)(81,442)Mellon Investments Corporation - International equity(182,198)(195,723)Mellon Investments Corporation - International equity(12,896)(60,399)Monroe Capital Private Credit Fund I LP - Private credit3,848,4561,832,544Oaktree Capital Management LP - Private credit25,885-PanAgora Asset Management LP - Overlay management services142,531193,606Pathway Capital Management LP - Private credit615,821487,511Pathway Capital Management LP - Private credit1,400,736476,649PGIM Inc Public credit1,400,736476,649PGIM Inc Public credit91,11583,582RREEF America LLC - Ore fixed income-209,722Principal Global Investors LLC - Core fixed income-427,215Tennenbaum Capital Partners LLC - Private credit3,300,6683,295,014UBS Asset Management (Americas) Inc Global smart beta equity681,880654,362UBS Realty Investors LLC - Private real assets2,104,8302,053,427Western Asset Management Company LLP - International equity2,245,5481,611,755Total investment management fees3,174,8175,804,870Investment staff and Board expenses2,658,9132,024,664Portial Investment tereft fees83,911,30257,709,715Wilshire - Investment fees3,174,8175,804,870Investment staff and Board expenses2,658,9132,024,661Miscellaneous expenses2	MacKay Shields LLC – Core fixed income		196,588
Mellon Investments Corporation – Domestic equity(182,198)(195,723)Mellon Investments Corporation – International equity(12,896)(60,399)Monroe Capital Private Credit3,848,4561,832,544Oaktree Capital Management LP – Private credit25,885–PanAgora Asset Management LC – Overlay management services142,531139,606Pathway Capital Management LP – Private credit615,821487,511Pathway Capital Management LP – Private credit11,568,88811,175,586PGIM Real Estate Global Debt LP – Private credit1,400,736476,649PGIM Inc. – Public credit561,981–Principal Global Investors LLC – Core fixed income–209,722Principal Global Investors LLC – Core fixed income–427,215Tennenbaum Capital Partners LLC – Private credit3,03,81,543,540,382TCW Asset Management (Americas) Inc. – Global smart beta equity681,880654,362UBS Farmland Investors LLC – Private real assets879,120716,358UBS Realty Investors LLC – Private real assets2,104,8302,053,427Western Asset Management Company LLP – International equity365,000480,000The Bank of New York Mellon – Custodian681,398663,575Treasurer of State – Custodian217,911207,897Wilsingen – Investment fees3,3174,8175,804,870Investment staff and Board expenses2,658,9132,034,681Total other investment fees92,867,872\$69,104,711Securities lending expenses92,86	Marathon Asset Management LP – Private credit	1,240,444	830,785
Mellon Investments Corporation – International equity(12,896)(60,399)Monroe Capital Private Credit Fund I LP – Private credit3,848,4561,832,544Oaktree Capital Management LP – Private credit25,885-PanAgora Asset Management Ic – Overlay management services142,531193,606Pathway Capital Management LP – Private credit615,821487,511Pathway Capital Management LP – Private credit615,821487,511Pathway Capital Management LP – Private credit11,568,88811,175,586PGIM Inc. – Public credit561,981-Principal Global Investors LLC – Core fixed income-209,722Principal Global Investors LLC – Core fixed income-209,722Principal Real Estate Debt Fund II LP – Private credit91,11583,582RREEF America LLC – Private real assets3,338,1543,540,382TCW Asset Management Company LLC – Core fixed income-427,215Tennenbaum Capital Partners LLC – Private credit3,300,8683,295,014UBS Realty Investors LLC – Private real assets879,120716,358UBS Realty Investors LLC – Private real assets2,104,8302,053,427Western Asset Management Company - Core fixed income-258,957Total investment management fees83,911,30257,709,715Western Asset Management Company - Core fixed income-258,957Total investment management fees83,911,30257,709,719Western Asset Management Company - Core fixed income-258,957Total investme	Mellon Investments Corporation – Core fixed income	(403,715)	(81,442)
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Monroe Capital Private Credit Fund I LP – Private credit3,848,4561,832,544Oaktree Capital Management LP – Private credit25,885-PanAgora Asset Management Inc – International equity3,322,121321,855Parametric Portfolio Associates LLC – Overlay management services142,531193,606Pathway Capital Management LP – Private credit615,821447,511Pathway Capital Management LP – Private credit11,568,88811,175,586PGIM Real Estate Global Debt LP – Private credit561,981-Principal Global Investors LLC – Core fixed income-209,722Principal Real Estate Debt Fund II LP – Private credit91,11583,582REEF America LLC – Private real assets3,338,1543,540,382TCW Asset Management Company LLC – Core fixed income-427,215Tennenbaum Capital Partners LLC – Private credit3,300,8683,295,014UBS Asset Management Company LLC – Core fixed income-258,957UBS Farmland Investors LLC – Private real assets879,120716,358UBS Realty Investors LLC – Private real assets2,104,8302,053,427Western Asset Management Company – Core fixed income-258,957Total investment management fees8,911,30257,709,715Wilshire – Investment consultant3,050,00480,000The Bank of New York Mellon – Custodian217,911207,809Commission expenses2,656,9132,204,061Investment related expenses8,956,57011,394,996Total investment fees9,	Mellon Investments Corporation – International equity		
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		\$15,420,525	





Investments

Investment Overview Investment Results Investment Policy and Goal Statement

Investment Overview

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

Investment returns play an important role in the funded ratio of the IPERS Trust Fund. The Investment Board has adopted an Investment Policy and Goal Statement with the objective to benefit IPERS members 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 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 about IPERS' investment return objectives.)

The System's investments are managed internally and 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 Fund's assets and assists the Investment Board in the formulation and implementation of investment policies and long-term investment strategy.

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. Unlike the fair values shown in this report's Financial and Actuarial sections, the values reflected in this section are gross of investment receivables and cash in investment manager accounts and net of payables and securities lending collateral.

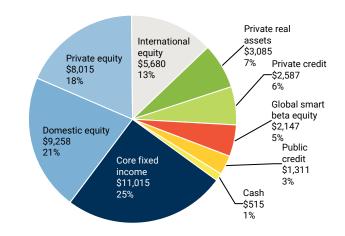
Asset Allocation and Diversification

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, 2024.

Summary of Investments by Asset Class

(Fair Values in Millions) As of June 30, 2024



Note: Due to rounding, chart does not equal 100%

Risk is further diversified by utilizing active and passive management and using multiple 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 or manager.

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.

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

Capital Markets Commentary

Fiscal year 2024 witnessed capital markets experience a combination of positive and cautious developments. The global equity market also saw a healthy rise although most gains were concentrated in the U.S., while markets in Europe remained subdued because of geopolitical uncertainties and Chinese stocks faced challenges from weak manufacturing data. Domestic equities continued their strong performance driven primarily by large tech companies with a surge in sectors tied to artificial intelligence. The IPERS portfolio delivered a return of 9.07 percent during the fiscal year, with domestic equities returning 24.22 percent and international equities returning 12.72 percent.

In fixed income, government bond yields were relatively stable, with a slight rise in U.S. Treasury yields. Central banks, such as the European Central Bank, began making cautious policy shifts with modest rate cuts, while the U.S. Federal Reserve held off on rate reductions but signaled potential cuts later in the year. Credit spreads widened slightly, as concerns over the broader economic outlook impacted high-yield bonds. Specifically, the 10-year Treasury yield rose to 4.40 percent by the end of the fiscal year. The Federal Reserve remains committed to controlling inflation, even if it means accepting a higher unemployment rate. Considering the Fed's ongoing position, the overall bond market, as measured by the Bloomberg Aggregate Index, stabilized with an annual return of 2.63 percent. IPERS' core fixed-income composite experienced a return of 2.37 percent during the fiscal year, while the public credit composite returned 10.65 percent.

IPERS' private equity portfolio experienced a somewhat muted fiscal year return, in comparison to public equities, recording a rate of 6.33 percent. On the

other hand, private credit demonstrated resilience by generating a return of 8.52 percent. The private real assets within IPERS' portfolio suffered a decline, with a return of -8.37 percent. This was primarily due to weaknesses observed in the office and hotel sectors. The cash composite clocked a return of 6.16 percent, primarily driven by the higher short-term rates and secondarily due to outperformance of the liquid absolute return strategies (LARS) program.

Investment Portfolio Assets

At the close of FY2024, IPERS' net investment portfolio assets had a fair value of \$43.612 billion. This represents an increase of \$2.483 billion from the \$41.129 billion investment asset fair value as of June 30, 2023. IPERS' 9.07 percent net investment return for the fiscal year was the main reason for the increase in fair value.

Investment Results

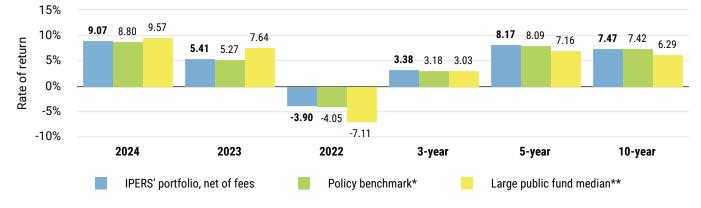
IPERS posted a total portfolio net-of-fees investment return of 9.07 percent for the fiscal year ended June 30, 2024. This return exceeded the 8.80 percent return of IPERS' policy benchmark, a set of market indexes and weightings to those indexes that reflect IPERS' asset class targets. The performance of IPERS' portfolio exceeded the policy benchmark largely due to the outperformance of the domestic equity and international equity composites.

IPERS' 9.07 percent return outperformed the actuarial assumed investment return of 7 percent by 2.07 percent, the policy benchmark by 0.27 percent and the Consumer Price Index (CPI) + 3 percent benchmark of 6.06 percent. The annual rate of inflation, as measured by CPI was 3.06 percent for the fiscal year.

The following tables provide a historical perspective of IPERS' investment returns and performance over the last 10 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. Domestic equities was the highest-returning asset class in FY2024 at 24.22 percent, while the private real assets portfolio had the lowest return of -8.37 percent.

On September 28, 2023, the Investment Board revised the Investment Policy and Goal Statement to change the asset allocation by reducing the target weight to international equity by 3.5 percent and increasing the core fixed-income weights by 3.5 percent. On December 7, 2023, the Investment Board revised investment policies for public and private markets by reducing verbiage and providing consent to move procedural elements of the policy into an investment procedure document to be overseen by the investment staff.

The total return an investment portfolio achieves over the long term is largely determined by the level of risk 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 ratio. 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 meaningful comparisons of a pension system's investment performance based solely on returns.



Investment Performance Summary

For Periods Ended June 30

*A benchmark composed of market indexes with weightings reflective of IPERS' asset allocation targets. **Investment Metrics' Universe of All Public Funds > \$1 Billion Index

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

Rates of Return

For Periods Ended June 30, 2024¹

	Annualized Returns (%)			
Asset Class	1-Year	3-Year	5-Year	10-Year
Total Fund				
IPERS	9.07	3.38	8.17	7.47
Policy benchmark ²	8.80	3.18	8.09	7.42
CPI + 3 percentage points	6.06	8.11	7.29	5.88
Actuarial assumed investment return	7.00	7.00	7.00	7.10
All Public Plans > \$1 Billion Index median	9.57	3.03	7.16	6.29
Domestic equity	04.00	0.00	14 40	10.00
Benchmark ³	24.22 23.12	8.98 8.37	14.43 14.41	12.36 12.35
	23.12	0.37	14.41	12.35
International equity IPERS	12.72	1.11	6.10	4.19
Benchmark ³	12.72	0.46	5.55	4.19
Global smart beta equity	11.02	0.40	5.55	4.04
IPERS	13.38	4.29	8.26	NA
Benchmark ³	13.65	4.50	8.44	NA
Core fixed income	10.00	4.00	0.11	10.1
IPERS	2.37	-3.34	-0.12	1.66
Benchmark ³	2.63	-2.95	-0.06	1.55
Public credit				
IPERS	10.65	0.60	3.00	3.66
Benchmark ³	9.75	0.37	2.71	3.55
Cash				
IPERS	6.16	6.11	5.19	3.92
Benchmark ³	5.40	3.03	2.16	1.50
Private equity				
IPERS	6.33	7.36	17.07	15.99
Benchmark ⁴	6.33	7.36	17.07	15.99
Private real assets				
IPERS	-8.37	4.48	6.54	NA
Benchmark ⁴	-8.37	4.48	6.54	NA
Private credit				
IPERS	8.52	7.30	7.08	NA
Benchmark ⁴	8.52	7.30	7.08	NA

¹*All returns are time-weighted returns. All returns beyond one year are annualized.*

²The policy benchmark on June 30, 2024, consisted of 21 percent Russell 3000, 13 percent MSCI ACWI ex U.S., 5 percent global smart beta equity custom benchmark; 25.5 percent Bloomberg Aggregate, 3 percent custom public credit benchmark, 1 percent Treasury bills, 17 percent IPERS private equity portfolio, 9 percent IPERS private real assets and 5.5 percent IPERS private credit benchmark. The composition of the policy benchmark has changed over the 10-year period.

³See the descriptions for each asset class in this Investments section for the specific benchmarks for each asset class.

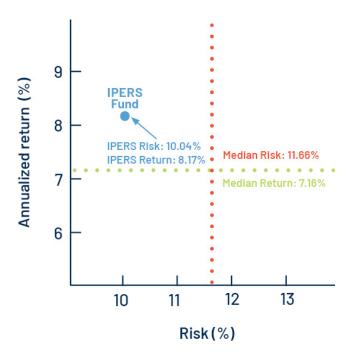
⁴The benchmark index for each private market asset class is the return of the portfolio itself. See Section IV of the Investment Policy and Goal Statement at the end of this Investments section for an explanation of private market benchmarking. A more meaningful peer comparison is when returns are compared on the basis of how much return is 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 5 years against Investment Metrics' Universe of All Public Funds > \$1 Billion Index. 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 5 years ended June 30, 2024, was higher than the median large public pension fund return and was earned with less risk.

Risk vs. Total Return

Investment Metrics' Universe of All Public Funds > \$1 Billion Index

5 Years Ended June 30, 2024

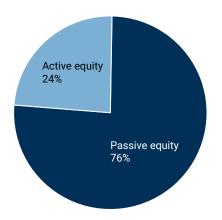


Domestic Equity

At June 30, 2024, 21.23 percent of IPERS' total portfolio was invested in domestic equities (U.S. stocks). The fair value of the domestic equity portfolio was \$9.258 billion. The portfolio is widely diversified across various equity market sectors and industries. The portfolio takes mainly a passive approach to the efficient U.S. stock market with 76.10 percent invested in passive investment strategies.

Domestic Equity Portfolio

June 30, 2024



Domestic Equity Performance

For Periods Ended June 30

Active Equity

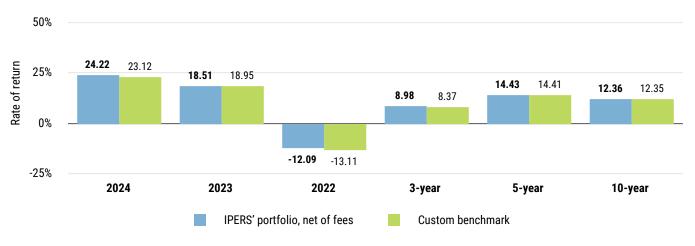
IPERS utilizes active management in small- and largecapitalization stock strategies. The active portfolio is primarily invested in systematic strategies that attempt to be uncorrelated with traditional factor betas. The systematic investment strategies are expected to exceed the core benchmark over a full market cycle.

Passive Equity

The passive component is divided into large-cap and small-cap 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, the returns of a broad market index. The passive component is designed to add diversity to the full 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 markets.

Results

For the year ended June 30, 2024, IPERS' domestic equity portfolio delivered a return of 24.22 percent, compared to 23.12 percent for its benchmark, the Russell 3000 Index. The outperformance was primarily driven by active systematic strategies within the portfolio.



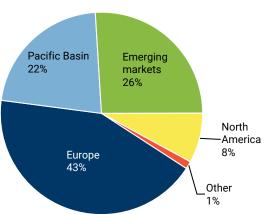
Note: 3-, 5- and 10-year results are annualized returns.

International Equity

At June 30, 2024, the international equity portfolio had a fair value of \$5.680 billion, representing 13.02 percent of the total IPERS portfolio. IPERS' international equity portfolio is composed primarily of publicly traded common stocks or equity commingled funds, foreign exchange contracts and cash. The portfolio assets are allocated across developed and emerging markets. Market weights are maintained in the same proportions as reflected in the MSCI All Country World ex U.S. asset class benchmark. The international equity portfolio utilizes both active and passive management strategies. On June 30, 2024, 38.66 percent of the portfolio was active strategies and 61.34 percent was in passive strategies.

International Equity Portfolio

June 30, 2024



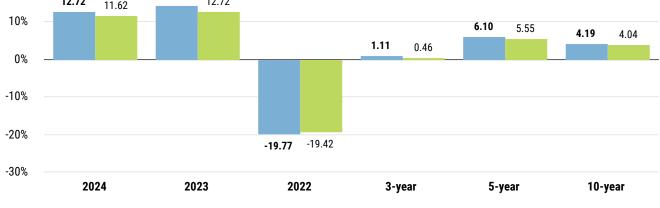
International Equity Performance

For Periods Ended June 30

20%

Rate of return

14.30 12.72 12.72 11.62



Custom benchmark

IPERS' portfolio, net of fees

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. 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, 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.

Results

The international equity market, as measured by the MSCI All Country World ex U.S. Index in U.S. dollars, returned 11.62 percent for the fiscal year ended June 30, 2024. IPERS' international equity portfolio outperformed its benchmark in FY2024, returning 12.72 percent net of fees. The outperformance was due to strong returns from active management in both emerging markets and developed markets.

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

PUBLIC EQUITY PORTFOLIO: TOP TEN HOLDINGS

The top 10 holdings within the public equity portfolio (domestic and international combined) at June 30, 2024, follow. The list includes IPERS' pro rata share of holdings within commingled funds. A complete list of holdings is available upon request.

Ten Largest Holdings at June 30, 2024	Fair Value (\$000)	% of Total
Microsoft Corporation	\$551,195	3.21
Apple, Inc.	506,329	2.95
Nvidia Corporation	472,613	2.75
Alphabet Inc.	338,401	1.97
Amazon.com, Inc.	294,848	1.72
Taiwan Semiconductor Manufacturing Company Ltd	176,915	1.03
Meta Platforms Inc.	174,395	1.02
Novo Nordisk A/S	138,449	0.81
Eli Lilly & Co.	133,936	0.78
ASML Holding N.V.	128,801	0.75
Total	\$2,915,882	16.99

Global Smart Beta Equity

At June 30, 2024, the global smart beta equity portfolio had a fair value of \$2.147 billion, representing 4.92 percent of the total IPERS portfolio. The program seeks to maintain regional weights of 60 percent U.S., 30 percent developed ex-U.S. and 10 percent emerging markets. The program creates a portfolio of stocks within each regional mandate that have positive exposures to a set of desired factors that have demonstrated a persistent ability to add value over long periods of time.

The global smart beta equity asset class was created in policy at the start of FY2018. Since the program is implemented passively, minimizing the tracking errors to the respective benchmark indexes is also critical. The Russell 1000 Comprehensive Factor Index is the benchmark for the U.S. region, the FTSE Developed Ex-U.S. Comprehensive Factor Index is the benchmark for the developed ex-U.S. region and the FTSE Emerging Markets Comprehensive Factor Index is the benchmark for the emerging markets region.

For FY2024 the program posted a 13.38 percent return, net of fees, versus its custom benchmark return of 13.65 percent. The program returned 4.29 percent for the three years ended June 30, 2024, versus 4.50 percent for its benchmark and 5.43 percent for the MSCI All Country World (Net) Index.

Fixed Income

IPERS has a significant allocation to fixed-income securities. At fiscal year-end, IPERS' core portfolio was 25.26 percent of total Fund assets and the public credit portfolio was 3.01 percent of total Fund assets. The total return for the consolidated fixed-income portfolio (core and public credit portfolios combined) for the year ended June 30, 2024, was 3.27 percent. The consolidated fixed-income portfolio fair value was \$12.326 billion and the average bond rating for the portfolio was "AA."

Core Fixed Income

The objective of the core fixed-income portfolio is to generate a return above the return of the U.S. fixedincome market. The portfolio is primarily allocated to a passively managed "core" investment in an index fund designed to earn the return of the Bloomberg U.S. Aggregate Index (Aggregate Index), an index consisting of high-quality U.S. investment-grade fixedincome securities. The secondary component of the composite is a fixed income relative value composite.

The core portfolio is a diversified portfolio of fixedincome 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 relative value portion of the portfolio consists of portable-alpha strategies in traditional fixed income that includes arbitrage,

Core Fixed-Income Performance

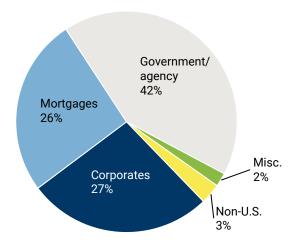
For Periods Ended June 30

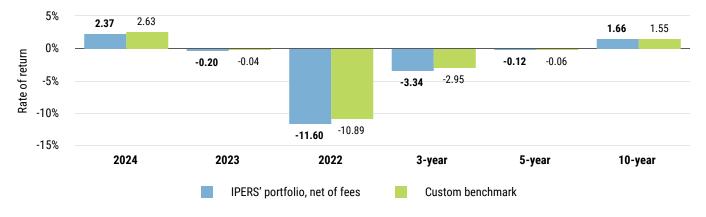
systematic, macroeconomic, emerging market debt and currency strategies. The relative value composite underperformed the policy index with a return of 0.94 percent versus the Mellon Aggregate Index.

IPERS' core fixed-income portfolio return of 2.37 percent underperformed the Bloomberg U.S. Universal Index return of 2.63 percent for the fiscal year ended June 30, 2024. The underperformance was mainly due to emerging market debt and currency portable-alpha strategies.

Passive Core Fixed-Income Portfolio

June 30, 2024





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

Public Credit Fixed Income

The objective of the public credit 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 public credit portfolio is invested in high-yield securities, while approximately one-third is invested in emerging market debt securities.

IPERS' public credit fixed-income portfolio generated a return of 10.65 percent for FY2024 versus its custom benchmark return of 9.75 percent.

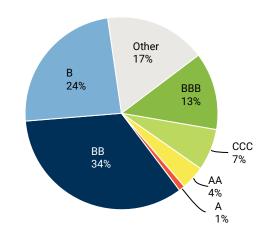
The benchmark is defined as 67 percent Bloomberg U.S. High Yield 2% Issuer Capped Index + 33 percent JP Morgan EMBI Global Index. The high-yield portion of the portfolio provided a return of 10.46 percent, outperforming the benchmark return of 10.43 percent. The emerging market debt portion of the portfolio generated a return of 11.02 percent through June 30, 2024, outperforming the JP Morgan EMBI Global Index return of 8.35 percent.

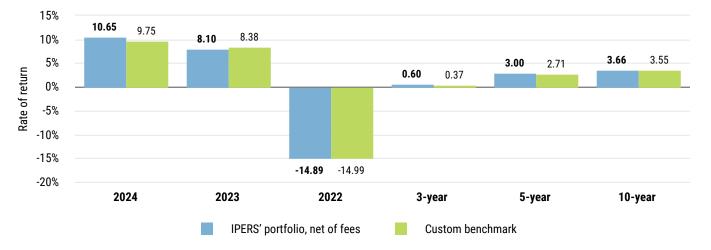
Public Credit Fixed-Income Performance

For Periods Ended June 30

Public Credit Fixed-Income Portfolio

June 30, 2024





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

FIXED-INCOME PORTFOLIO: TOP TEN HOLDINGS

The top 10 holdings within the consolidated fixedincome portfolio (core and public credit combined) at June 30, 2024, are provided in the following table. The list includes IPERS' pro rata share of holdings within commingled funds. A complete list of holdings is available upon request.

Ten Largest Holdings at June 30, 2024	Fair Value (\$000)	% of Total
U.S. Treasury Note - 4.500%, 11/15/33	\$42,723	0.34
U.S. Treasury Note - 4.000%, 2/15/34	40,060	0.32
U.S. Treasury Note - 3.875%, 8/15/33	38,041	0.30
U.S. Treasury Bond - 4.750%, 11/15/53	34,117	0.27
U.S. Treasury Note - 4.125%, 11/15/32	33,420	0.26
U.S. Treasury Note - 1.250%, 8/15/31	33,006	0.26
U.S. Treasury Note - 3.500%, 2/15/33	32,852	0.26
U.S. Treasury Note - 1.375%, 11/15/31	32,839	0.26
U.S. Treasury Note - 2.875%, 5/15/32	32,478	0.26
U.S. Treasury Note - 3.375%, 5/15/33	32,267	0.26
Total	\$351,803	2.79

Private Equity

At June 30, 2024, IPERS' private equity/debt portfolio had a fair value of \$8.015 billion, representing 18.38 percent of the total IPERS portfolio. From the inception of the private equity/debt portfolio through June 30, 2024, the System has committed \$15.900 billion to 271 partnerships and one fund-of-one investment. During FY2024, IPERS committed a total of \$517.3 million to the fund-of-one investment. At June 30, 2024, commitments of \$2.435 billion remained to be called for investment.

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, vintage year, 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 Russell 3000 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 10 years or more, so a longer evaluation time horizon is appropriate.

The private equity/debt portfolio returned 15.96 percent (net IRR) versus its benchmark return of 15.52 percent for the 10-year period ended June 30, 2024. Since inception in 1985, IPERS' total private equity/ debt portfolio has returned 14.47 percent, slightly underperforming the 14.94 percent asset class benchmark for private equity (switched from Wilshire 5000 plus 3 percentage points to Russell 3000 plus 3 percentage points on October 1, 2022).

"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 1.31.

The MSCI 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 MSCI information is as of October 2024, with data current for reporting periods ended March 31, 2024 (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 MSCI database for the period 1985–2024.

Vintage Years 1985 – 2024	IRR	DPI
IPERS' private equity/debt portfolio	14.47%	1.31
Burgiss All Regions Private Equity Composite	13.88%	0.97

Private Real Assets

Private real assets consist of investments in private equity real estate and other real assets (infrastructure, timberland and farmland). The real assets portfolio serves three distinct purposes for IPERS: diversification, income production and inflation protection. At June 30, 2024, \$3.085 billion, or 7.07 percent, of IPERS' total portfolio at fair value was invested in private real assets. There were no outstanding commitments at fiscal year-end within the private real assets portfolio.

IPERS' primary return objective for the private real assets program is to exceed the National Council of Real Estate Investment Fiduciaries' Open-End Diversified Core Index (ODCE) net of investment management fees, calculated on a time-weighted basis over rolling 10-year periods. As of June 30, 2024, the private real assets composite did not have 10 years of performance history. The composite inception was October 1, 2016. For FY2024, the portfolio posted a return of -8.37 percent versus the objective of –9.99 percent.

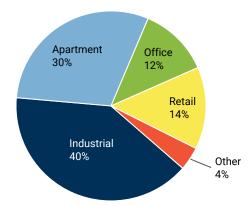
Real Estate

IPERS' real estate portfolio had a fair value of \$2.412 billion at June 30, 2024. To mitigate risk, the real estate portfolio is diversified by both geographic location and property type, as shown in the following charts.

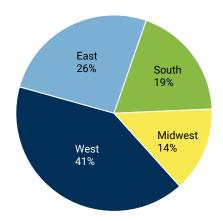
Real Estate Portfolio

June 30, 2024

By Property Type



By Property Location



The IPERS real estate portfolio benchmark is the ODCE Index. For the fiscal year, IPERS' real estate portfolio posted a return of -12.76 percent versus the benchmark return of -9.99 percent. 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, 2024, the real estate portfolio returned 8.18 percent, net of fees, versus the portfolio's benchmark of 5.47 percent.

Other Real Assets

The other real assets portfolio had a fair value of \$673.5 million at June 30, 2024. The portfolio is diversified by asset class (infrastructure, timberland and farmland), as well as by geography and markets within each asset class.

The primary objective for the other real assets portfolio is to exceed the ODCE Index. For the fiscal year, IPERS' other real assets portfolio posted a return of 10.77 percent versus the primary benchmark return of –9.99 percent. Over the 10 years, the portfolio returned 5.26 percent versus the primary benchmark return of 5.47 percent.

The secondary objective for IPERS' other real assets portfolio is to achieve a 5 percent real return after inflation and management fees over rolling 10-year periods. For the 10 years ended June 30, 2024, the other real assets portfolio returned 5.26 percent, net of fees, versus 7.94 percent for the portfolio's secondary objective.

Private Credit

IPERS' private credit portfolio consists of investments in opportunistic credit funds, real asset debt funds and direct lending funds. The funds are structured as partnerships and are illiquid.

At June 30, 2024, the fair value of the private credit portfolio was \$2.587 billion, or 5.93 percent of IPERS' total portfolio at fair value. There were unfunded commitments of \$960.4 million at fiscal year end. The portfolio produced a time-weighted return of 8.52 percent for the fiscal year versus the program objective of 12.21 percent.

The long-term return objective for IPERS' private credit portfolio is to exceed the Morningstar LSTA Leveraged Loan Index plus 1 percentage point, net of investment management fees, calculated on an internal rate of return basis over rolling 5-year periods. The private credit portfolio returned 7.33 percent (net IRR) versus its benchmark return of 8.30 percent for the 5-year period ended June 30, 2024.

Cash

IPERS' cash allocation is invested in a liquidity account and a cash overlay account.

Liquidity Account

The liquidity account invests in the custodian bank's short-term investment fund (similar to a money market fund) and provides the cash needed to make benefit payments, fund investment purchases and pay investment and administrative expenses. The liquidity account also receives deposits of employee and employer contributions, investment income distributions and investment sales proceeds. The IPERS investment staff use cash flow forecasting and periodic withdrawals from other asset classes to raise cash as needed to pay bills when they come due.

At June 30, 2024, the fair value of the combined liquidity account and the cash overlay account was \$515.5 million and earned a net-of-fees investment return of 6.16 percent.

Cash Overlay Account

IPERS uses a cash overlay investment program with the objectives of adding incremental return to the Fund and diversifying IPERS' investment strategies. The liquid absolute return strategies (LARS) program is a multi-advisor-managed futures "fund" that allocates and reallocates its capital to different trading advisors implementing various trading programs primarily using futures and options on futures. IPERS created its own managed account platform within a limited liability structure (LARS Liquid Assets, LLC) to control custody risk. IPERS acts as the investment manager for LARS and in such capacity directs the allocation of assets to the trading advisors. As of June 30, 2024, LARS had allocated capital across five different external trading advisors and an internally managed alternative risk premia portfolio. The fair value of the LARS program was \$241.0 million. The LARS program produced a net-of-fees investment return of 7.09 percent for FY2024, above the 5.40 percent return of the 90-day Treasury bill and the 5.61 percent return of the 3 month LIBOR.

Beta Management

IPERS' beta management overlay program is a systematic approach to rebalancing the public markets investment portfolio back to asset allocation targets using exchange-traded futures. The beta management overlay manager must rebalance the public markets portfolio back to its specified targets whenever a predefined deviation from a target allocation occurs. The gains or losses from this systematic rebalancing activity are recorded in each respective public market asset class, and therefore the investment returns for each asset class reflect any gains or losses from beta management rebalancing activity.

Investment Fees and Brokerage Commissions

Schedule of Investment Fees

Fiscal Year Ended June 30, 2024

		Average Quarterly Fair
	Amount Paid	Value
Domestic equity	\$12,095,790	\$8,865,445,850
International equity	15,232,093	5,601,090,072
Core fixed income	3,166,519	10,379,452,434
Public credit	1,052,834	1,266,521,422
Global smart beta equity	681,880	2,124,655,748
Cash	4,878,138	599,261,957
Private equity	11,568,888	7,935,347,360
Private real assets	15,354,191	3,149,927,213
Private credit	19,880,969	2,433,050,331
Total	\$83,911,302	\$42,354,752,387

Note: See Schedule of Investment-Related Expenses on page $\underline{48}$ for fees by manager.

Schedule of Brokerage Commissions Paid

Fiscal Year Ended June 30, 2024

PUBLIC EQUITY	Amount	Shares	Average
Brokerage Firm	Paid	Traded	Per Share
J.P. Morgan	\$377,370	77,352,976	\$0.005
UBS Securities	206,408	83,553,030	0.002
Morgan Stanley & Co. Inc	127,843	47,811,265	0.002
CLSA Ltd.	123,155	21,951,526	0.005
Goldman Sachs & Co.	117,643	60,233,554	0.000
Citigroup	47,065	49,444,212	0.002
Merrill Lynch	44,813	33,339,327	0.001
Instinet	30,508	18,364,170	0.001
Jefferies & Co. Inc	26,819	6,276,269	0.002
Macquarie Bank	22,531	36,579,406	0.004
Credit Lyonnais	16,371	47,937,532	- 0.002
HSBC	11,683	8,629,079	0.001
Barclays Bank	5,507	1,098,630	0.005
Argmaead Capital LTD	5,451	2,380,114	0.002
S. G. Warbur & Co	4,118	352,915	0.012
Bank of America	3,689	880,570	0.004
IM Trust	3,523	721,603	0.005
Nomura Holdings	3,043	175,275	0.017
Nordea Bank Apb	2,901	40,874	0.071
CIMB Group	2,880	847,900	0.003
BNP Paribas	2,664	871,431	0.003
Arqaam Securities LLC	2,038	4,268,048	-
Sanford C Bernstein & Co.	2,027	7,113,067	-
Kotak Securities	1,917	186,920	0.010
LarrainVial	1,688	3,250,129	0.001
All Others (includes 40	19,494	7,890,313	0.002
brokerage firms)	<u> </u>		40.000
Total Public Equity	\$1,213,149	521,550,135	\$0.002
FUTURES AND OPTIONS			Average
	Amount	Contracts	Per
Brokerage Firm	Paid	Traded	Contract
Morgan Stanley & Co. Inc.	\$1,154,833	649,620	\$1.78
Societe Generale	806,383	409,002	1.97
J.P. Morgan Total Futures and	452	1,126	0.40
Options	\$1,961,668	1,059,748	\$1.85
Total Commissions	\$3,174,817	1,000,040	

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

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 October 2023, 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

The Iowa Public Employees' Retirement System (IPERS or System) is governed by Iowa Code chapter 97B. System assets are held in trust and invested for the exclusive purposes of providing benefits to participants and their beneficiaries, minimizing contributions, and defraying reasonable expenses of administering the System. The investment activities of the System are governed by the "prudent person" rules as defined in §97B.7A. The investment policy and the investment strategies will be periodically reviewed to ensure they conform to §§97B.7A and 97B.8A.

The Investment Board (Board) is the trustee of the IPERS Trust Fund (Fund). The Board shall establish the System's tolerance for investment risk, and shall diversify the System's investments to minimize the risk of unacceptable large losses and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so. The Board also adopts the actuarial assumptions and methods, 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. A list of the statutory and administrative duties of Board and staff is provided in Appendix A.

The chief investment officer (CIO), under the supervision of the chief executive officer (CEO), is responsible for the administration of the System's investment program pursuant to the policies of the Board.

II. INVESTMENT OBJECTIVES

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.

The objective of the CIO is to execute the asset allocation policy established by the Board (the policy benchmark defined in this policy), and to attempt to add value relative to the policy benchmark while staying within the Board's tolerance for active risk.

III. DECISION MAKING

The Board is responsible for establishing broad policy guidelines and benchmarks that will enable the Fund to achieve its investment objectives. Board decisions are required in the following areas:

- 1. Establish asset allocation targets through adoption of a policy benchmark
- 2. Establish acceptable ranges around the policy benchmark targets
- 3. Establish the Fund- and program-level benchmarks
- 4. Establish the active risk budget

Beyond these broad policy decisions, the Board delegates to the CIO all other decision-making relating to the investment of IPERS assets, subject to the guidelines established in this policy and any statutory requirements or prohibitions.

The Board may utilize the services of investment consultants to assist them in their decision-making. Such services include, but are not limited to, conducting asset-liability and asset allocation studies, investment performance reviews, policy reviews and topical studies.

IV. ASSET ALLOCATION

The Board's asset allocation policy is established in the policy benchmark and the asset class ranges specified in Appendix B. The policy benchmark weights set 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. Positioning within a specified asset class range is acceptable and constitutes compliance with the policy benchmark.

IPERS' assets are divided into two groups for allocation purposes: *private markets* and *public markets*. Private market assets are generally illiquid, infrequently priced investments with long horizons. The Board has established a private markets investment policy specifying investment objectives, benchmarks, etc. for these types of assets. (See Appendix C)

It is the responsibility of the CIO to manage the allocation weights within the public market asset class ranges and keep them close to target, unless the CIO decides to tactically over- or under-weight a particular public market asset class. However, staff cannot quickly rebalance private markets to target weights due to the illiquid nature of private market assets, so any excess or deficiency between actual and target allocation for private market assets as a whole will be proportionately reallocated across all public market asset classes when rebalancing occurs.

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, with the exception that IPERS' actual weights and actual returns for each private market asset class shall be used in the calculation. If staff utilizes derivatives for rebalancing or tactical allocation decisions, the notional amount of derivatives contracts shall be used in calculating compliance with policy benchmark weights and asset class ranges.

V. ACTIVE RISK ALLOCATION AND MANAGEMENT

"Alpha" is the excess return resulting from active management decisions. IPERS believes positive alpha can be earned by employing a combination of active strategies that have low return correlation with one another, exhibit low correlation with beta returns and higher correlation to liability returns.

The Board has established an active risk budget in Appendix B as a means of controlling the active risk in the IPERS Trust Fund. The active risk budget consists of two components: risk allocated for external active management and risk allocated for internal active management through tactical allocation decisions. Active risk is measured as tracking error, which is the standard deviation of excess returns.

IPERS will seek to maintain a diversified alpha portfolio, and may utilize any strategy that in the discretion of the CIO will enhance the risk-adjusted return of the alpha portfolio, including but not limited to traditional longonly, long/short, portable alpha, derivative overlay and leveraged strategies. The CIO must formally authorize any tactical allocation decisions, and each decision shall be documented and tracked for performance evaluation purposes. Tactical allocation decisions by staff shall not result in allocations that would violate the asset class ranges set by the Board.

IPERS' investment in an investment manager's actively managed strategies shall not exceed 20 percent of the manager's total actively managed assets under management. The CIO shall have discretion to determine what types of similar products offered by a manager can be included in the definition of "actively managed strategies" for purposes of this calculation.

Cost efficiency is important, and the CIO should seek to implement active strategies with a high conversion ratio of active return (after fees) to the risk deployed. Active strategies shall use performance incentive fee structures, where appropriate, to ensure the economic interests of IPERS and the manager are properly aligned.

Investment 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. Investment staff is also authorized to invest in swaps for an Alternative Risk Premia internal investment program (the "ARP Program"), and may create or utilize limited liability corporations (LLCs) for the purpose of implementing the ARP Program.

VI. EXTERNAL INVESTMENT MANAGEMENT

The Board shall approve the hiring of investment management and investment consulting services. The CIO has full authority to terminate investment manager contracts provided the Board is notified of the termination prior to the effective date of the termination. The CIO also has full authority to negotiate and renegotiate contract terms and fees.

The CIO is responsible for ensuring that adequate due diligence is being performed in the evaluation of potential and existing investment managers. The CIO may hire operational due diligence consultants, attorneys, auditors and other service providers as needed to assist in the due diligence and performance evaluation of external investment management firms.

External 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. Each contract for a public market active management strategy shall clearly define investment objectives, permitted investments, concentration limits, risk budgeting parameters and performance benchmarks.

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. However, the System may require investment managers to clear trades through clearing brokers that are under contract to IPERS in order to control risk and costs. Investment managers will attempt to obtain "best execution" with respect to all transactions. Best execution is defined as the process and price that results in the best overall performance impact, taking into account market conditions at the time of the trade. IPERS will generally discourage a manager's use of soft dollar arrangements for IPERS' account, but may allow it if the usage is regularly monitored for reasonableness.

The CIO will provide the Board a summary of active management performance at least quarterly, and will highlight any concerns regarding performance, personnel turnover, or changes in the organization or investment process. The investment consultant will provide the Board semi-annual performance reviews of total Fund, asset class, and manager performance. To the extent possible, investment results will be reviewed in the context of risk-adjusted returns.

Any voting rights of securities 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, provided that such policies have been reviewed by the System and deemed to be in the best economic interests of IPERS. The System shall periodically review each investment manager's proxy voting policy and its compliance with such policies.

VII. RISK MANAGEMENT

The Fund's risk management objectives are to: (1) maintain the asset allocation as close to the policy benchmark as possible through rebalancing, and (2) manage the active risk of the alpha portfolio such that its tracking error does not exceed the upper limit established in the active risk budget in Appendix B.

The CIO and Chief Risk Officer (CRO) shall develop appropriate policies and procedures for the measurement, monitoring, management and reporting of risk to the Board, CEO and staff. The CRO is responsible for obtaining and/or developing the appropriate systems, models, tools and reporting processes that will allow for the timely and efficient management of investment risk. The CRO shall report any breach of risk limits established in this policy to the Board as soon as possible after the discovery of any material breach.

VIII. CUSTODY

The Treasurer of the State of Iowa (Treasurer) 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 sub-custodian 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 and any third-party custodian. The custodian bank agreement shall be reviewed periodically by the CIO and Board.

Certain strategies involving derivatives may require the use of a prime broker or clearing broker who will hold the System's cash or securities per the terms of a collateral agreement or futures clearing agreement. IPERS shall seek to ensure that such brokers do not require IPERS to post margin amounts that materially exceed the minimum required margin amounts set by an exchange or the terms of a collateral agreement.

IX. 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: (1) 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 (2) separate accounts that have investment guidelines identical to those required of a 2(a)(7) fund, or (3) 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: (1) safeguard principal; (2) maintain adequate liquidity; and (3) 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 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.

X. DERIVATIVE INSTRUMENTS

The System recognizes that derivative instruments can be useful tools in portfolio and risk management, but can also introduce unique risks. The CIO shall develop written policies and procedures to control the risks associated with derivatives, but at a minimum such procedures shall require: (1) a counterparty credit rating equivalent to at least "A" for over-the-counter derivatives; (2) payment netting arrangements; (3) daily marking-to-market; and (4) collateralization of net amounts owed under the contracts after meeting minimum threshold for transfers.

The CIO shall ensure that the derivatives policies and procedures are addressed in any external management services contract, as necessary. The CIO shall develop procedures for monitoring the use and exposure of derivatives within an investment manager's account. Mortgage-backed and asset-backed securities are not derivatives for the purpose of this policy.

XI. OTHER POLICIES

A. 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.

B. 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)

C. 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.

D. 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)

If the CEO, CIO, CRO, 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.

E. Leverage

The CIO may utilize leverage within staff tactical decisions up to the maximum negative allocation allowed by the asset class ranges for cash as specified in Appendix B. The CIO may also allow the use of leverage within external active investment management strategies and products consistent with the active risk budget. The private markets investment policy in Appendix C addresses the use of leverage for private market investments.

F. Board Meetings

Board meeting dates for the fiscal year shall be set by members of the Board at the first meeting of the fiscal year. At the first meeting in each fiscal year, the voting Board members shall elect a chair and vice chair.

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. 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*.

APPENDIX A

STATUTORY RESPONSIBILITIES OF THE INVESTMENT BOARD AND STAFF

- 1. The Board shall annually adopt an Investment Policy and Goal Statement. 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. *Iowa Code* §97B.8A.2(*a*)
- 3. The Board shall at least annually conduct a public meeting to review the policies and the investment performance of the Fund. *Iowa Code* §97B.8A.2(*a*)
- 4. With the approval of the Board, the Treasurer of State may conduct a program of lending securities in the IPERS portfolio. *Iowa Code* §12.8.3
- 5. The Board shall review and approve the hiring of each investment manager and investment consultant. *Iowa Code* §97B.4.3(*f*)
- 6. The Board shall select the actuary for the System, and shall adopt the mortality tables and actuarial assumptions and methods the actuary will use for the annual actuarial valuation. *Iowa Code* §§97B.4.3(c) and 97B.8A.3
- 7. The CEO will consult with the Board prior to employing a CIO. *Iowa Code* §97B.4.3(a)
- 8. The Board shall participate in the annual performance evaluation of the CIO. *Iowa Code* §97B.8A.2(c)
- 9. The CEO shall consult with the Board on the budget program for the System. *Iowa Code* §97B.4.2(c)
- 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. *Iowa Code* §97B.7.2
- 11. The Board shall consist of seven voting members and four nonvoting members. Four voting members of the Board shall constitute a quorum. *Iowa Code* §97B.8A
- 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 CEO. Iowa Code §97B.3.1

APPENDIX B ASSET ALLOCATION POLICY AND ACTIVE RISK BUDGET

I. Asset Allocation Policy¹

Asset Class	Asset Class Ranges	Policy Benchmark Weights	Policy Benchmark Index
Equities		39%	
Domestic Equities	+ / - 3%	21%	Russell 3000
International Equities	+ / - 3%	13%	MSCI ACWI ex-U.S. (Net)
Global Smart Beta Equities	+ / - 3%	5%	Custom Index ²
Fixed Income		29.5%	
Core Fixed Income	+ / - 3%	25.5%	Bloomberg U.S. Aggregate
Public Credit	+ / - 3%	3%	Custom Index ³
Cash	+ / - 3%	1%	Merrill Lynch 91-Day T-Bill
TOTAL PUBLIC MARKETS		69.5%	

Asset Class	Asset Class Targets	Policy Benchmark Weights	Policy Benchmark Index
Private Equity	17%	Actual ⁴	Portfolio ⁵
Private Credit	5.5%	Actual ⁴	Portfolio ⁵
Private Real Assets	9%	Actual ⁴	Portfolio⁵
TOTAL PRIVATE MARKETS		31.5	

¹On September 17, 2020, September 22, 2022, and September 28, 2023, the Investment Board revised the Asset Allocation Policy, as reflected in the table below. However, the Board stipulated that core fixed income assets should be reduced as needed to fund new allocations to the private markets. Therefore, beginning October 1, 2020, and revised as of October 1, 2022, and October 1, 2023, the target weight for private equity will be increased to 17 percent and core fixed income will be lowered to 22.5 percent, with target weights being adjusted quarterly in the future to reflect the progress in funding the increased allocations to private credit and private real assets.

Asset Class	Previous Target Weight	New Target Weight
Core Fixed Income	25.5%	22.5%
Private Credit	5.5%	8%
Private Real Assets	9%	9.5%

²This benchmark index is defined as 60 percent Russell 1000 Comprehensive Factor Index + 30 percent FTSE Developed ex U.S. Comprehensive Factor *Index* + 10 percent FTSE Emerging Comprehensive Factor Index. ³This benchmark index is defined as 67 percent Bloomberg U.S. High Yield 2% Issuer Capped Index + 33 percent JP Morgan EMBI Global Index.

⁴The benchmark weight for each private market asset class is the actual percentage of each asset class relative to the total fund portfolio.

⁵The benchmark index for each private market asset class is the return of the portfolio itself.

II. Active Risk Budget

	Target ⁶	Upper Limit ⁶
Total Fund	1.50%	3.00%
External Managers	1.00%	2.50%
Investment Staff	1.00%	2.50%

⁶Measured as tracking error (the standard deviation of excess return) at the Total Fund level.





Actuarial

Actuary's Certification Letter Principal Valuation Results Actuarial Balance Sheet Solvency Test Retirees and Beneficiaries — Changes in Rolls Schedule of Active Member Valuation Data Schedule of Funding Progress Actuarial Assumptions and Methods Contribution Rate Funding Policy Iowa Code Section 97D.5 Certification



November 15, 2024

This report presents the results of the June 30, 2024 actuarial valuation of the Iowa Public Employees' Retirement System (IPERS), a cost-sharing multiple employer defined benefit plan. The primary purposes of performing the annual valuation are as follows:

- to determine the Actuarial Contribution Rate (ACR) and the Required Contribution Rate (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, 2024,
- to determine the actuarial experience of the System since the last valuation,
- to assess and disclose the key risks associated with funding the System, and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

The 2024 Iowa Legislature passed House File 2661 (HF 2661) which provided the following benefit enhancements for members of the Sheriffs and Deputies group:

- increasing the benefit multiplier from 1.5% to 2.5% for years of service between 22 and 30, thereby increasing in the maximum benefit from 72% to 80% of Average Salary.
- granting an automatic 1.5% compound cost-of-living adjustment (COLA) for members who retire on or after July 1, 2024 who are at least age 50 when they terminate employment and have at least 22 years of special service. This COLA is provided in lieu of any Favorable Experience Dividend that future retirees would have otherwise been eligible for.

As a result of HF 2661, the unfunded actuarial liability for the Sheriffs and Deputies group increased by \$109.0 million and the Required Contribution Rate for FY 2026 increased by 7.16% of pay (split evenly between members and employers).

The 2023 lowa Legislature passed Senate File 513 (SF 513), which resulted in 28 members of the Department of Transportation who had fewer than 10 years of service being transferred from IPERS to the lowa Peace Officers Retirement System (POR). All years of service accrued under IPERS has been transferred to POR for purposes of vesting and benefit calculations. In addition, IPERS transferred an asset amount equal to the accumulated member and employer contributions for each transferred member. The amount of transferred assets and liabilities to POR were both small, so the impact on the June 30, 2024 IPERS valuation was minimal.

The actuarial valuation results provide a "snapshot" view of the System's financial condition on June 30, 2024. The valuation results reflect net favorable experience for the past plan year as demonstrated by an unfunded actuarial liability (UAL) that was less than expected. The total UAL on June 30, 2024, for all three membership groups covered by IPERS, is \$4.375 billion while the expected UAL was \$4.597 billion. The favorable experience was the net result of an experience gain of \$245 million on the actuarial value of assets and a small experience loss of \$23 million on System liabilities. In addition to the favorable



experience, the System also received contributions above the Actuarial Contribution Rate, which further lowered the June 30, 2024 UAL by \$174 million.

HF 2661 the Required Contribution Rate for the Sheriffs and Deputies group increased by 7.16% since last the Protection Occupation group. The Required Contribution Rate is above the Actuarial Contribution Based on the Contribution Rate Funding Policy and the valuation results, the Required Contribution Rate for Regular members remains unchanged at 15.73% of pay. As mentioned earlier, due to the passage of year, from 17.02% to 24.18%. The Required Contribution Rate also remained unchanged from last year for Rate for Regular members and Protection Occupation, resulting in a contribution margin, as shown in the following table.

Contributi	Contribution Rate for FY 2026	9	
	Regular	Sheriffs and	Protection
	Membership	Deputies	Occupation
1. Normal Cost Rate	10.63%	20.06%	15.43%
2. Amortization of UAL	2.91%	4.12%	0.00%
3. Actuarial Contribution Rate	13.54%	24.18%	15.43%
4. Required Contribution Rate	15.73%	24.18%	15.52%
5. Shortfall/(Margin) (3) – (4)	(2.19%)	0.00%	(%60.0)
6. Employee Contribution Rate	6.29%	12.09%	6.21%
7. Employer Contribution Rate (4) - (6)	9.44%	12.09%	9.31%
8. Unfunded Actuarial Liability (\$M)	\$4,370	\$88	(\$82)
9. Funded Ratio	%90.06	91.81%	103.65%

Actuarial Value of Net Assets

technique which dampens the volatility in the fair value and the resulting value is called the actuarial value of assets. Specifically, the assets are valued at their expected value at the valuation date (based on the Based on this methodology, there was an actuarial gain on assets of \$245 million. Between June For purposes of this section, fair value equals market value. For actuarial purposes, the assets are valued using a 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 fair 30, 2023 and June 30, 2024, the actuarial value of assets increased by \$1.9 billion. This represented an approximate rate of return of 7.61%, which was higher than the actuarial assumed rate of return of 7.00%. For financial statement purposes, the System's assets are reported at current fair values. value.

Liabilities

normal costs for active members. 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 UAL will be reduced if the contributions to the System exceed the normal cost for the year plus interest on the prior year's UAL, The actuarial liability is that portion of the present value of future benefits that will not be paid by future assuming that all actuarial assumptions are met.



The unfunded actuarial liability by group is shown as of June 30, 2024 in the following table:

	Regular	Sheriffs &	Protection	
(\$ Millions)	Membership	Deputies	Occupation	l otal
Actuarial Liability	\$43,969	\$1,072	\$2,262	\$47,303
Actuarial Value of Assets	39,599	984	2,344	42,927
Unfunded Actuarial Liability*	\$4,370	\$88	(\$82)	\$4,375
Funded Ratio	90.06%	91.81%	103.65%	90.75%
* May not odd duo to volu				

* May not add due to rounding.

30, 2024 was \$332 million, largely due to favorable investment experience. The components of the net change in the UAL are shown in the following table (in millions): Changes in the UAL occur for various reasons. The net decrease in the UAL from June 30, 2023 to June

Unfunded Actuarial Liability, June 30, 2023	4707
Expected increase from amortization method	5
Expected decrease from contributions above actuarial rate	(174)
Investment experience	(245)
Liability experience*	23
Benefit changes	109
Other	(20)
Unfunded Actuarial Liability, June 30, 2024	4375
FED transfer for favorable experience	0
Unfunded Actuarial Liability, June 30, 2024	4375
* Liability experience is 0.05% of the expected actuarial liability.	

gains (losses), which result from actual experience that is more (less) favorable than anticipated based on changes due to actuarial assumptions and methods or benefit provision changes. Overall, the System experienced a net actuarial gain of \$222 million which may be explained by considering the separate experience of assets and liabilities. As discussed earlier, there was a \$245 million actuarial gain on the actuarial value of assets and a net actuarial loss of \$23 million from demographic experience that was less Rates for FY 2024, which further decreased the UAL as of June 30, 2024 by \$174 million. Finally, when As can be observed above, various factors impacted the amount of the UAL as of June 30, 2024. Actuarial They are measured as the difference between the expected unfunded actuarial liability and the actual unfunded actuarial liability, after taking into account any favorable than anticipated by the actuarial assumptions. In addition to the actuarial gain from favorable experience, the Required Contribution Rates for the System were higher than the Actuarial Contribution covered payroll is higher than expected, more contribution dollars are received, which decreases the UAL. This is the main driver of the \$50 million decrease in UAL due to other factors. the actuarial assumptions, are reflected in the UAL.

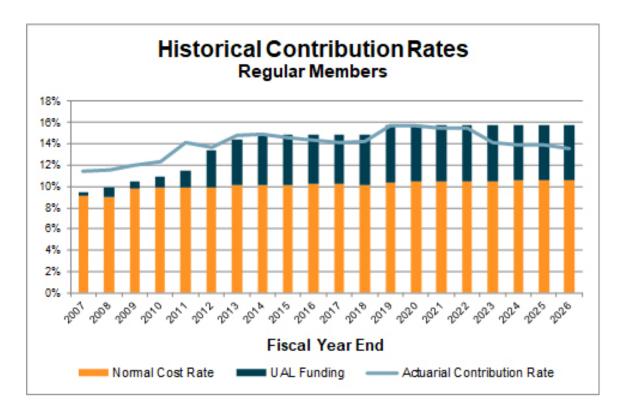


Contribution Rate

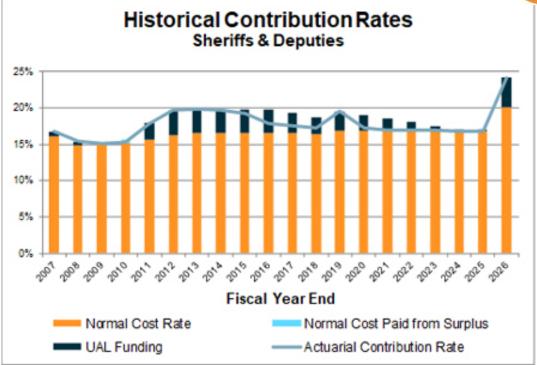
As with most public sector retirement systems, one important funding policy objective is to fund the plan in a manner that keeps contribution rates approximately level from generation to generation. A funding method that is specifically designed to maintain annual costs that are level as a percent of covered payroll is the Entry Age Normal (EAN) cost method. It is for this reason that the EAN cost method was selected by the Investment Board to be used in the actuarial valuation. Under the EAN cost method, the actuarial contribution rate consists of two components:

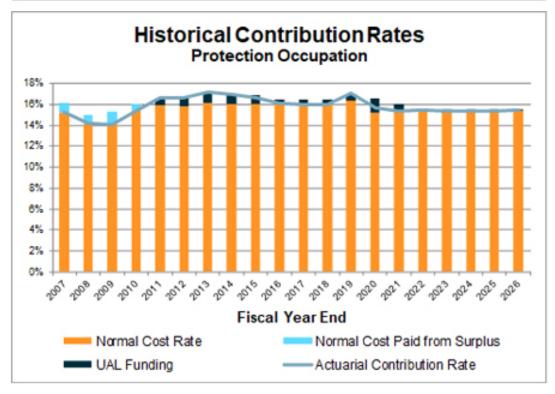
- a "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to the service of active members during the year following the valuation date, and
- an "unfunded actuarial liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

Beginning with the 2011 valuation (which applied to FY 2013), the Investment Board was given the authority to set the Required Contribution Rate for Regular members subject to certain statutory limitations. The Sheriffs and Deputies group and the Protection Occupation group have historically contributed the full Actuarial Contribution Rate, which was subject to change each year. A historical summary of the actual contribution rate, split between the normal cost rate and the remaining amount available to fund the UAL, and the Actuarial Contribution Rate is shown in the following graphs:











There were several factors that impacted the contribution rates in the 2024 valuation. The contribution rates are summarized in the following table:

Contribution Rate for FY 2026	Regular Membership	Sheriffs & Deputies	Protection Occupation
1. Actuarial Contribution Rate	13.54%	24.18%	15.43%
2. Required Contribution Rate	15.73%	24.18%	15.52%
3. Employee Contribution Rate	6.29%	12.09%	6.21%
4. Employer Contribution Rate $(2) - (3)$	9.44%	12.09%	9.31%
5. Shortfall/(Margin) (1) – (2)	(2.19%)	0.00%	(%60.0)

for Sheriffs and Deputies has increased by 7.16% since last year to equal the FY 2026 Actuarial below the FY 2025 Required Contribution Rate. While Protection Occupation also has a funded ratio greater than 95%, the difference between the Required Contribution Rate and the Actuarial Contribution Rate is not greater than 0.50%. Therefore, the FY 2026 Required Contribution Rate for the Protection Based on the results of this valuation and the Contribution Rate Funding Policy adopted by the Investment Board, the Required Contribution Rate for the fiscal year ending June 30, 2026 for the Regular members is 15.73%, which is greater than the Actuarial Contribution Rate by 2.19% of pay. The Actuarial Contribution Rate has increased by 7.38% for the Sheriffs and Deputies group - largely due to the passage of HF 2661 - and 0.09% for the Protection Occupation group. As a result, the FY 2026 Required Contribution Rate Contribution Rate. For Protection Occupation, the FY 2026 Actuarial Contribution Rate is 0.09% Occupation group will remain unchanged. The Actuarial Contribution Rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2024, and applies only for the fiscal year beginning July 1, 2025. 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

This System's total experience for FY 2024 was a net experience gain of \$222 million, resulting in a smaller favorable investment experience, combined with unrecognized investment gains in last year's valuation, Since that return is above the assumed investment return of 7.00%, there was an experience gain on the actuarial value of assets of \$245 million. This was partially offset by an experience loss on the System's liabilities of \$23 million. The unfunded actuarial liability than was expected. In addition, contributions above the Actuarial Contribution The investment return on the fair value of assets for FY 2024 was 9.07%, as reported by IPERS. led to an investment return on the actuarial value of assets of 7.61%. Rate also served to decrease the June 30, 2024 UAL by \$174 million.

Contribution Rate remained the same for Regular members and Protection Occupation. However, due to the passage of HF 2661 and the benefit enhancements thereunder, the Required Contribution Rate for Based on the Contribution Rate Funding Policy adopted by the Investment Board, the Required Sheriffs and Deputies increased by 7.16% from the prior valuation. The Required Contribution Rate for



FY 2026 remains higher than the Actuarial Contribution Rate for Regular members and Protection Occupation members.

The Actuarial Contribution Rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2024, and applies only for the fiscal year beginning July 1, 2025. 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 for Regular members is limited to 1.0% and the Contribution Rate Funding Policy also limits the decrease in the rate. 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 IPERS 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 the future and contributions are made according to the current Contribution Rate Funding Policy.

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 determined 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 certify that all costs, liabilities, 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); 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.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. Actuarial computations presented in the 2024 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, 2024 actuarial funding valuation report.

We have also prepared actuarial computations as of June 30, 2024 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, 2024 actuarial valuation. The actuarial assumptions used in the funding valuation were also used for the GASB 67 reporting. The assumptions include an assumed long-term rate of return of 7.00%, net of investment expenses, which is used to determine the actuarial liability in the funding valuation as well as the discount rate used to determine the Total Pension Liability for GASB 67 reporting. In addition, as noted earlier, the Entry Age Normal actuarial cost method, which is required to be used under GASB 67, is also used in the funding valuation. These computations reflect the benefit provisions described on pages 35-39 of this Annual Comprehensive Financial Report.

An experience study is performed for IPERS every four years, as required by statute. In June 2022, the results of the experience analysis of the System's actuarial assumptions were presented to the Investment Board. Based on this information, the Investment Board adopted certain changes to the set of actuarial assumptions which were first reflected in the June 30, 2022 actuarial valuation. The actuarial assumptions and methods used for funding purposes 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 States 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, 2024 and June 30, 2023 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.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and was prepared in accordance with standards of practice promulgated by the Actuarial Standards Board. The actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonable based on the actual experience of the System. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Respectfully Submitted,

CAVANAUGH MACDONALD CONSULTING, LLC

atrice Beckham

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

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Bat a. R. #

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



PRINCIPAL VALUATION RESULTS

	June 30, 2024	June 30, 2023	% Chg
SYSTEM MEMBERSHIP			
1. Active Membership			
 Number of Members (excluding Retired/Reemployed) 			
i) Regular	173,788	170,475	1.9
ii) Sheriffs & Deputies	1,738	1,732	0.3
iii) Protection Occupation	<u>7,822</u>	<u>7,668</u>	2.0
iv) Total	183,348	179,875	1.9
- Projected Payroll for Upcoming Fiscal Year	\$10,338M	\$9,891M	4.5
- Average Projected Salary	\$56,384	\$54,987	2.5
2. Inactive Membership			
- Number Not in Pay Status	93,266	89,034	4.8
- Number of Retirees/Beneficiaries	135,770	133,575	1.6
- Average Annual Benefit	\$19,528	\$19,115	2.2
ASSETS AND LIABILITIES			
1. Net Assets (excluding FED reserve)			
- Market Value	\$43,661M	\$41,206M	6.0
- Actuarial Value	42,927M	41,013M	4.7
	42,02710	41,0100	7.7
2. Present Value of Future Benefits	• • • • • • • • •		
- Retired Members	\$25,754M	\$24,939M	3.3
- Inactive Members	1,522M	1,440M	5.7
- Active Members	<u>30,287M</u>	<u>29,070M</u>	4.2
- Total Present Value of Future Benefits*	\$57,563M	\$55,449M	3.8
3. Actuarial Liability*	\$47,303M	\$45,720M	3.5
4. Unfunded Actuarial Liability	\$4,375M	\$4,707M	(7.1)
5. Funded Ratio			
a. Actuarial Value Assets/Actuarial Liability	90.75%	89.70%	1.2
b. Market Value Assets/Actuarial Liability	92.30%	90.13%	2.4
SYSTEM CONTRIBUTIONS			
Required Contribution Rate, Regular Members**	15.73%	15.73%	0.0
Employer Contribution Rate	9.44%	9.44%	0.0
Employee Contribution Rate	6.29%	6.29%	0.0
Total Actuarial Contribution Rate	13.54%	13.89%	(2.5)
Contribution Rate Shortfall/(Margin)	(2.19%)	(1.84%)	19.0

Note: Totals may not add due to rounding

M = (\$)Millions

* Difference between measures is the Present Value of Future Normal Costs

** Contribution rates for Sheriffs and Deputies are 12.09% for employers, 12.09% for employees Contribution rates for Protection Occupation are 9.31% for employers, 6.21% for employees

Note: For valuation purposes, the data provided by IPERS was reclassified by CavMac 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, 2024

	Regular Membership	Sheriffs & Deputies	Protection Occupation	Total
ASSETS		·		
Actuarial value of assets	\$39,598,880,967	\$984,272,434	\$2,344,103,661	\$42,927,257,062
Present value of future normal costs	9,185,480,843	342,999,494	731,579,341	10,260,059,678
Present value of future contributions to amortize unfunded actuarial liability	4,370,046,508	87,809,223	(82,493,136)	4,375,362,595
Total Net Assets	\$53,154,408,318	\$1,415,081,151	\$2,993,189,866	\$57,562,679,335
LIABILITIES				
Present Value of Future Benefits:				
Retired Members and Beneficiaries	\$24,078,875,502	\$481,919,593	\$1,193,576,038	\$25,754,371,133
Active Members	27,676,567,417	912,887,983	1,697,190,111	30,286,645,511
Inactive Members	1,398,965,399	20,273,575	102,423,717	1,521,662,691
Total Liabilities	\$53,154,408,318	\$1,415,081,151	\$2,993,189,866	\$57,562,679,335



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	Retirees and Beneficiaries	Active Members Employer	Actuarial Value of Assets		ns of Lial red by A	
	(1)	(2)	(3)		(1)	(2)	(3)
2024	\$5,907,873,137	\$25,754,371,133	\$15,640,375,387	\$42,927,257,062	100%	100%	72%
2023	5,582,696,391	24,938,672,578	15,198,610,470	41,012,524,216	100%	100%	69%
2022	5,364,065,009	24,154,298,284	14,451,351,313	39,354,232,379	100%	100%	68%
2021	5,247,068,871	23,243,536,718	14,054,043,161	37,584,987,296	100%	100%	65%
2020	5,058,909,592	22,406,283,053	13,607,234,895	34,485,656,745	100%	100%	52%
2019	4,883,842,179	21,505,868,873	13,411,627,745	33,324,327,606	100%	100%	52%
2018	4,667,977,892	20,659,565,531	13,315,290,230	31,827,755,864	100%	100%	49%
2017	4,508,869,822	19,334,772,904	13,596,739,303	30,472,423,914	100%	100%	49%
2016	4,344,382,843	17,657,404,813	12,617,961,491	29,033,696,587	100%	100%	56%
2015	4,150,432,107	16,843,177,973	12,376,708,651	27,915,379,103	100%	100%	56%

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

RETIREES AND BENEFICIARIES – CHANGES IN ROLLS

Schedule of Retirees Added to and Removed From Rolls

	Added to Rolls		Removed From Rolls		Rolls at Year-End		Percentage Change in	Average
Fiscal		Annual		Annual		Annual	Annual	Annual
Year	Number*	Allowances	Number	Allowances	Number	Allowances	Allowances	Allowances
2024	5,793	\$142,444,266	3,878	\$27,209,639	127,730	\$2,668,386,026	4.51	\$20,891
2023	5,709	138,610,414	3,886	27,105,989	125,815	2,553,151,399	4.57	20,293
2022	6,206	145,727,288	3,885	25,365,942	123,992	2,430,620,263	5.21	19,603
2021	6,084	135,015,654	4,088	26,673,788	121,671	2,310,258,917	4.92	18,988
2020	6,081	131,126,907	3,513	20,684,399	119,675	2,201,917,051	5.28	18,399
2019	5,891	133,719,897	3,363	18,728,888	117,107	2,091,474,543	5.82	17,860
2018	6,252	125,728,823	3,327	18,301,104	114,579	1,976,483,534	5.75	17,250
2017	6,307	127,297,430	3,325	17,353,866	111,654	1,869,055,815	6.25	16,740
2016	5,958	120,723,975	3,123	15,826,861	108,672	1,759,112,251	6.34	16,187
2015	5,926	8,930,554	3,104	18,262,385	105,837	1,654,215,137	(0.56)	15,630

Schedule of Beneficiaries Added to and Removed From Rolls

	Added to Rolls		d to Rolls Removed From Rolls Rolls at Year-		Year-End	Percentage Change in	Average	
Fiscal Year	Number*	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Annual Allowances	Annual Allowances
2024	779	\$11,513,497	440	\$2,380,448	8,406	\$125,135,227	7.87	\$14,886
2023	760	11,284,747	425	1,962,354	8,067	116,002,178	8.74	14,380
2022	774	11,276,390	397	1,756,086	7,732	106,679,785	9.80	13,797
2021	832	10,472,129	402	2,055,686	7,355	97,159,481	9.48	13,210
2020	626	8,817,344	374	1,646,795	6,925	88,743,038	8.79	12,815
2019	643	8,671,702	378	1,738,104	6,673	81,572,489	9.29	12,224
2018	626	8,257,415	323	1,530,533	6,408	74,638,891	9.91	11,648
2017	591	7,319,937	305	1,208,986	6,105	67,912,009	9.89	11,124
2016	543	6,736,612	255	1,277,504	5,819	61,801,058	9.69	10,621
2015	580	2,130,837	267	1,321,475	5,531	56,341,950	1.46	10,187

*The number of retirees and beneficiaries added to rolls in these tables does not equal the number of new retirees reported elsewhere in the ACFR. 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 $\underline{84} - \underline{85}$ are provided by IPERS.

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Fiscal Years Ended June 30	Participating Employers*	Active Members	Annual Covered Payroll	Annual Average Pay	Percentage Change in Average Pay
2024	1,945	183,389	\$10,002,034,975	\$54,540	2.33
2023	1,947	179,903	9,588,339,000	53,297	4.13
2022	1,943	176,186	9,018,019,950	51,185	2.50
2021	1,943	173,186	8,648,783,536	49,939	1.39
2020	1,944	170,380	8,391,856,350	49,254	4.12
2019	1,948	172,304	8,151,043,468	47,306	0.96
2018	1,956	170,378	7,983,219,527	46,856	1.25
2017	1,956	169,910	7,863,160,443	46,278	3.11
2016	1,960	168,372	7,556,515,720	44,880	2.53
2015	1,968	167,367	7,326,348,141	43,774	2.30

*GASB 67 requires employers within the same financial reporting entity to be counted as a single employer, even if the employers are legally separate.

SCHEDULE OF FUNDING PROGRESS

Fiscal Years Ended June 30	Actuarial Value of Assets	Actuarial Liability	Percentage Funded	Unfunded Actuarial Liability (UAL)	Annual Covered Payroll*	UAL as a Percentage of Covered Payroll
2024	\$42,927,257,062	\$47,302,619,657	90.75	\$4,375,362,595	\$10,002,034,975	43.74
2023	41,012,524,216	45,719,979,439	89.70	4,707,455,223	9,588,339,000	49.10
2022	39,354,232,379	43,969,714,606	89.50	4,615,482,227	9,018,019,950	51.18
2021	37,584,987,296	42,544,648,750	88.34	4,959,661,454	8,648,783,536	57.35
2020	34,485,656,745	41,072,427,540	83.96	6,586,770,795	8,391,856,350	78.49
2019	33,324,327,606	39,801,338,797	83.73	6,477,011,191	8,151,043,468	79.46
2018	31,827,755,864	38,642,833,653	82.36	6,815,077,789	7,983,219,527	85.37
2017	30,472,423,914	37,440,382,029	81.39	6,967,958,115	7,863,160,443	88.62
2016	29,033,696,587	34,619,749,147	83.86	5,586,052,560	7,556,515,720	73.92
2015	27,915,379,103	33,370,318,731	83.65	5,454,939,628	7,326,348,141	74.46

*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 10-year Schedule of Employers' Contributions in the Required Supplementary Information on page <u>44</u> for information on actuarial contributions and required contributions paid.



ACTUARIAL ASSUMPTIONS AND METHODS

ECONOMIC ASSUMPTIONS:

Rate of Inflation (effective June 30, 2017)

2.60% per annum

Rate of Crediting Interest on Contribution Balances (effective June 30, 2017)

3.50% per annum, compounded annually

Rate of Investment Return (effective June 30, 2017)

7.00% per annum, compounded annually, net of expenses.

Wage Growth Assumption (effective June 30, 2017)

3.25% per annum based on 2.60% inflation assumption and 0.65% real wage inflation.

Payroll Increase Assumption (effective June 30, 2017)

3.25% per year

Cost of Living Adjustments Assumption (effective June 30, 2017)

2.60% for members who retired before July 1, 1990.



DEMOGRAPHIC ASSUMPTIONS:

Rates of Mortality

Pre-Retirement (effective June 30, 2022)

State

Male	PubG-2010 Employee Table, Generational using MP-2021, 2 Year
	age setback
Female	PubG-2010 Employee Table, Generational using MP-2021, 2 Year
	age setback
School	
Male	PubG-2010 Employee Table, Generational using MP-2021, 4 Year
	age setback
Female	PubG-2010 Employee Table, Generational using MP-2021, 8 Year
	age setback
Other	
Male	PubG-2010 Employee Table, Generational using MP-2021, 4 Year
	age setback
Female	PubG-2010 Employee Table, Generational using MP-2021, 8 Year
	age setback
Sheriffs/Deputies and	
Male	PubG-2010 Employee Table, Generational using MP-2021, 4 Year
	age setback
Female	PubG-2010 Employee Table, Generational using MP-2021, 2 Year

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

age setback



Post-Retirement (effective June 30, 2022)

State Male Female	 PubG-2010 Healthy Annuitant, Generational using MP-2021 2 Year age set forward, 8% increase below age 75, 5% decrease above age 75 2 Year age set forward, 20% increase below age 75, 10% decrease above age 75
School Male Female	PubG-2010 Healthy Annuitant, Generational using MP-2021 No age adjustment, 20% decrease in rates below age 75 1 Year age setback, 10% increase below age 75, 6% increase above age 75
Other Male Female	PubG-2010 Healthy Annuitant, Generational using MP-2021 2 Year age set forward, 3% decrease at all ages No age adjustment, 4% decrease at all ages
Sheriffs/Deputies and Protection Occupation	PubS-2010 Healthy Annuitant, Generational using MP-2021
Male Female	3 Year age set forward 2 Year age set forward, 4% decrease at all ages
Beneficiaries:	Same as members
Disabled Members Regular Male Female	PubG-2010 Disabled Mortality, Generational using MP-2021 7 Year age set forward 5 Year age set forward
Sheriffs/Deputies and Protection Occupation Male Female	PubG-2010 Disabled Mortality, Generational using MP-2021 3 Year age set forward 3 Year age set forward



Retirement Rates (effective June 30, 2022)

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

Assumed Retirement Rates – Early							
<u>Age</u>	<u>State</u>	<u>School</u>	<u>Other</u>				
55	4.0%	5.0%	4.0%				
56	4.0%	5.0%	4.0%				
57	4.0%	5.0%	4.0%				
58	4.0%	5.0%	4.0%				
59	4.0%	7.0%	4.0%				
60	5.0%	10.0%	5.0%				
61	15.0%	10.0%	8.0%				
62	15.0%	13.0%	11.0%				
63	15.0%	13.0%	11.0%				
64	15.0%	15.0%	11.0%				

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

	Assumed Retirement Rates – Select Unreduced					
<u>Age</u>	<u>State</u>	<u>School</u>	<u>Other</u>			
55	25.0%	26.0%	19.0%			
56	20.0%	26.0%	19.0%			
57	20.0%	26.0%	19.0%			
58	20.0%	26.0%	19.0%			
59	20.0%	26.0%	19.0%			
60	20.0%	26.0%	19.0%			
61	20.0%	33.0%	19.0%			
62	30.0%	35.0%	27.0%			
63	35.0%	30.0%	20.0%			
64	30.0%	30.0%	25.0%			
65	30.0%	30.0%	40.0%			



Assumed Retirement Rates – Ultimate Unreduced					
<u>Age</u>	State	<u>School</u>	<u>Other</u>		
56	15.0%	20.0%	12.0%		
57	15.0%	20.0%	12.0%		
58	15.0%	20.0%	12.0%		
59	15.0%	21.0%	12.0%		
60	15.0%	23.0%	15.0%		
61	20.0%	28.0%	20.0%		
62	35.0%	35.0%	27.0%		
63	30.0%	30.0%	20.0%		
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

<u>Age</u>	Sheriffs and Deputies	Protection Occupation
50	17.0%	
51	15.0%	
52	15.0%	
53	15.0%	
54	15.0%	
55	15.0%	25.0%
56	15.0%	10.0%
57	15.0%	10.0%
58	15.0%	10.0%
59	15.0%	10.0%
60	15.0%	10.0%
61	15.0%	15.0%
62	30.0%	30.0%
63	30.0%	25.0%
64	30.0%	25.0%
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, 2022)

	Assumed Rates						
		Males			Females		
<u>Age</u>	<u>State</u>	<u>School</u>	<u>Other</u>	<u>State</u>	<u>School</u>	<u>Other</u>	
27	0.017%	0.018%	0.016%	0.016%	0.018%	0.016%	
32	0.017%	0.018%	0.016%	0.016%	0.018%	0.016%	
37	0.026%	0.031%	0.024%	0.024%	0.027%	0.024%	
42	0.043%	0.050%	0.040%	0.032%	0.036%	0.032%	
47	0.085%	0.088%	0.088%	0.056%	0.063%	0.058%	
52	0.153%	0.128%	0.208%	0.144%	0.117%	0.126%	
57	0.221%	0.207%	0.400%	0.248%	0.171%	0.224%	
62	0.289%	0.286%	0.576%	0.400%	0.234%	0.320%	

Assumed Rates Sheriffs/Deputies Protection Occupation*

<u>Age</u>	<u>Rate</u>
27	0.130%
32	0.130%
37	0.130%
42	0.150%
47	0.200%
52	0.240%
57	0.320%
62	0.430%

* 66.67% of disabilities are assumed to be in-service disabilities.

Rates of Termination of Employment (effective June 30, 2022)

Regular Membership

_	Male				Female	
Years of Service	<u>State</u>	<u>School</u>	<u>Other</u>	<u>State</u>	<u>School</u>	<u>Other</u>
1	14.00%	14.20%	17.50%	14.20%	14.20%	19.99%
5	5.25%	6.60%	7.00%	6.60%	6.60%	8.35%
10	2.40%	2.70%	3.75%	3.25%	2.70%	4.93%
15	1.60%	1.70%	2.55%	2.00%	1.70%	3.36%
20	1.10%	1.20%	1.90%	1.30%	1.20%	2.66%
25	1.00%	1.00%	1.40%	1.00%	1.00%	1.98%
30	1.00%	1.00%	1.00%	1.00%	1.00%	1.30%



Sheriffs/Deputies and Protection Occupation

<u>Years of</u> <u>Service</u>	Sheriffs/Deputies	Protection Occupation
1	6.00%	11.50%
5	2.50%	6.50%
10	1.15%	3.75%
15	1.00%	2.35%
20	1.00%	1.60%
25	1.00%	1.25%
30	1.00%	1.25%

Probability of Electing a Deferred Vested Benefit (effective June 30, 2018)

_	Regular Membership						
_	Male				Female		
Years of Service	<u>State</u>	<u>School</u>	<u>Other</u>	<u>State</u>	<u>School</u>	<u>Other</u>	
5	62.0%	74.0%	62.0%	56.0%	80.0%	70.0%	
10	71.0%	79.0%	71.0%	62.0%	80.0%	73.0%	
15	76.0%	84.0%	76.0%	72.0%	85.0%	80.0%	
20	81.0%	89.0%	81.0%	82.0%	90.0%	85.0%	
25	86.0%	94.0%	86.0%	92.0%	95.0%	90.0%	
30	90.0%	95.0%	90.0%	100.0%	100.0%	90.0%	

Sheriffs/Deputies and Protection Occupation

<u>Years of</u> <u>Service</u>	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, 2018)

	Annual Increase			
				Sheriffs/Deputies
Years of				and Protection
<u>Service</u>	State	<u>School</u>	<u>Other</u>	Occupation
1	14.25%	16.25%	14.25%	16.25%
5	7.75%	5.75%	5.35%	5.75%
10	5.50%	4.55%	4.55%	4.55%
15	4.45%	3.75%	4.05%	4.05%
20	3.85%	3.40%	3.75%	3.75%
25	3.60%	3.25%	3.65%	3.75%
30	3.35%	3.25%	3.65%	3.25%
35+	3.25%	3.25%	3.25%	3.25%

* Includes 3.25% wage growth

Marriage Assumption

100% of members are assumed to be married, with males 3 years older than females.



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:
- 4. The UAL for each membership group shall be amortized over a 30-year closed period.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. The dollar amount of the UAL payment for purposes of computing the UAL component of the actuarial and required contribution rate 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.
- 9. If the valuation shows that the group has surplus, the prior amortization bases will be eliminated and one base equal to the amount of surplus shall be established. The amortization period of a surplus shall be a 30-year open period for all groups.



Please note that the use of closed amortization periods, coupled with employers contributing the full actuarial required contribution each year, will result in the System being fully funded at the end of the amortization period, if all actuarial assumptions are met. Based on the current valuation, the full funded date is the 2046 valuation. In our opinion, the amortization policy meets the requirements of Actuarial Standard of Practice Number 4.

Due to the remaining amortization period of the legacy UAAL, the expected contributions in the next year are greater than the normal cost plus interest on the UAAL. In our professional judgement, the funding policy adopted by the Investment Board produces a reasonable actuarial required contribution as defined in Actuarial Standard of Practice Number 4. Contributions are developed with the intent of being level as a percentage of covered payroll, assuming the number of active members remains stable. Furthermore, the funding policy is expected to accumulate sufficient assets to make all future benefit payments as they become due, if all assumptions are met.

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 <u>ongoing</u> 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 percent 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 2013 are applicable to the rates for the fiscal year beginning July 1, 2014).

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 percent 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 Members.
 - iii. Increased to be equal to ACR for Regular Members, or one percentage point greater than the prior year's Required Contribution Rate, whichever is smaller.

Favorable Experience Dividend ("FED") and Supplemental Account for Active Members ("SAAM") transfers:

For the purposes and only for the purposes of calculating potential transfers to the favorable experience dividend reserve account and to each member's supplemental account the term "fully funded" as specified in the relevant Iowa Code and Administrative Rules¹ shall mean:

The funding percentage, which shall not be less than 100 percent,² determined by the System's actuary at which calculated transfers to the favorable experience dividend reserve account and to the member's supplemental accounts will not result in a material probability that the System will fall below 100 percent funded.³

¹ §97B.49F(2)(c)(5); §97B.49H (3); IAC 495—15.2(1).

² §97B.1A(11A).

³ As contemplated in §97B.4(4)(d) and §97B.65(2) the terms "fully funded" and "fully fund" shall reference a 100 percent funding ratio.



Policy Guidelines:

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

- 1. Stability in contribution rates (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 Benefits Advisory Committee 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.



IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM CERTIFICATION

This Addendum is being prepared solely for the purpose of providing the information required under Chapter 97 D.5 of the Iowa code. Calculations are based on the following prescribed methods:

Actuarial cost method: Entry Age Normal Amortization method: Level percent of payroll Amortization period: 30 years, open period

All other assumptions, methodologies, and System provisions used are consistent with those used in the June 30, 2024 valuation for the Iowa Public Employees' Retirement System.

The results shown in this Addendum may not be consistent with those in the June 30, 2024 valuation. The June 30, 2024 valuation results were determined in accordance with generally accepted actuarial principles and practices that are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying opinion and supporting recommendations of the American Academy of Actuaries. The results shown in this Addendum are not necessarily based on the methodologies adopted by the System.

We are available to answer any questions on the material contained in this report, or to provide explanations or further details as may be appropriate.

The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA

November 15, 2024 Date

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Brent A. Banister, PhD, FSA, EA, FCA, MAAA

Bryan K. Hoge, FSA, EA, FCA, MAAA

November 15, 2024 Date

November 15, 2024 Date



IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED METHODOLOGY PER IOWA CODE §97D.5

This addendum report has been prepared to present the results of a valuation of the Iowa Public Employees' Retirement System as of June 30, 2024, based on the prescribed methodology under Chapter D.5.

The unfunded actuarial accrued liability has been amortized as a level percent of payroll over 30 years. The payroll growth assumption used was 3.25%.

A summary of results from the current and the prior valuation follows.

	Regular Membership Actuarial Valuation as of		
	<u>June 30, 2024</u>	<u>June 30, 2023</u>	
Summary of Costs			
Normal cost	10.63%	10.62%	
UAL amortization	2.26%	2.63%	
Total	12.89%	13.25%	
Less Employee Contribution Rate	<u>(6.29%)</u>	<u>(6.29%)</u>	
Employer Required Contribution Rate	6.60%	6.96%	
Funded Status			
Actuarial liability	\$43,968,927,475	\$42,651,088,157	
Actuarial value of assets	39,598,880,967	37,856,178,601	
Unfunded actuarial liability	\$4,370,046,508	\$4,794,909,556	
Funded Ratio	90.1%	88.8%	
Asset Values			
Market value of assets (MVA)	\$40,276,123,118	\$38,036,856,757	
Actuarial Value of Assets (AVA)	39,598,880,967	37,856,178,601	
MVA/AVA	102%	100%	



Sheriffs and Deputies Actuarial Valuation as of

	<u>June 30, 2024</u>	<u>June 30, 2023</u>
Summary of Costs		
Normal cost	20.06%	16.80%
UAL amortization	3.20%	<u>(0.89%)</u>
Total	23.26%	15.91%
Less Employee Contribution Rate	<u>(12.09%)</u>	<u>(8.51%)</u>
Employer Required Contribution Rate	11.17%	7.40%
Funded Status		
Actuarial liability	\$1,072,081,657	\$910,174,648
Actuarial value of assets	984,272,434	933,813,522
Unfunded actuarial liability	\$87,809,223	(\$23,638,874)
Funded Ratio	91.8%	102.6%
Asset Values		
Market value of assets (MVA)	\$995,921,332	\$933,865,445
Actuarial Value of Assets (AVA)	984,272,434	933,813,522
MVA/AVA	101%	100%



Protection Occupation Group* Actuarial Valuation as of

	<u>June 30, 2024</u>	<u>June 30, 2023</u>
Summary of Costs		
Normal cost	15.43%	15.34%
UAL amortization	<u>(0.92%)</u>	<u>(0.76%)</u>
Total	14.51%	14.58%
Less Employee Contribution Rate	<u>(6.21%)</u>	<u>(6.21%)</u>
Employer Required Contribution Rate	8.30%	8.37%
Funded Status		
Actuarial liability	\$2,261,610,525	\$2,158,716,634
Actuarial value of assets	2,344,103,661	2,222,532,093
Unfunded actuarial liability	(\$82,493,136)	(\$63,815,459)
Funded Ratio	103.6%	103.0%
Asset Values		
Market value of assets (MVA)	\$2,389,078,850	\$2,235,592,057
Actuarial Value of Assets (AVA)	2,344,103,661	2,222,532,093
MVA/AVA	102%	101%

* Includes all public safety members other than Sheriffs and Deputies.



STATISTICAL



Statistical

Statistical Overview Membership and Trust Fund Summary Active Membership Summary Retiree and Benefit Payment Statistics Summary of Principal Employers Investment Statistics

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 106 - 107 is intended to help explain how the System's financial position has changed over time.

The demographic and operating information presented on pages <u>108</u> – <u>117</u> provides data on IPERS' membership, including:

- Members by group and type.
- Active membership data.
- Retiree information such as years of service, employer type and benefit amount.
- Benefits paid by option, employer type, benefit type and location.
- Principal participating employers.

The investment information presented on page <u>118</u> shows the growth of net investment portfolio assets and investment returns since 1995.

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.

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. Please note the membership totals in this section will not equal totals in the Actuarial section due to variables in the timing of the removal of deceased members and whether payments are received in the month of June.

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.

Membership and Trust Fund Summary

Changes in Fiduciary Net Position

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

	2024	2023	2022	2021	2020
Additions					
Employee contributions	\$633,294	\$605,141	\$573,027	\$549,091	\$531,935
Employer contributions	942,935	901,017	853,202	817,562	792,017
QBA Fund contributions	-	-	-	-	-
Service purchases	2,121	5,265	4,610	5,220	3,913
Net investment income	3,632,025	2,151,173	(1,583,546)	9,895,374	1,041,873
Total additions	5,210,375	3,662,596	(152,707)	11,267,247	2,369,738
Deductions					
Trust Fund benefits ¹	2,659,459	2,561,787	2,467,523	2,365,175	2,261,155
QBA Fund benefits	-	-	-	-	-
Refunds	79,715	72,114	64,517	53,636	57,988
Trust Fund administrative expenses	16,391	13,923	13,587	13,852	13,584
Total deductions	2,755,566	2,647,824	2,545,627	2,432,663	2,332,727
Extraordinary item ²	-	-	-	7,600	-
Change in net position	\$2,454,809	\$1,014,772	(\$2,698,334)	\$8,842,184	\$37,011

Continued on page 107

¹A Schedule of Benefit Payments by Type of Benefit is found on page <u>112</u>.

²IPERS received the final settlement payment from the Westridge Capital fraud case, CFTC v. Walsh / SEC v. WG in FY2021. This payment resulted in an extraordinary item during that fiscal year.

Note: The purpose of the Qualified Benefits Arrangement (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). IPERS began collecting QBA contributions and paying QBA benefits in FY2006. No members have qualified for the QBA since FY2015.

Changes in Fiduciary Net Position

(Dollar Values Expressed in Thousands) Fiscal Years Ended June 30 Continued from page 106

	2019	2018	2017	2016	2015
Additions					
Employee contributions	\$518,344	\$481,406	\$473,355	\$459,854	\$441,213
Employer contributions	771,782	716,753	704,766	684,665	656,908
QBA Fund contributions	-	-	-	-	3
Service purchases	4,312	4,629	4,271	32,148	17,476
Net investment income	2,640,007	2,458,969	3,279,743	624,854	1,080,045
Total additions	3,934,445	3,661,757	4,462,135	1,801,521	2,195,645
Deductions					
Trust Fund benefits ¹	2,160,487	2,052,428	1,943,103	1,840,735	1,744,598
QBA Fund benefits	-	-	-	-	3
Refunds	62,169	58,924	50,451	49,248	47,167
Trust Fund administrative expenses	15,697	14,754	15,899	14,939	12,592
Total deductions	2,238,353	2,126,106	2,009,453	1,904,922	1,804,360
Extraordinary item ²	_	-	-	-	_
Change in net position	\$1,696,092	\$1,535,651	\$2,452,682	(\$103,401)	\$391,285

¹A Schedule of Benefit Payments by Type of Benefit is found on page <u>112</u>.

²IPERS received the final settlement payment from the Westridge Capital fraud case, CFTC v. Walsh / SEC v. WG in FY2021. This payment resulted in an extraordinary item during that fiscal year.

Note: The purpose of the Qualified Benefits Arrangement (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). IPERS began collecting QBA contributions and paying QBA benefits in FY2006. No members have qualified for the QBA since FY2015.

Changes to Membership and Net Position

Fiscal Years Ended June 30

Fiscal						
Year	Retired Members	Active Members	Total Additions	Total Deductions	Total Investments	Total Net Position*
2024	136,060	183,389	\$5,210,374,541	\$2,755,565,502	\$43,398,927,683	\$43,661,123,300
2023	133,847	179,903	3,662,595,593	2,647,823,405	40,780,122,137	41,206,314,261
2022	131,704	176,186	(152,706,815)	2,545,626,794	40,898,541,814	40,191,542,073
2021	129,026	173,186	11,267,246,693	2,432,662,727	43,151,464,813	42,889,875,682
2020	126,600	170,380	2,369,737,986	2,332,726,605	34,847,055,326	34,047,692,112
2019	123,781	172,304	3,934,445,544	2,238,353,408	34,766,936,003	34,010,680,731
2018	120,987	170,378	3,661,757,083	2,126,106,199	32,916,559,493	32,314,588,595
2017	117,759	169,910	4,462,135,823	2,009,453,153	30,707,033,241	30,779,116,326
2016	114,491	168,372	1,801,520,563	1,904,921,736	29,276,427,008	28,326,433,656
2015	111,368	167,367	2,195,645,133	1,804,360,197	28,806,868,252	28,429,834,829

*FY2021 Total Net Position includes an extraordinary item of \$7,599,604 from the Westridge Capital fraud case settlement.

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
2024	Active members	173,827	1,739	7,823	183,389
2024	Inactive members	91,248	254	3,221	94,723
	Retired members	130,595	1,274	4,191	136,060
	Total	395,670	3,267	15,235	414,172
2023	Active members	170,504	1,732	7,667	179,903
2023	Inactive members	87,143	236	2,995	90,374
	Retired members	128,589	1,250	4,008	133,847
	Total	386,236	3,218	14,670	404,124
2022	Active members	167,041	1,725	7,420	176,186
2022	Inactive members	81,900	207	2,728	84,835
	Retired members	126,703	1,215	3,786	131,704
	Total	375,644	3,147	13,934	392,725
2021	Active members	164,150	1,674	7,362	173,186
	Inactive members	77,135	191	2,384	79,710
	Retired members	124,279	1,178	3,569	129,026
	Total	365,564	3,043	13,315	381,922
2020	Active members	161,391	1,685	7,304	170,380
	Inactive members	75,980	168	2,212	78,360
	Retired members	122,137	1,084	3,379	126,600
	Total	359,508	2,937	12,895	375,340
2019	Active members	163,348	1,664	7,292	172,304
	Inactive members	70,025	163	2,019	72,207
	Retired members	119,562	1,039	3,180	123,781
	Total	352,935	2,866	12,491	368,292
2018	Active members	161,707	1,638	7,033	170,378
	Inactive members	67,992	152	1,903	70,047
	Retired members	117,010	988	2,989	120,987
	Total	346,709	2,778	11,925	361,412
2017	Active members	161,316	1,594	7,000	169,910
	Inactive members	65,989	135	1,838	67,962
	Retired members	114,076	959	2,724	117,759
	Total	341,381	2,688	11,562	355,631
2016	Active members	159,782	1,598	6,992	168,372
	Inactive members	65,002	126	1,719	66,847
	Retired members	111,103	889	2,499	114,491
	Total	335,887	2,613	11,210	349,710
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

Active Membership Summary

Active Membership Statistics

Fiscal Years Ended June 30

Fiscal Year	Active Members	Percentage Change	Annual Average Pay	Average Age (Years)	Average Service Credit (Years)
2024	183,389	1.9	\$54,540	44.3	10.4
2023	179,903	2.1	53,297	44.4	10.5
2022	176,186	1.7	51,185	44.5	10.7
2021	173,186	1.6	49,939	44.7	11.0
2020	170,380	(1.1)	49,254	44.9	11.1
2019	172,304	1.1	47,306	45.1	11.1
2018	170,378	0.3	46,856	45.2	11.2
2017	169,910	0.9	46,278	45.4	11.3
2016	168,372	0.6	44,880	45.5	11.4
2015	167,367	0.9	43,774	45.6	11.5

Analysis of Change in Active Membership

Fiscal Years Ended June 30

Fiscal Year	Beginning Members	Additions	Retired	Died	Other Terminations	Ending Members
2024	179,903	24,753	4,590	207	16,470	183,389
2023	176,186	25,168	4,466	224	16,761	179,903
2022	173,186	24,856	5,048	251	16,557	176,186
2021	170,380	21,514	4,952	270	13,486	173,186
2020	172,304	19,598	4,837	226	16,459	170,380
2019	170,378	20,733	4,660	194	13,953	172,304
2018	169,910	19,569	5,004	206	13,891	170,378
2017	168,372	19,714	5,067	222	12,887	169,910
2016	167,367	19,130	4,784	210	13,131	168,372
2015	165,913	19,236	4,840	219	12,723	167,367

Retiree and Benefit Payment Statistics

New Retirees by Employer Type

Fiscal Years Ended June 30

Fiscal Year		City	County	Education	State	Utility	Health	Other	Total
	Number of retirees	801	887	3,155	793	70	-	115	5,821
2024									
	Average monthly benefit	\$1,987	\$2,155	\$1,966	\$2,928	\$2,849	-	\$1,246 15.70	\$2,125
	Average years of service	21.40	20.87	21.89	24.58	23.87	-		21.94
2023	Number of retirees	785	995	2,952	824	71	-	120	5,747
	Average monthly benefit	\$2,103	\$2,081	\$1,883	\$2,906	\$2,247	-	\$1,185	\$2,084
	Average years of service	21.91	20.9	21.39	24.58	23.15	-	16.31	21.75
2022	Number of retirees	857	1,008	3,212	962	76	-	147	6,262
	Average monthly benefit	\$1,891	\$1,922	\$1,889	\$2,931	\$2,469	-	\$990	\$2,041
	Average years of service	21.62	21.18	22.07	25.47	22.01	-	15.23	22.23
2021	Number of retirees	848	1,134	3,069	849	80	-	147	6,127
	Average monthly benefit	\$1,892	\$2,191	\$1,663	\$2,806	\$1,749	-	\$1,459	\$1,947
	Average years of service	21.98	22.43	20.34	24.32	19.24	-	16.20	21.39
2020	Number of retirees	845	958	3,264	883	57	-	137	6,144
	Average monthly benefit	\$1,786	\$1,811	\$1,764	\$2,646	\$1,821	-	\$1,084	\$1,887
	Average years of service	21.26	21.28	21.72	24.53	22.32	-	15.97	21.87
2019	Number of retirees	844	1,047	2,936	920	65	-	144	5,956
	Average monthly benefit	\$1,812	\$1,692	\$1,670	\$2,890	\$2,124	-	\$916	\$1,869
	Average years of service	21.36	20.78	20.99	25.05	23.05	-	13.59	21.48
2018	Number of retirees	943	1,015	2,942	1,195	64	-	157	6,316
	Average monthly benefit	\$1,622	\$1,657	\$1,716	\$2,651	\$2,004	-	\$1,090	\$1,857
	Average years of service	20.23	20.35	21.84	25.06	20.34	-	16.11	21.81
2017	Number of retirees	872	987	3,288	1,023	74	-	116	6,360
	Average monthly benefit	\$1,650	\$1,685	\$1,696	\$2,786	\$2,391	-	\$1,240	\$1,863
	Average years of service	21.08	20.87	21.79	24.98	23.80	-	15.67	21.98
2016	Number of retirees	872	986	3,049	908	66	_	130	6,011
	Average monthly benefit	\$1,636	\$1,642	\$1,677	\$2,380	\$1,888	-	\$789	\$1,755
	Average years of service	21.24	21.42	21.62	23.02	20.36	-	13.95	21.56
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	21.9	22.21	21.48	23.72	19.71	18.28	14.17	21.53

Note: With the implementation of I-Que, revised employer classifications are being used for FY2012 and forward. Health was previously reported separately to assist in tracking licensed health care professionals due to a unique bona fide retirement provision that is no longer in effect.

Average Benefit Payments for Retirees

Fiscal Years Ended June 30

Fiscal					Years of	f Service			
Year		0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	>30	Total
2024	Number of retirees	6,602	17,056	17,583	17,578	18,279	17,303	41,659	136,060
	Average monthly benefit	\$158	\$338	\$618	\$1,028	\$1,534	\$2,176	\$2,896	\$1,632
	Average high average salary	\$1,349	\$2,166	\$2,591	\$3,086	\$3,581	\$4,158	\$4,894	\$3,579
	Average years of service	4.45	8.45	13.31	18.47	23.33	28.20	34.89	22.78
2023	Number of retirees	6,496	16,766	17,388	17,366	17,949	16,929	40,953	133,847
	Average monthly benefit	\$156	\$326	\$601	\$1,001	\$1,505	\$2,131	\$2,843	\$1,598
	Average high average salary	\$1,353	\$2,099	\$2,524	\$3,012	\$3,511	\$4,074	\$4,811	\$3,505
	Average years of service	4.45	8.45	13.31	18.47	23.32	28.2	34.87	22.76
2022	Number of retirees	6,429	16,465	17,165	17,244	17,610	16,517	40,274	131,704
	Average monthly benefit	\$153	\$319	\$583	\$979	\$1,466	\$2,086	\$2,792	\$1,563
	Average high average salary	\$1,349	\$2,052	\$2,454	\$2,940	\$3,434	\$3,914	\$4,731	\$3,434
	Average years of service	4.45	8.46	13.32	18.47	23.31	28.21	34.85	22.74
2021	Number of retirees	6,387	16,189	16,869	17,011	17,182	16,068	39,320	129,026
	Average monthly benefit	\$156	\$312	\$568	\$955	\$1,423	\$2,037	\$2,737	\$1,524
	Average high average salary	\$1,351	\$1,991	\$2,383	\$2,862	\$3,343	\$3,914	\$4,647	\$3,354
	Average years of service	4.45	8.46	13.32	18.46	23.31	28.21	34.82	22.68
2020	Number of retirees	6,298	15,949	16,568	16,722	16,779	15,778	38,506	126,600
	Average monthly benefit	\$151	\$302	\$550	\$925	\$1,391	\$1,993	\$2,686	\$1,489
	Average high average salary	\$1,347	\$1,924	\$2,307	\$2,779	\$3,258	\$3,831	\$4,573	\$3,278
	Average years of service	4.45	8.46	13.31	18.46	23.31	28.21	34.77	22.65
2019	Number of retirees	6,175	15,692	16,217	16,417	16,390	15,376	37,514	123,781
	Average monthly benefit	\$152	\$294	\$537	\$902	\$1,361	\$1,952	\$2,638	\$1,457
	Average high average salary	\$1,339	\$1,873	\$2,241	\$2,710	\$3,182	\$3,763	\$4,497	\$3,209
	Average years of service	4.45	8.46	13.32	18.45	23.31	28.22	34.74	22.61
2018	Number of retirees	6,016	15,393	15,875	16,020	16,070	15,028	36,585	120,987
	Average monthly benefit	\$142	\$286	\$524	\$872	\$1,324	\$1,908	\$2,589	\$1,423
	Average high average salary	\$1,329	\$1,817	\$2,171	\$2,624	\$3,107	\$3,677	\$4,427	\$3,138
	Average years of service	4.46	8.46	13.33	18.45	23.31	28.21	34.70	22.58
2017	Number of retirees	5,899	15,022	15,503	15,592	15,683	14,600	35,460	117,759
	Average monthly benefit	\$142	\$276	\$514	\$846	\$1,290	\$1,866	\$2,537	\$1,389
	Average high average salary	\$1,310	\$1,753	\$2,108	\$2,535	\$3,025	\$3,593	\$4,350	\$3,061
	Average years of service	4.46	8.45	13.33	18.45	23.31	28.21	34.65	22.53
2016	Number of retirees	5,808	14,724	15,192	15,293	15,244	13,958	34,272	114,491
	Average monthly benefit	\$142	\$270	\$499	\$822	\$1,253	\$1,814	\$2,483	\$1,349
	Average high average salary	\$1,318	\$1,698	\$2,035	\$2,462	\$2,950	\$3,509	\$4,273	\$2,984
	Average years of service	4.46	8.44	13.33	18.45	23.30	28.21	34.61	22.45
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

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. Until June 30, 2012, the highest 3-year average salary was used, and a spiking control was incorporated. 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.

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
2024	136,060	\$2,041,612,788	\$387,563,684	\$101,410,831	\$8,801,141	\$48,213,739	\$2,901,695	\$649,526	\$2,591,153,404
2023	133,847	1,953,692,309	385,458,093	94,772,914	8,513,584	47,406,462	2,467,143	579,745	2,492,890,250
2022	131,704	1,871,096,121	380,768,441	87,883,631	8,054,935	46,574,416	2,351,485	604,424	2,397,333,453
2021	129,026	1,779,148,064	374,794,591	80,505,611	7,672,458	46,181,544	2,117,595	607,073	2,291,026,936
2020	126,600	1,700,010,453	367,981,549	74,081,682	7,122,717	46,886,343	2,001,478	599,991	2,198,684,213
2019	123,781	1,617,364,436	360,734,274	69,230,557	6,540,301	45,818,753	1,795,634	503,977	2,101,987,932
2018	120,987	1,530,480,793	351,227,851	64,331,097	6,089,032	44,946,581	1,551,385	469,750	1,999,096,489
2017	117,759	1,440,073,713	341,016,819	59,235,879	5,628,874	44,145,318	1,321,552	428,570	1,891,850,725
2016	114,491	1,358,625,886	330,328,320	54,759,110	5,157,531	42,716,696	1,305,876	402,828	1,793,296,247
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

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

Schedule of Retired Members by Type of Benefit

As of June 30, 2024

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	20,039	8,482	9,779	995	137	646	-	-
250 - 499	16,436	6,045	8,407	1,085	151	746	-	2
500 - 749	12,233	5,057	5,532	1,026	104	513	1	-
750 – 999	9,418	4,343	3,731	833	69	442	-	-
1,000 - 1,249	8,440	4,152	3,063	806	56	362	1	-
1,250 - 1,499	7,212	3,913	2,319	641	55	278	2	4
1,500 - 1,749	6,782	4,198	1,780	528	42	225	3	6
1,750 - 1,999	6,959	4,882	1,372	466	46	181	10	2
2,000 - 2,249	7,019	5,380	1,128	350	28	122	6	5
2,250 - 2,499	6,789	5,614	783	271	18	90	9	4
2,500 - 2,749	6,243	5,435	524	186	15	75	6	2
2,750 - 2,999	5,597	4,982	413	116	8	67	10	1
3,000 - 3,249	5,079	4,689	229	99	6	48	8	-
3,250 - 3,499	4,172	3,902	155	73	5	31	5	1
3,500 - 3,749	3,286	3,093	114	46	2	19	10	2
3,750 - 3,999	2,582	2,448	71	42	4	14	3	-
4,000+	7,774	7,403	187	94	9	68	13	-
Total	136,060	84,018	39,587	7,657	755	3,927	87	29

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, 2024

Amount of Monthly Repofit	Number of	Ontion 1	Ontion 2	Ontion 2	Ontion 4	Ontion 5	Ontion 6	Miss
Monthly Benefit	Retirees	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Misc.
\$ <250	20,039	4,951	5,461	3,791	1,876	2,010	1,949	1
250 - 499	16,436	4,081	4,404	2,257	1,898	1,542	2,248	6
500 - 749	12,233	2,845	3,175	1,387	1,560	1,170	2,096	-
750 - 999	9,418	1,927	2,416	1,037	1,283	847	1,908	-
1,000 - 1,249	8,440	1,671	2,089	804	1,287	645	1,944	-
1,250 - 1,499	7,212	1,408	1,720	666	1,139	583	1,696	-
1,500 - 1,749	6,782	1,378	1,486	559	1,048	563	1,748	-
1,750 - 1,999	6,959	1,167	1,531	618	1,106	582	1,955	-
2,000 - 2,249	7,019	1,256	1,406	659	925	606	2,167	-
2,250 - 2,499	6,789	1,049	1,435	606	852	571	2,276	-
2,500 - 2,749	6,243	1,017	1,319	594	654	502	2,157	-
2,750 - 2,999	5,597	841	1,244	529	514	470	1,999	-
3,000 - 3,249	5,079	733	1,078	476	496	378	1,918	-
3,250 - 3,499	4,172	604	901	331	438	303	1,595	-
3,500 - 3,749	3,286	444	730	295	311	233	1,273	-
3,750 - 3,999	2,582	365	564	222	214	171	1,046	-
4,000+	7,774	956	1,563	722	933	597	3,003	-
Total	136,060	26,693	32,522	15,553	16,534	11,773	32,978	7

See definitions of benefit options beginning on page <u>37</u>.

Note: Miscellaneous column consists of survivor death benefits based upon law provisions no longer available.

Benefit Payment Summary

Fiscal Years Ended June 30

Fiscal Year	To Iowa	To Other States	To Foreign Countries
2024	\$2,350,701,690	\$308,154,604	\$603,164
2023	2,259,995,138	301,188,591	603,607
2022	2,174,863,675	292,090,640	568,512
2021	2,082,541,465	282,100,294	533,314
2020	1,990,517,110	270,119,230	518,048
2019	1,904,028,981	256,016,365	442,097
2018	1,810,076,771	241,972,129	378,845
2017	1,716,489,981	226,225,319	387,908
2016	1,625,956,965	214,384,328	393,315
2015	1,541,982,482	202,258,326	360,202

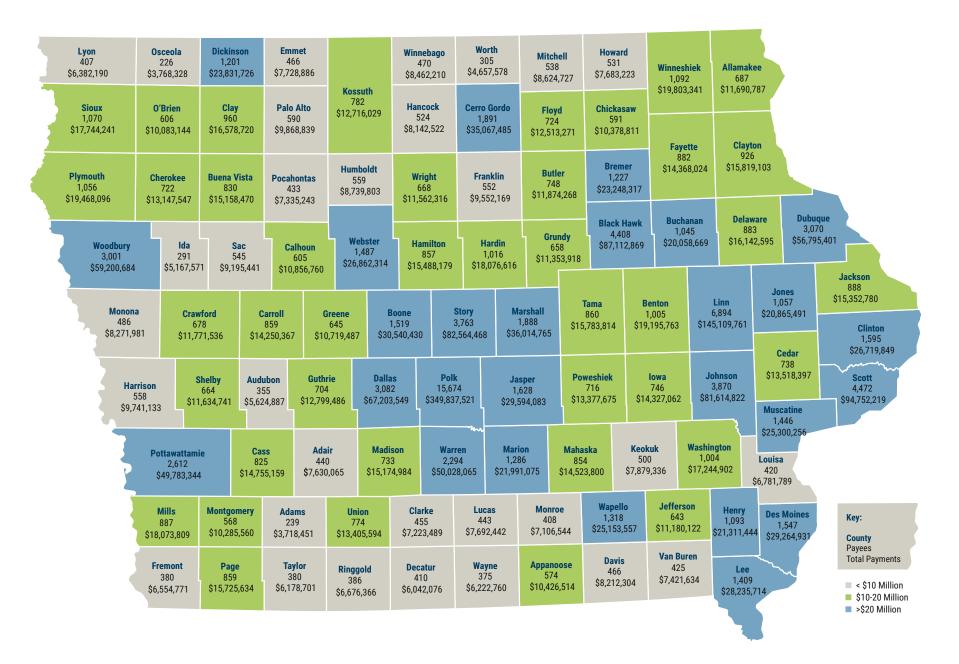
Benefit Payments by Iowa County

Fiscal Year 2024

County	Amount	Annual Average	Payees	County	Amount	Annual Average	Payees
Adair	\$7,630,065	\$17,341	440	Johnson	\$81,614,822	\$21,089	3,870
Adams	3,718,451	15,558	239	Jones	20,865,491	19,740	1,057
Allamakee	11,690,787	17,017	687	Keokuk	7,879,336	15,759	500
Appanoose	10,426,514	18,165	574	Kossuth	12,716,029	16,261	782
Audubon	5,624,887	15,845	355	Lee	28,235,714	20,040	1,409
Benton	19,195,763	19,100	1,005	Linn	145,109,761	21,049	6,894
Black Hawk	87,112,869	19,762	4,408	Louisa	6,781,789	16,147	420
Boone	30,540,430	20,106	1,519	Lucas	7,692,442	17,364	443
Bremer	23,248,317	18,947	1,227	Lyon	6,382,190	15,681	407
Buchanan	20,058,669	19,195	1,045	Madison	15,174,984	20,703	733
Buena Vista	15,158,470	18,263	830	Mahaska	14,523,800	17,007	854
Butler	11,874,268	15,875	748	Marion	21,991,075	17,100	1,286
Calhoun	10,856,760	17,945	605	Marshall	36,014,765	19,076	1,888
Carroll	14,250,367	16,589	859	Mills	18,073,809	20,376	887
Cass	14,755,159	17,885	825	Mitchell	8,624,727	16,031	538
Cedar	13,518,397	18,318	738	Monona	8,271,981	17,021	486
Cerro Gordo	35,067,485	18,544	1,891	Monroe	7,106,544	17,418	408
Cherokee	13,147,547	18,210	722	Montgomery	10,285,560	18,108	568
Chickasaw	10,378,811	17,561	591	Muscatine	25,300,256	17,497	1,446
Clarke	7,223,489	15,876	455	O'Brien	10,083,144	16,639	606
Clay	16,578,720	17,270	960	Osceola	3,768,328	16,674	226
Clayton	15,819,103	17,083	926	Page	15,725,634	18,307	859
Clinton	26,719,849	16,752	1,595	Palo Alto	9,868,839	16,727	590
Crawford	11,771,536	17,362	678	Plymouth	19,468,096	18,436	1,056
Dallas	67,203,549	21,805	3,082	Pocahontas	7,335,243	16,941	433
Davis	8,212,304	17,623	466	Polk	349,837,521	22,320	15,674
Decatur	6,042,076	14,737	410	Pottawattamie	49,783,344	19,059	2,612
Delaware	16,142,595	18,282	883	Poweshiek	13,377,675	18,684	716
Des Moines	29,264,931	18,917	1,547	Ringgold	6,676,366	17,296	386
Dickinson	23,831,726	19,843	1,201	Sac	9,195,441	16,872	545
Dubuque	56,795,401	18,500	3,070	Scott	94,752,219	21,188	4,472
Emmet	7,728,886	16,586	466	Shelby	11,634,741	17,522	664
Fayette	14,368,024	16,290	882	Sioux	17,744,241	16,583	1,070
Floyd	12,513,271	17,284	724	Story	82,564,468	21,941	3,763
Franklin	9,552,169	17,305	552	Tama	15,783,814	18,353	860
Fremont	6,554,771	17,249	380	Taylor	6,178,701	16,260	380
Greene	10,719,487	16,619	645	Union	13,405,594	17,320	774
Grundy	11,353,918	17,255	658	Van Buren	7,421,634	17,463	425
Guthrie	12,799,486	18,181	704	Wapello	25,153,557	19,085	1,318
Hamilton	15,488,179	18,073	857	Warren	50,028,065	21,808	2,294
Hancock	8,142,522	15,539	524	Washington	17,244,902	17,176	1,004
Hardin	18,076,616	17,792	1,016	Wayne	6,222,760	16,594	375
Harrison	9,741,133	17,457	558	Webster	26,862,314	18,065	1,487
Henry	21,311,444	19,498	1,093	Winnebago	8,462,210	18,005	470
Howard	7,683,223	14,469	531	Winneshiek	19,803,341	18,135	1,092
Humboldt	8,739,803	15,635	559	Woodbury	59,200,684	19,727	3,001
Ida	5,167,571	17,758	291	Worth	4,657,578	15,271	305
lowa	14,327,062	19,205	746	Wright	11,562,316	17,309	668
Jackson	15,352,780	17,289	888	Total Iowa Benefit		\$2,350,701,690	
Jasper	29,594,083	18,178	1,628		•		
Jefferson	11,180,122	17,387	643	Note: Payments deter	rmined by zip code.		

BENEFIT PAYMENTS BY IOWA COUNTY

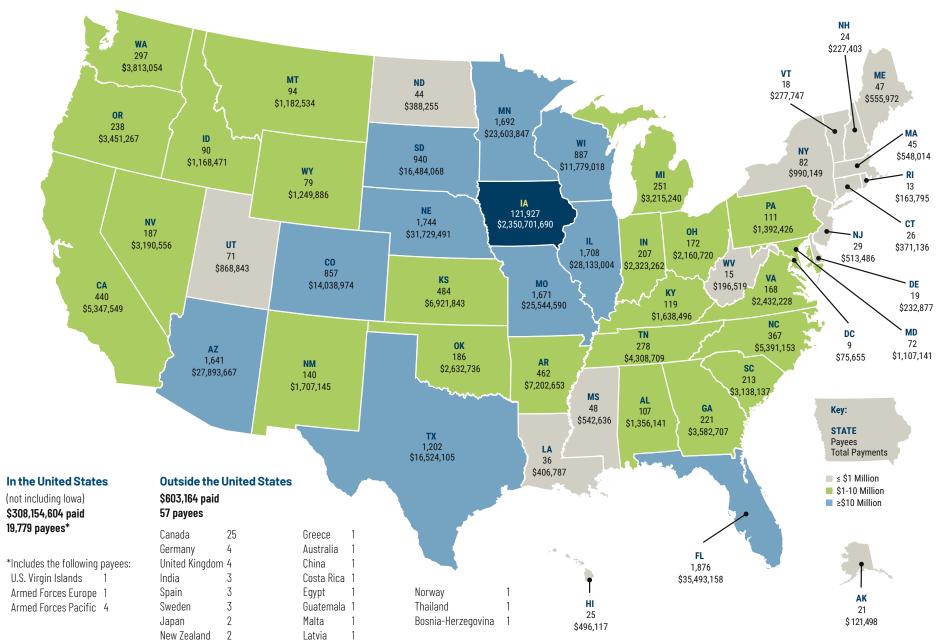
Fiscal Year 2024



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BENEFIT PAYMENTS BY STATE

Fiscal Year 2024



STATISTICAL IPERS Annual Comprehensive Financial Report FY2024

Summary of Principal Employers

Principal Participating Employers

Fiscal Years Ended June 30

Participating Employer	Covered Employees	Rank	Percentage of Total Covered Employees
State of Iowa Centralized Payroll	29,069	1	14.13
Des Moines Community School District (CSD)	5,038	2	2.45
Cedar Rapids CSD	2,821	3	1.37
lowa City CSD	2,698	4	1.31
Davenport CSD	2,225	5	1.08
Sioux City CSD	2,115	6	1.03
Waukee CSD	2,052	7	1.00
Dubuque CSD	1,934	8	0.94
Waterloo CSD	1,795	9	0.87
Ankeny CSD	1,721	10	0.84
All other employers*	131,921		74.99
Total (1,945 employers)	183,389		100

	2015		
Participating Employer	Covered Employees	Rank	Percentage of Total Covered Employees
State of Iowa Centralized Payroll	25,107	1	15.00
Des Moines 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
lowa 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

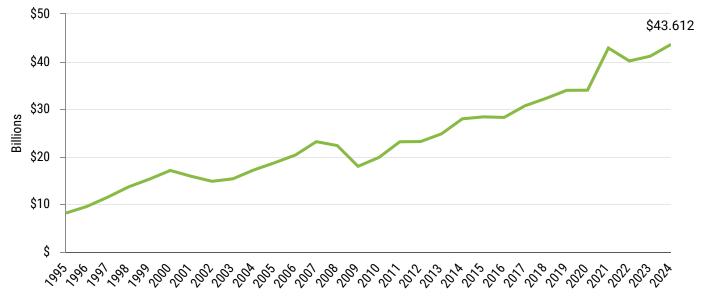
*All other employers for FY2024

Туре	Number	Employees
City	958	25,325
Education	342	71,615
County	351	28,932
Other	154	4,051
Utilities	130	1,998
Total	1,935	131,921

Investment Statistics

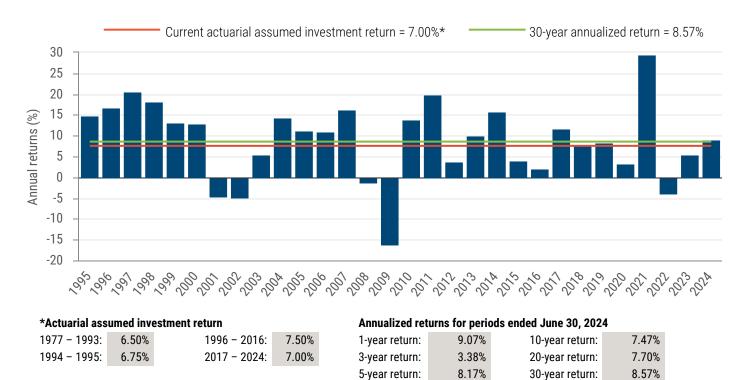
Growth of Net Investment Portfolio Assets

Fiscal Years Ended June 30



Investment Returns

For Fiscal Years Ended June 30



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