

For the Fiscal Year Ended June 30, 2023

IIIII



# ANNUAL COMPREHENSIVE FINANCIAL REPORT

Prepared through the joint efforts of INPRS's team members. Available online at www.in.gov/inprs

The Indiana Public Retirement System is a component unit and a pension trust fund of the State of Indiana.

# 2023 ANNUAL COMPREHENSIVE FINANCIAL REPORT For the Fiscal Year Ended June 30, 2023

# INPRS is a component unit and a pension trust fund of the State of Indiana.

INPRS is a trust and an independent body corporate and politic. The system is not a department or agency of the state, but is an independent instrumentality exercising essential governmental functions (IC 5-10.5-2-3).

	FUNDS MANAGED BY INPRS	ABBREVIATIONS USED
	Defined Benefit	DB Fund
1.	Public Employees' Defined Benefit Account	PERF DB
2.	Teachers' Pre-1996 Defined Benefit Account	TRF Pre-'96 DB
3.	Teachers' 1996 Defined Benefit Account	TRF '96 DB
4.	1977 Police Officers' and Firefighters' Retirement Fund	77 Fund
5.	Judges' Retirement System	JRS
6.	Excise, Gaming and Conservation Officers' Retirement Fund	EG&C
7.	Prosecuting Attorneys' Retirement Fund	PARF
8.	Legislators' Defined Benefit Fund	LE DB
	Defined Contribution	DC Fund
9.	Public Employees' Defined Contribution Account	PERF DC
10.	My Choice: Retirement Savings Plan for Public Employees	PERF MC DC
11.	Teachers' Defined Contribution Account	TRF DC
12.	My Choice: Retirement Savings Plan for Teachers	TRF MC DC
13.	Legislators' Defined Contribution Fund	LE DC
	Other Post Employment Benefit	OPEB Fund
14.	Special Death Benefit Fund	SDBF
15.	Retirement Medical Benefits Account Plan	RMBA
	Custodial	Custodial Fund
16.	Local Public Safety Pension Relief Fund	LPSPR

# **Contact Information**

Indiana Public Retirement System One North Capital, Suite 001 Indianapolis, IN, 46204 Toll Free (844) GO - INPRS www.in.gov/inprs | questions@inprs.in.gov



# **INTRODUCTORY SECTION**

- 8 About INPRS
- 9 INPRS Believes
- 10 Letter of Transmittal
- 13 Professional Awards
- 14 Governance and Administrative Organization

# **FINANCIAL SECTION**

- <u>17</u> Independent Auditor's Report
- 20 Management's Discussion and Analysis

## **Financial Statements**

- 24 Statement of Fiduciary Net Position
- 26 Statement of Changes in Fiduciary Net Position
- 28 Notes to the Financial Statements

# **Required Supplementary Information**

- 67 Introduction to Required Supplementary Information
- 68 Schedules of Changes in Net Pension Liability and Related Ratios
- 84 Schedule of Contributions
- 86 Schedule of Investment Returns
- 87 Schedule of Notes to Required Supplementary Information

# **Other Supplementary Schedules**

- 88 Schedule of Administrative Expenses
- 89 Schedule of Administrative Expenses Vendors
- 90 Schedule of Direct Investment Expenses

# INVESTMENT SECTION

- 92 Report on Investment Activities
- <u>96</u> Report from the Chief Investment Officer

- 104 Asset Class Summaries
- 108 Outline of Investment Policies
- 109 Notes to the Investment Schedules

# Investment Results – Consolidated Defined Benefit Assets

- 110 Asset Allocation Summary: June 30, 2023 Actual vs. June 30, 2022 Actual
- 111 Time-Weighted Rate of Return by Asset Class vs. Benchmark Returns
- 111 Historical Time-Weighted Investment Rates of Return
- 112 Time-Weighted Rates of Return by Asset Class vs Benchmark Returns
- 113 Statistical Performance

# Investment Results – Consolidated Defined Contribution Assets

- 114 Assets by Investment Option
- 115 Rate of Return by Investment Option vs. Benchmark Returns
- <u>116</u> Historical Annual Interest Crediting Rates

#### **Investment Information**

- 117 Top 10 Holdings by Fair Value
- 118 Investment Fees and Brokers' Commission Fees
- 119 Investment Professionals

# **ACTUARIAL SECTION**

#### Introduction to Actuarial Information

- 123 Purpose of the Actuarial Section
- <u>124</u> Actuary's Certification Letter

#### **Combined Defined Benefit Funds**

- 127 Summary of Funded Status
- 128 Reconciliation of the Change in the Unfunded Liability

# Table of Contents, continued

# ACTUARIAL SECTION, continued

- 129 10-Year Schedule of Employer Counts
- 131 Demonstration of Asset Smoothing

#### Public Employees' Defined Benefit Account

- <u>131</u> Historical Summary of Actuarial Valuation Results
- <u>132</u> Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- <u>137</u> Analysis of Financial Experience, and Solvency Test
- 138 Schedule of Active Members Valuation Data
- <u>139</u> Schedule of Retirants and Beneficiaries

#### **Teachers' Pre-1996 Defined Benefit Account**

- <u>140</u> Historical Summary of Actuarial Valuation Results
- 141 Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- <u>145</u> Analysis of Financial Experience, and Solvency Test
- <u>146</u> Schedule of Active Members Valuation Data
- <u>147</u> Schedule of Retirants and Beneficiaries

# **Teachers' 1996 Defined Benefit Account**

- <u>148</u> Historical Summary of Actuarial Valuation Results
- 149 Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- 153 Analysis of Financial Experience, and Solvency Test
- 154 Schedule of Active Members Valuation Data
- 155 Schedule of Retirants and Beneficiaries

# 1977 Police Officers' and Firefighters' Retirement Fund

- <u>156</u> Historical Summary of Actuarial Valuation Results
- 157 Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- 160 Analysis of Financial Experience, and Solvency Test
- 161 Schedule of Active Members Valuation Data

<u>162</u> Schedule of Retirants and Beneficiaries

## Judges' Retirement System

- <u>163</u> Historical Summary of Actuarial Valuation Results
- <u>164</u> Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- <u>167</u> Analysis of Financial Experience, and Solvency Test
- 168 Schedule of Active Members Valuation Data
- <u>169</u> Schedule of Retirants and Beneficiaries

# Excise, Gaming and Conservation Officers' Retirement Fund

- <u>170</u> Historical Summary of Actuarial Valuation Results
- 171 Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- 175 Analysis of Financial Experience, and Solvency Test
- <u>176</u> Schedule of Active Members Valuation Data
- 177 Schedule of Retirants and Beneficiaries

#### **Prosecuting Attorneys' Retirement Fund**

- <u>178</u> Historical Summary of Actuarial Valuation Results
- 179 Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- 182 Analysis of Financial Experience, and Solvency Test
- <u>183</u> Schedule of Active Members Valuation Data
- 184 Schedule of Retirants and Beneficiaries

#### Legislators' Defined Benefit Fund

- <u>185</u> Historical Summary of Actuarial Valuation Results
- 186 Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions
- <u>189</u> Analysis of Financial Experience, and Solvency Test
- <u>190</u> Schedule of Active Members Valuation Data
- <u>191</u> Schedule of Retirants and Beneficiaries

# STATISTICAL SECTION

# Introduction to Statistical Information

193 Purpose of the Statistical Section

# **Combined Funds**

- 194 Schedule of Changes and Growth in Fiduciary Net Position
- <u>196</u> Summary of Income and Expense Sources for a 10-Year Period
- <u>197</u> Summary of Participating Employers
- <u>198</u> Membership Data Summary
- <u>199</u> Ratio of Active Members to Annuitants
- 200 Pension Benefits by Indiana County
- 201 Retirees by Geographical Location
- 202 Summary of Defined Benefit Retirement Benefits

#### Public Employees' Defined Benefit Account

- 204 Schedule of Changes and Growth in Fiduciary Net Position
- 206 Schedule of Historical Contribution Rates
- 207 Ratio of Active Members to Annuitants
- 208 Schedule of Benefit Recipients by Type of Benefit Option
- 209 Schedule of Average Benefit Payments
- 211 Schedule of Participating Employers: Top 10

# **Teachers' Pre-1996 Defined Benefit Account**

- 212 Schedule of Changes and Growth in Fiduciary Net Position
- 214 Ratio of Active Members to Annuitants
- 215 Schedule of Benefit Recipients by Type of Benefit Option
- 216 Schedule of Average Benefit Payments
- <u>218</u> Schedule of Participating Employers: Top 10

#### **Teachers' 1996 Defined Benefit Account** Schedule of Changes and Growth in Fiduciary Net 220 Position 222 Schedule of Historical Contribution Rates 223 Ratio of Active Members to Annuitants Schedule of Benefit Recipients by Type of Benefit 224 Option 225 Schedule of Average Benefit Payments 227 Schedule of Participating Employers: Top 10 **1977 Police Officers' and Firefighters' Retirement** Fund Schedule of Changes and Growth in Fiduciary Net 228 Position 230 Schedule of Historical Contribution Rates 231 Ratio of Active Members to Annuitants Schedule of Benefit Recipients by Type of Benefit 232 Option 233 Schedule of Average Benefit Payments 234 Schedule of Participating Employers: Top 10 Judges' Retirement System Schedule of Changes and Growth in Fiduciary Net 236 Position Ratio of Active Members to Annuitants 238 Schedule of Benefit Recipients by Type of Benefit 239 Option 240 Schedule of Average Benefit Payments Excise, Gaming and Conservation Officers' **Retirement Fund** Schedule of Changes and Growth in Fiduciary Net 242 Position

- 244 Schedule of Historical Contribution Rates
- 245 Ratio of Active Members to Annuitants
- 246 Schedule of Benefit Recipients by Type of Benefit Option
- 247 Schedule of Average Benefit Payments

# STATISTICAL SECTION, continued

# **Prosecuting Attorneys' Retirement Fund**

- 248 Schedule of Changes and Growth in Fiduciary Net Position
- 250 Ratio of Active Members to Annuitants
- 251 Schedule of Benefit Recipients by Type of Benefit Option
- 252 Schedule of Average Benefit Payments

# Legislators' Defined Benefit Fund

- 254 Schedule of Changes and Growth in Fiduciary Net Position
- 256 Ratio of Active Members to Annuitants
- 257 Schedule of Benefit Recipients by Type of Benefit Option
- <u>258</u> Schedule of Average Benefit Payments

# **Public Employees' Defined Contribution Account**

- 260 Schedule of Changes and Growth in Fiduciary Net Position
- 261 Membership Data
- 262 Schedule of Historical Contribution Rates

# **Teachers' Defined Contribution Account**

- 264 Schedule of Changes and Growth in Fiduciary Net Position
- 265 Membership Data
- 266 Schedule of Historical Contribution Rates

# Legislators' Defined Contribution Fund

- 268 Schedule of Changes and Growth in Fiduciary Net Position
- 270 Schedule of Historical Contribution Rates

#### **Special Death Benefit Fund**

- 272 Schedule of Changes and Growth in Fiduciary Net Position
- 274 Schedule of Average Death Benefit Payments

### **Retirement Medical Benefit Account Plan**

- 275 Schedule of Changes and Growth in Fiduciary Net Position
- 275 Membership Data

# Local Public Safety Pension Relief Fund

- 276 Schedule of Changes and Growth in Fiduciary Net Position
- 278 Schedule of Average Death Benefit Payments



# **Introductory Section**

- 8 About INPRS
- <u>9</u> INPRS Believes
- <u>10</u> Letter of Transmittal
- 13 Professional Awards
- 14 Governance and Administrative Organization

# Vision

Engaged members able to realize their retirement dreams.

# **Mission**

As fiduciaries, educate stakeholders, collect necessary contributions, and prudently manage member assets to deliver promised DB and DC benefits and services.

**529,244** Members

**\$46.7 Billion** Total fund fair value 1,318 Participating employers

89.1% Funded Excluding TRF Pre-'96



The Indiana Public Retirement System (INPRS) is an independent body corporate and politic of the State of Indiana, which currently consists of 16 funds (eight defined benefit, five defined contribution, two other postemployment benefit, and one custodial). The Public Employees' Retirement Fund (PERF) and the Teachers' Retirement Fund (TRF), the two largest retirement plans offered by the State of Indiana, trace their existence back to the early and middle parts of the 20th Century. TRF was established in 1921 and PERF in 1945. Pursuant to statute, the Indiana General Assembly integrated the management of the two systems in 2011, creating INPRS.

In accordance with Indiana Code (IC) 5-10.5, INPRS is governed by a nine-member Board of Trustees. The Board is composed of:

- One trustee with experience in economics, finance, or investments;
- One trustee with experience in executive management or benefits administration;
- One trustee who is an active or retired member of the '77 Fund;
- Two trustees who are TRF members with at least 10 years of creditable service;
- One trustee who is a PERF member with at least 10 years of creditable service;
- Director of the Office of Management and Budget, or designee;
- State Comptroller, or nominee;
- Treasurer of State, or nominee.

# Indiana Public Pension Timeline (Calendar Year)

- 1915 Locally funded teachers retirement fund established.
- 1921 State funded Teachers' Retirement Fund created; a "pay-as-you-go", multiple-employer pension system.
- **1945** PERF created; a multiple-employer retirement system with a defined benefit component (DB).
- 1953 JRS was created with its own board.
- **1955** Annuity Savings Accounts (ASA's) created to supplement PERF DB and TRF DB plans resulting in the nation's first pension systems to adopt a hybrid design.
- 1972 EG&C created.
- **1977** '77 Fund created for local police officers and firefighters hired after April 30, 1977.

- **1980** LPSPR created to support police and firefighter pension obligations of Indiana's cities and towns for plans under the "Old Funds".
- **1983** The 1977 and 1985 Judges' Benefits Fund System (now Judges' Retirement System) were created and administered by the PERF board, the 1953 JRS plan was eliminated and members were transferred to the 1977 Judges' Benefits Fund System.
- **1989** Legislators' Retirement System created. Participants in the DB plan limited to members serving as of April 30, 1989; otherwise, the plan is Defined Contribution only.
- **1990** PARF created. Members must also be members of PERF.
- **1996** Closed TRF Pre-'96 to new entrants as of July 1, 1996, and created TRF '96. Also created the Pension Stabilization Fund (PSF) to partially fund TRF Pre-'96.
- **1996** Amendment to the Indiana Constitution approved allowing funds to invest in equities.
- 2011 Indiana General Assembly created the Board of Trustees of INPRS to administer public employee retirement plans.
- 2013 ASA Only (now PERF MC DC) plan offered to state employees who joined after February 28, 2013. Default option remains as PERF Hybrid.
- 2016 PERF MC DC offered to employees of political subdivisions who join after January 2, 2016. Default option remains as PERF Hybrid.
- 2017 State Employees' Death Benefit Fund, Public Safety Officer's Death Benefit Fund, and the "in the line of duty" death benefit from the Local Public Safety Pension Relief Fund assets merged into SDBF.
- 2018 ASA's previously reported within the DB Hybrid funds of PERF, TRF Pre-'96, and TRF '96 became segregated and administered as DC plans.

Supplemental Reserve Accounts (SRA's) established for PERF DB, TRF Pre-'96 DB, TRF '96 DB, EG&C, and LE DB to pay postretirement benefit increases after June 30, 2018.

2019 TRF MC DC offered to new members of TRF.

RMBA was transferred to INPRS for administration.

# **INPRS BELIEVES...**

**PEOPLE** ARE THE FOUNDATION OF OUR SUCCESS. IT TAKES PEOPLE WITH DIFFERENT BACKGROUNDS, IDEAS, AND STRENGTHS TO BE SUCCESSFUL.

# MODELS OF INTEGRITY Hold themselves accountable to the highest standards of ethical CONTINUOUS LEARNERS and professional behavior. Eager to improve while having an open mind to feedback and new ideas. **TEAM PLAYERS Encourage & support others** for the success of the team. breaking down silos & connecting with our shared vision. DILIGENT Well-researched, risk-aware, and transparent. CANDID Believe in direct, respectful, and honest communication.

# SUCCESS IS BUILT UPON...

**Accountability**- Setting clear expectations for people, roles, and teams and holding ourselves and each other accountable for results.

Commitment- Dedicated to decisions and action plans.

Constructive Conflict- Encouraging debate around ideas to arrive at the best solution.

**Trust**- *Empowering our people to successfully fulfill their duties while providing them with training, support, and mentorship.* 

BALANCE IN LIFE IS IMPORTANT. WE STRIVE TO HAVE A FLEXIBLE AND SUPPORTIVE ENVIRONMENT WHILE NOT SACRIFICING SERVICE TO OUR MEMBERS.





ONE NORTH CAPITOL, SUITE 001 🔺 INDIANAPOLIS, IN 46204

December 12, 2023

To the Board of Trustees, Employers, and Members of the Retirement Systems:

On behalf of all management and staff, we are pleased to submit the Annual Comprehensive Financial Report of the Indiana Public Retirement System (INPRS) for the year ended June 30, 2023. We are responsible for the accuracy of the content and the completeness and fairness of the presentation, including disclosures. A narrative overview and analysis to accompany the basic financial statements is presented as Management's Discussion and Analysis (MD&A); which can be found immediately following the Independent Auditor's Report in the Financial Section. This Letter of Transmittal is designed to complement the MD&A.

INPRS, an independent body corporate and politic of the State of Indiana, currently consists of 16 funds. As fiduciaries, our mission is to educate stakeholders, collect necessary contributions, and prudently manage member assets to deliver promised defined benefit and defined contribution benefits and services.

# **INPRS's Vision and Mission Inspire Us to Deliver and Serve**

Since the formation of INPRS in 2011, our Vision Statement has served as the guiding inspiration for our success. This statement provides direction and describes what our organization wants to achieve in the future. Our vision at INPRS remains the same - Engaged members able to realize their retirement dreams.

In support of our Vision Statement, the Mission Statement reflects a concise explanation of INPRS's reason for existence. This statement describes our purpose and overall intention in our role as a fiduciary. Our top priority is to keep our promise of a secure pension benefit for our members – We are trusted to pay. As fiduciaries, we educate stakeholders, collect necessary contributions, and prudently manage member assets to deliver promised defined benefit (DB) and defined contribution (DC) benefits and services.

Year-over-year, the INPRS team continues to deliver top-tier service levels as measured and reported by CEM Benchmarking, Inc. This independent research firm ranks pension plan performance in various service and cost categories. Last year, INPRS achieved the highest service score in our pension plan peer group. INPRS is focused on maintaining high levels of service and low-cost performance as participant experiences and expectations continue to evolve.

Additionally, our year-over-year internal strategic performance measures reflect consistent progress in achieving or exceeding our performance targets in all performance perspectives of customer, financial, process, and learning and growth.

INPRS is committed to maintaining the trust our members and stakeholders have placed in us. The executive and leadership staff have developed and will continue to implement strategic initiatives to accomplish the defined goals and objectives as outlined by our Strategic Plan. Driven by our Vision and Mission statements, our Strategic Plan Goals and Objectives are straightforward and tightly centered on improving our engagement and overall services to our members and employers.

The goals include:

GOAL 1: Promote an engaged, high-performing, and agile workforce.

GOAL 2: Deliver a quality member experience.

- GOAL 3: Deliver a quality employer experience.
- GOAL 4: Manage a financially secure retirement system.
- GOAL 5: Reduce complexity and optimize operational efficiency across the enterprise.

Over the last fiscal year (FY), our teams collaborated to achieve these objectives and leveraged critical thought processes and innovative technologies to assess the organization for improved services and operational efficiencies.

INPRS is proud to look back at the accomplishments and initiatives that helped us deliver benefits and distributions and provide high quality service at a low cost to members and employers. INPRS continues to adapt to unique challenges to deliver improved service to our 529,244 members and 1,318 employers. In FY 2023, we delivered benefits and distributions of \$3.4 billion and collected \$6.1 billion in contributions.

# **Economic Conditions**

The fiscal year 2023 was influenced by various global and domestic economic factors, such as global supply shocks, the Russia-Ukraine conflict, aggressive monetary policies, a banking sector crisis, interest rate hikes, and the highest inflation increase in four decades. The Federal Reserve and other central banks took decisive measures to control inflation, which significantly impacted market dynamics. Monetary policy became increasingly forceful, leading to heightened economic volatility through a series of rate hikes.

Despite these challenges, the economy demonstrated resilience as investors maintained optimism regarding U.S. economic growth and strong corporate earnings. This was largely due to inflation cooling off while growth remained strong, leading to some bear market rallies. With investor sentiment leaning towards expected continued growth and stable inflation, the market continued to rally through the second half of FY2023.

The economic condition of INPRS is driven by investment results and contributions from members, employers, and nonemployer contributing entities. Our Chief Investment Officer, in partnership with Verus Consulting, has evaluated the economic conditions of INPRS's investments, the details of which can be found in the Investment Section. Total defined benefit contributions for FY 2023 have exceeded the actuarially determined contribution. A historical look at this activity is outlined in the Schedule of Contributions in the Required Supplementary Information.

# Funding of the Defined Benefit Program

INPRS's primary goal continues to be ensuring a financially sound retirement system. We establish a predictable schedule of contribution rates, which works with investment portfolio performance to advance our funds along the path of long-term sustainability. In FY 2020, INPRS completed an actuarial experience study to update our assumptions about the future workforce, benefits, and contributions. In FY 2021, INPRS completed an asset-liability study to update the actuarial assumptions about future investment returns and inflation. And in FY 2022, INPRS completed a study of our Funding Policy to assess the balance between contribution levels and stability, resulting in changes to how we will determine employer contribution rates going forward.

The aggregate funded status of the pre-funded defined benefit plans decreased from 89.6% in FY 2022 to 89.1% in FY 2023. The funded status of the Teachers' Pre-1996 Defined Benefit Account (a pay-as-you-go plan) improved from 37.5% in FY 2022 to 63.6% in FY 2023, with \$5.0 billion in unfunded liabilities. Excluding special contributions, the TRF Pre-'96 projected peak appropriations level is in FY 2026. TRF Pre-'96 is projected to reach 100% funded status on its base benefits in FY 2030. A snapshot of the Defined Benefit Plans' funding status is presented in the MD&A.

# **Investment Overview**

INPRS's consolidated defined benefit assets returned 2.5% net of fees and held assets with a fair value of \$39.8 billion as of June 30, 2023. As the economic backdrop proved to be highly volatile and unpredictable, we saw a shift in trends. Notably, asset classes that typically benefited from higher growth and lower inflation performed well in the instability. However, as markets began to account for the tightening of monetary policy and economic decline, rate sensitive assets were negatively impacted. The investment portfolio is diversified by asset class, investment approach, and individual investments within each global asset class to reduce overall portfolio risk and volatility. In addition, INPRS administered defined contribution assets of \$6.5 billion.

Please refer to the Investment Section for more information on INPRS's portfolio performance, investment strategy, and policy.

# The OneINPRS Culture

Having shared values, goals, and beliefs drives organizations forward, but a healthy organizational culture truly contributes to their success. In FY 2023, we continued the journey of fostering a robust culture of beliefs and norms. At INPRS, we encourage a workplace culture based on partnership and teamwork. Cross-functional teams inspire employees to develop connections across the organization, and these interactions provide a setting where core values can be demonstrated and acknowledged.

In FY 2023, INPRS realized an increase in our culture and engagement scores, largely attributed to improvements made based on employee feedback. INPRS will continue to place focus on cultivating internal talent by providing staff with essential resources, mentoring options, and the learning opportunities necessary to grow professionally at all levels within the organization. These opportunities enable the organization to close skill gaps and enhance the overall employee experience while also enhancing services to our members, employers, and stakeholders.

# Enhancements in Efficiency and Service to Our Members and Employers

Over the past fiscal year, team members across the organization have assessed numerous workflows and processes, evaluated user and member feedback, and embarked upon technological initiatives to improve operational performance, reduce risk and complexity, and improve the member and employer experience. As a result, INPRS realized improvements in several areas including retirement processing time, reduction in time to pensioner's first benefit payment, improved overall customer satisfaction, improved internal process maturity, increased the number of members served through dynamic education channels, and cost savings realized across the entire agency.

Additionally, as we reimagine technology and data assets, the importance of strategic technology investments grows. INPRS continues to evaluate solutions to improve our ability to monitor activities within our systems, improve responsiveness to business needs, and provide better visibility into data integrity within our systems. Proactively evaluating potential risks and developing risk mitigation strategies allows us to best protect the data of members and employers, which is paramount to us.

In FY 2023, INPRS defined a comprehensive technology modernization roadmap to transform business service delivery. Over the next four to five years, INPRS will embark upon a journey to reimagine and modernize our technological solutions to realize operational efficiencies and enhance our customer experience, data governance and core IT infrastructure.

## **Strategic Plan**

The INPRS strategic plan provides the foundation from which INPRS moves towards its vision and mission. A copy of the INPRS strategic plan that includes details of other key initiatives can be found on the INPRS website, <u>www.in.gov/inprs</u>.

#### Legislative Changes

Several legislative changes were signed into law to improve the benefits of members and beneficiaries. Details can be found in Note 7 of the Financial Section.

#### Management's Responsibility for Financial Reporting and Internal Controls

INPRS management is responsible for establishing and maintaining a system of adequate internal accounting controls. A system of internal accounting controls ensures the security of member and employer contributions and provides a reasonable, but not absolute, assurance that assets are properly safeguarded, transactions are properly executed, and financial statements are reliable. Our independent external auditors have conducted an audit of the basic financial statements in accordance with auditing standards generally accepted in the United States of America. They have full and unrestricted access to the Board to discuss their audit and related findings concerning the integrity of financial reporting and adequacy of internal controls. The Independent Auditor's Report regarding the fair presentation of the financial statements is in the Financial Section.

#### Awards and Acknowledgments

For the 11<sup>th</sup> consecutive year, INPRS received a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA), the highest recognition in governmental accounting and financial reporting. For the 12<sup>th</sup> consecutive year, INPRS received a Public Pension Standards Award for Funding and Administration from the Public Pension Coordinating Council.

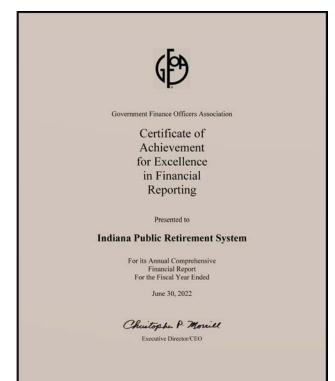
We express our gratitude to the staff, advisors, and all who have contributed to the preparation of this report. This report is intended to provide complete and reliable information as a basis for making management decisions, for determining compliance with legal provisions, and as a measurement of responsible stewardship of the assets. The INPRS staff also wishes to express our appreciation to Indiana Governor Eric Holcomb, the Indiana General Assembly, members of the Indiana Committee on Pension Management Oversight, and the INPRS Board of Trustees who provided INPRS staff the privilege of serving the needs of our members and employers.

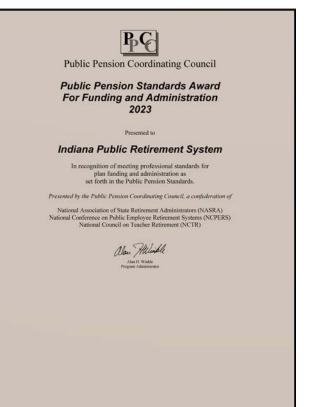
Sincerely,

Steve Russo Executive Director

Kobert & Come

Robert Corne Chief Financial Officer





# CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to INPRS for its annual comprehensive financial report for the fiscal year ended June 30, 2022. This was the 11<sup>th</sup> consecutive year that INPRS has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to GFOA to determine its eligibility for another certificate.

# PUBLIC PENSION STANDARDS AWARD

The Public Pension Coordinating Council awarded the Public Pension Standards Award for Funding and Administration to INPRS for the fiscal year ended June 30, 2023. This is the 12<sup>th</sup> consecutive year that INPRS has achieved this prestigious award. In order to be awarded a Public Pension Standards Award, a public pension program must meet professional standards for plan design and administration as set forth in the Public Pension Standards. A Public Pension Standards Award is valid for a period of one year.

# **Executive Branch**

Eric Holcomb Governor



Suzanne Crouch Lt. Governor

# **Board of Trustees**



Brian Abbott TRF Member

Nomination/Appointment: Speaker of House/ Governor Term Expiration: 6/30/2023



Tera Klutz

State Comptroller

Nomination/Appointment: Self-nominated/Governor Term Expiration: 6/30/2023



Daniel Elliot Treasurer of State Nomination/Appointment: Self-nominated/Governor Term Expiration: 6/30/2027

Justin McAdam

OMB General Counsel & Policy Director

Nomination/Appointment: Director of OMB/Governor

Term Expiration:

6/30/2023

Bre Eco Inv No Go Term Expiration:

6/30/2025



David Frick

**Executive Management** and Benefits Administration

Nomination/Appointment:

Governor

Term Expiration: 6/30/2025





Mike Pinkham
--------------

1

1977 Fund Member

Nomination/Appointment: Speaker of House/ Governor Term Expiration: 6/30/2024



Vivienne Ross

PERF Member

Nomination/Appointment: Senate Pro Tempore/ Governor Term Expiration: 6/30/2024



et Swanson	
onomics, Finance, restments	
mination/Appointment:	
vernor	
rm Expiration	





# **Governance and Administrative Organization, continued**

# **Executive Team**

Steve Russo Executive Director





Tony Green Deputy Executive Director



Matt Ackerman Chief Benefits Officer



Steven Barley Chief Information and Technology Officer



Derek Benson Chief Communications Officer



Robert Corne Chief Financial Officer



Scott Davis Chief Investment Officer



Jeff Gill Chief Legal, Procurement, and Compliance Officer



Keith Hall Chief Audit and Risk Officer



Cheryl Harding Director of Strategic Initiatives



Joy Smith Chief Human Resource Officer

# Professional Consultants<sup>1</sup>

Capital Cities, LLC 426 East New York Street Indianapolis, IN 46202 Kutak Rock, LLP 8601 North Scottsdale Road, #300 Scottsdale, AZ 85253 Cavanaugh Macdonald Consulting, LLC 3802 Raynor Parkway, Suite 202 Bellevue, NE 68123

Verus 800 Fifth Avenue, Suite 3900 Seattle, WA 98104 Foster Garvey PC 1111 Third Avenue, Suite 3000 Seattle, WA 98101

<sup>1</sup> Information regarding investment professionals that have provided services to INPRS can be found starting on page <u>118</u> in the Schedules of Investment Management Fees and Investments Professionals in the Investment Section.



# **Financial Section**

- 17 Independent Auditor's Report
- 20 Management's Discussion and Analysis
- 24 Financial Statements
- 28 Notes to the Financial Statements
- 67 Required Supplementary Information
- 88 Other Supplementary Schedules

**\$4.3 Billion** Increase in net position over the previous fiscal year

**\$19.8 Million** Additional funds issued as COLA payments **\$3.4 Billion** Benefits and distributions paid to members

**\$4.2 Billion** Funds appropriated to fund the pay-as-yougo TRF Pre-'96 DB plan





RSM US LLP

#### Independent Auditor's Report

Board of Trustees Indiana Public Retirement System

#### Opinion

We have audited the financial statements of the Indiana Public Retirement System (the System), a component unit of the State of Indiana, as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System, as of June 30, 2023, and the changes in 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). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Other Matter - Prior-Year Comparative Information

The financial statements include partial prior-year comparative information. Such information does not include all of the information required or sufficient detail to constitute a presentation in accordance with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2022, from which such partial information was 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 the System's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

THE POWER OF BEING UNDERSTOOD AUDIT | TAX | CONSULTING

RSM US LLP is the U.S. member firm of RSM International, a global network of independent audit, tax. and consulting firms. Visit rsmus.com/aboutus for more information regarding RSM US LLP and RSM International.

## 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 will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

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

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

# **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, and the schedules of changes in net pension liability and related ratios, schedule of contributions, schedule of investment returns, annual money-weighted rate of return, net of investment expense and the related schedule of notes to required supplementary information 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 and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

# Supplementary Information

Our audit for the year ended June 30, 2023 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The other supplementary information including the schedule of administrative expenses, schedule of administrative expenses – vendors and the schedule of direct investment expenses for the year ended June 30, 2023 is presented for purposes of additional analysis and is not a required part of the basic financial statements.

Such 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. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements for the year ended June 30, 2023 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 other supplementary information including the schedule of administrative expenses, schedule of administrative expenses – vendors and the schedule of direct investment expenses is fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2023.

We also previously audited, in accordance with GAAS, the basic financial statements of the System as of and for the year ended June 30, 2022 (not presented herein), and have issued our report thereon dated December 8, 2022 which contained an unmodified opinion on those basic financial statements. The other supplementary information including the schedule of administrative expenses, schedule of administrative expenses – vendors and the schedule of direct investment expenses for the year ended June 30, 2022 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and related directly to the underlying accounting and other records used to prepare the 2022 financial statements. The information was subjected to the audit procedures applied in the audit of the 2022 basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those financial statements or to those financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the other supplementary information including the schedule of administrative expenses, schedule of administrative expenses - vendors and the schedule of direct investment expenses is fairly stated in all material respects in relation to the basic financial statements as a whole for the year ended June 30, 2022.

# Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, 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.

# **Report on Summarized Comparative Information**

We have previously audited the System's 2022 financial statements, and we expressed an unmodified opinion on the basic financial statements of the System in our report dated December 8, 2022. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2022, is consistent, in all material respects, with the audited financial statements from which it has been derived.

RSM US LLP

Indianapolis, Indiana December 12, 2023

# Introduction

Management's Discussion and Analysis (MD&A) provides details of INPRS's financial performance during the fiscal year ended June 30, 2023. The MD&A is intended to serve as an introduction to INPRS's financial statements that we present in conjunction with the Letter of Transmittal included in the Introductory Section. Reviewing these statements, along with the accompanying notes, Investment, Actuarial, and Statistical sections, will provide for a comprehensive understanding of INPRS's financial position.

The Statement of Fiduciary Net Position is a point-in-time snapshot of the net assets available to pay for future benefits owed as of the statement date. The Statement of Changes in Fiduciary Net Position presents the additions and deductions for the fiscal year. Major sources of additions are contributions and investments gains. Major sources of deductions are benefit disbursements, investment losses, distributions of contributions and interest, pension relief distributions, and administrative expenses.

Notes to the Financial Statements provide additional analysis that is essential for a complete understanding of the information provided in the financial statements. The notes describe the history and purpose of the plans, current information about accounting and investment policies, actuarial methods and assumptions, as well as subsequent events that may impact INPRS's financial position.

The Required Supplementary Information includes schedules about the changes in the net pension liability, employer contributions, actuarial assumptions used to calculate the actuarially determined contributions, historical trends, along with other information used in evaluating the financial condition of INPRS.

INPRS administers 16 funds consisting of eight defined benefit and five defined contribution retirement funds, two other postemployment benefit funds, and one custodial fund (refer to Note 1 for further details). PERF DC and PERF MC DC are consolidated on the financial statements for reporting purposes and shown as PERF DC. The TRF DC and TRF MC DC funds are consolidated on the financial statements for reporting purposes and shown as TRF DC.

# **Management Discussion**

# **Financial Highlights**

The Fiduciary Net Position of INPRS held in trust to pay pension benefits and refund of contributions was \$46.7 billion as of June 30, 2023. The amount reflects an increase of \$4.3 billion from the prior year. This change is primarily the result of additional appropriations received for TRF Pre-'96 DB, as well as modest investment earnings.

- INPRS's Net Investment Income/Loss for the years ended June 30, 2023, and June 30, 2022, was \$1.7 billion and -\$3.3 billion, respectively. The money-weighted rate of return for INPRS assets, net of investment expense, was 3.7% for the year ended June 30, 2023, and -7.0% for the year ended June 30, 2022.
- Contributions from employers, members, and appropriations were \$6.1 billion for the year ended June 30, 2023, compared to \$3.2 billion for the fiscal year ended June 30, 2022. The \$2.9 billion increase was predominantly due to TRF Pre-'96 DB receiving \$3.2 billion in additional state funding during the fiscal year.
- Net position for the Supplemental Reserve Accounts at June 30, 2023, totaled \$355.0 million. These reserves were utilized to pay postretirement benefit increases for PERF DB, TRF Pre-'96 DB, TRF '96 DB, EG&C, and LE DB enacted since June 30, 2018.
- Benefits, administrative expenses, and refunds of contributions and interest totaled \$3.4 billion for the year ended June 30, 2023, compared to \$3.4 billion for the year ended June 30, 2022. Benefits paid included a distribution of \$19.8 million as a COLA to benefit recipients of PERF DB, TRF Pre-'96 DB, TRF '96 DB, EG&C, and LE DB.

# Management's Discussion and Analysis, continued

(dollars in millions)	Defined Benefit			Defined Contribution			OPEB and Custodial				Total				Increase/(Decrease)				
Assets		2023		2022		2023		2022		2023		2022		2023		2022	A	nount	Percent
Investments	\$	48,498	\$	44,430	\$	6,593	\$	6,023	\$	405	\$	387	\$	55,496	\$	50,840	\$	4,656	9.2 %
Other Assets		36		23		12		7		29		44		77		74		3	4.1
Total Assets		48,534		44,453		6,605		6,030		434		431		55,573		50,914		4,659	9.2
Liabilities																			
Investments		8,740		8,347		76		25		_		_		8,816		8,372		444	5.3
Other Liabilities		15		124		6		7		_		_		21		131		(110)	(84.0)
Total Liabilities		8,755		8,471	_	82		32	_	_		_		8,837		8,503		334	3.9
Net Position	\$	39,779	\$	35,982	\$	6,523	\$	5,998	\$	434	\$	431	\$	46,736	\$	42,411	\$	4,325	10.2 %

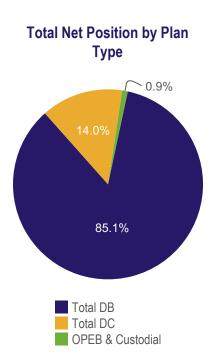
#### CONDENSED SUMMARY OF TOTAL FIDUCIARY NET POSITION RESTRICTED

#### CONDENSED SUMMARY OF CHANGES IN TOTAL FIDUCIARY NET POSITION RESTRICTED

(dollars in millions)	Defined	Benefit		Define	d Co	ontril	bution	0	PEB and	Cus	stodial	Tot	al		Ir	crease/(	Decrease)
Additions	2023	2022		2023			2022	2	2023		2022	2023	20	)22	A	mount	Percent
Contributions	\$ 5,458	\$ 2,66	5	\$	374	\$	343	\$	236	\$	237	\$ 6,068	\$	3,245	\$	2,823	87.0 %
Net Investment Income	1,072	(2,53	6)	į	578		(685)		3		(30)	1,653		(3,251)		4,904	150.8
Other Additions	 22	1	1		_		_		_		_	 22		11		11	100.0
Total Additions	 6,552	14	0		952		(342)		239		207	 7,743		5		7,738	154760.0
Deductions																	
Benefits and Refunds	2,697	2,57	7	4	415		508		235		245	3,347		3,330		17	0.5
Other Deductions	 58	4	2		12		11		1		1	 71		54		17	31.5
Total Deductions	2,755	2,61	9		427		519		236		246	3,418		3,384		34	1.0
Net Increase/(Decrease)	 3,797	(2,47	9)		525		(861)		3		(39)	4,325		(3,379)		7,704	228.0
Balance, Beginning of Year	 35,982	38,46	1	5,9	998		6,859		431		470	 42,411		45,790		(3,379)	(7.4)
Balance, End of Year	\$ 39,779	\$ 35,98	2	\$6,	523	\$	5,998	\$	434	\$	431	\$ 46,736	\$	42,411	\$	4,325	10.2 %

#### FIDUCIARY NET POSITION RESTRICTED - SUMMARY BY FUND

(dollars in millions)		As of .	lune	30	Increase/ (Decrease)			
Fund		2023		2022	Α	mount	Percent	
PERF DB	\$	14,886	\$	14,848	\$	38	0.3 %	
TRF Pre-'96 DB		8,473		5,113		3,360	65.7	
TRF '96 DB	7,746			7,497		249	3.3	
77 Fund		7,772		7,634		138	1.8	
JRS		640		635		5	0.8	
EG&C		177		172		5	2.9	
PARF		82		80		2	2.5	
LE DB		3		3		_		
Total DB		39,779		35,982		3,797	10.6	
PERF DC		3,333		3,075		258	8.4	
TRF DC		3,153		2,888		265	9.2	
LE DC		37		35		2	5.7	
Total DC		6,523		5,998		525	8.8	
SDBF		9		10		(1)	(10.0)	
RMBA		412		413		(1)	(0.2)	
LPSPR	13		8		5		62.5	
Total Fiduciary Net Position		46,736	\$	42,411	\$	4,325	10.2 %	



# **Investment Highlights**

# **Defined Benefits**

The consolidated defined benefit assets ended with a fair value of \$39.8 billion, an increase of 2.5% (time-weighted) net of all fees over the past fiscal year. The long-term targeted rate of return is 6.25%. The fiscal year was characterized by aggressive monetary policy and heightened economic volatility. Public Equity and Absolute Return proved resilient, however the dampening returns across other asset classes had discernible effect on portfolio returns. The consolidated defined benefit portfolio underperformed its passive benchmark by 0.1%, as asset classes with the largest allocations underperformed their respective benchmarks.

The following table provides a comparison of time-weighted rates of return for the defined benefit assets for the year ended June 30, 2023, and June 30, 2022, with corresponding benchmarks for each asset class.

		1-Yea	ar Notional	Return <sup>1</sup>	1-Year Benchmark Return and Variance						
Global Asset Class	Target Allocation	2023	2022	Increase / (Decrease)	2023	Out/(Under) Performance	2022	Out/(Under) Performance			
Public Equity	20 %	16.7 %	(17.2)%	33.9 %	16.1 %	0.6 %	(16.5)%	(0.7)%			
Private Markets	15	3.2	10.2	(7.0)	(0.6)	3.8	7.5	2.7			
Fixed Income - Ex Inflation-Linked	20	(0.1)	(17.1)	17.0	2.0	(2.1)	(14.9)	(2.2)			
Fixed Income - Inflation-Linked	15	(2.7)	(7.4)	4.7	(2.0)	(0.7)	(7.9)	0.5			
Commodities	10	(5.2)	9.6	(14.8)	(5.6)	0.4	13.3	(3.7)			
Real Assets	10	(1.4)	19.8	(21.2)	(11.1)	9.7	13.3	6.5			
Absolute Return	5	3.0	7.2	(4.2)	2.3	0.7	1.7	5.5			
Risk Parity	20	(2.6)	(16.6)	14.0	9.9	(12.5)	(13.4)	(3.2)			
Cash and Cash Overlay	N/A	3.0	(12.5)	15.5	2.9	0.1	(11.8)	(0.7)			
Total Consolidated Defined Benefit Assets		2.5 %	(6.6)%	9.1 %	2.4 %	0.1 %	(6.1)%	(0.5)%			

As of June 30, 2023, INPRS estimates 51% of the Consolidated Defined Benefit Assets could be liquidated in one week, 60% of the assets could be liquidated within six months without a significant market impact.

<sup>1</sup> The defined benefit plans target allocation for total exposure is 115%. Performance returns are presented using exposure/notional amounts for Public Equity, Fixed Income - Ex Inflation-Linked, and Commodities asset classes.

# **Defined Contribution**

The consolidated defined contribution assets ended with a fair value of \$6.5 billion, an increase of \$0.5 billion from the prior fiscal year. All twelve target date funds had a positive net return ranging from 2.9% to 14.0%, with only the Fund 2015 return not exceeding their custom benchmarks due to active management. The more aggressive the target date fund (i.e., longer vintage dates), the larger gains due to the higher equity exposure and all target date funds except three returned over 7% due to the strong equity performance. For the core menu, three of the seven standalone investment options exceeded their respective benchmarks.

# **Actuarial Highlights**

In accordance with GASB Statement No. 67, the fair value of assets is used for financial reporting purposes; however, the actuarial value of assets will continue to be used for funding purposes as presented in the Actuarial Section. The Fair Value Funded Status declined for all funds except TRF Pre-'96 DB and LE DB due to modest investment returns. The Fair Value Funded Status for TRF Pre-'96 DB and LE DB increased due to additional contributions. Liability experience had offsetting factors which varied by fund, but which resulted in losses for most funds. Liability experience is further discussed below. All funds except JRS and PARF contributed at least their Actuarially Determined Contribution (ADC). JRS and PARF set contribution amounts every other year in accordance with the biennial budget cycle. ADCs are determined as a percent of payroll, but biennial budget appropriations must be made in advance in specific amounts. JRS did not meet its ADC due to faster-than-expected payroll growth over the biennium. PARF did not meet its ADC due to assumption changes causing an increase in the ADC. Both of these factors increased their ADC beyond the estimates made at the start of the biennium. See the Required Supplementary Information of the Financial Section for more information.

There were no changes in assumptions from the June 30, 2022 actuarial valuations to the June 30, 2023 actuarial valuations. The most significant factor in the liability experience was salaries increasing by more than expected, especially in PERF DB, TRF '96 DB, '77 Fund, JRS, and PARF. Note that the data used in these valuations is based on census data as of June 30, 2022, and therefore includes experience for part of the COVID-19 pandemic.

The INPRS Funding Policy sets the employer contribution rates for PERF DB, TRF '96 DB, '77 Fund, and EG&C. The employer contribution rate is set to be at least the ADC, but per the funding policy, is not allowed to decrease until a fund reaches 95 percent funded. As a result, employers in these funds systemically contribute more than the ADC. TRF Pre-'96 DB, JRS, PARF, and LE DB are funded

# Management's Discussion and Analysis, continued

through appropriations. Due to the biennial budget cycle, these appropriations do not always match their corresponding ADC exactly. TRF Pre-'96 DB received special appropriations of \$3.2 billion in fiscal year 2023, consisting of \$2.5 billion per the excess reserve provisions of IC 4-10-22-3 and an additional \$700 million provided by the state budget bill passed in 2023. These special contributions were the driving factor in the increase in TRF Pre-'96 DB's funded status.

An analysis of the funding progress, contributions, and a summary of actuarial assumptions and methods are outlined in Note 8 and in the Required Supplementary Information of the Financial Section. For additional actuarial-related information on a funding basis, refer to the Actuarial Section.

The following table provides a comparison of the defined benefit funding progress for each plan as of June 30, 2023, and June 30, 2022.

(dollars in millions)				
Pre-Funded	Fair Value Fund	ed Status	 et Pension Liability/	Contributions as a Percent
DB Pension Funds	2023	2022	(Asset)	of ADC
PERF DB	80.8 %	82.5 %	\$ 3,529.3	145.3 %
TRF '96 DB	87.7	91.9	1,086.4	101.5
77 Fund	88.4	92.2	1,024.4	110.0
JRS	87.9	93.8	87.9	82.9
EG&C	90.8	91.8	17.9	182.9
PARF	64.4	65.3	45.2	95.5
LE DB	112.4	109.9	(0.3)	662.4
Pay-As-You-Go DB Pension Fund				
TRF Pre-'96 DB	61.8 %	36.4 %	\$ 5,230.4	100.0 %

# **Request For Information**

This financial report is designed to provide the Board of Trustees, our membership, employers, rating agencies, and investment managers with a general overview of INPRS's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be directed to:

Indiana Public Retirement System Finance Department

One North Capitol, Suite 001

.....

. .... .

Indianapolis, IN 46204

(dollars in thousands)				Pensio	n Trust Funds <sup>2</sup>	1			
				Define	d Benefit (DB)				
		TRF Pre-'96							
	PERF DB	DB	TRF '96 DB	77 Fund	JRS	EG&C	PARF	LE DB	Total DB
Assets									
Cash	\$ 2,693	\$ 11	\$ 314	\$ 564	\$ —	\$ —	\$ —	\$ —	\$ 3,582
Receivables:									
Contributions and Miscellaneous	9,049	3,090	3,499	5,456	3,628	-	_	_	24,722
Investments	122,319	69,656	63,674	63,875	5,235	1,455	671	25	326,910
Foreign Exchange Contracts	2,591,930	1,476,027	1,349,250	1,353,515	110,918	30,841	14,219	525	6,927,225
Interest and Dividends	38,918	22,162	20,259	20,323	1,665	463	213	8	104,011
Due From Other Funds	3,195								3,195
Total Receivables	2,765,411	1,570,935	1,436,682	1,443,169	121,446	32,759	15,103	558	7,386,063
Investments:									
Repurchase Agreements	6,762	3,852	3,521	3,532	290	81	37	1	18,076
Short-Term	1,339,396	762,745	697,232	699,436	57,317	15,937	7,348	271	3,579,682
Fixed Income	4,086,676	2,327,239	2,127,350	2,134,075	174,883	48,627	22,418	828	10,922,096
Equities	2,075,750	1,182,078	1,080,549	1,083,965	88,829	24,699	11,387	421	5,547,678
Alternative	7,830,040	4,458,975	4,075,990	4,088,875	335,075	93,171	42,954	1,587	20,926,667
Derivatives	(4,943)	(2,815)	(2,573)	(2,582)	(212)	(59)	(27)	(1)	(13,212)
Pooled Synthetic GIC's at Contract Value	_	_	_	_	_	_	_	_	_
Securities Lending Collateral	59,581	33,930	31,015	31,113	2,550	709	327	12	159,237
Total Investments	15,393,262	8,766,004	8,013,084	8,038,414	658,732	183,165	84,444	3,119	41,140,224
Other Assets	324	_	_	_	_	_	_	_	324
Gross Capital Assets	21,445	_	_	_	_	_	_	_	21,445
Less: Accumulated Depreciation and Amortization	(17,502)								(17,502)
Net Capital Assets	3,943								3,943
Total Assets	18,165,633	10,336,950	9,450,080	9,482,147	780,178	215,924	99,547	3,677	48,534,136
Liabilities									
Administrative Payable	8,770	695	55	76	11	11	13	7	9,638
Retirement Benefits Payable	715	184	155	2,110	_	88	1	_	3,253
Investments Payable	519,272	295,709	270,311	271,165	22,221	6,179	2,848	105	1,387,810
Foreign Exchange Contracts Payable	2,600,953	1,481,165	1,353,947	1,358,227	111,304	30,949	14,268	527	6,951,340
Securities Lending Obligations	59,581	33,930	31,015	31,113	2,550	709	327	12	159,237
Obligations Under Reverse Repurchase Agreement	90,427	51,496	47,073	47,221	3,870	1,076	496	18	241,677
Due to Other Funds	_	868	1,048	337	15	12	9	1	2,290
Total Liabilities	3,279,718	1,864,047	1,703,604	1,710,249	139,971	39,024	17,962	670	8,755,245
Total Fiduciary Net Position Restricted	\$ 14,885,915	\$ 8,472,903	\$ 7,746,476	\$ 7,771,898	\$ 640,207	\$ 176,900	\$ 81,585	\$ 3,007	\$ 39,778,891

# As of June 30, 2023 (with Comparative Totals as of June 30, 2022)<sup>1</sup>

<sup>1</sup> The accompanying notes are an integral part of the financial statements.

<sup>2</sup> Pension Trust Fund assets are restricted solely for qualifying member benefits.

# As of June 30, 2023 (with Comparative Totals as of June 30, 2022)<sup>1</sup>

(dollars in thousands)			rust Funds <sup>2</sup> htribution (DC)		OPEB DB Fund <sup>3</sup>	OPEB DC Fund <sup>3</sup>	Custodial Fund		al Fiduciary vities
	PERF DC	TRF DC	LE DC	Total DC	SDBF	RMBA	LPSPR	2023	2022
Assets									
Cash	\$ 4,651	\$ 1,749	\$2	\$ 6,402	\$ 12	\$ 16,010	\$ —	\$ 26,006	\$ 8,388
Receivables:									
Contributions and Miscellaneous	2,834	2,266	224	5,324	75	10,417	2,721	43,259	59,333
Investments	15,954	15,103	177	31,234	_	_	_	358,144	299,821
Foreign Exchange Contracts	22,803	21,587	253	44,643	_	_	—	6,971,868	7,022,763
Interest and Dividends	15,855	15,009	176	31,040	1	_	320	135,372	104,704
Due From Other Funds	_	_	_	_	_	_	_	3,195	2,508
Total Receivables	57,446	53,965	830	112,241	76	10,417	3,041	7,511,838	7,489,129
Investments:									
Repurchase Agreements	_	_	_	_	_	_	_	18,076	82,400
Short-Term	74,595	70,617	827	146,039	123	_	9,603	3,735,447	3,018,953
Fixed Income	196,845	186,347	2,183	385,375	9,110	385,564	_	11,702,145	10,487,924
Equities	1,899,876	1,798,553	21,070	3,719,499	_	_	_	9,267,177	7,899,798
Alternative	_	_	_	_	_	_	_	20,926,667	19,743,472
Derivatives	_	_	_	_	_	_	_	(13,212)	(263,557)
Pooled Synthetic GIC's at Contract Value	1,141,787	1,080,893	12,662	2,235,342	-	-	-	2,235,342	2,275,539
Securities Lending Collateral	_	_	_	_	_	_	_	159,237	167,504
Total Investments	3,313,103	3,136,410	36,742	6,486,255	9,233	385,564	9,603	48,030,879	43,412,033
Other Assets	_	_	_	_	_	_	_	324	226
Gross Capital Assets	_	_	_	_	_	_	_	21,445	21,445
Less: Accumulated Depreciation and Amortization	_	_	_	_	_		_	(17,502)	(17,253)
Net Capital Assets	_	_	_					3,943	4,192
Total Assets	3,375,200	3,192,124	37,574	6,604,898	9,321	411,991	12,644	55,572,990	50,913,968
Liabilities									
Administrative Payable	1,095	1,238	1	2,334	_	38	_	12,010	13,624
Retirement Benefits Payable	1,515	1,117	1	2,633	_	_	_	5,886	115,480
Investments Payable	15,897	15,050	176	31,123	1	8	_	1,418,942	1,017,650
Foreign Exchange Contracts Payable	22,825	21,608	253	44,686	_	_	_	6,996,026	6,965,990
Securities Lending Obligations	_	_	_	_	_	_	_	159,237	167,504
Obligations Under Reverse Repurchase Agreement	_	_	_	_	_	_	_	241,677	219,297
Due to Other Funds	597	237	1	835	5	43	22	3,195	2,508
Total Liabilities	41,929	39,250	432	81,611	6	89	22	8,836,973	8,502,053
Total Fiduciary Net Position Restricted	\$3,333,271	\$ 3,152,874	\$ 37,142	\$ 6,523,287	\$ 9,315	\$ 411,902	\$ 12,622	\$ 46,736,017	\$ 42,411,915

<sup>1</sup> The accompanying notes are an integral part of the financial statements.

<sup>2</sup> Pension Trust Fund assets are restricted solely for qualifying member benefits.

<sup>3</sup> Other postemployment benefit trust fund.

# For the Year Ended June 30, 2023 (with Comparative Totals as of June 30, 2022)<sup>1</sup>

(dollars in thousands)				Pension 1	Frust Funds <sup>2</sup>	1			
				Defined	Benefit (DB)				
	PERF DB	TRF Pre-'96 DB	TRF '96 DB	77 Fund	JRS	EG&C	PARF	LE DB	Total DB
Additions									
Contributions:									
Employer	\$ 682,854	\$ 2,467	\$ 244,600	\$ 192,972	\$ 18,047	\$ 7,177	\$ 4,155	\$ 182	\$ 1,152,454
Nonemployer Contributing Entity	_	4,235,000	_	_	_	_	_	_	4,235,000
Member	208	4	379	62,932	4,122	1,497	1,531	_	70,673
Total Contributions	683,062	4,237,471	244,979	255,904	22,169	8,674	5,686	182	5,458,127
Investment Income / (Loss):									
Net Appreciation Fair Value of Investments	258,247	236,812	134,204	135,186	11,044	3,080	1,427	52	780,052
Other Net Investment Income	453	256	234	236	19	5	3	_	1,206
Net Interest and Dividends Income	194,588	103,131	100,181	101,021	8,387	2,292	1,084	41	510,725
Securities Lending Income	1,136	591	585	589	49	13	6		2,969
Total Investment Income / (Loss)	454,424	340,790	235,204	237,032	19,499	5,390	2,520	93	1,294,952
Less Direct Investment Expenses:									
Investment Management Fees	(81,386)	(40,962)	(41,739)	(42,161)	(3,513)	(956)	(455)	(17)	(211,189)
Securities Lending Fees	(116)	(61)	(60)	(60)	(5)	(1)	(1)	—	(304)
General Investment Expenses	(6,103)	(1,876)	(2,120)	(1,116)	(75)	(31)	(19)	(2)	(11,342)
Total Direct Investment Expenses	(87,605)	(42,899)	(43,919)	(43,337)	(3,593)	(988)	(475)	(19)	(222,835)
Net Investment Income / (Loss)	366,819	297,891	191,285	193,695	15,906	4,402	2,045	74	1,072,117
Other Additions:									
Member Reassignment Income	7,732	2,784	10,803	14	11	207	_	_	21,551
Miscellaneous Income	4			8					12
Total Other Additions	7,736	2,784	10,803	22	11	207			21,563
Total Additions	1,057,617	4,538,146	447,067	449,621	38,086	13,283	7,731	256	6,551,807
Deductions									
Pension, Disability, and Survivor Benefits	984,759	1,170,518	185,167	303,825	32,560	8,311	5,739	329	2,691,208
Special Death Benefits	_	_	_	1,212	_	_	_	_	1,212
Retiree Health Benefits	_	_	_	_	_	_	_	_	_
Retiree Health Forfeitures	_	_	_	_	_	_	_	_	_
Distributions of Contributions and Interest	_	_	_	4,060	59	72	334	_	4,525
Pension Relief Distributions	_	_	_	_	_	_	_	_	_
Administrative Expenses	21,695	5,761	6,319	2,429	124	119	108	36	36,591
Member Reassignment Expenses	13,609	2,085	5,645	210	_	2	_	_	21,551
Total Deductions	1,020,063	1,178,364	197,131	311,736	32,743	8,504	6,181	365	2,755,087
Net Increase / (Decrease)	37,554	3,359,782	249,936	137,885	5,343	4,779	1,550	(109)	3,796,720
Beginning Fiduciary Net Position Restricted	14,848,361	5,113,121	7,496,540	7,634,013	634,864	172,121	80,035	3,116	35,982,171
Ending Fiduciary Net Position Restricted	\$ 14,885,915	\$ 8,472,903	\$ 7,746,476	\$ 7,771,898	\$ 640,207	\$ 176,900	\$ 81,585	\$ 3,007	\$ 39,778,891

<sup>1</sup> The accompanying notes are an integral part of the financial statements.

<sup>2</sup> Pension Trust Fund assets are restricted solely for qualifying member benefits.

#### (dollars in thousands) Pension Trust Funds <sup>2</sup> OPEB DC OPEB DB Custodial **INPRS** Total Fiduciary Defined Contribution (DC) Activities Fund <sup>3</sup> Fund <sup>3</sup> Fund PERF DC TRF DC LE DC SDBF **RMBA** LPSPR Total DC 2023 2022 Additions Contributions: \$ \$ \$ \$ 28,569 1,182,680 \$ 1,076,370 Employer \$ \$ 1,657 1,657 \$ \$ 463 4,442,174 Nonemployer Contributing Entity 206,711 1,760,372 217,910 153,657 456 372,023 442,696 408,854 Member **Total Contributions** 217,910 153,657 2,113 373,680 463 28,569 206,711 6,067,550 3,245,596 Investment Income / (Loss): 267,473 Net Appreciation Fair Value of 230,692 2,854 501,019 (13) (261) 1,280,797 (6, 623, 716)\_ Investments Other Net Investment Income 53 61 1 115 1,321 1,454 40,353 685 86,639 9 60 3,524 600,957 Net Interest and Dividends Income 45,601 3,656,697 Securities Lending Income 2,969 1,488 Total Investment Income / (Loss) 271,098 313,135 3,540 587,773 (4) (201) 3,524 1,886,044 (2,964,077)Less Direct Investment Expenses: Investment Management Fees (4, 161)(3,905)(46) (8,112) (2) (25) (219, 328)(273, 431)Securities Lending Fees (304) (210) (935) General Investment Expenses (1,243) (9) (2,187) (6) (31) (25) (13,591) (13, 366)Total Direct Investment (5,404)(4, 840)(55)(10, 299)(8) (56)(25)(233, 223)(287,007) Expenses Net Investment Income / (Loss) 265,694 308,295 3,485 577,474 (12) (257) 3,499 1,652,821 (3,251,084) Other Additions: Member Reassignment Income 21,551 10,841 \_ Miscellaneous Income 12 12 24 69 12 21,575 **Total Other Additions** 12 10,910 **Total Additions** 483,604 461,952 5,610 951,166 451 210,210 7,741,946 28,312 5,422 Deductions 2,691,208 Pension, Disability, and Survivor 2,570,772 Benefits Special Death Benefits 1,575 2,787 4,542 **Retiree Health Benefits** 15,559 15,559 17,093 **Retiree Health Forfeitures** 12,835 12,835 17,295 Distributions of Contributions and 217,539 193,364 3,796 414,699 419,224 512,706 Interest Pension Relief Distributions 205,531 205,531 207,363 Administrative Expenses 8,113 3,459 8 11,580 37 795 146 49,149 43,187 Member Reassignment Expenses 21,551 10,841 **Total Deductions** 225,652 196,823 3,804 426,279 1,612 29,189 205,677 3,417,844 3,383,799 Net Increase / (Decrease) 257,952 265,129 1,806 524,887 (1, 161)(877) 4,533 4,324,102 (3,378,377)Beginning Fiduciary Net Position Restricted 3,075,319 2,887,745 35,336 5,998,400 10,476 412,779 8,089 42,411,915 45,790,292 **Ending Fiduciary Net Position** Restricted \$ 3,333,271 \$ 3,152,874 \$ 37,142 \$ 6,523,287 \$ 9,315 \$ 411,902 \$ 12,622 \$ 46,736,017 \$ 42,411,915

# For the Year Ended June 30, 2023 (with Comparative Totals as of June 30, 2022)<sup>1</sup>

<sup>1</sup>The accompanying notes are an integral part of the financial statements.

<sup>2</sup> Pension Trust Fund assets are restricted solely for qualifying member benefits.

<sup>3</sup> Other postemployment benefit trust fund.

# Note 1. Descriptions of System and Funds

# **Reporting Entity**

INPRS is an independent body corporate and politic, a component unit, and is not a department or agency of the State of Indiana. INPRS exercises essential government functions as established by Indiana Public Law 23-2011, and is a pension trust fund for the State of Indiana for financial statement reporting purposes.

INPRS administers 16 funds consisting of eight DB funds and five DC funds, two OPEB funds, and one custodial fund. PERF DC and PERF MC DC are consolidated on the financial statements for reporting purposes and shown as PERF DC. The TRF DC and TRF MC DC funds are consolidated on the financial statements for reporting purposes and shown as TRF DC. These fiduciary funds account for assets held by the government in a trustee capacity or as an agent on behalf of others.

In accordance with Indiana Code (IC) 5-10.5, INPRS is governed by a nine-member Board of Trustees. The Board approves an annual budget for general administrative and direct investment expenses. Expenses are paid from investment earnings and if necessary, plan assets. The Board is composed of:

- One trustee with experience in economics, finance, or investments;
- One trustee with experience in executive management or benefits administration;
- One trustee who is an active or retired member of the '77 Fund;
- Two trustees who are TRF members with at least 10 years of creditable service;
- One trustee who is a PERF member with at least 10 years of creditable service;
- Director of the Office of Management and Budget, or designee;
- State Comptroller, or nominee;
- Treasurer of State, or nominee.

# **Demographic Information of Funds**

DB member data shown below is based on census data as of June 30, 2022, and used in the actuarial valuations for June 30, 2023. DC member account data is as of June 30, 2023, based on information from the recordkeeper. Members of PERF DC and TRF DC are included in the PERF DB, TRF Pre-'96 DB and TRF '96 DB member count.

. . . . . . .

. .

	-	Number of DB Members as of June 30, 2022											
DB Fund	Number of DB Employers	Active	Annuitants	Inactive Vested	Inactive Non-Vested With Balance	Total							
PERF DB	1,244	119,398	99,635	35,174		254,207							
TRF Pre-'96 DB	334	6,287	53,282	1,502	_	61,071							
TRF '96 DB	384	60,057	10,127	8,029	_	78,213							
77 Fund	186	14,503	6,993	315	1,710	23,521							
JRS	1	480	426	30	38	974							
EG&C	1	431	275	7	148	861							
PARF	1	210	203	75	140	628							
LE DB	1	3	74	6	_	83							

Number of DC Member Accounts on of June 20, 2022

	Number of DC Employers	Number of DC Member Accounts as of June 30, 2023		
DC Fund		Active	Inactive	Total
PERF DC	1,244	127,809	109,018	236,827
PERF MC DC	45	5,188	4,438	9,626
TRF DC	384	67,745	32,122	99,867
TRF MC DC	317	2,636	753	3,389
LE DC	1	150	86	236

# **Description of Defined Benefit Funds**

# Public Employees' Defined Benefit Account (PERF DB)

PERF DB is a cost-sharing, multiple-employer DB fund providing retirement, disability, and survivor benefits to full-time employees of the State of Indiana not covered by another plan and those political subdivisions (counties, cities, townships and other governmental units) that elect to participate in the retirement fund. Administration of the fund is generally in accordance with IC 5-10.2, 5-10.3, 5-10.5, 35 IAC 1.2 and other Indiana pension law. PERF DB is a component of the Public Employees' Hybrid plan (PERF Hybrid).

PERF Hybrid consists of two components: PERF DB, the monthly employer-funded defined benefit component, along with the Public Employees' Hybrid Members Defined Contribution Account (PERF DC), a member-funded account. First time new employees hired by the State or a participating political subdivision who offers a choice, have a one-time election to join either the PERF Hybrid plan or PERF MC DC. Refer to the Description of Defined Contribution Funds for discussion of both the PERF DC and PERF MC DC plans. A new hire that is an existing member of PERF Hybrid and was not given the option for the PERF MC DC plan is given the option to elect PERF MC DC or remain in PERF Hybrid.

Members who have service in both PERF DB and either TRF Pre-'96 DB or TRF '96 DB, have the option of choosing from which of these funds they would like to retire.

# **Eligibility for Pension Benefit Payment**

# **Full Retirement Benefit**

- Age 65 with at least 10 years of creditable service (eight years for certain elected officials).
- Age 60 with at least 15 years of creditable service.
- Age 55 if age and creditable service total at least 85 ("Rule of 85").
- Age 55 with 20 years of creditable service and active as an elected official in the PERF-covered position.
- Age 70 with 20 years of creditable service and still active in the PERF-covered position.

# **Early Retirement Benefit**

Age 50 and minimum of 15 years of creditable service (44% of full benefit at age 50, increasing 5% per year up to 89% at age 59).

# **Disability Benefit**

An active member qualifying for Social Security disability with five years of creditable service may receive an unreduced retirement benefit for the duration of their disability (minimum of \$180 per month).

# **Survivor Benefit**

If a member dies after June 30, 2018, a spouse or dependent beneficiary of a member with a minimum of 10 years of creditable service receives a benefit as if the member retired the later of age 50 or the age the day before the member's death.

If a member dies while receiving a benefit, a beneficiary receives the benefit associated with the member's selected form of payment: Five Year Certain & Life, Joint with 100% Survivor Benefits, Joint with Two-Thirds Survivor Benefits, or Joint with One-Half Survivor Benefits.

# Contribution

Contributions are determined by the Board based on an actuarial valuation. Employers contribute 11.2% of covered payroll, with 0.72% from July 2022 to December 2022 and 0.66% from January 2023 to June 2023 funding a supplemental reserve account for postretirement benefit increases. Contributions from employers with PERF MC DC plan members who offered PERF Hybrid prior to July 1, 2016 fund PERF DB's unfunded liability at 7.5% of covered payroll for the State and 6.8% for political subdivisions as of June 30, 2023. No member contributions are required.

# Benefit Formula & Postretirement Benefit Adjustment

Lifetime Annual Benefit = Years of Creditable Service x Average Highest Five-Year Annual Salary x 1.1% (minimum of \$180 per month). Average annual compensation is outlined in IC 5-10.2-4-3 and includes compensation of not more than \$2,000 received from the employer in severance.

Postretirement benefit increases are granted on an ad hoc basis pursuant to IC 5-10.2-12-4 and administered by the Board. For the year ended June 30, 2023, postretirement benefits of \$8 million were issued to members as a COLA.

# Teachers' Pre-1996 Defined Benefit Account (TRF Pre-'96 DB)

TRF Pre-'96 DB is a pay-as-you-go, cost-sharing, multiple-employer DB fund providing retirement, disability and survivor benefits for teachers, administrators and certain INPRS personnel hired before July 1, 1996. Membership in TRF Pre-'96 DB is closed to new entrants. Administration of the fund is generally in accordance with IC 5-10.2, IC 5-10.4, 35 IAC 14 and other Indiana pension law. TRF Pre-'96 DB is a component of the Teachers' Hybrid Plan (TRF Hybrid).

TRF Hybrid Plan consists of three components: TRF Pre-'96 DB and TRF '96 DB, the monthly employer-funded defined benefit components, along with TRF DC, a member-funded account. Refer to the Description of Defined Contribution Funds for discussion of the TRF DC plan.

## **Eligibility for Pension Benefit Payment**

## **Full Retirement Benefit**

- Age 65 with at least 10 years of creditable service.
- Age 60 with at least 15 years of creditable service.
- Age 55 if age and creditable service total at least 85 ("Rule of 85").
- Age 55 with 20 years of creditable service and active as an elected official in the TRF-covered position.
- Age 70 with 20 years of creditable service and still active in the TRF-covered position.

#### **Early Retirement Benefit**

Age 50 and minimum of 15 years of creditable service (44% of full benefit at age 50, increasing 5% per year up to 89% at age 59).

#### **Disability Benefit**

An active member qualifying for Social Security disability with five years of creditable service may receive an unreduced retirement benefit for the duration of their disability (minimum of \$185 per month). Under certain conditions, active TRF members may qualify for a classroom disability benefit of at least \$125 per month.

#### **Survivor Benefit**

If a member dies after June 30, 2018, a spouse or dependent beneficiary of a member with a minimum of 10 years of creditable service receives a benefit as if the member retired the later of age 50 or the age the day before the member's death.

If a member dies while receiving a benefit, a beneficiary receives the benefit associated with the member's selected form of payment: Five Year Certain & Life, Joint with 100% Survivor Benefits, Joint with Two-Thirds Survivor Benefits, or Joint with One-Half Survivor Benefits.

#### Contribution

According to statute, the TRF Pre-'96 DB fund is funded primarily by appropriations from the state general fund and lottery proceeds. The total contributions for TRF Pre-'96 DB were \$4.2 billion. This includes a base appropriation of \$1.0 billion, \$30.0 million of lottery proceeds to fund the supplemental reserve account for postretirement benefits, and \$2.5 million of employer contributions from grant monies. In addition, TRF Pre-'96 DB received special appropriations of \$3.2 billion in fiscal year 2023. Of that, \$2.5 billion was due to the excess reserve provisions of IC 4-10-22-3. An additional \$700 million was provided per the state budget bill HB 1001 passed in fiscal year 2023. No member contributions are required.

## Benefit Formula & Postretirement Benefit Adjustment

Lifetime Annual Benefit = Years of Creditable Service x Average Highest Five-Year Annual Salary x 1.1% (minimum of \$185 per month). Average annual compensation is outlined in IC 5-10.2-4-3 and includes compensation of not more than \$2,000 received from the employer in severance.

Postretirement benefit increases are granted on an ad hoc basis pursuant to IC 5-10.2-12-4 and administered by the Board. For the year ended June 30, 2023, postretirement benefits of \$10.2 million were issued to members as a COLA.

# Teachers' 1996 Defined Benefit Account (TRF '96 DB)

TRF '96 DB is a cost-sharing, multiple-employer DB fund providing retirement, disability and survivor benefits. Membership in TRF '96 DB is required for all legally qualified and regularly employed licensed teachers who serve in the public schools of Indiana, teachers employed by the State at state institutions, and certain INPRS personnel. Faculty members and professional employees at Ball State University and Vincennes University have the option of selecting membership in the fund or an alternate university plan not administered by INPRS. Membership in TRF '96 DB is optional for teachers employed by charter schools, employees and officials of the Indiana State Board of Education who were Indiana licensed teachers before their employment with the Board, and teachers employed by special management teams as defined under IC 20-31. Administration of the fund is generally in accordance with IC 5-10.2, IC 5-10.4, 35 IAC 14 and other Indiana pension law. TRF '96 DB is a component of the Teachers' Hybrid Plan (TRF Hybrid).

TRF Hybrid Plan consists of three components: TRF Pre-'96 DB and TRF '96 DB, the monthly employer-funded defined benefit components, along with TRF DC, a member-funded account. Refer to the Description of Defined Contribution Funds for discussion of the TRF DC plan.

## **Eligibility for Pension Benefit Payment**

## **Full Retirement Benefit**

- Age 65 with at least 10 years of creditable service.
- Age 60 with at least 15 years of creditable service.
- Age 55 if age and creditable service total at least 85 ("Rule of 85").
- Age 55 with 20 years of creditable service and active as an elected official in the TRF-covered position.
- Age 70 with 20 years of creditable service and still active in the TRF-covered position.

# **Early Retirement Benefit**

Age 50 and minimum of 15 years of creditable service (44% of full benefit at age 50, increasing 5% per year up to 89% at age 59).

#### **Disability Benefit**

An active member qualifying for Social Security disability with five years of creditable service may receive an unreduced retirement benefit for the duration of their disability (minimum of \$185 per month). Under certain conditions, active TRF members may qualify for a classroom disability benefit of at least \$125 per month.

#### **Survivor Benefit**

If a member dies after June 30, 2018, a spouse or dependent beneficiary of a member with a minimum of 10 years of creditable service receives a benefit as if the member retired the later of age 50 or the age the day before the member's death.

If a member dies while receiving a benefit, a beneficiary receives the benefit associated with the member's selected form of payment: Five Year Certain & Life, Joint with 100% Survivor Benefits, Joint with Two-Thirds Survivor Benefits, or Joint with One-Half Survivor Benefits.

#### Contribution

Contributions are determined by the Board based on an actuarial valuation. Employers contribute 5.5% of covered payroll, with 0.21% for the full fiscal year funding a supplemental reserve account for future postretirement benefit increases. No member contributions are required.

# Benefit Formula & Postretirement Benefit Adjustment

Lifetime Annual Benefit = Years of Creditable Service x Average Highest Five-Year Annual Salary x 1.1% (minimum of \$185 per month). Average annual compensation is outlined in IC 5-10.2-4-3 and includes compensation of not more than \$2,000 received from the employer in severance.

Postretirement benefit increases are granted on an ad hoc basis pursuant to IC 5-10.2-12-4 and administered by the Board. For the year ended June 30, 2023, postretirement benefits of \$1.5 million were issued to members as a COLA.

# 1977 Police Officers' and Firefighters' Retirement Fund ('77 Fund)

The '77 Fund is a cost-sharing, multiple-employer DB fund for members hired (or rehired) after April 30, 1977. The fund provides retirement, disability and survivor benefits to full-time sworn officers of a police force of an Indiana city or eligible town, along with full-time firefighters employed by an Indiana city, town, township, county, or airport authority. Administration of the fund is generally in accordance with IC 36-8, 35 IAC 2, and other Indiana pension law.

#### **Eligibility for Pension Benefit Payment**

#### **Full Retirement Benefit**

Age 52 with 20 years of creditable service.

## **Early Retirement Benefit**

Age 50 and 20 years of creditable service (reduce full benefit by 7% for each year less than age 52).

## **Deferred Retirement Option Plan (DROP)**

In accordance with IC 36-8-8.5, members eligible to retire with an unreduced benefit may elect to earn a DROP benefit while continuing to work. Members execute an irrevocable election to retire on a DROP retirement date and remain in active service while contributing to the fund until that date. The DROP retirement date must be no less than 12 months and not more than 36 months after their DROP entry date, and cannot be after the date the member reaches mandatory retirement age. The DROP and future retirement monthly benefit are calculated as of the member's DROP entry date. At retirement, members must choose among the available options for distribution of the accumulated benefit under the DROP. As of June 30, 2023, the amount held by the fund under the DROP is \$98.6 million.

## Non vested Termination

If a member ends employment prior to reaching vested status, the member may apply to receive the sum total of the member's contributions plus interest at a rate set by the Board.

#### **Disability Benefit**

An active member may qualify for a benefit with the amount based on the class of impairment and other factors, as recommended by the local pension board with final determination by the Board.

#### **Survivor Benefit**

The eligible survivor of a member who dies in the line of duty receives 100% of member's benefit (the minimum benefit is calculated as if the member had at least 20 years of service and age 52). Otherwise, eligible survivors of members who die other than in the line of duty receive 70% of the member's benefit.

While receiving a benefit, a spouse or a wholly dependent parent (for their lifetimes) or dependent (until at least age 18) receives up to 70% of the member's benefit. Heirs or estate may be entitled to receive \$12,000.

#### Contribution

Contributions are determined by the Board based on an actuarial valuation. Employers contribute 18.0% of the salary of a first-class officer or firefighter. Members are required to contribute 6% of the salary of a first-class officer or firefighter for the term of the member's employment up to 32 years. Employers may pay all or part of the member contribution for the member.

#### **Benefit Formula & Postretirement Benefit Adjustment**

Annual Benefit = 52% of first-class officer salary for 20 years of service. The percentage is increased by 1% for each six months of active service accumulated after 20 years of service to a maximum of 32 years, or 76%.

Postretirement benefit increases is a percentage determined by statute equal to the change in the Consumer Price Index but not in excess of a 3% increase. For the year ended June 30, 2023, no postretirement benefits were issued to members as a COLA.

# Judges' Retirement System (JRS)

JRS is a single-employer (State of Indiana) DB fund providing retirement, disability and survivor benefits to members. Membership consists of individuals who served, are serving, or shall serve as a regular judge, magistrate, or justice of the (1) Supreme Court of the State of Indiana, (2) Court of Appeals, (3) Indiana Tax Court, (4) Circuit Court of a Judicial Circuit, or (5) county courts including: Superior, Criminal, Probate, Juvenile, Municipal and County. Administration of the fund is generally in accordance with IC 33-38 and other Indiana pension law.

## **Eligibility for Pension Benefit Payment**

# **Full Retirement Benefit**

- Age 65 with at least eight years of creditable service.
- Age 55 if age and creditable service total at least 85 ("Rule of 85").

## **Early Retirement Benefit**

Age 62 and at least eight years of creditable service (full benefit reduced by 0.1% for each month less than age 65).

## Non vested Termination

If a member ends employment prior to reaching vested status, the member may apply to receive the sum total of the member's contributions plus interest at a rate set by the Board.

#### **Disability Benefit**

A qualified member with 22+ years of creditable service receives an unreduced benefit. Members with less than 22 years of creditable service receive the full benefit reduced by 1% for each year under 22 years of creditable service (benefit to be no lower than 50%).

## **Survivor Benefit**

While in active service with 8+ years of service, or while receiving a benefit, a spouse or dependent child(ren) (for their lifetime) receive the greater of \$12,000 annually or 50% of benefit entitled at the date of death.

#### Contribution

Employer contributions are determined by the Board based on an actuarial valuation and are received from the state general fund and certain court and docket fees. Employer contributions totaled \$18.0 million, with appropriations of \$10.9 million and \$7.2 million in docket and court fees. The Actuarially Determined Contribution (ADC) was \$21.8 million.

Members are required to contribute 6% of the member's salary for a maximum period of 22 years of creditable service. Employers may pay all or part of the member contribution for the member.

#### Benefit Formula & Postretirement Benefit Adjustment

Annual Benefit = Individual Salary, or Salary of Office at Retirement x Percentage for Years of Service: 24% at eight years of service; increased by 3% per year for years nine through 11; 50% at year 12; increased by 1% per year for years 13 through 22 with a maximum of 60%.

Postretirement benefit increases for JRS members (not survivors or disabled members) are equal to the change in the salary of the office at retirement. For the year ended June 30, 2023, no postretirement benefits were issued to members as a COLA.

# Excise, Gaming and Conservation Officers' Retirement Fund (EG&C)

EG&C is a single-employer (State of Indiana) DB fund providing retirement, disability and survivor benefits to certain employees of: (1) the Indiana Department of Natural Resources, (2) the Indiana Alcohol and Tobacco Commission and (3) any Indiana State excise police officer, Indiana State conservation enforcement officer, gaming agent, or any gaming control officer who is engaged exclusively in the performance of law enforcement duties. Administration of the fund is generally in accordance with IC 5-10-5.5. 35 IAC 4, and other Indiana pension law.

## **Eligibility for Pension Benefit Payment**

## **Full Retirement Benefit**

- Age 65 if members were employed by age 50 with 15 years of creditable service. Retirement is mandatory.
- Age 65 if employed after age 50 with 10 years of service. Mandatory retirement occurs on the first day of the month after age 65 or 15 years of creditable service.
- Age 55 if age and creditable service total at least 85 ("Rule of 85").
- Age 50 with 25 years of service.

# **Early Retirement Benefit**

Age 45 and 15 years of creditable service (reduce full benefit by 0.25% for each month less than age 60).

## **Deferred Retirement Option Plan (DROP)**

In accordance with IC 5-10-5.5-22, members eligible to retire with an unreduced benefit may elect to earn a DROP benefit while continuing to work. Members execute an irrevocable election to retire on a DROP retirement date and remain in active service while contributing to the fund until that date. The DROP retirement date must be no less than 12 months and not more than 36 months after their DROP entry date, and cannot be after the member reaches mandatory retirement age. The DROP and future retirement monthly benefit are calculated as of the members' DROP entry date. At retirement, members must choose among the available options for distribution of the accumulated benefit under the DROP. As of June 30, 2023, the amount held by the fund under the DROP is \$1.7 million.

#### **Nonvested Termination**

If a member ends employment prior to reaching vested status, the member may apply to receive the sum total of the member's contributions plus interest at a rate set by the Board.

#### **Disability Benefit**

If disability occurs in the line of duty, the benefit is the member's salary times the degree of impairment without a reduction for early commencement. If not in the line of duty, the member's salary used to calculate the benefit is reduced 50%.

#### **Survivor Benefit**

The eligible survivor of an active member who dies in the line of duty receives 100% of the member's benefit. Survivors of active members who die not in the line of duty or inactive members with more than 15 years of service who die receive 50% of the member's benefit. The minimum benefit is calculated as if the member had at least 25 years of service and age 50. For inactive members with less than 15 years of creditable service, the benefit consists of contributions plus interest.

While receiving a benefit, a spouse or parent (for their lifetime), or dependent(s) (until age 18) receives 50% of the member's benefit. If the spouse is more than five years younger than the member, the benefit is actuarially adjusted.

#### Contribution

Contributions are determined by the Board based on an actuarial valuation. Employers contribute 20.8%, with 0.94% from July 2022 to December 2022 and 1.00% January 2023 to June 2023 funding a supplemental reserve account for postretirement benefits administered by the Board. Members are required to contribute 4% of annual salary. Employers may pay all or part of the member contribution for the member.

#### **Benefit Formula & Postretirement Benefit Adjustment**

Annual Benefit = 25% x Average Annual Salary. Average annual salary = average annual salary of the five highest years in the 10 years immediately preceding an officer's retirement date. Percentage is increased by 1.66% for each completed year of creditable service after 10 years. Total percentage may not exceed 75%.

Postretirement benefit increases are granted on an ad hoc basis pursuant to IC 5-10.2-12-4 and administered by the Board. For the year ended June 30, 2023, postretirement benefits of \$76 thousand were issued to members as a COLA.

# Prosecuting Attorneys' Retirement Fund (PARF)

PARF is a single-employer (State of Indiana) DB fund that provides retirement, disability and survivor benefits to prosecuting attorneys. Members serve as a: (1) prosecuting attorney or chief deputy prosecuting attorney, (2) deputy prosecuting attorney, (3) executive director, or (4) assistant executive director of the Indiana Prosecuting Attorneys Council. Administration of the fund is generally in accordance with IC 33-39-7 and other Indiana pension law.

PARF members are also members of the PERF Hybrid Plan. According to statute, benefits payable from PARF are reduced by any benefits payable from the PERF DB Fund.

#### **Eligibility for Pension Benefit Payment**

## **Full Retirement Benefit**

- Age 65 with at least eight years of creditable service.
- Age 55 if age and creditable service total at least 85 ("Rule of 85").

## **Early Retirement Benefit**

Age 62 and eight years of creditable service (reduce full benefit by 0.25% for each month less than age 65).

## **Nonvested Termination**

If a member ends employment prior to reaching vested status, the member may apply to receive the sum total of the member's contributions plus interest at a rate set by the Board.

#### **Disability Benefit**

A qualified member with 22+ years of creditable service receives full benefit. Less than 22 years of creditable service receives the full benefit reduced by 1% for each year under 22. Benefit to be no lower than 50%.

#### **Survivor Benefit**

While in active service, a spouse or dependent child(ren) receives the greater of \$12,000 annually or 50% of benefit for the later of age 62 or age the day before death.

While receiving a benefit, a spouse (for their lifetime), or dependent child(ren) (until age 18 unless disabled) receives the greater of \$12,000 annually or 50% of the member's benefit.

#### Contribution

Employer contributions are determined by the Board based on an actuarial valuation and appropriations are received from the state's General Fund and totaled \$4.2 million. The Actuarially Determined Contribution (ADC) was \$4.4 million.

Members are required to contribute 6% of the state-paid portion of salary for a maximum period of 22 years of creditable service. In addition, members are required to contribute 3% as participants of the PERF DC plan. Employers may pay all or part of the member contributions for the member.

#### Benefit Formula & Postretirement Benefit Adjustment

Annual Benefit = Highest 12 consecutive months of salary (state-paid portion only) before separation from service x Percentage for Years of Service: 24% at eight years of service; increased by 3% per year for years nine through 11; 50% at year 12; increased by 1% per year for years 13 through 22 with a maximum of 60%, and reduced for any PERF DB benefit.

No postretirement benefit adjustment is provided.

# Legislators' Defined Benefit Fund (LE DB)

LE DB is a single-employer (State of Indiana) DB fund providing retirement, disability and survivor benefits to members of the General Assembly who were serving on April 30, 1989, and filed an election under IC 2-3.5-3-1(b). The fund is closed to new entrants. Administration of the fund is generally in accordance with IC 2-3.5 and other Indiana pension law.

## **Eligibility for Pension Benefit Payment**

## **Full Retirement Benefit**

- Age 65 with at least 10 years of creditable service.
- Age 60 with at least 15 years of creditable service.
- Age 55 if age and creditable service total at least 85 ("Rule of 85").

## **Early Retirement Benefit**

Age 55 and 10 years of creditable service (reduce full benefit by 0.1% per month between ages 60 and 65, and by 5/12 percent per month between ages 55 and 60). Early retirement benefits are applicable when the member is no longer serving in the General Assembly and is not receiving, nor entitled to receive, compensation from the state for work in any capacity.

#### **Disability Benefit**

Any active member that qualifies for social security disability with at least five years of creditable service may receive an unreduced benefit for the duration of their disability.

## **Survivor Benefit**

While in active service, a spouse or dependent child(ren) receives 50% of the benefit for the later of age 55 or age the day before the member's death.

While receiving a benefit, a spouse (for their lifetime), or dependent(s) (until age 18 unless disabled) receives 50% of the member's benefit.

#### Contribution

Employer contributions are actuarially determined and derive from the state's General Fund, a portion of which will be allocated to fund a supplemental reserve account for postretirement benefits administered by the Board. Appropriations were \$182 thousand. The Actuarially Determined Contribution (ADC) was \$28 thousand.

#### Benefit Formula & Postretirement Benefit Adjustment

Annual Benefit = The lesser of \$40 x 12 months x years of service before November 8, 1989, or the highest consecutive three year average annual salary.

Postretirement adjustments are granted by the Indiana General Assembly on an ad hoc basis pursuant to IC 5-10.2-12-4, IC 2-3.5-4-13 and administered by the Board. For the year ended June 30, 2023, postretirement benefits of \$3.2 thousand were issued to members as a COLA.

## **Description of Defined Contribution Funds**

### Public Employees' Defined Contribution Account (PERF DC)

PERF DC is a multiple-employer DC fund providing retirement benefits to full-time employees of the State of Indiana not covered by another plan and those political subdivisions (counties, cities, townships and other governmental units) that elected to participate in the retirement fund. Administration of the account is generally in accordance with IC 5-10.2, IC 5-10.3, 35 IAC 1.2 and other Indiana pension law.

PERF DC fund provides supplemental defined contribution benefits under the PERF Hybrid plan. Refer to the Description of Defined Benefit Funds for discussion of the PERF Hybrid plan.

First time new employees hired by the State of Indiana or a political subdivision that offers a choice have a one-time election to join either PERF Hybrid or PERF MC DC. A state rehire that is an existing member of PERF Hybrid plan and was not given the option for PERF MC DC is given the option to elect PERF MC DC or remain in PERF Hybrid.

#### Contribution

Member contributions under PERF DC are set by statute and the Board at 3% of covered payroll. The employer may choose to make these contributions on behalf of the member. Under certain limitations, voluntary post-tax member contributions up to 10% of their compensation can be made solely by the member.

#### **Retirement & Termination Benefit**

Members are entitled to the sum total of vested contributions plus earnings 30 days after separation from employment (retirement, termination, disability or death). As of January 1, 2021, members at least 59½ years of age and service eligible for normal retirement may take in-service distribution of their DC account. Additionally, members who are age and service eligible for normal retirement may take a withdrawal after separation without the 30 day wait period. The amount may be paid in a lump sum, partial lump sum, direct rollover to another eligible retirement plan or a monthly annuity. PERF DC members are 100% vested in their account balance.

#### **Disability Benefit**

Upon providing proof of the member's qualification for social security disability benefits, the member is entitled to the sum total of contributions plus earnings. The amount can be paid in a full or partial withdrawal as a lump sum, direct rollover to another eligible retirement plan or a monthly annuity.

### **Survivor Benefit**

Beneficiary is entitled to the sum total of contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity. The amount a beneficiary is entitled to if a member dies after having selected an annuity or having withdrawn from the account depends upon the annuity option selected by the member and the amount of benefits the member received.

### My Choice: Retirement Savings Plan for Public Employees (PERF MC DC)

PERF MC DC is a multiple-employer DC fund providing retirement benefits to full-time employees of the State of Indiana not covered by another plan and those political subdivisions (counties, cities, townships and other governmental units) that elected to participate in the retirement fund. PERF MC DC is a primary defined contribution benefit plan for members making this election. Administration of the account is generally in accordance with other Indiana pension law.

The Volunteer Firefighters Fund (PERF VFF) allows a political subdivision served by a volunteer fire department to make contributions to the PERF MC DC plan for the members of the volunteer fire department in an amount determined by the governing body of the political subdivision. As of June 30, 2023 there were no participants in this fund.

First time new employees hired by the State of Indiana or a political subdivision who offer a choice, have a one-time election to join either PERF Hybrid or PERF MC DC. A state hire that is an existing member of PERF Hybrid plan and was not given the option for PERF MC DC is given the option to elect PERF MC DC or remain in PERF Hybrid.

#### Contribution

The PERF MC DC plan may be funded with a variable employer contribution. As of June 30, 2023, the employer contribution is 3.7% for state employees and up to 4.4% for political subdivision members. Political subdivisions may match 50% of a member's voluntary contributions.

Member contributions under the PERF MC DC are set by statute and the Board at 3% of covered payroll. The employer may choose to make these contributions on behalf of the member. Under certain limitations, voluntary member contributions up to 10% can be made solely by the member.

#### **Retirement & Termination Benefit**

Members are entitled to the sum total of vested contributions plus earnings 30 days after separation from employment (retirement, termination, disability, or death). As of January 1, 2021, members at least 62 years of age with five qualifying years of service may take an in-service distribution of their DC account. Additionally, members that are normal retirement age may take a withdrawal after separation without the 30 day wait period. The amount may be paid in a lump sum, partial lump sum, direct rollover to another eligible retirement plan, or a monthly annuity. PERF MC DC members are 100% vested in their member contributions. PERF MC DC members vest in employer contributions in increments of 20% for each full year of service until 100% is reached at 5 years.

### **Disability Benefit**

Upon providing proof of the member's qualification for social security disability benefits, the member is entitled to the sum total of vested contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity.

### **Survivor Benefit**

Beneficiary is entitled to the sum total of vested contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity. The amount a beneficiary is entitled to if a member dies after having selected an annuity or having withdrawn from the account depends upon the annuity option selected by the member and the amount of benefits the member received.

### **Teachers' Defined Contribution Account (TRF DC)**

TRF DC is a multiple-employer DC fund providing supplemental retirement benefits to TRF Pre-'96 DB and TRF '96 DB members. Administration of the fund is generally in accordance with IC 5-10.2, IC 5-10.4, 35 IAC 14 and other Indiana pension law. TRF DC is the defined contribution component of the Teachers' Hybrid Plan. Refer to the Description of Defined Benefit Funds for discussion of both Teachers' Defined Benefit plans.

### Contribution

Contributions are determined by statute and the Board at 3% of covered payroll. The employer may choose to make these contributions on behalf of the member. Under certain limitations, voluntary contributions up to 10% can be made solely by the member.

#### **Retirement & Termination Benefit**

Members are 100% vested in their account balance plus earnings and may take a distribution 30 days after separation from employment (retirement, termination, disability, or death). As of January 1, 2021, members at least 59½ years of age and service eligible for a normal retirement may take an in-service distribution of their DC account. Additionally, members who are age and service eligible for normal retirement may take a withdrawal after separation without the 30 day wait period. The amount may be paid in a lump sum, partial lump sum, direct rollover to another eligible retirement plan, or a monthly annuity.

#### **Disability Benefit**

Upon providing proof of the member's qualification for social security disability benefits, the member is entitled to the sum total of vested contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity.

### **Survivor Benefit**

Beneficiary is entitled to the sum total of vested contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity. The amount a beneficiary is entitled to if a member dies after having selected an annuity or having withdrawn from the account depends upon the annuity option selected by the member and the amount of benefits the member received.

### My Choice: Retirement Savings Plan for Teachers (TRF MC DC)

TRF MC DC is a multiple-employer DC fund providing retirement benefits to eligible school corporation employees. New employees hired by a school corporation after June 30, 2019 have a one-time election to join either TRF Hybrid or TRF MC DC.

### Contribution

TRF MC DC plan is funded with employer contributions and member contributions. The employer contributions must equal the contribution rate for TRF Hybrid DB. The amount deposited into the employer contribution subaccount for the member is the normal cost of participation. The employer contribution can be no less than 3%. For fiscal year 2023 the rate was 6.0%.

Member contributions are determined by statute and the Board at 3% of covered payroll. The employer is required to make these contributions on behalf of the member. Under certain limitations, voluntary contributions up to 10% can be made solely by the member.

### **Retirement & Termination Benefit**

Members are entitled to the sum total of vested contributions plus earnings 30 days after separation from employment (retirement, termination, disability or death). As of January 1, 2021, members at least 62 years of age with five qualifying years of service may take an in-service distribution of their DC account. Additionally, members that are normal retirement age may take a withdrawal after separation without the 30 day wait period. The amount may be paid in a lump sum, partial lump sum, direct rollover to another eligible retirement plan or a monthly annuity. TRF MC DC members are 100% vested in their member contributions. TRF MC DC members vest in employer contributions in increments of 20% for each full year of service until 100% is reached at 5 years. The variable employer rate contribution amount that is not vested remains in the account until the member either vests or forfeits the balance. The balance is forfeited by death, member withdrawal, or a required minimum distribution occurs.

### **Disability Benefit**

Upon providing proof of the member's qualification for social security disability benefits, the member is entitled to the sum total of vested contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity.

### **Survivor Benefit**

Beneficiary is entitled to the sum total of vested contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity. The amount a beneficiary is entitled to if a member dies after having selected an annuity or having withdrawn from the account depends upon the annuity option selected by the member and the amount of benefits the member received.

### Legislators' Defined Contribution Fund (LE DC)

LE DC is a single-employer (State of Indiana) DC fund that provides retirement benefits to members of the General Assembly. Administration of the fund is generally in accordance with IC 2-3.5 and other Indiana pension law.

#### Contribution

Contributions are determined by statute and the Board, and confirmed by the State Budget Agency. The employer contribution rate is 14.2% of covered payroll. This rate may not exceed the sum contribution rates for State of Indiana employer and member PERF Hybrid plans. The member contribution is 5% of member's salary. The employer may choose to make contributions on behalf of the member.

#### **Retirement & Termination Benefit**

Members are entitled to the sum total of vested contributions plus earnings. Effective January 1, 2021, a member at least 59½ years of age may take an in-service distribution of their account. The amount may be paid in a lump sum, partial lump sum, direct rollover to another eligible retirement plan, monthly annuity, or installment options.

#### **Survivor Benefit**

Beneficiary is entitled to the sum total of contributions plus earnings. The amount can be paid in a lump sum, direct rollover to another eligible retirement plan, or a monthly annuity.

## **Description of Other Postemployment Benefit Fund (OPEB)**

### Special Death Benefit Fund (SDBF)

SDBF is an OPEB DB fund and is generally administered in accordance with IC 5-10-10, IC 5-10-11, IC 35-33-8 and IC 36-8-8. The fund is a multiple-employer, cost-sharing plan with approximately 44 thousand members. Funds are restricted for the purpose of providing surviving spouses, children, or parents a benefit of \$100,000 for state employees and \$225,000 for public safety officers or other eligible officers who die in the line of duty.

The Hero's Honor benefit was passed in 2015 by the Indiana General Assembly. The benefit covers a line-of-duty death in the amount of \$225,000 for emergency medical service providers. Employers may elect to purchase coverage at \$100 per year for each employee.

Funding is derived from bail bond fees, payments under IC 5-10-10-4.5 and investment income earned. The measurement of potential liability and the related disclosures required for other postemployment benefit plans have been excluded, as they would not be material to the INPRS system.

### **Retirement Medical Benefits Account Plan (RMBA)**

RMBA is a single-employer (State of Indiana) OPEB DC plan administered in accordance with IC 5-10-8.5. RMBA allows for certain medical care expense premiums to be reimbursed from individual accounts established for retired participants under IC 5-10-8.5-9. RMBA became effective for participants who retired on or after July 1, 2007.

Retired participants include:

- a. A participant who is eligible for a normal, unreduced or disability retirement benefit.
- b. A participant who has completed at least ten years of service as an elected or appointed officer on their last day of service.
- c. A participant who is a member of the PERF My Choice plan who is of normal retirement age on their last day of service and whose last day of service is after June 30, 2021.

Individual account balances are comprised of annual contributions and earnings on investments after deduction of costs to manage the plan. Annual contributions range between \$500 and \$1,400, based on the participant's age while in service. Individual account balances are reset after a break in service of more than 30 days.

IC 5-10-8.5-16 provides a one-time credit for an additional contribution to a participant's account, if, by June 30, 2017, the participant was eligible for an unreduced pension benefit and had completed at least 15 years of service or had completed 10 years of service as an elected or appointed officer. The one-time additional contribution is credited to a participant's account after the participant's last day of service. Participants lose their right to this one-time contribution if there is a break in service for more than 30 days between July 1, 2007 and June 30, 2017.

Contributions for self-funded agencies, and employees not funded by the state budget, are funded with an annual charge per employee determined each year. The annual charge for FY 2023 was \$1,026, which is due by June 30. The remaining funding is through appropriation of cigarette taxes (IC 6-7-1-28.1(6)) received throughout the year.

The Plan administrator reimburses premiums for medical, dental, vision, and long-term care for retired participants and their spouses and dependent children. The reimbursements are deducted from the participant's individual account balance and end when the participant's individual account balance is exhausted. If a retired participant dies without a surviving spouse or dependent children, unused amounts are forfeited. Forfeitures are used to reduce the contributions required from the employer.

As of June 30, 2023, \$10.4 million is due as a contribution receivable, of which \$0.7 million was received in July 2023 and \$9.7 million is an employer owed contribution due to the plan to fulfill its obligation towards additional contributions per IC 5-10-8.5-16.

As of June 30, 2023, participation in the plan was as follows:

Active	28,240
Retired or beneficiaries	8,617
Total	36,857

# **Description of Custodial Fund**

### Local Public Safety Pension Relief Fund (LPSPR)

LPSPR is a custodial fund and is generally administered in accordance with IC 5-10.3 and IC 36-8. Funds are restricted for the purpose of providing financial relief to pension funds maintained by units of local government for their police officers' and firefighters' retirement plan benefits.

Funding is derived from contributions from the State of Indiana from a portion of cigarette and alcohol taxes, a portion of the state's lottery proceeds, investment income earned and appropriations from the General Assembly.

Distributions are made from LPSPR to units of local government in two equal installments before July 1 and before October 2 of each year. The distribution is determined by an estimate of the total amount of pension, disability, and survivor benefits that will be paid in the current calendar year by the local government units from the 1925 Police Pension Fund, the 1937 Firefighters' Pension Fund and the 1953 Police Pension Fund (before the establishment of the '77 Fund).

Local government units may deposit funds with INPRS and funds are maintained in separate accounts for each local governmental unit that made an election in 2001. As of June 30, 2023, there are no local government funds deposited with INPRS. Funds deposited are invested and are available for withdrawal at their request.

## Note 2. Summary of Significant Accounting Policies

### **Basis of Presentation**

The accompanying financial statements are fiduciary account assets held in a trustee capacity on behalf of its members. In the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position, PERF DC and PERF MC DC are combined into PERF DC for the purposes of presentation. In the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position, TRF DC and TRF MC DC are combined into TRF DC for the purposes of presentation. INPRS's financial statements are not intended to present the financial position or results of operations for the State of Indiana or any other retirement and benefit plans administered by the State. The basic financial statements include certain prior-year summarized comparative information in total but not at the level of detail required for a presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the government's financial statements for the year ended June 30, 2022, from which the summarized information was derived.

### **Basis of Accounting**

#### **Accrual Basis**

INPRS maintains records and prepares financial statements using the accrual basis of accounting in conformity with generally accepted accounting principles (GAAP) as applied to governmental units.

#### **Provision for Taxes**

All defined benefit funds administered by INPRS are qualified under section 401(a) of the internal revenue code and are exempt from federal income taxes. Therefore, no provision for income taxes has been included in the financial statements.

#### **Use of Estimates**

In preparing the financial statements in conformity with GAAP, INPRS management makes estimates and assumptions that affect the reported amount of assets and liabilities, disclosures of contingent assets and liabilities, as well as the reported amounts of revenue and expenses at the date of the financial statements. Actual results could differ from those estimates and assumptions.

#### Contributions

Employer and member contributions are recognized when due, according to statutory requirements, in accordance with the terms of each plan. Nonemployer contributions are recognized when funds are received from the State of Indiana. Service purchase revenues are recognized in full when employers elect to participate in a fund or enlarge participation. As of June 30, 2023, \$839 thousand is outstanding for employer service purchase contracts. The payment terms of the contracts vary between lump sum payment and 40 years.

#### **Net Investment Income**

Net appreciation (depreciation) is determined by calculating the change in the fair value of investments between the beginning of the year and the end of the year, less purchases of investments at cost, plus sales of investments at fair value. Other investment income is recognized when earned. Dividend income is recognized on the ex-dividend date. Investment expenses consist of external expenses directly related to INPRS's investment operations, as well as the internal administrative expenses associated with INPRS's investment program.

#### **Other Additions**

Member reassignments are recorded when a member is retiring with service credit in multiple funds. Applicable member and employer balances are transferred between funds as allowed by the statute. The transfer allows all benefits to be paid from the fund designated by the member.

#### **Deductions & Expenses**

Benefit payments, including refunds and distributions of employee contributions, are recognized when due and payable in accordance with the benefit terms. Internal administrative expenses are recognized when due and payable. Retiree health benefits reimbursements are issued to qualified retirees to cover qualifying health insurance and medical cost. INPRS also acts as a custodian to receive and distribute funds on a biannual basis to specific pension plans of local government entities.

Year-end expense accruals include compensated absences which are calculated for earned but unused vacation, compensatory, and personal time of full-time INPRS employees.

Forfeitures are shown as deductions when the retiree and any covered dependents are deceased or an active member terminates before meeting eligibility requirements.

#### **Net Investment Assets**

Investments are recorded on a trade-date basis and reported at fair value. Fair value is defined as the amount that can reasonably be expected to be received for an investment in a current sale between a willing buyer and a willing seller. Certain INPRS investment assets, in particular, Global Real Assets, Global Private Equity, and Opportunistic Investments, use estimates in reporting fair value in the financial statements. These estimates are subject to uncertainty in the near term, which could result in changes in the values reported for those assets in the Statement of Fiduciary Net Position. See Note 3 for detailed information on the investment policy, valuation and methods used to measure the fair value of investments.

#### **Pool Accounting**

All DB assets are pooled for the purpose of investments. Each DB fund holds units of the total investment pool. Units of participation are bought and sold as each plan contributes and withdraws cash or assets from the investment pool. The investment pool earnings are allocated to each fund with a change in the unit of participation price. The price is determined by dividing the net asset value of the investment pool by the total number of Master Trust Units held by funds. The price of one unit of the DB pool on June 30, 2023 was \$42.15 The unit holdings by DB fund are shown below:

DB Fund Name	Units
PERF DB	352,924,583
TRF Pre-'96 DB	200,980,009
TRF '96 DB	183,717,677
77 Fund	184,298,426
JRS	15,102,899
EG&C	4,199,443
PARF	1,936,072
LE DB	71,512
Total	943,230,621

All DC assets are pooled for the purpose of investments. The DC pool consists of the asset class options offered to the DC members. Each DC fund holds units of each asset class option.

### **Capital Assets**

The cost of Building and Related Improvements, Equipment, and Software in excess of \$100 thousand is capitalized when the asset is put into service. Improvements that increase the useful life of the property are capitalized. Capital Assets are depreciated using the straight-line method. Land is not subject to depreciation. Depreciation expense of \$249 thousand is included in Administrative Expenses. A summary of Capital Assets is shown below:

Capital Assets	Jun	e 30, 2022	Ad	ditions	Disp	osals	Jun	e 30, 2023
Land	\$	856	\$	_	\$	_	\$	856
Depreciable Capital Assets (Useful Life):								
Software (5 years)	\$	15,989		_		_	\$	15,989
Building and Related Improvements (20 years)	\$	4,600		_			\$	4,600
Total Depreciable Capital Assets		20,589		_		_		20,589
Less: Accumulated Depreciation/Amortization								
Software		(15,989)		_		_	\$	(15,989)
Building and Related Improvements		(1,264)		(249)				(1,514)
Total Accumulated Depreciation/Amortization		(17,253)		(249)		_		(17,502)
Total Net Depreciable Capital Assets		3,336		(249)				3,087
Total Net Capital Assets	\$	4,192	\$	(249)	\$		\$	3,943

#### Reserves

The reserves required by Indiana Code are shown below for June 30, 2023:

- Member Reserves The sum of member contributions and the investment earnings for the four DB funds listed below are set aside in a separate member's account. A member may withdraw the amounts before being vested.
- Supplemental Reserve Accounts Amounts set aside to pay postretirement benefit enacted since June 30, 2018.

ollars in thousands)				
Defined Benefit Pension Trust Fund	 Member eserves	Defined Benefit Pension Trust Fund	S	
Fund	\$ 883,960	PERF DB	\$	
S	44,819	TRF Pre-'96 DB		
G&C	15,292	TRF '96 DB		
RF	27,409	EG&C		
		LE DB		

### **Due To/Due From**

Due To and Due From balances result from member reassignments and other miscellaneous income and expenses recorded to the applicable accounts. A surcharge based on the Long-Term Assumed Investment Rate of Return is collected from the respective fund each month that the balance is not repaid the following month.

#### Accounting Pronouncements Effective for the Year

Management has determined that GASB Statements; No.91 (Conduit Debt Obligations), No. 94 (Public-Private and Public-Public Partnerships and Availability Payment Arrangements), and No. 96 (Subscription-Based Information Technology Arrangements) do not have a material effect on financial statements as presented. GASB No. 99 (Omnibus 2022) has been implemented as applicable with this fiscal year 2023 report.

## Note 3. Investment Policy, Valuation and Performance

### **Investment Oversight and Policy**

Oversight of INPRS assets is the fiduciary responsibility of the Board. As stated in IC 5-10.3-5-3(a) and IC 5-10.4-3-10(a) "The Board shall invest its assets with the care, skill, prudence, and diligence that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character with like aims." Accordingly, the Board must sufficiently diversify the portfolio to minimize the risk of large losses unless, under the circumstances, it is clearly prudent not to do so. Primary risk measures are volatility in the plan's assets, funded status and contribution rates.

Indiana law permits the Board to establish investment guidelines, limits on all types of investments, and take other actions necessary to fulfill its duty as a fiduciary for all assets under its control. On June 30, 2023, cash and investments were held by banks or trust companies under custodial agreements with INPRS. The Investment Policy Statement, adopted by the Board, includes target asset allocation and allowable ranges that are expected to meet rates of return over a period while minimizing risk.

#### **Defined Benefit Assets**

The following Defined Benefits global asset classes, target allocations and target ranges were approved by the Board based on a formal asset-liability study and shall remain in place until revised by the Board. An asset-liability study is conducted every five years. Further information regarding the Investment Policy Statement can be found in the Investment Section.

To maximize the probability of achieving the target rate of return over a 30-year time horizon, INPRS's Board of Trustees approved a new asset allocation on May 7, 2021 that included an increased use of leverage. The explicit leverage enables the Plan to obtain additional investment exposure, which results in an asset allocation that exceeds 100% of invested assets. Beginning in fiscal year 2022, the plan's target allocation for total exposure is 115%. Further details of INPRS's leverage policy are available in the Investment Policy Statement.

Global Asset Class:	Target Alloca	tion	Target Range	
Public Equity	20.0	%	17.0 to 23.0	%
Private Markets	15.0		10.0 to 20.0	
Fixed Income - Ex Inflation-Linked	20.0		17.0 to 23.0	
Fixed Income - Inflation-Linked	15.0		12.0 to 18.0	
Commodities	10.0		7.0 to 13.0	
Real Assets	10.0		5.0 to 15.0	
Absolute Return	5.0		0.0 to 10.0	
Risk Parity	20.0		15.0 to 25.0	

#### **Defined Contribution Assets**

The Defined Contribution plans are structured to provide members with a choice of diverse investment options that offer a range of risk and return characteristics appropriate for members. Members can self-direct their investment options or leave their contributions invested in a default target date retirement fund. The offered investment options undergo periodic reviews by the Board. Detailed information of the funds is provided in the Investment Section.

### **Other Funds Assets**

The Special Death Benefit Fund (SDBF) and the Retirement Medical Benefits Account Plan (RMBA) assets are allocated to commingled funds that invest in intermediate term fixed income securities. The Local Public Safety Pension Relief Fund (LPSPR) is invested 100% in high-quality, short-term money market instruments.

### **Methods Used to Value Investments**

Public Equity investments are comprised of domestic and international stocks as well as commingled equity instruments. Equity securities traded on a national or international exchange are valued at the official closing price or last reported sales price of the instrument. International equities are then adjusted to reflect the exchange rate as of June 30, 2023 of the underlying currency. Commingled equities are not traded on a national security exchange and are valued at the net asset value of the units held at June 30, 2023, based on the fair value of the underlying securities.

Private Market investments are valued using current estimates of fair value obtained from the general partner or investment manager. Holdings are generally valued by a general partner or investment manager on a quarterly or semi-annual basis. Investments in private markets are generally considered illiquid long-term investments. Due to the inherent uncertainty that exists in the valuation of alternative investments, the realized value upon sale of an asset may differ significantly from the fair value. Fixed Income securities are comprised of U.S. Government, U.S. government-sponsored agencies, publicly traded debt, and commingled debt instruments. Securities traded on national and international exchanges are valued based on published market prices and quotations. Securities that are not traded on a national security exchange are valued using a matrix pricing approach. Commingled securities are valued at the net asset value of the units held as of June 30, 2023 based on the fair value of the securities.

Commodities, including derivative instruments, are reported at fair value and involve, to varying degrees, elements of market risk to the extent of future market movements in excess of amounts recognized in the Financial Statements. Derivative instruments are considered investments and not hedges for accounting purposes. The fair value of all derivative financial instruments is reported in the Statement of Fiduciary Net Position. The change in the fair value is recorded in the Statement of Changes in Fiduciary Net Position as Net Investment Income (Loss). Gains and losses arising from this activity are recognized in the Statement of Changes in Fiduciary Net Position as incurred.

Real Assets, Absolute Return, and Risk Parity investments are valued by the manager or independent appraiser based on reported net asset values, cash flow analysis, purchases and sales of similar investments, new financings, economic conditions, other practices used within the industry, or other information provided by the underlying investment advisors. Due to the inherent uncertainty in privately held securities, the fair value may differ from the values that would have been used if a ready market for such securities existed, and the differences can be material.

INPRS relies on third party resources to verify the methodology and calculation used for investment valuation and performance metric reported by the custodian.

### **Fair Value Measurement**

GASB Statement No. 72 requires investments measured at fair value to be categorized under a fair value hierarchy. The categorization of INPRS's investments within the hierarchy is based on the valuation transparency of the instrument and should not be perceived as the risk of the particular investment. The three-tier hierarchy is summarized as follows:

Level 1 - Unadjusted quoted prices for identical instruments in active markets.

Level 2 - Quoted prices in active markets; quoted prices for identical or similar instruments in markets that are not active, and modelderived valuations in which all significant inputs are observable.

Level 3 - Valuations reflect practices where significant inputs are unobservable.

The table on the next page presents the fair value hierarchy of the INPRS investment portfolio as of June 30, 2023.

U.S. Treasury Obligations generally include investments in money market securities that are reported at either fair value or at cost plus accrued interest, which approximates market or fair value.

U.S. Government, U.S. corporate obligations, Equity and Derivative securities classified in Level 1 are valued using prices quoted in active markets for those securities.

Debt and Derivative securities classified in Level 2 are valued using either a bid evaluation or a matrix based pricing technique. Bid evaluations are typically based on market quotations, yields, maturities, call features, and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Index linked debt securities are valued by multiplying the external market price by the applicable day's index ratio. Level 2 debt securities have non-proprietary information that is readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. Equity and equity derivatives classified in Level 2 are securities whose values are derived daily from associated traded securities.

Investments classified as Level 3 are valued using best available sources such as property appraisals, discounted cash flow models and public market comparisons of similar assets where applicable. The values are supplied by advisors or general partners who hold those or similar assets in investment vehicles they oversee. These pricing sources may or may not be indicative of realizable exit values attainable for the assets.

The remaining investments not categorized under the fair value hierarchy are measured at the Net Asset Value (NAV). The NAV for these investments is provided by the investment manager and may be sold at an amount different than NAV. To manage risk relating to Absolute Return investments, assets are placed in limited liability vehicles to protect INPRS from losing more than its invested capital.

The following table summarizes INPRS's investment assets and liabilities measured at fair value as of June 30, 2023, presented in the fair value hierarchy. Also shown are investments at amortized cost and NAV to allow reconciliation to the Total Pooled Investments in the Statement of Fiduciary Net Position.

# Notes to the Financial Statements, continued

			Fair Valu	e Measurements Usin	s Using	
(dollars in thousands)			oted Prices in Active ets for Identical Assets	Significant Other Observable Inputs		Significant bservable Inputs
Investment Type	Jun	e 30, 2023	 (Level 1)	(Level 2)		(Level 3)
Investments by Fair Value Level						
Short-Term Investments						
BNY - Mellon Cash Reserves	\$	10,572	\$ _	\$ 10,572	\$	_
U.S. Treasury Obligations		544,265	544,265	_		_
Non U.S. Government		22,214	_	22,214		_
Commercial Paper		3,285	_	3,285		_
Corporate Bonds (Short Term)		3,160	_	3,160		_
Total Short-Term Investments		583,496	544,265	39,231		_
Fixed Income Investments						
U.S. Governments		5,759,378	5,759,378	_		_
Non-U.S. Governments		3,717,445	_	3,659,895		57,550
U.S. Agencies		122,212	_	122,212		_
Corporate Bonds		846,078	720	284,380		560,978
Asset-Backed Securities		261,693	 _	261,693		
Total Fixed Income Investments		10,706,806	5,760,098	4,328,180		618,528
Equity Investments						
Domestic Equities		3,305,332	3,303,795	1,537		_
International Equities		3,375,670	 3,374,446	1,224		
Total Equity Investments		6,681,002	6,678,241	2,761		_
Total Investments by Fair Value Level	\$	17,971,304	\$ 12,982,604	\$ 4,370,172	\$	618,528
Investments Measured at the Net Asset Value (NAV)						
Commingled Short Term Funds		173,466				
Commingled Fixed Income Funds		995,340				
Commingled Equity Funds		2,586,176				
Private Markets		6,912,375				
Absolute Return		3,479,522				
Real Assets		3,233,819				
Risk Parity		7,300,950				
Total Investments Measured at the Net Asset Value (NAV)		24,681,648				
Investment Derivatives						
Total Futures		(20,933)	\$ (20,933)	\$ —	\$	_
Total Options		14,572	2,088	12,484		_
Total Swaps		(6,851)	_	(6,851)		_
Total Investment Derivatives	\$	(13,212)	\$ (18,845)	\$ 5,633	\$	_
Investments Not Subject to Fair Value Leveling						
Cash at Brokers	\$	440,642				
Repurchase Agreements		18,076				
Short-Term Investments		2,537,842				
Pooled Synthetic GIC's at Contract Value		2,235,342				
Securities Lending Collateral		159,237				
Total Investments Not Subject to Fair Value Leveling		5,391,139				
Total Investments	\$	48,030,879				
	<u> </u>	,,				

(dollars in thousands)	 Fair Value	Unfunded ommitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Commingled Short Term Funds	\$ 173,466	\$ _	Daily	1 day
Commingled Fixed Income Funds	995,340	_	Daily	1 day
Commingled Equity Funds	2,586,176	_	Daily	1 day
Private Markets	6,912,375	3,830,886	Not Eligible	N/A
Absolute Return	3,479,522	331,630	Monthly, Quarterly, Semi-Annually	30-120 days
Real Asset Funds	3,233,819	1,518,807	Quarterly	30-90 days
Risk Parity	 7,300,950	 _	Daily, Weekly, Monthly	3-5 days
Total	\$ 24,681,648	\$ 5,681,323		

The valuation method for investments measured at the NAV per share or equivalent, at June 30, 2023, is presented as follows:

### Commingled Short-Term, Fixed Income, and Equity Funds

There are three short-term funds, 15 fixed income funds and three equity funds, which are considered to be commingled in nature. These investments are valued at the net asset value of the units held at June 30, 2023, based upon the fair value of the underlying securities.

### **Private Markets**

There are 263 funds that invest across a range of strategies, geographies, and industries within private equity and private credit. The underlying portfolio investments cannot be redeemed with each fund, but rather the fund will make distributions of capital as the fund liquidates the underlying portfolio investments over the typical 10 year term in the case of private equity, and the typical 7 year term in the case of private credit.

#### **Absolute Return**

The portfolio consists of 23 fund holdings that cover a broad spectrum of investment strategies and investment horizons which result in distinct fund redemption terms to prevent asset-liability mismatches. These funds attempt to generate returns in excess of the plan's target actuarial rate of return over a full market cycle with minimal beta to the plan's primary long-only market exposures (equities, credit, rates, and commodities). Fund redemption periods range from weeks (alternative beta) to years (drawdown vehicles), but as a whole, on a weighted-average basis, the portfolio maintains a liquidity profile of less than one year. The valuation process for the majority of absolute return funds are done monthly.

### **Real Assets**

There are 87 funds invested primarily in U.S. commercial real assets, of which 78 funds are classified as illiquid, or approximately 64% of the value of the real asset fund investments. These funds have underlying portfolio investments that cannot be redeemed with the funds, but rather these funds will make distributions of capital as the funds liquidate their underlying portfolio investments over the average 10year life of the funds. There are nine real asset funds that have been classified as liquid due to the open-ended structure of the fund. Open-ended funds generally offer periodic distributions of net cash flow, which can be reinvested, as well as quarterly redemption windows.

### **Risk Parity**

This portfolio, which consists of four funds, is constructed to accrue various asset class risk premiums, including equity, without long-term reliance on any single asset class. The structure of these investments provides a reasonable level of liquidity and investments may be redeemed in accordance to the terms set forth by each investment management agreement. Investments are considered to be liquid, market-priced instruments, and 100% of the NAV is independently calculated by the fund administrators. Fair values are reported as NAV per share.

It is probable that illiquid investments will be sold at an amount different from the NAV of the ownership interest in partners' capital. Therefore, the fair values of the investments in this type have been estimated using recent observable transaction information for similar investments and non-binding bids received from potential buyers of the investments (one quarter in arrears plus current quarter cash flows).

### **Investment Performance**

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

For the year ended June 30, 2023, the annual money-weighted rates of return for DB investments are as follows:

Defined Benefit Pension Trust Funds	Annual-Money Weighted Rate of Return
PERF DB	2.5 %
TRF Pre-'96 DB	4.0 %
TRF '96 DB	2.5 %
77 Fund	2.5 %
JRS	2.5 %
EG&C	2.5 %
PARF	2.5 %
LE DB	2.4 %

Time-weighted rates of return for DB asset classes and DC investment options are detailed in the Investment Section.

### Note 4. Deposit and Investment Risk Disclosure

### **Custodial Credit Risk for Deposits**

Custodial credit risk for deposits is the risk that in the event of a bank failure, INPRS's deposits may not be returned. Deposits are exposed to custodial credit risk if they are not covered by depository insurance, and the deposits are uncollateralized or collateralized with securities held by the pledging financial institution. At June 30, 2023, \$466.4 million of cash deposits were uninsured and uncollateralized and therefore exposed to credit risk. The following table shows cash deposits and short-term investments as of June 30, 2023.

(dollars in thousands)

Cash Deposits	 Total
Demand Deposit Account – Bank Balances (Insured by FDIC up to \$250 thousand per financial institution)	\$ 26,006
Held with Custodian Bank (Uncollateralized)	440,642
Short-Term Investment Funds held at Bank (Collateralized)	 2,721,881
Total	\$ 3,188,529

#### **Custodial Credit Risk for Investments**

Custodial credit risk for investments is a risk if the securities are uninsured, are not registered in the name of INPRS, and are held by either the counterparty or the counterparty's trust department or agent, but not in the name of INPRS. INPRS's custody agreement with the custodian requires the custodian to segregate the securities on the custodian's books and records from the custodian's property. In addition, investment managers are not allowed, under any circumstances, to take possession, custody, title, or ownership of any managed assets. As such, there is no custodial credit risk for INPRS investments.

### **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates adversely affect the fair value of the investments. The Investment Policy Statement recognizes interest rate risk as a market risk factor. While INPRS does not have a formal stated policy regarding interest rate risk, it is monitored regularly at the Plan level, and within the fixed income asset classes as part of achieving the long-term actuarial rate of return. Duration is a measure of interest rate risk. The longer a fixed-income investment is to maturity, the more susceptible the value of the fixed-income investment is to market interest rate changes. Short-Term Investments excludes cash with custodian of approximately \$440.6 million. Securities with no available duration include term loans, commingled funds, private placements, commit to purchase swaps, and new positions where availability of modeling characteristics are pending.

As of June 30, 2023, the duration of the fixed income portfolio is as follows:

Debt Security Type	Fair Value	% of All Debt Security	Portfolio Weighted Average Effective Duration (Years)
Short-Term Investments	 		
Short-Term Investment Fund	\$ 2,721,881	18.1 %	0.08
U.S. Treasury Obligations	544,265	3.6	0.13
Non - US Governments Short Term	25,374	0.2	0.08
Commercial Paper	3,285	_	0.24
Total Short-Term Investments	 3,294,805	21.9	
Fixed Income Investments			
US Governments	5,759,378	38.4	12.16
Non - US Governments Fixed Income	3,329,828	22.2	6.62
Corporate Bonds	784,603	5.2	3.25
Asset Backed Securities	311,942	2.1	0.72
Commingled Fixed Income Pools	269,252	1.8	2.90
US Agencies	128,964	0.9	6.29
Duration Not Available	1,118,178	7.5	N/A
Total Fixed Income Investments	11,702,145	78.1	
Total Debt Securities	\$ 14,996,950	100.0 %	

### **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of a plan's investment in a single issuer. As of June 30, 2023, INPRS does not have investments in any single issuer that represent 5% or more of the Fiduciary Net Position other than U.S. Government securities which are not subject to the GASB 40 disclosure requirements. To limit business and liquidity risk arising due to the allocation of a large percentage of assets to a single investment manager, the Board has placed an upper limit on the concentration of assets placed with an investment manager as follows:

- No investment manager shall manage more than 15% of the System's assets in actively managed portfolios.
- No investment manager shall manage more than 20% of the System's assets in passively managed portfolios.
- No investment manager shall manage more than 25% of the assets in a combination of actively and passively managed portfolios.

### **Credit Quality Risk**

Credit quality risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. In accordance with the Investment Policy Statement, when building the most diversified investment portfolio, emphasis is given to risk allocation, not capital allocation. As a result, INPRS regularly monitors success in achieving the targeted risk diversification that is inherent in the approved asset allocation. Credit ratings, obtained from several industry rating services for Fixed Income Securities and Short-Term Investments are shown in the table below. The most conservative rating of Standard and Poor's, Moody's, and Fitch are utilized in the schedule below. Short-Term Investments excludes cash with custodian of approximately \$440.6 million. Unrated investments primarily consist of money market sweep vehicles, private placement, term loans and asset-backed securities, commercial mortgages, CMO/REMIC's, and commingled debt funds.

Credit Rating	hort-Term vestments	 xed Income Securities	 Total	% of All Debt Securities
AAA	\$ _	\$ 432,590	\$ 432,590	2.9 %
U.S. Government Guaranteed	_	5,888,343	5,888,343	39.3
AA	544,265	1,217,535	1,761,800	11.7
A	_	359,718	359,718	2.4
BBB	3,285	653,441	656,726	4.4
BB	_	645,662	645,662	4.3
В	_	340,006	340,006	2.3
Below B	_	317,244	317,244	2.1
Unrated	 2,747,255	 1,847,606	 4,594,861	30.6
Total	\$ 3,294,805	\$ 11,702,145	\$ 14,996,950	100.0 %

### **Custodial Credit Risk for Securities Lending**

The Board has authorized the custodian to enter into a securities lending program agreement under which securities held by the custodian on behalf of INPRS may be loaned. The purpose of such a program is to provide additional revenue. The policy requires the following:

- Securities that are loaned in exchange for cash or securities collateral must be at least 102% of the fair value of domestic securities on loan and 105% of the fair value of international securities on loan, with a simultaneous agreement to return the collateral for the same securities in the future. In no event shall the acceptable collateral be less than the total fair value of loaned securities. Securities shall not be loaned in excess of 40% of the fair value.
- The custodian and/or securities lending sub-agent is required to provide agreed upon indemnification to INPRS from and against any losses, damages, costs, and expenses which arise from a borrower defaulting on a loan or filing for bankruptcy.
- A maximum of 25% of the cash collateral may be invested with a single counterparty.
- All collateral investments have a maturity of the next business day.

As of June 30, 2023, there was no security lending credit risk exposure as the collateral pledged of \$292.9 million exceeded the fair value of securities on loan, as shown below. All reinvested cash collateral investments consist of repurchase agreements which are not rated by any of the rating agencies.

#### (dollars in thousands)

Security Type	 r Value of ties on Loan
U.S. Government	\$ 80,029
Corporate Bonds	13,408
International Bonds	64,912
Domestic Equities	89,902
International Equities	 28,479
Total	\$ 276,730

### **Credit Risk for Repurchase Agreements**

A repurchase agreement is an agreement in which cash is transferred to a broker-dealer or financial institution in return for transfer of security to the custodian and promise to repay cash plus interest. These repurchase agreements are assets whereby security collateral is held by the custodian. An obligation under a reverse repurchase agreement is the same as a repurchase agreement, but from the perspective of the buyer rather than a seller. Obligations under reverse repurchase agreements are liabilities whereby security collateral is held at the broker-dealer or financial institution's custodian.

INPRS's Investment Policy Statement allows prudent use of securities lending, repurchase, and reverse repurchase agreements. Repurchase agreements that may create explicit leverage in the portfolio are prohibited; however, repurchase transactions (including triparty repurchase transactions) collateralized with U.S. Government securities are permitted. Repurchase transactions are required to be collateralized at 102% at time of purchase and marked to market on each business day.

Investments under Repurchase Agreements (exclusive of Securities Lending) as of June 30, 2023 are as follows. At June 30, 2023, there was no reverse repurchase risk as the cash collateral value posted was less than the fair value of the liability held.

Repurchase Agreements by Collateral Type	_	Collateral	Fa	iir Value	Obligations Under Reverse Repurchase Agreements by Collateral Type	h Collateral Posted	Fa	air Value
U.S. Treasury	\$	18,076	\$	18,076	U.S. Treasury	\$ 241,677	\$	435,815

### **Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. INPRS has defined a foreign exchange risk management policy to effectively manage the Fund's performance volatility associated with foreign currency risk.

Foreign investments included in the Fiduciary Net Position as of June 30, 2023 are below. Short-term, fixed income, and equity investments include income accruals. Other investments include foreign holdings of other investments, derivatives, and receivables/ payables. The percentage shown in the table is with respect to DB pooled investments. Totals less than \$5 million are included in Other.

(dollars in thousands)			Investments Held	I in Foreign Currency		
Currency	Short-Term	Fixed Income	Equity	Other Investments	Total	% of Total
AUSTRALIAN DOLLAR	\$ 377	\$ 64,799	\$ 9,295	\$ (66,033)	\$ 8,438	— %
BRAZIL REAL	(9	9) 140,998	56,456	(36,528)	160,917	0.3
CANADIAN DOLLAR	4,465	5 107,934	61,298	(112,900)	60,797	0.1
CHILEAN PESO	394	25,271	_	(733)	24,932	0.1
CHINESE YUAN RENMINBI	9,388	32,804	142,418	(41,344)	143,266	0.3
COLOMBIAN PESO	1,007	56,763	_	(2,423)	55,347	0.1
CZECH KORUNA	708	57,871	_	(1,952)	56,627	0.1
DANISH KRONE	1,982	6,417	60,281	(6,941)	61,739	0.1
DOMINICAN REP PESO	-	- 22,400	_	(17,369)	5,031	_
EGYPTIAN POUND	3,160	1,232	_	2,761	7,153	_
EURO CURRENCY UNIT	17,543	932,307	758,164	(710,505)	997,509	2.1
HONG KONG DOLLAR	752	2 —	181,261	87	182,100	0.4
HUNGARIAN FORINT	884	31,117	871	12,631	45,503	0.1
INDIAN RUPEE	3	198	67,829	9,114	77,144	0.2
INDONESIAN RUPIAH	380	96,574	7,827	3,318	108,099	0.2
JAPANESE YEN	27,178	3 230,032	538,848	(232,153)	563,905	1.2
MALAYSIAN RINGGIT	580	76,854	3,308	21,613	102,355	0.2
MEXICAN PESO	(530	9) 80,316	19,415	25,133	124,334	0.3
NEW TAIWAN DOLLAR	-	· _	113,192	(6,503)	106,689	0.2
NORWEGIAN KRONE	272	1,852	12,307	(1,515)	12,916	_
PERUVIAN SOL	827	57,933	_	(29,934)	28,826	0.1
POLISH ZLOTY	(1,732	?) 56,562	7,579	9,933	72,342	0.2
POUND STERLING	2,311	533,678	151,789	(548,265)	139,513	0.3
ROMANIAN LEU	344	43,108	_	(1,884)	41,568	0.1
SOUTH AFRICAN RAND	(10,153	3) 126,572	22,015	(27,197)	111,237	0.2
SOUTH KOREAN WON	769	(693)	160,821	(1,700)	159,197	0.3
SWEDISH KRONA	678	67,958	65,024	(73,676)	59,984	0.1
SWISS FRANC	8,714		145,654	1,435	155,803	0.3
THAILAND BAHT	20	52,021	8,359	48,830	109,230	0.2
TURKISH LIRA	39	) —	60,127	109	60,275	0.1
Other	2,495	23,396	22,964	(28,647)	20,208	
Held in Foreign Currency	\$ 72,846	<u>\$ 2,926,274</u>	\$ 2,677,102	\$ (1,813,238)	\$ 3,862,984	7.9 %

### Note 5. Derivative Instruments - Activity and Risk

### **Derivative Instruments - Activity**

A derivative is a contract between two or more parties whose value is based on an agreed-upon underlying financial asset (similar to a security) or set of assets (similar to an index). Common underlying instruments include bonds, commodities, currencies, interest rates, market indexes and stocks. The following derivative instruments are included in Investments:

### Futures

A futures contract is an agreement between two parties to buy and sell a financial instrument at a set price on a future date.

### Options

Options are agreements that give the owner of the option the right, but not the obligation, to buy (in the case of a call) or to sell (in the case of a put) a specific amount of an asset for an agreed price on or before the specified expiration date.

### **Swaps**

Swaps are derivative instruments in which one party exchanges a stream of fixed cash flows for floating cash flows. A notional amount of principal is required to compute the actual cash amounts and is determined at contract inception.

The following table summarizes the derivative instruments outstanding as of June 30, 2023:

Futures:         Index Futures - Long         Index Futures - Short         Commodity Futures - Long         Commodity Futures - Short         Fixed Income Futures - Long         Fixed Income Futures - Short         Currency Futures - Long         Total Futures         Options:         Currency Spot Options Bought         Currency Spot Options Written         Interest Rate Options Bought         Interest Rate Options Written	\$ 2,167				
Index Futures - Short Commodity Futures - Long Commodity Futures - Short Fixed Income Futures - Long Fixed Income Futures - Short Currency Futures - Long <b>Total Futures</b> <b>Options:</b> Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	\$ 0 167				
Commodity Futures - Long Commodity Futures - Short Fixed Income Futures - Long Fixed Income Futures - Short Currency Futures - Long Total Futures Options: Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	2,107	\$	2,167	\$	167,642
Commodity Futures - Short Fixed Income Futures - Long Fixed Income Futures - Short Currency Futures - Long Total Futures Options: Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	_		_		_
Fixed Income Futures - Long Fixed Income Futures - Short Currency Futures - Long Total Futures Options: Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	(122,361)		(122,361)		3,835,484
Fixed Income Futures - Short Currency Futures - Long Total Futures Options: Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	12,293		12,293		(164,665)
Currency Futures - Long Total Futures Options: Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	83,626		83,626		4,368,696
Total Futures Options: Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	3,331		3,331		(300,820)
Options: Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	 11		11		14,370
Currency Spot Options Bought Currency Spot Options Written Interest Rate Options Bought	(20,933)		(20,933)		7,920,707
Currency Spot Options Written Interest Rate Options Bought					
Interest Rate Options Bought	_		_		_
	500		(1,694)		(214,316)
Interest Rate Options Written	1,749		2,239		9,000
•	(3,702)		(4,192)		(45,000)
ABS Shares Par	(430)		2,234		245,833
Market Index - Options and Hybrids	956		14,204		10,701
Options on Futures	(119)		1,781		(50,200)
Total Options	(1,046)		14,572		(43,982)
Swaps:					
Variance Swaps	_		_		_
Interest Rate Swaps - Pay Fixed Receive Variable	2,797		5,644		405,851
Interest Rate Swaps - Pay Variable Receive Fixed	(9,950)		(13,127)		842,017
Inflation Swaps - Pay Fixed Receive Variable	_		—		—
Zero Coupon Swaps - Pay Fixed Receive Variable	849		908		287,129
Zero Coupon Swaps - Pay Variable Receive Fixed	120		2		481,574
Total Return Swaps	_		_		_
Credit Default Swaps Single Name - Buy Protection	(352)		401		17,890
Credit Default Swaps Single Name - Sell Protection	2,445		(278)		120,821
Credit Default Swaps Index - Buy Protection	(280)		(105)		14,600
Credit Default Swaps Index - Sell Protection	214		(296)		11,548
Total Swaps	 (4.4	-	(0.054)	-	2,181,430
Total Derivatives	(4,157)		(6,851)		2,101,430

# Notes to the Financial Statements, continued

(dollars in thousands)	Swap Maturity Profile											
Swap Type	<u>&lt;1 yr</u> <u>1-5 yrs</u> <u>5-10 yrs</u> <u>10</u>				0-20 yrs		20+ yrs		Total			
Interest Rate Swaps - Pay Fixed Receive Variable	\$	_	\$	781	\$	1,254	\$	(468)	\$	4,077	\$	5,644
Interest Rate Swaps - Pay Variable Receive Fixed		_		(6,651)		(3,757)		(1,414)		(1,305)		(13,127)
Inflation Swaps - Pay Fixed Receive Variable		_		_		_		_		_		_
Zero Coupon Swaps - Pay Fixed Receive Variable		_		993		(1)		(84)		_		908
Zero Coupon Swaps - Pay Variable Receive Fixed		_		(2,462)		2,464		_		_		2
Credit Default Swaps Single Name - Buy Protection		_		187		214		_		_		401
Credit Default Swaps Single Name - Sell Protection		_		81		(359)		_		_		(278)
Credit Default Swaps Index - Buy Protection		_		_		(105)		_		_		(105)
Credit Default Swaps Index - Sell Protection		_		(157)		(129)		_		(10)		(296)
Total Swap Fair Value	\$		\$	(7,228)	\$	(419)	\$	(1,966)	\$	2,762	\$	(6,851)

The table below summarizes the swap maturity profile of derivative instruments as of June 30, 2023:

### **Derivative Instruments - Risk Management:**

INPRS's Investment Policy Statement allows derivative transactions by investment managers who possess recognized expertise in derivative overlay strategies to offset, or hedge, unintended market exposures in underlying funds that remain in a lock-up period. Direct purchases of physical commodities are prohibited; however, swaps and instruments that constitute a security or authorized derivatives are permitted.

INPRS effectively manages credit risk relating to derivative instruments by following the guidelines below:

- To avoid counterparty risk, derivative transactions are executed through the use of listed options and futures traded on registered exchanges, whenever possible. Non-exchange traded options, forwards, or swaps are executed only if the counterparty is rated "A" or better by at least one of the Nationally Recognized Statistical Rating Organizations ("NRSROs").
- Exchange-traded commodity futures, options, and other instruments are traded on any exchange regulated by the Commodities Futures Trading Commission ("CFTC") of the United States and/or the Financial Services Authority ("FSA") of the United Kingdom.
- For non-exchange traded derivatives, counterparty creditworthiness is at a minimum of "A3" as defined by Moody's Investor Service, "A-" by Standard & Poor's, and/or "A-" by Fitch. Unrated counterparties are not selected unless such counterparty is a wholly-owned affiliate of a parent organization that guarantees payment and meets the above counterparty creditworthiness standards.
- Derivative instruments are standardized and exchange-traded (e.g., futures) and/or privately-negotiated and over-the-counter (e.g., swap agreements). Underlying risk exposures may be to cash commodities and/or commodity derivatives. Risk exposures for exchange-traded instruments shall lie with exchange clearinghouses and with approved counterparties for non-exchange traded transactions.
- The fair value of commodities collateral is maintained at 100% or greater of the net option-adjusted notional value of any commodities overlay exposure at the consummation of any new commodities overlay position. If the collateral fair value falls below the net option-adjusted value of the overlay, the investment manager(s) adjust their portfolio at the earliest feasible opportunity to bring the collateral value up to the notional value of the overlay.

### **Derivative Instruments - Counterparty Credit Risk**

Counterparty credit risk exists on all open over-the-counter positions. INPRS investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, posting collateral exposure, and monitoring procedures, in addition to adherence to the standard International Swaps and Derivatives Association and Credit Support Annex agreements.

As of June 30, 2023, the aggregate fair value of investment derivatives in an unrealized gain position subject to counterparty credit risk was approximately \$24.3 million, of which \$20.4 million was uncollateralized.

The table below summarizes the counterparty positions as of June 30, 2023:

(dollars in thousands)			Fair Value		Colla	ateral
Swaps Counterparty	S&P Rating	Receivable Unrealized Gain	Payable (Unrealized Loss)	Total Fair Value	Posted	Received
Bank of America	A-	\$ —	\$ —	\$ —	\$ 920	\$ (200)
Banque Nationale De Paris	A+	655	(216)	(9)	1,580	_
Barclays	BBB	389	(137)	(105)	3,128	(210)
Chicago Mercantile Exchange	AA-	9,794	(11,344)	(793)	1,773	_
Citigroup	BBB+	699	(209)	(128)	_	(2,730)
Goldman Sachs	BBB+	624	(413)	348	3,735	(3,064)
Intercontinental Exchange Inc.	A-	1,080	(1,060)	(281)	_	2,346
JPMorgan Chase Bank	A-	211	(42)	127	1,050	(100)
London Clearing House	А	9,418	(14,601)	(6,134)	_	_
Morgan Stanley	A-	1,385	(390)	124	5,851	163
Standard Chartered	BBB+				3,900	(20)
Total		\$ 24,255	\$ (28,412)	\$ (6,851)	\$ 21,937	\$ (3,815)

### **Derivative Instruments - Foreign Currency Risk**

Foreign currency forward contracts and futures contracts are exposed to foreign currency risk. At June 30, 2023, INPRS's investments included a foreign currency contract receivable balance of \$7.0 billion and an offsetting foreign currency contract payable of \$7.0 billion. In addition, the net gain for the year ended June 30, 2023, due to foreign currency transactions was \$2.5 million.

### Derivative Instruments - Synthetic Guaranteed Investment Contracts (GICs)

The Defined Contribution Stable Value Fund consists of fully benefit-responsive synthetic guaranteed investment contracts (GICs). The Stable Value Fund is an investment option that seeks to provide safety of principal and a stable credited rate of interest, while generating competitive returns over time compared to other comparable investments. As of June 30, 2023, the Stable Value Fund portfolio of well-diversified high-quality investment grade fixed income securities had a fair value of \$1.8 billion, which was \$443.8 million less than the fair value protected by the wrap contract.

### **Derivative Instruments - Interest Risk**

INPRS has exposure to interest rate risk due to investments in interest rate swaps, inflation swaps and forward mortgage-backed securities (TBAs). Reference Note 4 Interest Rate Risk for further analysis.

Derivative Instruments as of June 30, 2023, subject to interest rate risk are summarized below:

Reference Currency	Reference Currency         Pays         Receives		Fa	ir Value	 Notional
Interest Rate Swap - Pay Fixed Re	ceive Variable:				
U.S. Dollar	0.00% to 3.25%	3M USD LIBOR BBA	\$	8,175	\$ 167,940
Polish Zloty	0.25% to 7.31%	6M PLN WIBOR		(2,325)	87,135
Euro Currency Unit	0.25% to 3.25%         6M EURIBOR REUTERS           7.84% to 9.24%         6M HUB BUBOR REUTERS			(323)	30,755
Hungarian Forint				(77)	825
Chilean Peso	3.73% to 9.82%	CLP CLICP BLOOMBERG		(302)	29,096
Mexican Peso	6.40% to 9.37%	28D MXN TIIE BANXICO		(248)	19,921
Israeli Shekel	li Shekel 3.75% to 4.25% 3M ILS TELBOR REFERENCE BANKS			(95)	24,732
Malaysian Ringgit	3.00% to 3.55%	3M MYR-KLIBOR-BNM		63	10,391
Pound Sterling	0.75% to 3.75%	GBP SONIA COMPOUND		1,010	18,689
South African Rand	6.12% to 9.25%	3M ZAR JIBAR SAFEX		(234)	 16,367
			\$	5,644	\$ 405,851
Interest Rate Swap - Pay Variable	Receive Fixed:				
U.S. Dollar	3M USD LIBOR BBA	0.00% to 3.80%	\$	(8,198)	\$ 302,420
South Korean Won	3M KRW KWCDC COD	3.25%		(690)	57,980
Polish Zloty	6M PLN WIBOR	1.19% to 8.01%		344	28,299
Euro Currency Unit	6M EURIBOR REUTERS	0.65% to 3.00%		(1,010)	32,185
Hungarian Forint	6M HUB BUBOR REUTERS	1.76% to 8.67%		(509)	15,044
Chilean Peso	CLP CLICP BLOOMBERG	3.25% to 7.24%		293	6,464
Czech Koruna	6M CZK PRIBOR PRBO	1.12% to 4.69%		369	50,505
Mexican Peso	28D MXN TIIE BANXICO	7.27% to 9.25%		214	69,257
Malaysian Ringgit	3M MYR-KLIBOR-BNM	3.50% to 4.00%		(48)	14,989
Thailand Baht	6M THB THBFIX REUTERS	2.25%		(150)	18,606
Pound Sterling	GBP SONIA COMPOUND	3.50% to 5.59%		(1,792)	31,402
South African Rand	3M ZAR JIBAR SAFEX	8.12% to 10.50%		445	11,390
New Zealand Dollar	3M NZD BBR FRA	3.00%	(651)		59,059
Canadian Dollar	CAD-BA-CDOR 3M	2.06% to 4.00%	(1,744)	 144,417	
			\$	(13,127)	\$ 842,017

## Note 6. Other Risk Management

INPRS is exposed to the following risks:

- Damage to INPRS property.
- Personal injury or property damage liabilities.
- Errors, omissions and employee theft.
- Employee death benefits.
- Certain employee health benefits, unemployment and worker's compensation costs for INPRS employees.
- Breach of fiduciary responsibility.
- Lawsuits.
- Unanticipated events.
- Cybersecurity and breach of IT systems.

INPRS purchases commercial insurance for property, general liability, employee crime, employee health, and fiduciary responsibility. INPRS follows industry best practice to mitigate the risk of breaches to cybersecurity and IT systems. INPRS pays into the unemployment insurance fund as legally required. Settlements have not exceeded the insurance coverage for any of the past three years. INPRS records expenses for losses, if any, as the liabilities are incurred or replacement items are purchased.

### Note 7. Legislative Changes

The following legislative changes were signed into law during the fiscal year, which have a financial impact in the current and future years. These changes have been included in the actuarial valuations, where applicable, as of June 30, 2023.

### House Enrolled Act (HEA) 1001

Changes requirements for PERF and TRF members to begin receiving pension benefits while continuing to work in a covered position (inservice retirement). PERF and TRF plan members with at least 20 years of service are now eligible for in-service retirement, also known as Millie Morgan retirement, at age 65. Prior to July 1, 2023, the eligibility age for in-service retirement was 70. This change excludes elected officials who are still able to begin in-service retirement at age 55 with 20 years of service.

Provided an extra \$700 million appropriation for TRF Pre-'96 DB. This appropriation was received in fiscal year 2023 and is reported in our financial statements.

### House Enrolled Act (HEA) 1008

Provides that a fiduciary, in making and supervising investments of a reserve fund of the public pension system, shall discharge the fiduciary's duties solely in the financial interest of the participants and beneficiaries of the public pension system. Establishes certain requirements for fiduciaries, proxy advisors, service providers, and proxy voting. Requires a governmental entity to, at least annually, tabulate and report all proxy votes made in relation to the administration of a fund of the public pension system. Provides that the treasurer of state shall enforce these provisions.

### House Enrolled Act (HEA) 1055

Provides that if an entity is eligible to participate in the '77 Fund under IC 36-8-8-18, prior service as a full-time and fully-paid Conservancy District Marshal may be purchased under the provisions of IC 36-8-8-18 and IC 36-8-8-18-1.

This amendment is only for the purpose of prior service and not membership in the '77 Fund.

### Senate Enrolled Act (SEA) 185

Modifies the definition of "salary of a first class patrolman or first class firefighter" for the 1977 police officers' and firefighters' pension and disability fund ('77 Fund). Allows an airport authority to participate in the '77 Fund. Increases the maximum age for a firefighter to be appointed to a fire department and become a member of the '77 Fund from 35 years of age to 39 years of age. Makes corresponding changes. Effective July 1, 2023.

### Senate Enrolled Act (SEA) 268

Provides as follows beginning June 30th, 2023; The Indiana Public Retirement System will be prohibited from investing in certain restricted entities or restricted investment products, including particular investments publicly confirmed to be controlled by the People's Republic of China or the Chinese Communist Party. Specifies exceptions, a divestment schedule, and reporting requirements. Adds a provision urging the legislative council to assign to the interim study committee on pension management oversight the topic of studying whether to cease or defer divestment or resume investment in an entity or product in accordance with the provisions regarding divestment from Chinese companies. Additionally, the board shall make a good faith effort to identify all restricted entities and restricted investment products in which the system holds an investment beginning July 30th, 2023 and before July 1st each subsequent year. If the board determines after a review that the system has investments in a restricted entity or a restricted investment product, the board shall establish a plan to divest the investment and complete the divestment as soon as financially prudent. However, the investment must be divested not later than the following:

(1) At least fifty percent (50%) of the investment shall be removed from a fund's assets within three (3) years after the board discovers that the investment is in a restricted entity or restricted investment product.

(2) At least seventy-five percent (75%) of the investment shall be removed from a fund's assets within four (4) years after the board discovers that the investment is in a restricted entity or restricted investment product.

(3) One hundred percent (100%) of the investment shall be removed from a fund's assets within five (5) years after the board discovers that the investment is in a restricted entity or restricted investment product.

## Note 8. Net Pension Liability and Actuarial Information – Defined Benefit Plans

The components of the Net Pension Liability of each defined benefit retirement plan as of June 30, 2023:

(dollars in thousands) Pre-Funded Defined Benefit Pension Trust Funds	Т	otal Pension Liability (a)	Fiduciary Net Position (b)	Net F	Pension Liability (Asset) (a) - (b)	Fiduciary Net Position as a Percent of Total Pension Liability (Asset) (b) / (a)
PERF DB	\$	18,415,248	\$ 14,885,915	\$	3,529,333	80.8%
TRF '96 DB		8,832,827	7,746,476		1,086,351	87.7
77 Fund		8,796,329	7,771,898		1,024,431	88.4
JRS		728,137	640,207		87,930	87.9
EG&C		194,827	176,900		17,927	90.8
PARF		126,749	81,585		45,164	64.4
LE DB		2,676	 3,007		(331)	112.4
Total Pre-Funded DB	\$	37,096,793	\$ 31,305,988	\$	5,790,805	84.4
Pay-As-You-Go Defined Benefit Pension Trust Fund						
TRF Pre-'96 DB	\$	13,703,295	\$ 8,472,903	\$	5,230,392	61.8%
Total DB	\$	50,800,088	\$ 39,778,891	\$	11,021,197	78.3%

Total Pension Liability is determined by the actuaries in accordance with GASB Statement No. 67, as part of their annual actuarial valuation for each defined benefit retirement plan. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts (e.g., salaries, credited service, etc.) and assumptions about the probability of occurrence of events in the future (e.g., mortality, disabilities, retirements, employment terminations, etc.). Actuarially determined amounts are subject to review and modifications, as actual results are compared with past expectations and new estimates are developed. INPRS completed an asset-liability study in February 2021. Assumption changes were recommended to the board and adopted in May 2021 for the June 30, 2021 actuarial valuations. No changes in methods were recommended or adopted. See the Schedule of Notes to Required Supplementary Information for additional information.

The Schedule of Contributions in the Required Supplementary Information presents trend information about the amounts contributed to the plan by employers and a nonemployer contributing entity in comparison to the Actuarially Determined Contribution (ADC). The ADC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost for each year and the amortization of any unfunded actuarial accrued liability.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing benefit costs between the employers and plan members. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations.

Actuarial calculations reflect a long-term perspective. For a newly hired employee, actuarial calculations will take into account the employee's entire career with the employer and also take into consideration the benefits, if any, paid to the employee after termination of employment until the death of the employee and any applicable contingent annuitant. In many cases, actuarial calculations reflect several decades of service with the employer and the payment of benefits after termination.

# Notes to the Financial Statements, continued

Key methods and assumptions used in calculating the total pension liability in the latest actuarial valuations are presented below:

Description		PERF DB	TRF Pre-'96 DB	TRF '96 DB	77 Fund	JRS	EG&C	PARF	LE DB		
Asset Valuation Date				-	Ju	ne 30, 2023	-		-		
Liability Valuation Da	te	June 30, 2022 - changes betwe	en June 30. 2	2022 and June	30. 2023. Star	ndard actuarial	e valuation and adju roll forward techniqu e June 30, 2023 me	les were then u	used to project the		
Actuarial Cost Metho	d (Accounting)			E	ntry Age Norma	I (Level Percen	t of Payroll)				
Actuarial Assumption	s:										
Experience Study D	Date			I	Period of five ye	ears ended June	e 30, 2019				
Investment Rate of	Return (Accounting)		6.25%, includes inflation and net of investment expenses								
Cost of Living Incre Notes 1 and 7	ases (COLA), see	Beginning	Jan. 1, 2026 - Jan. 1, 2034 Jan. 1, 2039	- 0.50%,	1.95%	2.65%	Beginning Jan. 1, 2026 - 0.40%, Beginning Jan. 1, 2034 - 0.50%, Beginning Jan. 1, 2039 - 0.60%	N/A	Beginning Jan. 1, 2026 - 0.40%, Beginning Jan. 1, 2034 - 0.50%, Beginning Jan. 1, 2039 - 0.60%		
Future Salary Incre Inflation	ases, including	2.65% - 8.65%	2.65%	- 11.90%	2.6	55%	2.65% - 4.90%	2.65%	N/A		
Inflation						2.00%					
Mortality - Healthy	Base Table	PubG-2010	PubT	Г-2010	PubS-2010	PubG-2010	PubS-2010	PubG-2010	PubG-2010		
Employees and Retirees	M/F Set Forward	+3/+1	+1	l/+1	+3/+0	-1/-1	+3/+0	-1/-1	-1/-1		
Mortality -	Base Table				F	PubG-2010	-		-		
Disabled	Load	140%	14	40%	100%	140%	100%	140%	140%		
Mortality -	Base Table		PubCS-2010								
Beneficiaries	M/F Set Forward					+0/+2					
Mortality - Improvement - All Tables	Generational Improvement Scale					MP-2019					

# Notes to the Financial Statements, continued

The long-term return expectation for the INPRS defined benefit retirement plans has been determined by using a building-block approach and assumes a time horizon, as defined in the INPRS Investment Policy Statement. A forecasted rate of inflation serves as the baseline for the return expectation. In order to determine the expected long-term nominal market rate of return, the asset class geometric real returns are projected for a 30-year time horizon. These returns are combined with a projected covariance matrix and the target asset allocations to create a range of expected long-term real market rates of return for the portfolio. A range of possible expected long-term rates of return is created by adding the forecasted inflation to the expected long-term real rates of return. This range, along with a reasonable alpha assumption from manager selection, ultimately supports the long-term expected rate of return assumption of 6.25% selected by the Board as the discount rate. The assumption is a long-term assumption and is not expected to change with small fluctuations in the underlying inputs, but may change with a fundamental shift in the underlying market factors or significant asset allocation change.

Global Asset Class	Long-Term Expected Real Rate of Return (Geometric Basis)	Target Asset Allocation <sup>1</sup>
Public Equity	3.7%	20.0%
Private Markets	6.4	15.0
Fixed Income - Ex Inflation-Linked	2.2	20.0
Fixed Income - Inflation-Linked	0.5	15.0
Commodities	1.1	10.0
Real Assets	3.4	10.0
Absolute Return	1.6	5.0
Risk Parity	5.9	20.0
Cash and Cash Overlay	_	N/A

<sup>1</sup> The defined benefit plans target allocation for total exposure is 115%. For the long-term expected rate of return calculation, an additional -15% is allocated to the cash and cash overlay global asset class.

The Total Pension Liability (TPL) for each defined benefit pension plan was calculated using the long-term expected rate of return of 6.25%. The projection of cash flows used to determine the discount rate assumed the contributions from employers and, where applicable, from members, would at the minimum be made at the actuarially determined required rates, computed in accordance with the current funding policy adopted by the Board, and contributions required by the State of Indiana (the nonemployer contributing entity) would be made as stipulated by Indiana statute. Projected inflows from investment earnings were calculated using the 6.25% long-term assumed investment rate of return. Based on those assumptions, each defined benefit pension plan's Fiduciary Net Position were projected to be available to make all projected future benefit payments of current plan members, therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefits to determine the TPL for each plan.

Net Pension Liability (NPL) is sensitive to changes in the discount rate. To illustrate the potential impact, the following table presents the NPL of the defined benefit pension plans calculated using the discount rate of 6.25%, as well as what each plan's NPL would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

(dollars in thousands)			D	iscount Rate	_	
Pre-Funded Defined Benefit Pension Trust Funds	1%	Decrease 5.25%		Current 6.25%		1% Increase 7.25%
PERF DB	\$	5,751,693	\$	3,529,333	\$	1,676,324
TRF '96 DB		2,628,611		1,086,351		(160,302)
77 Fund		2,387,039		1,024,431		(75,709)
JRS		173,420		87,930		16,121
EG&C		44,068		17,927		(3,612)
PARF		61,123		45,164		32,005
LE DB		(162)		(331)		(482)
Pay-As-You-Go Defined Benefit Pension Trust Fund						
TRF Pre-'96 DB	\$	6,442,684	\$	5,230,392	\$	4,183,478
Total	\$	17,488,476	\$	11,021,197	\$	5,667,823

### Note 9. Subsequent Events

### Impact on the Financial Statements

Before the issuance of the financial statements, there were no known events or transactions that were material in nature that would have affected the financial results as of June 30, 2023. All events and transactions have been recognized or disclosed in the financial statements and notes as it pertains to the period ending June 30, 2023.

This page is intentionally left blank.

## **Purpose of Supplementary Information**

Required Supplementary Information and the Other Supplementary Schedules consist of statistical data and other information to provide greater transparency and to enhance the usefulness of the financial statements.

### **RSI Schedules (Unaudited)**

- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Contributions
- Schedule of Investment Returns
- Schedule of Notes to Required Supplementary Information

### **OSS Schedules**

- Schedule of Administrative Expenses
- Schedule of Administrative Expenses Vendors
- Schedule of Direct Investment Expenses

### Accompanying Notes to the RSI Schedules

The schedules currently reflect historical results for the years available within the last 10 years.

Schedules for Public Employees' Defined Benefit Account, Teachers' Pre-1996 Defined Benefit Account and Teachers' 1996 Defined Benefit Account were restated for fiscal years 2014-2017 to reflect the DB/DC split effective January 1, 2018.

The following details are intended to clarify results for selected categories in these schedules:

- Benefit Payments includes pension, disability and survivor benefits, special death benefits, distributions of contributions and interest, and refund of employee contributions.
- ASA Annuitizations include activity through December 31, 2017. Effective January 1, 2018, members can no longer annuitize their DC balances to increase their DB payments.
- Net Member Reassignments includes net interfund transfers of employer contribution amounts.
- Contributions include received and accrued contributions from employers, members, nonemployer contributing entity, and additional one-time contributions as reflected in the table below. In accordance with statute, TRF Pre-'96 DB nonemployer contributing entity contributions increase 3% annually.

(dollars in thousands)		On	e-time Contribu	tions	
Fund	2023	2022	2021	2019	2016
PERF DB	\$ —	\$ —	\$ 23,000	\$ —	\$ —
TRF Pre-'96 DB	3,200,000	545,410	621,805	_	_
TRF '96 DB	_	_	5,000	150,000	_
JRS	_	_	_	_	_
EG&C	_	_	195	_	70
PARF	_	_	_	_	_
LE DB	_	_	30	_	_

- Administrative Expenses include contributions by INPRS to PERF DB and TRF '96 DB for its employees in their respective funds. Administrative expenses use a predetermined allocation methodology.
- Covered Payroll Excludes payroll corresponding to the contribution accrual. LE DB has no covered payroll. TRF Pre-'96 DB and LE DB are closed to new members and the population will continue to decline over time.
- Actuarially Determined Contribution (ADC) Calculated using covered payroll at the applicable ADC rate. To determine the contribution deficiency/(excess), contributions in relation to ADC exclude service purchases and specific financed liabilities.

### Trends

In 2021, HEA 1001-2021 granted a 1% COLA for PERF DB, TRF Pre-'96 DB, TRF '96 DB, EG&C and LE DB beginning January 1, 2022, and no additional postretirement benefit increases for those funds through June 30, 2024. Additionally in 2021, an asset-liability study was completed resulting in updates to several economic assumptions. These assumption changes included changes in the inflation rate, discount rate, salary increase rates, and COLA assumptions for the '77 Fund and JRS. For further details, refer to the Actuarial Section.

# Schedule of Changes in Net Pension Liability and Related Ratios

# Public Employees' Defined Benefit Account<sup>1</sup>

# For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	 2022	 2021	 2020	 2019
Total Pension Liability - Beginning of Year	\$ 18,002,194	\$ 17,563,157	\$ 16,281,754	\$ 16,576,060	\$ 16,091,373
Service Cost	246,229	237,481	206,225	201,143	195,383
Interest Cost	1,109,694	1,082,719	1,080,920	1,101,241	1,069,184
Experience (Gains) / Losses	43,755	73,112	30,429	(54,832)	101,180
Assumption Changes	_	_	896,589	(616,830)	_
Plan Amendments	_	_	15,946	_	12,920
Benefit Payments <sup>1</sup>	(984,759)	(949,955)	(946,107)	(922,189)	(888,512)
ASA Annuitizations <sup>1</sup>	_	_	_	_	_
Net Member Reassignment <sup>1</sup>	(5,876)	(5,714)	(3,057)	(3,163)	(5,787)
Other	4,011	1,394	 458	324	319
Net Change in Total Pension Liability	413,054	439,037	1,281,403	(294,306)	484,687
Total Pension Liability - End of Year	\$ 18,415,248	\$ 18,002,194	\$ 17,563,157	\$ 16,281,754	\$ 16,576,060
Fiduciary Net Position - Beginning of Year	\$ 14,848,361	\$ 16,247,310	\$ 13,261,360	\$ 13,270,996	\$ 12,694,328
Employer Contributions <sup>1</sup>	682,854	629,001	627,315	599,100	581,873
Member Contributions <sup>1</sup>	208	307	131	127	296
Net Investment Income / (Loss)	366,819	(1,053,903)	3,325,549	335,139	906,388
Benefit Payments <sup>1</sup>	(984,759)	(949,955)	(946,107)	(922,189)	(888,512)
ASA Annuitizations <sup>1</sup>	_	_	_	_	_
Net Member Reassignment <sup>1</sup>	(5,877)	(5,714)	(3,057)	(3,163)	(5,787)
Administrative Expenses <sup>1</sup>	(21,695)	(18,704)	(18,003)	(18,887)	(18,472)
Other	 4	 19	 122	 237	 882
Net Change in Fiduciary Net Position	37,554	(1,398,949)	2,985,950	(9,636)	576,668
Fiduciary Net Position - End of Year	\$ 14,885,915	\$ 14,848,361	\$ 16,247,310	\$ 13,261,360	\$ 13,270,996
Net Pension Liability					
Total Pension Liability	\$ 18,415,248	\$ 18,002,194	\$ 17,563,157	\$ 16,281,754	\$ 16,576,060
Fiduciary Net Position	14,885,915	14,848,361	16,247,310	13,261,360	13,270,996
Net Pension Liability / (Asset)	\$ 3,529,333	\$ 3,153,833	\$ 1,315,847	\$ 3,020,394	\$ 3,305,064
Fiduciary Net Position as a Percentage of the Total Pension Liability	80.8 %	82.5 %	92.5 %	81.4 %	80.1 %
Covered Payroll <sup>1</sup>	\$ 6,149,915	\$ 5,670,744	\$ 5,482,242	\$ 5,380,843	\$ 5,205,243
Net Pension Liability as a Percentage of Covered Payroll	57.4 %	55.6 %	24.0 %	56.1 %	63.5 %

# Schedule of Changes in Net Pension Liability and Related Ratios, continued

# Public Employees' Defined Benefit Account<sup>1</sup>

# For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	 2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 16,335,253	\$ 15,752,055	\$ 15,263,395	\$ 13,880,722	\$ 13,349,578
Service Cost	202,324	194,101	191,055	273,910	258,070
Interest Cost	1,088,503	1,051,217	1,018,993	936,404	895,454
Experience (Gains) / Losses	20,103	82,964	(4,870)	247,978	(15,161)
Assumption Changes	(731,601)	22,809	_	488,354	_
Plan Amendments	_	(22,766)	_	_	(42,985)
Benefit Payments <sup>1</sup>	(860,613)	(820,721)	(786,607)	(752,896)	(680,203)
ASA Annuitizations <sup>1</sup>	43,874	78,793	75,036	196,788	119,094
Net Member Reassignment <sup>1</sup>	(7,030)	(3,618)	(5,441)	(8,155)	(3,125)
Other	 560	 419	 494	 290	 _
Net Change in Total Pension Liability	 (243,880)	583,198	488,660	1,382,673	531,144
Total Pension Liability - End of Year	\$ 16,091,373	\$ 16,335,253	\$ 15,752,055	\$ 15,263,395	\$ 13,880,722
Fiduciary Net Position - Beginning of Year	\$ 11,873,709	\$ 11,213,610	\$ 11,190,493	\$ 11,252,787	\$ 9,924,498
Employer Contributions <sup>1</sup>	571,374	558,891	615,773	538,059	526,090
Member Contributions	708	590	443	_	_
Net Investment Income / (Loss)	1,093,094	870,592	147,106	(10,667)	1,393,814
Benefit Payments <sup>1</sup>	(860,613)	(820,721)	(786,607)	(752,896)	(680,203)
ASA Annuitizations <sup>1</sup>	43,874	78,793	75,036	196,788	119,094
Net Member Reassignment <sup>1</sup>	(7,030)	(3,618)	(5,441)	(8,155)	(3,125)
Administrative Expenses <sup>1</sup>	(20,844)	(24,483)	(24,098)	(25,506)	(27,433)
Other	 56	 55	 905	 83	 52
Net Change in Fiduciary Net Position	 820,619	660,099	23,117	(62,294)	1,328,289
Fiduciary Net Position - End of Year	\$ 12,694,328	\$ 11,873,709	\$ 11,213,610	\$ 11,190,493	\$ 11,252,787
Net Pension Liability					
Total Pension Liability	\$ 16,091,373	\$ 16,335,253	\$ 15,752,055	\$ 15,263,395	\$ 13,880,722
Fiduciary Net Position	12,694,328	11,873,709	11,213,610	11,190,493	11,252,787
Net Pension Liability / (Asset)	\$ 3,397,045	\$ 4,461,544	\$ 4,538,445	\$ 4,072,902	\$ 2,627,935
Fiduciary Net Position as a Percentage of the Total Pension Liability	78.9 %	72.7 %	71.2 %	73.3 %	81.1 %
Covered Payroll <sup>1</sup>	\$ 5,083,131	\$ 4,997,555	\$ 4,868,709	\$ 4,804,145	\$ 4,896,635
Net Pension Liability as a Percentage of Covered Payroll	66.8 %	89.3 %	93.2 %	84.8 %	53.7 %

# Schedule of Changes in Net Pension Liability and Related Ratios

# Teachers' Pre-1996 Defined Benefit Account<sup>1</sup>

# For the Years Ended, June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	 2022	 2021	 2020	 2019
Total Pension Liability - Beginning of Year	\$ 14,059,122	\$ 14,338,188	\$ 13,968,703	\$ 14,389,164	\$ 14,583,189
Service Cost	29,212	32,789	31,513	33,750	37,234
Interest Cost	843,965	861,852	905,232	933,928	947,607
Experience (Gains) / Losses	(59,219)	(11,007)	6,414	(43,562)	(15,073)
Assumption Changes	_	_	582,474	(170,663)	_
Plan Amendments	_	_	22,605	_	(190)
Benefit Payments <sup>1</sup>	(1,170,518)	(1,164,307)	(1,178,740)	(1,174,419)	(1,165,134)
ASA Annuitizations <sup>1</sup>	_	_	_	_	_
Net Member Reassignment <sup>1</sup>	699	1,543	(35)	484	1,494
Other	 34	 64	 22	 21	 37
Net Change in Total Pension Liability	 (355,827)	 (279,066)	 369,485	 (420,461)	 (194,025)
Total Pension Liability - End of Year	\$ 13,703,295	\$ 14,059,122	\$ 14,338,188	\$ 13,968,703	\$ 14,389,164
Fiduciary Net Position - Beginning of Year	\$ 5,113,121	\$ 5,074,751	\$ 3,661,151	\$ 3,759,145	\$ 3,711,347
Employer Contributions <sup>1</sup>	2,467	2,205	2,254	2,356	3,505
Nonemployer Contributing Entity Contributions <sup>1</sup>	4,235,000	1,550,410	1,598,375	971,132	943,900
Member Contributions <sup>1</sup>	4	64	23	21	36
Net Investment Income / (Loss)	297,891	(346,479)	996,761	107,748	269,009
Benefit Payments <sup>1</sup>	(1,170,518)	(1,164,307)	(1,178,740)	(1,174,419)	(1,165,134)
ASA Annuitizations <sup>1</sup>	_	_	_	_	_
Net Member Reassignment <sup>1</sup>	699	1,543	(34)	484	1,494
Administrative Expenses <sup>1</sup>	(5,761)	(5,067)	(5,039)	(5,341)	(5,329)
Other	 	 1	 	 25	 317
Net Change in Fiduciary Net Position	 3,359,782	 38,370	 1,413,600	 (97,994)	 47,798
Fiduciary Net Position - End of Year	\$ 8,472,903	\$ 5,113,121	\$ 5,074,751	\$ 3,661,151	\$ 3,759,145
Net Pension Liability					
Total Pension Liability	\$ 13,703,295	\$ 14,059,122	\$ 14,338,188	\$ 13,968,703	\$ 14,389,164
Fiduciary Net Position	 8,472,903	 5,113,121	 5,074,751	 3,661,151	 3,759,145
Net Pension Liability / (Asset)	\$ 5,230,392	\$ 8,946,001	\$ 9,263,437	\$ 10,307,552	\$ 10,630,019
Fiduciary Net Position as a Percentage of the Total Pension Liability	61.8 %	36.4 %	35.4 %	26.2 %	26.1 %
Covered Payroll <sup>1</sup>	\$ 521,286	\$ 575,523	\$ 625,812	\$ 693,965	\$ 753,355
Net Pension Liability as a Percentage of Covered Payroll	1,003.4 %	1,554.4 %	1,480.2 %	1,485.3 %	1,411.0 %

# Schedule of Changes in Net Pension Liability and Related Ratios, continued

# Teachers' Pre-1996 Defined Benefit Account<sup>1</sup>

# For the Years Ended, June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	 2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 15,494,539	\$ 15,575,072	\$ 15,596,291	\$ 14,639,876	\$ 14,649,549
Service Cost	44,603	43,204	46,787	57,751	68,860
Interest Cost	1,010,565	1,016,915	1,019,404	959,895	961,628
Experience (Gains) / Losses	(162,414)	22,416	(5,794)	(140,466)	(70,517)
Assumption Changes	(668,484)	(61,548)	_	1,033,157	_
Plan Amendments	_	4,213	_	_	(25,524)
Benefit Payments <sup>1</sup>	(1,153,374)	(1,135,662)	(1,118,122)	(1,100,434)	(1,034,563)
ASA Annuitizations <sup>1</sup>	16,301	30,502	35,185	143,225	93,982
Net Member Reassignment <sup>1</sup>	1,428	_	_	3,266	(3,802)
Other	 25	 (573)	 1,321	 21	 263
Net Change in Total Pension Liability	(911,350)	 (80,533)	(21,219)	956,415	 (9,673)
Total Pension Liability - End of Year	\$ 14,583,189	\$ 15,494,539	\$ 15,575,072	\$ 15,596,291	\$ 14,639,876
Fiduciary Net Position - Beginning of Year	\$ 3,575,400	\$ 3,522,401	\$ 3,678,455	\$ 3,786,527	\$ 3,401,153
Employer Contributions <sup>1</sup>	4,168	4,525	5,048	5,811	6,325
Nonemployer Contributing Entity Contributions <sup>1</sup>	917,900	871,000	887,500	845,616	825,617
Member Contributions <sup>1</sup>	156	10	132	_	5
Net Investment Income / (Loss)	354,639	288,850	40,767	953	504,801
Benefit Payments <sup>1</sup>	(1,153,374)	(1,135,662)	(1,118,122)	(1,100,434)	(1,034,563)
ASA Annuitizations <sup>1</sup>	16,301	30,502	35,185	143,225	93,982
Net Member Reassignment <sup>1</sup>	1,429	_	_	3,266	(3,802)
Administrative Expenses <sup>1</sup>	(5,385)	(6,226)	(6,564)	(6,530)	(7,010)
Other	 113	 _	 _	 21	 19
Net Change in Fiduciary Net Position	135,947	52,999	(156,054)	(108,072)	 385,374
Fiduciary Net Position - End of Year	\$ 3,711,347	\$ 3,575,400	\$ 3,522,401	\$ 3,678,455	\$ 3,786,527
Net Pension Liability					
Total Pension Liability	\$ 14,583,189	\$ 15,494,539	\$ 15,575,072	\$ 15,596,291	\$ 14,639,876
Fiduciary Net Position	3,711,347	3,575,400	3,522,401	3,678,455	3,786,527
Net Pension Liability / (Asset)	\$ 10,871,842	\$ 11,919,139	\$ 12,052,671	\$ 11,917,836	\$ 10,853,349
Fiduciary Net Position as a Percentage of the Total Pension Liability	25.4 %	23.1 %	22.6 %	23.6 %	25.9 %
Covered Payroll <sup>1</sup>	\$ 824,770	\$ 912,685	\$ 989,093	\$ 1,074,827	\$ 1,262,828
Net Pension Liability as a Percentage of Covered Payroll	1,318.2 %	1,305.9 %	1,218.6 %	1,108.8 %	859.4 %

# Schedule of Changes in Net Pension Liability and Related Ratios

# Teachers' 1996 Defined Benefit Account<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	 2022	 2021	2020	 2019
Total Pension Liability - Beginning of Year	\$ 8,154,991	\$ 7,517,702	\$ 6,403,252	\$ 5,980,426	\$ 5,563,264
Service Cost	240,571	230,270	190,037	183,633	180,559
Interest Cost	519,115	479,121	439,929	411,329	383,384
Experience (Gains) / Losses	97,604	91,984	96,923	(31,433)	(21,588)
Assumption Changes	_	_	536,184	(114)	_
Plan Amendments	_	_	3,034	_	2,939
Benefit Payments <sup>1</sup>	(185,167)	(168,621)	(155,348)	(143,372)	(132,572)
ASA Annuitizations <sup>1</sup>	_	_	_	_	_
Net Member Reassignment <sup>1</sup>	5,158	4,037	3,092	2,679	4,293
Other	 555	 498	599	104	 147
Net Change in Total Pension Liability	 677,836	 637,289	 1,114,450	 422,826	 417,162
Total Pension Liability - Ending	\$ 8,832,827	\$ 8,154,991	\$ 7,517,702	\$ 6,403,252	\$ 5,980,426
Fiduciary Net Position - Beginning of Year	\$ 7,496,540	\$ 7,987,495	\$ 6,325,311	\$ 6,124,086	\$ 5,452,352
Employer Contributions <sup>1</sup>	244,600	210,665	202,489	188,789	393,172
Member Contributions <sup>1</sup>	379	433	464	104	127
Net Investment Income / (Loss)	191,285	(532,181)	1,616,454	158,072	411,147
Benefit Payments <sup>1</sup>	(185,167)	(168,621)	(155,348)	(143,372)	(132,572)
ASA Annuitizations <sup>1</sup>	_	_	_	_	_
Net Member Reassignment <sup>1</sup>	5,158	4,038	3,091	2,679	4,293
Administrative Expenses <sup>1</sup>	(6,319)	(5,292)	(4,966)	(5,090)	(5,038)
Other	 	 3	 	 43	 605
Net Change in Fiduciary Net Position	 249,936	 (490,955)	 1,662,184	 201,225	 671,734
Fiduciary Net Position - End of Year	\$ 7,746,476	\$ 7,496,540	\$ 7,987,495	\$ 6,325,311	\$ 6,124,086
Net Pension Liability					
Total Pension Liability	\$ 8,832,827	\$ 8,154,991	\$ 7,517,702	\$ 6,403,252	\$ 5,980,426
Fiduciary Net Position	 7,746,476	 7,496,540	 7,987,495	 6,325,311	 6,124,086
Net Pension Liability / (Asset)	\$ 1,086,351	\$ 658,451	\$ (469,793)	\$ 77,941	\$ (143,660)
Fiduciary Net Position as a Percentage of the Total Pension Liability	87.7 %	91.9 %	106.2 %	98.8 %	102.4 %
Covered Payroll <sup>1</sup>	\$ 4,199,773	\$ 3,915,888	\$ 3,634,649	\$ 3,465,728	\$ 3,257,918
Net Pension Liability as a Percentage of Covered Payroll	25.9 %	16.8 %	(12.9)%	2.2 %	(4.4)%

## Schedule of Changes in Net Pension Liability and Related Ratios, continued

## Teachers' 1996 Defined Benefit Account<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	 2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 5,536,094	\$ 5,174,317	\$ 4,734,777	\$ 4,116,264	\$ 3,757,444
Service Cost	182,558	168,651	167,836	170,892	155,314
Interest Cost	382,298	357,392	328,017	287,265	262,263
Experience (Gains) / Losses	(142,275)	46,460	29,876	(40,857)	504
Assumption Changes	(285,442)	(115,506)	_	263,991	_
Plan Amendments	_	1,353	_	_	(4,504)
Benefit Payments <sup>1</sup>	(122,239)	(109,335)	(99,507)	(90,267)	(77,253)
ASA Annuitizations <sup>1</sup>	6,504	8,504	8,932	22,575	15,151
Net Member Reassignment <sup>1</sup>	5,601	4,258	4,370	4,890	6,922
Other	165	 _	 16	 24	 423
Net Change in Total Pension Liability	27,170	 361,777	439,540	618,513	 358,820
Total Pension Liability - Ending	\$ 5,563,264	\$ 5,536,094	\$ 5,174,317	\$ 4,734,777	\$ 4,116,264
Fiduciary Net Position - Beginning of Year	\$ 4,873,897	\$ 4,393,797	\$ 4,208,198	\$ 4,068,713	\$ 3,442,972
Employer Contributions <sup>1</sup>	235,819	227,207	215,626	205,763	194,751
Member Contributions	130	58	43	_	_
Net Investment Income / (Loss)	457,708	354,927	61,722	2,684	492,856
Benefit Payments <sup>1</sup>	(122,239)	(109,335)	(99,507)	(90,267)	(77,253)
ASA Annuitizations <sup>1</sup>	6,504	8,504	8,932	22,575	15,151
Net Member Reassignment <sup>1</sup>	5,601	4,258	4,370	4,890	6,922
Administrative Expenses <sup>1</sup>	(5,208)	(5,553)	(5,603)	(6,184)	(6,707)
Other	 140	 34	 16	24	21
Net Change in Fiduciary Net Position	 578,455	 480,100	185,599	 139,485	 625,741
Fiduciary Net Position - End of Year	\$ 5,452,352	\$ 4,873,897	\$ 4,393,797	\$ 4,208,198	\$ 4,068,713
Net Pension Liability					
Total Pension Liability	\$ 5,563,264	\$ 5,536,094	\$ 5,174,317	\$ 4,734,777	\$ 4,116,264
Fiduciary Net Position	 5,452,352	 4,873,897	 4,393,797	4,208,198	4,068,713
Net Pension Liability / (Asset)	\$ 110,912	\$ 662,197	\$ 780,520	\$ 526,579	\$ 47,551
Fiduciary Net Position as a Percentage of the Total Pension Liability	98.0 %	88.0 %	84.9 %	88.9 %	98.8 %
Covered Payroll <sup>1</sup>	\$ 3,129,070	\$ 3,020,463	\$ 2,881,397	\$ 2,742,187	\$ 2,598,115
Net Pension Liability as a Percentage of Covered Payroll	3.5 %	21.9 %	27.1 %	19.2 %	1.8 %

## Schedule of Changes in Net Pension Liability and Related Ratios 1977 Police Officers' and Firefighters' Retirement Fund<sup>1</sup> For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	2022	 2021	2020	 2019
Total Pension Liability - Beginning of Year	\$ 8,281,865	\$ 7,598,774	\$ 6,785,608	\$ 6,389,002	\$ 5,839,659
Service Cost	223,652	210,536	188,344	162,497	150,289
Interest Cost	521,949	480,332	462,723	434,975	398,002
Experience (Gains) / Losses	77,525	240,229	33,618	11,694	31,019
Assumption Changes	_	_	366,065	2,278	_
Plan Amendments	_	_	_	_	157,278
Benefit Payments <sup>1</sup>	(309,097)	(249,119)	(238,903)	(215,751)	(189,951)
Net Member Reassignment <sup>1</sup>	(196)	8	_	_	_
Other	 631	 1,105	 1,319	 913	 2,706
Net Change in Total Pension Liability	514,464	683,091	813,166	396,606	 549,343
Total Pension Liability - Ending	\$ 8,796,329	\$ 8,281,865	\$ 7,598,774	\$ 6,785,608	\$ 6,389,002
Fiduciary Net Position - Beginning of Year	\$ 7,634,013	\$ 8,189,789	\$ 6,542,800	\$ 6,379,786	\$ 5,927,570
Employer Contributions <sup>1</sup>	192,972	177,035	166,436	162,302	155,051
Member Contributions <sup>1</sup>	62,932	58,921	55,703	54,175	52,811
Net Investment Income / (Loss)	193,695	(540,566)	1,665,668	164,228	436,229
Benefit Payments <sup>1</sup>	(309,097)	(249,119)	(238,903)	(215,751)	(189,951)
Net Member Reassignment <sup>1</sup>	(196)	9	_	_	_
Administrative Expenses <sup>1</sup>	(2,429)	(2,073)	(1,934)	(1,960)	(1,904)
Other	 8	 17	 19	 20	 (20)
Net Change in Fiduciary Net Position	137,885	(555,776)	1,646,989	163,014	 452,216
Fiduciary Net Position - End of Year	\$ 7,771,898	\$ 7,634,013	\$ 8,189,789	\$ 6,542,800	\$ 6,379,786
Net Pension Liability					
Total Pension Liability	\$ 8,796,329	\$ 8,281,865	\$ 7,598,774	\$ 6,785,608	\$ 6,389,002
Fiduciary Net Position	 7,771,898	 7,634,013	 8,189,789	 6,542,800	6,379,786
Net Pension Liability / (Asset)	\$ 1,024,431	\$ 647,852	\$ (591,015)	\$ 242,808	\$ 9,216
Fiduciary Net Position as a Percentage of the Total Pension Liability	88.4 %	92.2 %	107.8 %	96.4 %	99.9 %
Covered Payroll <sup>1</sup>	\$ 1,072,187	\$ 1,018,600	\$ 951,301	\$ 940,496	\$ 866,299
Net Pension Liability as a Percentage of Covered Payroll	95.5 %	63.6 %	(62.1)%	25.8 %	1.1 %

# Schedule of Changes in Net Pension Liability and Related Ratios, continued 1977 Police Officers' and Firefighters' Retirement Fund<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	 2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 5,385,753	\$ 5,039,836	\$ 4,680,694	\$ 4,706,997	\$ 4,392,947
Service Cost	136,640	134,489	129,369	138,204	133,074
Interest Cost	366,932	344,397	320,219	323,129	301,824
Experience (Gains) / Losses	123,069	33,409	41,723	(61,640)	(11,754)
Assumption Changes	_	(23,399)	_	(309,801)	_
Plan Amendments	_	1,323	_	_	_
Benefit Payments <sup>1</sup>	(172,908)	(148,865)	(132,746)	(116,490)	(109,094)
Net Member Reassignment <sup>1</sup>	_	_	(74)	_	_
Other	 173	 4,563	 651	 295	 _
Net Change in Total Pension Liability	453,906	345,917	359,142	(26,303)	314,050
Total Pension Liability - Ending	\$ 5,839,659	\$ 5,385,753	\$ 5,039,836	\$ 4,680,694	\$ 4,706,997
Fiduciary Net Position - Beginning of Year	\$ 5,401,179	\$ 4,950,999	\$ 4,828,415	\$ 4,757,978	\$ 4,116,861
Employer Contributions <sup>1</sup>	147,094	150,857	151,674	146,697	140,119
Member Contributions <sup>1</sup>	48,839	51,521	44,918	43,523	41,791
Net Investment Income / (Loss)	504,991	398,196	60,320	(1,600)	570,058
Benefit Payments <sup>1</sup>	(172,908)	(148,865)	(132,746)	(116,490)	(109,094)
Net Member Reassignment <sup>1</sup>	_	_	(74)	_	_
Administrative Expenses <sup>1</sup>	(1,643)	(1,607)	(1,651)	(1,708)	(1,787)
Other	 18	 78	 143	 15	 30
Net Change in Fiduciary Net Position	526,391	450,180	122,584	70,437	641,117
Fiduciary Net Position - End of Year	\$ 5,927,570	\$ 5,401,179	\$ 4,950,999	\$ 4,828,415	\$ 4,757,978
Net Pension Liability					
Total Pension Liability	\$ 5,839,659	\$ 5,385,753	\$ 5,039,836	\$ 4,680,694	\$ 4,706,997
Fiduciary Net Position	 5,927,570	 5,401,179	 4,950,999	 4,828,415	 4,757,978
Net Pension Liability / (Asset)	\$ (87,911)	\$ (15,426)	\$ 88,837	\$ (147,721)	\$ (50,981)
Fiduciary Net Position as a Percentage of the Total Pension Liability	101.5 %	100.3 %	98.2 %	103.2 %	101.1 %
Covered Payroll <sup>1</sup>	\$ 842,179	\$ 809,382	\$ 771,949	\$ 745,336	\$ 710,581
Net Pension Liability as a Percentage of Covered Payroll	(10.4)%	(1.9)%	11.5 %	(19.8)%	(7.2)%

## Schedule of Changes in Net Pension Liability and Related Ratios

## Judges' Retirement System<sup>1</sup>

#### For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	 2022	 2021	 2020	 2019
Total Pension Liability - Beginning of Year	\$ 676,859	\$ 642,172	\$ 592,510	\$ 586,499	\$ 547,694
Service Cost	21,922	20,838	17,969	19,567	18,230
Interest Cost	42,657	40,497	40,244	40,006	37,346
Experience (Gains) / Losses	19,233	3,481	(6,219)	(1,968)	8,527
Assumption Changes	_	_	26,217	(24,814)	_
Benefit Payments <sup>1</sup>	(32,619)	(30,977)	(28,916)	(26,837)	(25,391)
Net Member Reassignment	11	126	_	_	_
Other	 74	 722	 367	 57	 93
Net Change in Total Pension Liability	 51,278	 34,687	 49,662	 6,011	 38,805
Total Pension Liability - Ending	\$ 728,137	\$ 676,859	\$ 642,172	\$ 592,510	\$ 586,499
Fiduciary Net Position - Beginning of Year	\$ 634,864	\$ 687,993	\$ 554,121	\$ 545,331	\$ 513,952
Employer Contributions	18,047	17,564	18,621	18,167	16,031
Member Contributions	4,122	4,632	4,041	3,549	3,476
Net Investment Income / (Loss)	15,906	(44,387)	140,227	14,020	37,371
Benefit Payments <sup>1</sup>	(32,619)	(30,976)	(28,916)	(26,837)	(25,391)
Net Member Reassignment	11	126	_	_	_
Administrative Expenses <sup>1</sup>	(124)	(104)	(101)	(109)	(108)
Other	 	 16	 	 	 
Net Change in Fiduciary Net Position	 5,343	 (53,129)	 133,872	 8,790	 31,379
Fiduciary Net Position - End of Year	\$ 640,207	\$ 634,864	\$ 687,993	\$ 554,121	\$ 545,331
Net Pension Liability					
Total Pension Liability	\$ 728,137	\$ 676,859	\$ 642,172	\$ 592,510	\$ 586,499
Fiduciary Net Position	 640,207	 634,864	 687,993	 554,121	 545,331
Net Pension Liability / (Asset)	\$ 87,930	\$ 41,995	\$ (45,821)	\$ 38,389	\$ 41,168
Fiduciary Net Position as a Percentage of the Total Pension Liability	87.9 %	93.8 %	107.1 %	93.5 %	93.0 %
Covered Payroll <sup>1</sup>	\$ 67,466	\$ 65,159	\$ 61,215	\$ 58,189	\$ 56,380
Net Pension Liability as a Percentage of Covered Payroll	130.3 %	64.5 %	(74.9)%	66.0 %	73.0 %

### Schedule of Changes in Net Pension Liability and Related Ratios, continued

## Judges' Retirement System<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	 2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 523,735	\$ 501,126	\$ 468,945	\$ 464,855	\$ 453,110
Service Cost	14,886	14,762	13,870	15,283	15,302
Interest Cost	35,567	34,083	31,888	31,754	30,992
Experience (Gains) / Losses	(3,090)	(3,107)	7,182	8,411	(16,026)
Assumption Changes	_	(1,213)	_	(31,926)	_
Benefit Payments <sup>1</sup>	(23,623)	(22,099)	(20,922)	(19,432)	(18,527)
Net Member Reassignment <sup>1</sup>	_	_	_	_	4
Other	219	 183	163		 
Net Change in Total Pension Liability	23,959	22,609	 32,181	 4,090	11,745
Total Pension Liability - Ending	\$ 547,694	\$ 523,735	\$ 501,126	\$ 468,945	\$ 464,855
Fiduciary Net Position - Beginning of Year	\$ 475,055	\$ 441,790	\$ 437,352	\$ 432,730	\$ 375,752
Employer Contributions <sup>1</sup>	15,117	16,824	16,946	21,020	20,895
Member Contributions <sup>1</sup>	3,418	3,468	3,239	3,292	2,856
Net Investment Income / (Loss)	44,104	35,196	5,323	(102)	51,890
Benefit Payments <sup>1</sup>	(23,623)	(22,099)	(20,922)	(19,432)	(18,527)
Net Member Reassignment <sup>1</sup>	_	_	_	_	4
Administrative Expenses <sup>1</sup>	(119)	(124)	(148)	(165)	(146)
Other		 	_	9	 6
Net Change in Fiduciary Net Position	 38,897	 33,265	 4,438	 4,622	 56,978
Fiduciary Net Position - End of Year	\$ 513,952	\$ 475,055	\$ 441,790	\$ 437,352	\$ 432,730
Net Pension Liability					
Total Pension Liability	\$ 547,694	\$ 523,735	\$ 501,126	\$ 468,945	\$ 464,855
Fiduciary Net Position	 513,952	 475,055	 441,790	 437,352	 432,730
Net Pension Liability / (Asset)	\$ 33,742	\$ 48,680	\$ 59,336	\$ 31,593	\$ 32,125
Fiduciary Net Position as a Percentage of the Total Pension Liability	93.8 %	90.7 %	88.2 %	93.3 %	93.1 %
Covered Payroll <sup>1</sup>	\$ 53,350	\$ 54,755	\$ 51,382	\$ 48,582	\$ 46,041
Net Pension Liability as a Percentage of Covered Payroll	63.2 %	88.9 %	115.5 %	65.0 %	69.8 %

## Schedule of Changes in Net Pension Liability and Related Ratios Excise, Gaming and Conservation Officers' Retirement Fund<sup>1</sup> For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	 2022	 2021	 2020	 2019
Total Pension Liability - Beginning of Year	\$ 187,505	\$ 180,848	\$ 163,978	\$ 152,207	\$ 140,056
Service Cost	4,537	4,631	4,050	3,983	3,551
Interest Cost	11,751	11,346	11,081	10,294	9,448
Experience (Gains) / Losses	(902)	(1,431)	(1,099)	6,031	6,427
Assumption Changes	_	_	10,403	(1,984)	_
Plan Amendments	_	_	159	814	_
Benefit Payments <sup>1</sup>	(8,383)	(7,947)	(7,735)	(7,367)	(7,325)
Net Member Reassignment <sup>1</sup>	205	_	_	_	_
Other	114	 58	 11	 _	 50
Net Change in Total Pension Liability	7,322	6,657	16,870	11,771	 12,151
Total Pension Liability - Ending	\$ 194,827	\$ 187,505	\$ 180,848	\$ 163,978	\$ 152,207
Fiduciary Net Position - Beginning of Year	\$ 172,121	\$ 184,314	\$ 146,358	\$ 142,115	\$ 131,491
Employer Contributions <sup>1</sup>	7,177	6,714	7,083	6,742	6,982
Member Contributions <sup>1</sup>	1,497	1,352	1,333	1,298	1,368
Net Investment Income / (Loss)	4,402	(12,209)	37,370	3,677	9,711
Benefit Payments <sup>1</sup>	(8,383)	(7,948)	(7,736)	(7,367)	(7,325)
Net Member Reassignment <sup>1</sup>	205	_	_	_	_
Administrative Expenses <sup>1</sup>	(119)	(102)	(94)	(107)	(112)
Other	_	 _	 —	 _	 _
Net Change in Fiduciary Net Position	4,779	 (12,193)	37,956	4,243	10,624
Fiduciary Net Position - End of Year	\$ 176,900	\$ 172,121	\$ 184,314	\$ 146,358	\$ 142,115
Net Pension Liability					
Total Pension Liability	\$ 194,827	\$ 187,505	\$ 180,848	\$ 163,978	\$ 152,207
Fiduciary Net Position	 176,900	 172,121	 184,314	 146,358	142,115
Net Pension Liability / (Asset)	\$ 17,927	\$ 15,384	\$ (3,466)	\$ 17,620	\$ 10,092
Fiduciary Net Position as a Percentage of the Total Pension Liability	90.8 %	91.8 %	101.9 %	89.3 %	93.4 %
Covered Payroll <sup>1</sup>	\$ 34,597	\$ 32,356	\$ 33,194	\$ 32,491	\$ 33,272
Net Pension Liability as a Percentage of Covered Payroll	51.8 %	47.5 %	(10.4)%	54.2 %	30.3 %

## Schedule of Changes in Net Pension Liability and Related Ratios, continued Excise, Gaming and Conservation Officers' Retirement Fund<sup>1</sup> For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	 2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 142,603	\$ 138,965	\$ 132,796	\$ 123,601	\$ 118,097
Service Cost	3,369	3,550	3,011	3,905	3,841
Interest Cost	9,619	9,389	8,955	8,384	8,031
Experience (Gains) / Losses	(587)	120	470	845	(430)
Assumption Changes	(8,015)	(2,578)	_	2,669	_
Plan Amendments	_	_	_	_	_
Benefit Payments <sup>1</sup>	(6,935)	(6,826)	(6,245)	(6,608)	(5,938)
Net Member Reassignment <sup>1</sup>	_	(26)	(21)	_	_
Other	 2	9	(1)	 _	_
Net Change in Total Pension Liability	 (2,547)	 3,638	6,169	9,195	5,504
Total Pension Liability - Ending	\$ 140,056	\$ 142,603	\$ 138,965	\$ 132,796	\$ 123,601
Fiduciary Net Position - Beginning of Year	\$ 120,016	\$ 111,329	\$ 110,038	\$ 110,657	\$ 97,019
Employer Contributions <sup>1</sup>	6,175	5,691	5,367	5,215	5,359
Member Contributions <sup>1</sup>	1,172	1,102	1,016	1,004	1,019
Net Investment Income / (Loss)	11,189	8,869	1,313	(71)	13,339
Benefit Payments <sup>1</sup>	(6,935)	(6,826)	(6,245)	(6,608)	(5,938)
Net Member Reassignment <sup>1</sup>	_	(26)	(21)	_	_
Administrative Expenses <sup>1</sup>	(136)	(123)	(139)	(159)	(141)
Other	10	_	_	_	_
Net Change in Fiduciary Net Position	 11,475	 8,687	1,291	(619)	 13,638
Fiduciary Net Position - End of Year	\$ 131,491	\$ 120,016	\$ 111,329	\$ 110,038	\$ 110,657
Net Pension Liability					
Total Pension Liability	\$ 140,056	\$ 142,603	\$ 138,965	\$ 132,796	\$ 123,601
Fiduciary Net Position	 131,491	 120,016	 111,329	 110,038	 110,657
Net Pension Liability / (Asset)	\$ 8,565	\$ 22,587	\$ 27,636	\$ 22,758	\$ 12,944
Fiduciary Net Position as a Percentage of the Total Pension Liability	93.9 %	 84.2 %	80.1 %	82.9 %	89.5 %
Covered Payroll <sup>1</sup>	\$ 29,387	\$ 27,428	\$ 25,526	\$ 25,133	\$ 25,825
Net Pension Liability as a Percentage of Covered Payroll	29.1 %	82.4 %	108.3 %	90.6 %	50.1 %

## Schedule of Changes in Net Pension Liability and Related Ratios

## Prosecuting Attorneys' Retirement Fund<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	 2022	 2021	2020	 2019
Total Pension Liability - Beginning of Year	\$ 122,474	\$ 117,023	\$ 107,049	\$ 110,081	\$ 103,284
Service Cost	2,144	2,197	2,164	2,068	2,031
Interest Cost	7,599	7,273	7,193	7,402	6,959
Experience (Gains) / Losses	605	1,682	(298)	(2,515)	2,240
Assumption Changes	_	_	6,203	(5,012)	_
Plan Amendments	_	_	_	_	_
Benefit Payments <sup>1</sup>	(6,073)	(5,699)	(5,289)	(4,975)	(4,433)
Net Member Reassignment	_	(2)	_	_	_
Other	 _	 _	 1	 _	 1
Net Change in Total Pension Liability	4,275	 5,451	 9,974	 (3,032)	 6,798
Total Pension Liability - Ending	\$ 126,749	\$ 122,474	\$ 117,023	\$ 107,049	\$ 110,082
Fiduciary Net Position - Beginning of Year	\$ 80,035	\$ 85,869	\$ 67,876	\$ 65,523	\$ 61,019
Employer Contributions <sup>1</sup>	4,155	4,044	4,402	4,232	3,216
Member Contributions <sup>1</sup>	1,531	1,474	1,459	1,440	1,307
Net Investment Income / (Loss)	2,045	(5,582)	17,492	1,730	4,489
Benefit Payments <sup>1</sup>	(6,073)	(5,699)	(5,289)	(4,975)	(4,433)
Net Member Reassignment	_	(2)	_	_	_
Administrative Expenses <sup>1</sup>	(108)	(69)	(71)	(74)	(75)
Other	_	_	_	_	_
Net Change in Fiduciary Net Position	1,550	(5,834)	17,993	2,353	4,504
Fiduciary Net Position - End of Year	\$ 81,585	\$ 80,035	\$ 85,869	\$ 67,876	\$ 65,523
Net Pension Liability					
Total Pension Liability	\$ 126,749	\$ 122,474	\$ 117,023	\$ 107,049	\$ 110,082
Fiduciary Net Position	 81,585	80,035	 85,869	 67,876	 65,523
Net Pension Liability / (Asset)	\$ 45,164	\$ 42,439	\$ 31,154	\$ 39,173	\$ 44,559
Fiduciary Net Position as a Percentage of the Total Pension Liability	64.4 %	65.3 %	73.4 %	63.4 %	59.5 %
Covered Payroll <sup>1</sup>	\$ 25,515	\$ 24,577	\$ 24,323	\$ 23,989	\$ 21,791
Net Pension Liability as a Percentage of Covered Payroll	177.0 %	172.7 %	128.1 %	163.3 %	204.5 %

## Schedule of Changes in Net Pension Liability and Related Ratios, continued

## Prosecuting Attorneys' Retirement Fund<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 96,655	\$ 85,033	\$ 77,861	\$ 65,336	\$ 61,940
Service Cost	1,947	1,650	1,626	1,603	1,587
Interest Cost	6,521	5,714	5,239	4,409	4,207
Experience (Gains) / Losses	2,156	1,996	4,058	4,551	_
Assumption Changes	_	(216)	_	5,216	_
Plan Amendments	_	6,547	_	_	_
Benefit Payments <sup>1</sup>	(3,995)	(4,069)	(3,747)	(3,254)	(2,398)
Net Member Reassignment	_	_	_	_	_
Other	 	 _	 (4)		 
Net Change in Total Pension Liability	 6,629	 11,622	 7,172	 12,525	 3,396
Total Pension Liability - Ending	\$ 103,284	\$ 96,655	\$ 85,033	\$ 77,861	\$ 65,336
Fiduciary Net Position - Beginning of Year	\$ 55,575	\$ 52,792	\$ 53,424	\$ 54,507	\$ 47,920
Employer Contributions <sup>1</sup>	3,014	1,486	1,440	1,063	1,174
Member Contributions <sup>1</sup>	1,294	1,357	1,279	1,269	1,334
Net Investment Income / (Loss)	5,218	4,167	589	(34)	6,581
Benefit Payments <sup>1</sup>	(3,995)	(4,069)	(3,747)	(3,254)	(2,398)
Net Member Reassignment	_	_	_	_	_
Administrative Expenses <sup>1</sup>	(87)	(158)	(193)	(127)	(108)
Other	 _	_	_	_	4
Net Change in Fiduciary Net Position	5,444	 2,783	 (632)	 (1,083)	 6,587
Fiduciary Net Position - End of Year	\$ 61,019	\$ 55,575	\$ 52,792	\$ 53,424	\$ 54,507
Net Pension Liability					
Total Pension Liability	\$ 103,284	\$ 96,655	\$ 85,033	\$ 77,861	\$ 65,336
Fiduciary Net Position	 61,019	 55,575	52,792	 53,424	 54,507
Net Pension Liability / (Asset)	\$ 42,265	\$ 41,080	\$ 32,241	\$ 24,437	\$ 10,829
Fiduciary Net Position as a Percentage of the Total Pension Liability	59.1 %	57.5 %	62.1 %	68.6 %	83.4 %
Covered Payroll <sup>1</sup>	\$ 21,578	\$ 22,635	\$ 21,372	\$ 21,145	\$ 20,608
Net Pension Liability as a Percentage of Covered Payroll	195.9 %	181.5 %	150.9 %	115.6 %	52.5 %

# Schedule of Changes in Net Pension Liability and Related Ratios Legislators' Defined Benefit Fund<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2023	 2022	 2021	 2020	 2019
Total Pension Liability - Beginning of Year	\$ 2,835	\$ 3,034	\$ 3,126	\$ 3,362	\$ 3,484
Service Cost	_	_	_	_	_
Interest Cost	167	179	200	214	223
Experience (Gains) / Losses	3	(44)	(49)	(14)	10
Assumption Changes	_	_	90	(87)	_
Plan Amendments	_	_	7	_	_
Benefit Payments <sup>1</sup>	(329)	(334)	(341)	(349)	(356)
Other		 	 1	 _	1
Net Change in Total Pension Liability	 (159)	 (199)	 (92)	 (236)	 (122)
Total Pension Liability - Ending	\$ 2,676	\$ 2,835	\$ 3,034	\$ 3,126	\$ 3,362
Fiduciary Net Position - Beginning of Year	\$ 3,116	\$ 3,515	\$ 2,924	\$ 3,026	\$ 2,942
Employer Contributions <sup>1</sup>	182	183	208	208	269
Nonemployer Contributing Entity Contributions <sup>1</sup>	_	_	30	_	_
Net Investment Income / (Loss)	74	(217)	729	77	209
Benefit Payments <sup>1</sup>	(329)	(335)	(341)	(349)	(356)
Administrative Expenses <sup>1</sup>	(36)	 (30)	 (35)	 (38)	 (38)
Net Change in Fiduciary Net Position	 (109)	(399)	591	(102)	 84
Fiduciary Net Position - End of Year	\$ 3,007	\$ 3,116	\$ 3,515	\$ 2,924	\$ 3,026
Net Pension Liability					
Total Pension Liability	\$ 2,676	\$ 2,835	\$ 3,034	\$ 3,126	\$ 3,362
Fiduciary Net Position	3,007	 3,116	 3,515	 2,924	 3,026
Net Pension Liability / (Asset)	\$ (331)	\$ (281)	\$ (481)	\$ 202	\$ 336
Fiduciary Net Position as a Percentage of the Total Pension Liability	112.4 %	109.9 %	115.9 %	93.5 %	90.0 %
Covered Payroll <sup>1</sup>	N/A	N/A	N/A	N/A	N/A
Net Pension Liability as a Percentage of Covered Payroll	N/A	N/A	N/A	N/A	N/A

## Schedule of Changes in Net Pension Liability and Related Ratios, continued

## Legislators' Defined Benefit Fund<sup>1</sup>

## For the Years Ended June 30

(dollars in thousands)

Changes in Net Pension Liability	 2018	 2017	 2016	 2015	 2014
Total Pension Liability - Beginning of Year	\$ 3,804	\$ 4,015	\$ 4,325	\$ 4,166	\$ 4,285
Service Cost	_	1	2	3	3
Interest Cost	245	258	280	269	277
Experience (Gains) / Losses	(85)	(113)	(233)	(68)	(36)
Assumption Changes	(121)	_	_	325	_
Plan Amendments	_	_	_	_	_
Benefit Payments <sup>1</sup>	(359)	(357)	(359)	(370)	(363)
Other		 	 _	 _	 
Net Change in Total Pension Liability	 (320)	 (211)	 (310)	 159	 (119)
Total Pension Liability - Ending	\$ 3,484	\$ 3,804	\$ 4,015	\$ 4,325	\$ 4,166
Fiduciary Net Position - Beginning of Year	\$ 2,865	\$ 2,919	\$ 3,174	\$ 3,489	\$ 3,337
Employer Contributions <sup>1</sup>	237	135	138	131	138
Nonemployer Contributing Entity Contributions <sup>1</sup>	_	_	_	_	_
Net Investment Income / (Loss)	263	221	27	(5)	439
Benefit Payments <sup>1</sup>	(359)	(357)	(359)	(370)	(363)
Administrative Expenses <sup>1</sup>	 (64)	(53)	 (61)	 (71)	 (62)
Net Change in Fiduciary Net Position	 77	 (54)	(255)	(315)	152
Fiduciary Net Position - End of Year	\$ 2,942	\$ 2,865	\$ 2,919	\$ 3,174	\$ 3,489
Net Pension Liability					
Total Pension Liability	\$ 3,484	\$ 3,804	\$ 4,015	\$ 4,325	\$ 4,166
Fiduciary Net Position	 2,942	 2,865	 2,919	3,174	 3,489
Net Pension Liability / (Asset)	\$ 542	\$ 939	\$ 1,096	\$ 1,151	\$ 677
Fiduciary Net Position as a Percentage of the Total Pension Liability	84.4 %	75.3 %	72.7 %	73.4 %	83.7 %
Covered Payroll	N/A	N/A	N/A	N/A	N/A
Net Pension Liability as a Percentage of Covered Payroll	N/A	N/A	N/A	N/A	N/A

## **Schedule of Contributions**

dollars in thousands) For the Years Ended June 30	arially mined on (ADC) <sup>1</sup>	ntributions in ation to ADC <sup>1</sup>		Contribution iciency (Excess)	Contributions as a Percentage of ADC	 Covered Payroll <sup>1</sup>	Contributions as a Percentage of Covered Payroll
			F	PERF DB			
2023	\$ 467,207	\$ 679,052	\$	(211,845)	145.3 %	\$ 6,149,915	11.0 %
2022	433,048	627,914		(194,866)	145.0	5,670,744	11.1
2021	452,333	626,780		(174,447)	138.6	5,482,242	11.4
2020	482,316	598,903		(116,587)	124.2	5,380,843	11.1
2019	527,836	581,559		(53,723)	110.2	5,205,243	11.2
2018	502,206	571,099		(68,893)	113.7	5,083,131	11.2
2017	496,867	558,659		(61,792)	112.4	4,997,555	11.2
2016	492,000	547,684		(55,684)	111.3	4,868,709	11.2
2015	517,717	536,467		(18,750)	103.6	4,804,145	11.2
2014	528,562	519,576		8,986	98.3	4,896,635	10.6
			TRF	Pre-'96 DB			
2023	\$ 4,237,437	\$ 4,237,437	\$	—	100.0 %	\$ 521,286	812.9
2022	1,552,615	1,552,615		_	100.0	575,523	269.8
2021	1,600,629	1,600,629		—	100.0	625,812	255.8
2020	973,488	973,488		—	100.0	693,965	140.3
2019	947,405	947,405		—	100.0	753,355	125.8
2018	922,068	922,068		_	100.0	824,770	111.8
2017	875,525	875,525		_	100.0	912,685	95.9
2016	892,548	892,548		_	100.0	989,093	90.2
2015	851,427	851,427		_	100.0	1,074,827	79.2
2014	831,942	831,942		_	100.0	1,262,828	65.9
			T	RF '96 DB			
2023	\$ 240,742	\$ 244,424	\$	(3,682)	101.5 %	\$ 4,199,773	5.8 9
2022	171,570	210,601		(39,031)	122.7	3,915,888	5.4
2021	158,763	202,353		(43,590)	127.5	3,634,649	5.6
2020	162,035	188,789		(26,754)	116.5	3,465,728	5.4
2019	226,099	393,151		(167,052)	173.9	3,257,918	12.1
2018	210,586	235,675		(25,089)	111.9	3,129,070	7.5
2017	198,444	227,207		(28,763)	114.5	3,020,463	7.5
2016	180,375	215,626		(35,251)	119.5	2,881,397	7.5
2015	178,260	205,763		(27,503)	115.4	2,742,187	7.5
2014	177,711	194,751		(17,040)	109.6	2,598,115	7.5
				77 Fund			
2023	\$ 175,142	\$ 192,700	\$	(17,558)	110.0 %	\$ 1,072,187	18.0
2022	142,146	176,667		(34,521)	124.3	1,018,600	17.3
2021	113,015	166,094		(53,079)	147.0	951,301	17.5
2020	91,134	162,056		(70,922)	177.8	940,496	17.2
2019	78,010	154,228		(76,218)	197.7	866,299	17.8
2018	74,491	147,074		(72,583)	197.4	842,179	17.5
2017	91,258	150,698		(59,440)	165.1	809,382	18.6
2016	113,438	151,299		(37,861)	133.4	771,949	19.6
2015	118,881	146,402		(27,521)	123.2	745,336	19.6
2014	103,425	140,119		(36,694)	135.5	710,581	19.7

## Schedule of Contributions, continued

(dollars in thousands) For the Years Ended June 30	Actuarially Determined Contribution (ADC)		Contributions in elation to ADC <sup>1</sup>	De	Contribution eficiency (Excess)	Contributions as a Percentage of ADC	 Covered Payroll <sup>1</sup>	Contributions as a Percentage of Covered Payroll
					JRS			
2023	\$ 21,77	1 \$	18,047	\$	3,724	82.9 %	\$ 67,466	26.7 %
2022	19,03	9	17,564		1,475	92.3	65,159	27.0
2021	22,07	4	18,621		3,453	84.4	61,215	30.4
2020	19,40	6	18,166		1,240	93.6	58,189	31.2
2019	14,86	2	16,031		(1,169)	107.9	56,380	28.4
2018	14,85	3	15,117		(264)	101.8	53,350	28.3
2017	14,33	5	16,824		(2,489)	117.4	54,755	30.7
2016	17,48	5	16,946		539	96.9	51,382	33.0
2015	18,86	5	21,020		(2,155)	111.4	48,582	43.3
2014	27,64	8	20,895		6,753	75.6	46,041	45.4
					EG&C			
2023	\$ 3,92	3 \$	7,177	\$	(3,254)	182.9 %	\$ 34,597	20.7 %
2022	3,20	0	6,714		(3,514)	209.8	32,356	20.8
2021	2,92	4	7,083		(4,159)	242.2	33,194	21.3
2020	3,64	7	6,742		(3,095)	184.9	32,491	20.8
2019	4,87	4	6,982		(2,108)	143.2	33,272	21.0
2018	4,39	3	6,175		(1,782)	140.6	29,387	21.0
2017	4,03	3	5,691		(1,658)	141.1	27,428	20.7
2016	4,07	8	5,297		(1,219)	129.9	25,526	20.8
2015	4,82	0	5,215		(395)	108.2	25,133	20.7
2014	5,34	1	5,359		(18)	100.3	25,825	20.8
					PARF			
2023	\$ 4,35		4,155	\$	198	95.5 %	\$ 25,515	16.3 %
2022	4,01	1	4,044		(33)	100.8	24,577	16.5
2021	5,04		4,402		640	87.3	24,323	18.1
2020	4,60		4,232		376	91.8	23,989	17.6
2019	3,54		3,216		327	90.8	21,791	14.8
2018	2,53		3,014		(481)	119.0	21,578	14.0
2017	2,14		1,486		662	69.2	22,635	6.6
2016	1,38		1,440		(59)	104.3	21,372	6.7
2015	1,41		1,063		356	74.9	21,145	5.0
2014	2,34	5	1,174		1,171	50.1	20,608	5.7
					LE DB			
2023		8 \$	183	\$	(155)	662.4 %	N/A	N/A
2022	20		183		19	90.6	N/A	N/A
2021	21		238		(21)	109.7	N/A	N/A
2020	21		208		8	96.3	N/A	N/A
2019	24		269		(29)	112.1	N/A	N/A
2018	23		237		_	100.0	N/A	N/A
2017	17		135		35	79.4	N/A	N/A
2016	13		138		_	100.0	N/A	N/A
2015	11		131		(12)	110.1	N/A	N/A
2014	13	8	138		_	100.0	N/A	N/A

## Schedule of Investment Returns <sup>1</sup>

## Annual Money-Weighted Rate of Return, Net of Investment Expense

## For the Years Ended, June 30

Defined Benefit Pension Trust Funds	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
PERF DB	2.51 %	(6.55)%	25.46 %	2.58 %	7.32 %	9.33 %	7.60 %	1.11 %	0.32 %	12.33 %
TRF Pre-'96 DB	3.99	(5.89)	25.67	2.76	7.61	9.46	8.14	1.01	0.57	12.71
TRF '96 DB	2.54	(6.64)	25.46	2.58	7.47	9.28	8.14	1.01	0.57	12.71
77 Fund	2.53	(6.62)	25.47	2.57	7.34	9.30	7.97	1.22	(0.07)	13.70
JRS	2.50	(6.48)	25.46	2.57	7.31	9.32	7.96	1.18	(0.06)	13.69
EG&C	2.54	(6.63)	25.48	2.57	7.40	9.30	7.97	1.17	(0.09)	13.69
PARF	2.49	(6.38)	25.49	2.60	7.30	9.31	7.94	1.10	(0.08)	13.70
LE DB	2.41	(6.15)	25.46	2.64	7.19	9.39	7.91	0.84	(0.13)	13.65
Total INPRS <sup>2</sup>	3.65	(6.96)	24.76	2.77	6.84	8.88	7.85	1.10	0.44	12.69

<sup>1</sup> For further details, see Accompanying Notes to the RSI Schedules in the Introduction to Required Supplementary Information (Unaudited).

<sup>2</sup> Rate of return includes DC, OPEB and custodial funds.

### Schedule of Notes to Required Supplementary Information

#### **Plan Amendments**

In 2023, for PERF DB, TRF Pre-'96 DB, and TRF '96 DB the full retirement benefit eligibility condition of age 70 and 20 years of credible service while still active in covered position was changed to age 65 and 20 years of creditable service while still active in a covered position. This change was deemed immaterial and has no impact on the actuarial liability.

#### **Assumption Changes**

In 2023, there were no changes to the actuarial assumptions during the fiscal year. For further details, refer to the Actuarial Section.

## Methods and Assumptions Used in Calculating Actuarially Determined Contributions<sup>1</sup>

The following actuarial methods and assumptions were used to determine the ADC Rates for the Fiscal Year Ending June 30, 2023:

Description	PERF DB	TRF Pre-'96 DB	TRF '96 DB	77 Fund	JRS	EG&C	PARF	LE DB	
Valuation Date:									
Assets					June 30, 2	021			
Liabilities		une 30, 2020 - Member census data as of June 30, 2020 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2020 and June 30, 2021. Standard actuarial roll forward techniques were then used to project the total pension liability computed as of June 30, 2020 to the June 30, 2021 measurement date.							
Actuarial Cost Method (Funding)		Entry Age Normal (Level Percent of Payroll) Traditional Unit Credit							
Actuarial Amortization Method for Unfunded Liability		Level Dollar							
Actuarial Amortization Period for Unfunded Liability	20 years, closed							30 years, open <sup>3</sup>	
Asset Valuation Method		Five-year smoothing of gains and losses on the fair value of assets subject to a 20% corridor							
Investment Rate of Return (Funding)		6.25%, includes inflation, and net of administrative and investment expenses							
Cost of Living Increases	Beginning Jan. 1, 2024 - 0.40% Beginning Jan 1, 2034 - 0.50% Beginning Jan 1, 2039 - 0.60%			1.95%	2.65%	Beginning Jan. 1, 2024 - 0.40% Beginning Jan 1, 2034 - 0.50% Beginning Jan 1, 2039 - 0.60%	N/A	Beginning Jan. 1, 2024 - 0.40% Beginning Jan 1, 2034 - 0.50% Beginning Jan 1, 2039 - 0.60%	
Future Salary Increases, including Inflation	2.65% - 8.65%	2.65% -	11.90%	2.65% 2.65% - 4.90%		2.65% - 4.90%	2.65%	2.65%	
Inflation					2.00%				

<sup>1</sup> Differs from Note 8 schedule as this table is for funding purposes and Note 8 is for financial reporting purposes. Actuarially Determined Contributions in a given year are determined based on the actuarial valuation dated two fiscal years prior (i.e., rates effective 7-1-17 are based on the 6-30-16 valuation).

<sup>2</sup> TRF Pre-96 is funded in accordance with IC 5-10.4 and does not use an amortization of the unfunded liability period to determine its contribution amounts.

<sup>3</sup> The remaining amortization period becomes 30 years, open when a plan reaches 100% funded status.

## Schedule of Administrative Expenses

## For the Years Ended June 30

 875 249 530 227 141 45 371 <b>1,563</b>		823 281 505 250 33 41 390 <b>1,500</b>
249 530 227 141 45		281 505 250 33 41
 249 530 227 141		281 505 250 33
 249 530 227		281 505 250
 249 530		281 505
 249		281
 875		823
 875		823
17		12
143		135
516		496
199		180
8,284		7,579
 3,585		3,387
2,764		2,348
1,935		1,844
12,473		11,086
 6,605		6,642
63		67
434		345
3,298		1,953
2,073		2,079
 25,954		22,199
732		636
7,694		6,204
\$ 17,528	\$	15,359
 2023	2	022
\$	7,694 732 25,954 2,073 3,298 434 63 6,605 12,473 1,935 2,764 3,585 8,284 199 516 143	\$ 17,528 7,694 732 25,954 2,073 3,298 434 63 6,605 6,605 12,473 1,935 2,764 3,585 8,284 199 516 143

## Schedule of Administrative Expenses - Vendors

## For the Years Ended June 30

INPRS elected to display vendors with administrative expenses of \$50 thousand or greater.

(dollars in thousands)

Vendor	 2023	 2022	Nature of Services
Voya Institutional Plan Services LLC	\$ 8,700	\$ 8,878	Recordkeeper & Benefit Processing Services
CherryRoad Technologies Inc.	1,814	1,628	INPAS Pension System Support
ILAB LLC	1,649	1,607	Quality Assurance
Mythics	1,712	1,372	Mythics Software Vendor and Support
Intervision Systems LLC	1,424	1,298	Servers - Offsite
Indiana Office of Technology	673	677	Desktop & Network Services, Software
Accenture LLP	621	_	Consultant for CRM Business Case and Roadmap
Acorio LLC	502	206	ServiceNow Consultant and Implementation
JLL Property Management	468	392	Property Management
RSM US LLP	465	465	Auditing Services
Key Benefit Administrators	446	364	RMBA Account Administrators
8X8 INC	446	65	Call Center Software and Phone Services
Cavanaugh Macdonald Consulting LLC	349	345	Actuarial Services
KPMG LLP	254	187	Document and Data Retention Governance
DAS	189	152	FileNet Managed Service Provider
Crowe	172	28	IT Security, Website Governace Assessment
ServiceNow	170	170	IT Desktop Support Services
Tandem	166	141	Mail and Print Services
Fineline Printing Group	138	155	Printing
Dynatrace	131	118	Application & Server Monitoring Software
Brown & Brown Of Indiana Inc.	118	115	Insurance
Looker Data Sciences Inc.	109	123	Data Analytics & Reporting Software
Indiana State Personnel Department	97	89	HR Shared Services
Carahsoft Technology Corporation	88	113	IT Software
Gabriel, Roeder, Smith & Company	85	_	Actuarial Services
Pension Benefit Information LLC	85	83	Death Match Services
Flashpoint, Inc.	82	124	Management Consulting
Gartner Inc.	81	77	IT Project Research & Advisory Services
Experian Reserved Response Inc.	75	75	Identity Theft Protection Services
Loyalty Research Center	73	73	Research Services
Automatic Data Processing Inc.	72	63	Payroll Processing Services
Dr. Omkar N. Markand, MD	64	60	Medical Consulting
GitLab	59	_	Software Development Platform
Dr. Lisa Helene Smith, MD	58	50	Medical Consulting
Optiv Security Inc.	54	34	Cybersecurity Services
CEM Benchmarking Inc.	50	50	Benchmarking Services
Other	 1,207	 1,330	, i i i i i i i i i i i i i i i i i i i
Total	22,946	20,707	
Personnel Services	25,954	22,199	
Depreciation and Amortization	 249	 281	
Total Administrative Expenses	\$ 49,149	\$ 43,187	

## Schedule of Direct Investment Expenses

#### For the Years Ended June 30

(dollars in thousands)		2023	2022		
Investment Management Fees <sup>1</sup>	\$	219,328	\$	273,431	
Securities Lending Fees		304		210	
General Investment Expenses					
Investment Consultants:					
Verus		773		753	
TorreyCove		650		650	
Mercer		621		609	
Aksia		400		400	
Strive Advisory		100		_	
Other		492		358	
Total Investment Consultants		3,036		2,770	
Investment Custodian (BNY Mellon)		959		863	
Broker Commissions:					
Morgan Stanley & Co. Inc.		750		719	
Goldman Sachs & Co.		629		665	
J P Morgan Securities Ltd., New York		603		534	
Newedge USA LLC		130		407	
Merrilly Lynch International Equities		128		80	
Instinet Clearing Services Inc.		116		102	
Jefferies & Co. Inc.		72		55	
Pershing LLC, Jersey City		61		34	
J P Morgan Securities Ltd., London		58		53	
Exane, Paris		55		28	
Other Brokers		1,453		1,416	
Total Broker Commissions		4,055		4,093	
Investment Staff Expenses		3,750		3,696	
Investment Administrative Expenses:					
Barra		501		470	
Foster Garvey PC		494		676	
Bloomberg		301		289	
Kutak Rock LLP		172		178	
Dynamo		128		165	
Other		195		166	
Total Investment Administrative Expenses		1,791		1,944	
Total General Investment Expenses		13,591		13,366	
Total Direct Investment Expenses	\$	233,223	\$	287,007	
Information regarding investment professionals that ha	wo provido	d oonvioon to INI	200 200	n ha in tha Saha	

' Information regarding investment professionals that have provided services to INPRS can be in the Schedules of Investment Management Fees and Investments Professionals in the Investment Section.



## **Investment Section**

- 92 Report on Investment Activities
- <u>96</u> Report from the Chief Investment Officer
- 104 Asset Class Summaries
- 108 Outline of Investment Policies
- 109 Notes to the Investment Schedules
- 110 Investment Results Consolidated Defined Benefit Assets
- 114 Investment Results Consolidated Defined Contribution Assets
- <u>117</u> Investment Information

## \$39.8 Billion

Fair value of defined benefit assets

**\$6.5 Billion** Fair value of defined contribution assets

**2.48%** Annualized time-weighted rate of return on defined benefit investments





August 25, 2023

Board of Trustees Indiana Public Retirement System One North Capitol Avenue Indianapolis, IN 46204

Dear Trustees:

Verus is pleased to provide the Board of Trustees of the Indiana Public Retirement System ("INPRS") with an overview of the market environment and a summary of recent developments for the fiscal year ended June 30, 2023.

#### Market Environment

Risk assets delivered a strong start to calendar year 2023, building off the positive momentum seen towards the end of 2022. Year-to-date performance was positive across all major asset classes outside of commodities, as was performance on a one-year basis. Despite the challenging outlook presented in our last letter, economic growth proved to be resilient, despite an ending to the large amount of stimulus introduced in response to the pandemic, and quickly rising interest rates. While earlier in 2023 many economists had forecast a U.S. recession in mid to late summer (especially after a series of regional bank failures, notably Silicon Valley Bank and First Republic), sentiment eased considerably as the prospect of a "soft-landing" was revived. Falling headline inflation, resilient labor market data, and the first rate pause from the Federal Reserve all contributed to a more positive macroeconomic outlook.

Despite the strong first half of calendar 2023, challenges remain going forward. Within the U.S., inflation is still a concern. The Federal Reserve continues to face difficult policy decisions as inflation, while lower, sits above the two-percent target and economic and labor market strength persists. The FOMC briefly paused rate hikes in June only to further hike the benchmark rate again in July. Markets are pricing as many as two additional hikes before the end of the current tightening cycle. Overseas, growth in advanced economies remains stunted as many central banks continue their battle against inflation. Within emerging markets, the loudest narrative has centered on China. Reopening after the pandemic provided a material boost to activity, though positive momentum has been overshadowed by mounting geopolitical tension with the United States, a lack of broader accommodative stimulus from Beijing, and a hobbling real estate market.

#### U.S. Equity

Shares in the U.S. outperformed relative to international developed and emerging market counterparts across both the calendar year-to-date and fiscal year timeframe. The S&P 500 index rose by an outstanding 19.6% over the trailing one-year period, driven by a 16.9% 2023 year to date gain. Many expected a higher rate environment and slowing domestic consumer to be a ceiling on domestic equity prices, especially following the aforementioned regional bank failures. This ceiling was quickly shattered as the prospect and development of artificial intelligence (AI) technology boosted the already technology-heavy S&P 500 index.

#### SEATTLE | LOS ANGELES | SAN FRANCISCO | PITTSBURGH | VERUSINVESTMENTS.COM

The significant movements of heavyweight technology names is apparent when looking at size and style factors. Large-cap equities significantly outperformed over the one-year, with the Russell 1000 index gaining 19.4% relative to a 12.3% increase in the Russell 2000 index. Growth handily outperformed value, with the Russell 1000 Growth index rising 27.1% from last year compared to an 11.5% gain from the Russell 1000 Value index.

While U.S. shares have outperformed, the earnings story remains uncertain. Per FactSet, S&P 500 companies are on track for their third straight quarter of year-over-year earnings decline. The expected decline of -7.0% in Q2 2023 reflects a volatile business environment. While earnings expectations are rosier going forward, recent gains seen from U.S. equities are by no means an indicator that the Federal Reserve has successful achieved a "soft-landing" for the economy.

#### International Equity

International share performance lagged that of the U.S. shares as technology-related gains were primarily captured by large U.S. firms. Despite this relative underperformance, both international developed and emerging market shares saw absolute gains on a one-year horizon. The MSCI EAFE index increased 18.8% year-over-year, while the MSCI EM index posted a meager 1.7% gain.

International developed shares rebounded in Q4 of 2022, and this momentum carried into 2023, driven by strength from both European and Japanese shares. The STOXX 50, which represents the 50 largest companies in Europe, rose 36.3% from the prior year. While Europe continues to face tighter central bank policies due to high inflation (June 2023 CPI came in at 5.5% year-over-year), resilience was much better than expected, especially in comparison to the negative sentiment following Russia's invasion of Ukraine. Japanese equities also saw strong performance due to a combination of positive economic growth, inflation (Japan has sought higher inflation for many years), and a potential shift to foreign shareholder prioritization. Gains in Japanese equities were mostly achieved in 2023. The TOPIX index increased 25.9% over the year-to-date, making up most of the 31.2% one-year gain.

China dominated the narrative in emerging markets, as emerging market shares initially outperformed on enthusiasm around the country's reopening. This reopening momentum turned out to be short-lived, as negative sentiment quickly overshadowed the move away from an almost three-year "zero-covid" policy. It appears that two primary factors contributed to losses for Chinese shares. The first was a smaller-than-expected reopening wave of economic activity, with no substantial monetary or fiscal stimulus used to accelerate the reopening. This contrasted sharply to the large amounts of stimulus used in the U.S. and Europe. This smaller-than-expected reopening wave provided no reprieve to the already struggling real estate market. The second factor was growing geopolitical tension with the United States. A series of events, including a spy balloon being shot down over U.S. airspace, continued to bolster negative relations between the two global leaders, which likely hurt foreign investor sentiment. The MSCI China index fell -5.5% over the yearto-date, further adding to the -16.8% loss seen over the one-year period.

#### Fixed Income

Inflation and Federal Reserve action continued to be the dominant driver of fixed income performance over the past year. With the bulk of Federal Reserve rate hikes occurring in the second half of 2022, bonds received the brunt of the pain over the 2022 calendar year (Bloomberg U.S. Aggregate down -13.0%). The Federal Reserve continued to increase rates in response to inflation in



2023, but at a considerably slower pace. The upper bound of the Fed's target rate moved from 4.50% to 5.25% over the 2023 year-to-date period. Smaller hikes were likely in response to strong signs of falling inflation, as headline CPI fell to 3.0% in June of 2023.

Positive performance in 2023 has helped to improve one-year performance for the fixed income complex. Core fixed income (Bloomberg U.S. Aggregate) saw a 2.1% gain over the year-to-date period, bringing the one-year loss to -0.9%. In terms of duration, short maturity U.S. treasuries outperformed, with the Bloomberg U.S. Treasury 1-3 Year index gaining 0.1% over the one-year, compared to -2.1% and -6.8% losses from the U.S. Treasury index and U.S. Treasury Long index, respectively.

Expectations for worsening credit conditions may have reached a peak earlier in the year following the regional bank failures, as many investors expected a material pull back in credit availability. While high-yield bond and leveraged loan default rates have reached a two-year high per J.P. Morgan, the broader credit spectrum has performed strongly over the one-year period. Emerging market debt in local currency (+11.4%) was the best performer, followed by leveraged loans (+10.1%), high-yield bonds (+9.1%), and hard currency emerging market debt (+7.4%). Credit spreads compressed in the first half of calendar 2023, with the average option-adjusted spread for high-yield and investment grade bonds sitting at 390 basis points and 123 basis points, respectively. It has been surprising to see credit spread remain at low levels, despite recent rises in bond default activity, and expectations that defaults will continue to rise into 2024.

#### **Commodities**

In 2022, there was two major stories in the commodities space. First, the rapid increase in energy and grain prices — much of this due to Russia's invasion of Ukraine — was an igniting factor for global inflation issues. The second story was commodity performance. Commodities were one of the few asset classes to post a positive return during the 2022 calendar year, and the asset dominated the narrative in 2022 with some market participants calling for a new booming commodity cycle. However, commodities ended up playing a much smaller role in 2023, as a combination of easing supply pressures and lower demand hurt price performance. The Bloomberg Commodity index fell - 7.8% over the first half of 2023, driving the -9.6% one-year loss in the index.

#### Outlook

The first half of 2023 has been a strong period for most risk assets, especially across the equity and credit spectrum. Despite this strength, investor views of the future have diverged regarding whether the economy has achieved a new equilibrium ("soft landing"), or whether a material recession is in imminent. Domestic investor sentiment remains positive as inflation has shown signs of easing, real earnings growth has moved back into positive territory, and the labor market remains resilient despite the quick rise in interest rates. While strong asset performance has further boosted sentiment, risks including regional banks, commercial office real estate, and sticker inflation remain. It is important to remember that rising interest rates tend to impact the economy *with a lag.* We believe many effects of interest rate rises have yet to be felt, and that the economy and markets may feel some pain by early 2024. Across international developed markets, we believe growth will continue to face headwinds until inflation is under control, but for the moment, these markets have shown greater resilience than expected. Lastly, emerging markets are set to grow faster than advanced economy counterparts, but China may continue to overshadow the narrative, especially as the U.S. China relationship remains tenuous.



#### **Plan Activity**

During the 2023 fiscal year, Verus and INPRS' staff collaborated on several different initiatives. Together we completed a comprehensive analysis of the Plan's domestic equity structure focused on identifying areas where active management will likely have the highest probability of success. Verus and INPRS also conducted an in-depth review of INPRS' international equity structure including an assessment of the advantages and disadvantages of investing in certain countries. Verus recommended a preferred go forward structure for the international equity portfolio based on anticipated legislative changes.

At the request of staff, Verus examined the asset allocation of the TRF Pre-96 Plan and summarized the potential effects of de-risking given the rise in yields throughout the fiscal year. Verus also collaborated with staff to update INPRS RFP questionnaires for various asset classes to streamline future manager search activity.

Additional ongoing work involved public market asset class reviews, annual fee benchmarking, investment and operational due diligence on existing managers, investment policy statement revisions, and natural collaboration with staff on a smaller projects and issues.

#### Conclusion

Verus values our relationship with INPRS, and we appreciate the privilege of working with the Board and staff in designing policies and supporting decisions aimed at meeting the Plan's investment objectives. We remain confident in the direction of the Portfolio given the System's demographics, fiscal strength, and well-designed investment strategy. We look forward to continuing our partnership as we navigate ever-changing capital markets.

Sincerely,

up Marter

Jeffrey J. MacLean Chief Executive Officer

Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus – also known as Verus Advisory™.



#### **INPRS's Defined Benefit Investment Imperatives**

Established in fiscal year 2012, three long-term imperatives that are vital to the continued health of the System's defined benefit plans have served as the guide for the investment team. Every strategic, tactical, and operational decision that is made must have the expectation of positively contributing to at least one of these imperatives.

- Achieve the long-term rate of return assumption. Effective fiscal year 2013, INPRS's Board set the long-term rate of return assumption at 6.75 percent. Following the fiscal year 2021 Asset-Liability Study, the Board then approved 6.25 percent as the appropriate long-term assumption. In order for the System to maintain a healthy funded status, it is essential to achieve this rate of return over the long-term (defined as 10+ years in INPRS's Investment Policy Statement).
- 2. Accomplish the first imperative as effectively and efficiently as possible. While it is important to establish an asset allocation that is expected to meet the target rate of return over a long-time horizon, as fiduciaries, it is also important to maintain focus on maximizing the return per unit of risk, limiting return volatility, and maximizing cost efficiency.
- 3. **Maintain enough liquidity to make retirement payments on time.** As the System matures, retirement payments will be a greater cash outflow each year. As a result, it is critical to maintain an appropriate level of liquidity to ensure payments are made on time and without causing undue stress to the investment portfolio.

### The Fiscal Year in Review (Defined Benefit Portfolio)<sup>1</sup>

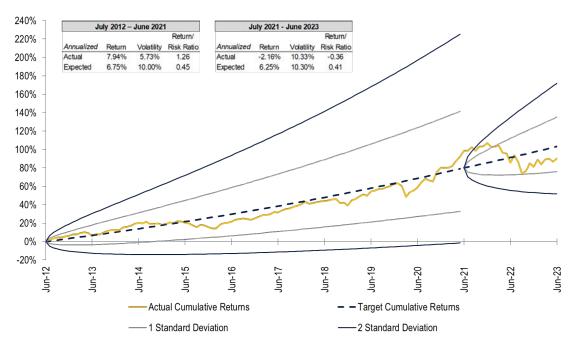
Fiscal year 2023 was shaped by both global and domestic economic factors including global supply shocks, the ongoing Russia-Ukraine conflict, aggressive monetary policies, a banking sector crisis, interest rate hikes, and the most rapid increase in inflation in four decades. Decisive actions from the Federal Reserve and other central banks to tame inflation significantly influenced market dynamics. Monetary policy became increasingly aggressive, with a series of rate hikes leading to heightened economic volatility. Despite restrictive monetary policy and lingering inflation, the economy demonstrated resilience. Investors remained bullish about the prospects of U.S. economic growth and strong corporate earnings, contributing to a rally that extended well into the second half of fiscal year 2023.

The consolidated defined benefit assets returned 2.48 percent net of all fees over the fiscal year, falling short of the 6.25 target return, and ended with a fair market value of \$39.8 billion. The rise in U.S. real yields, one of the largest in history, and the associated tightening by the Fed, was a major detractor for all asset classes. However, public equities proved resilient, delivering a return of 16.67 percent. Investor optimism over successful inflation control and potential interest rate cuts fueled a rally from late 2022 into the first half of 2023. Private markets and absolute return posted positive returns of 3.24 percent and 3.00 percent, respectively. Inflation-Linked bonds had a return of -2.66 percent, attributed to the spike in real yields relative to the discount rate. Similarly, Fixed Income (excluding Inflation-Linked) registered a -0.12 percent return, largely driven by the sell-off in developed world bond yields due to rising discount rates. Commodities negatively impacted the portfolio due to decelerating inflation but increasing interest rates in 2023. Fortunately, the strong rally from equities offset these losses.

Based on the research of various asset classes and their performance in different economic environments over time, it was determined in 2012 that a new risk-balanced framework better fit our first two imperatives. Developed from this research, the following chart illustrates the projected range of outcomes for INPRS's asset allocation around the former 6.75 percent and current 6.25 percent return targets (represented by the blue dotted line). This visual is intended to track the cumulative performance of the actual portfolio (shown by the yellow solid line) versus those expectations. After outperforming the target rate of return from the start of fiscal year 2013 through the end of fiscal year 2021, the portfolio underperformed the target rate of return during the challenging market environment the past two fiscal years.

<sup>&</sup>lt;sup>1</sup> Rates of return and market values are specific to INPRS's portfolio are based on calculations made by INPRS's custodian, Bank of New York Mellon, and are presented using a time-weighted rate of return methodology based upon fair value.

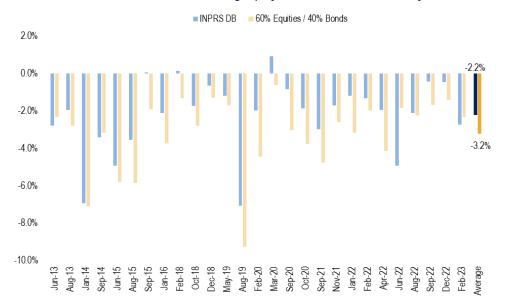
## Report from the Chief Investment Officer, continued



#### **INPRS Defined Benefit Net of Fee Cumulative Return**

Since inception of the revised strategy in 2012, the portfolio has generated an annual return of 5.13 percent above the return of cash. The current economic environment presents both challenges and opportunities. While the rise in inflation and interest rates has negatively impacted our investment performance, the portfolio has benefited from strong equities returns over the short-term and should benefit from higher interest rates, and thus cash flow, longer term.

Due to our long-term focus, it remains crucial to consistently monitor the portfolio's performance across different market conditions. Diversification is a key strategy to reduce the impact of economic headwinds and to position the portfolio for future growth. To assess this, we analyzed historical data from months since July 2012 when global equities experienced losses of 2 percent or worse. The chart demonstrates that INPRS's defined benefit portfolio has consistently performed favorably in comparison to such market downturns. As anticipated, our portfolio experienced significantly lower losses on average than a 60 percent equity and 40 percent bond portfolio. This reinforces the effectiveness of our diversification approach and aligns with our expectations.

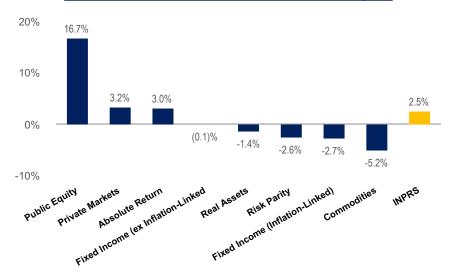


#### Defined Benefit Performance During Equity Drawdowns >2% Since July 2012

#### **Performance Attribution**

The 2023 fiscal year was marked by some of the most significant shifts in macroeconomic conditions that developed world countries have experienced in decades. Geopolitical tensions escalated with the war in Eastern Europe, and pandemic-induced monetary and fiscal stimulus led to rapidly increasing, above-target inflation, not seen in over 30 years. As a response, the Fed hiked rates from 0 percent in the Spring of 2022 to over 5 percent in early 2023, causing monetary tightening that negatively impacted rate-sensitive assets. Despite the tumultuous year, certain sectors experienced growth, demonstrating market resilience and the benefits of portfolio diversification amidst economic volatility.

In the second half of the fiscal year, inflation began to fade while growth remained resilient, leading to some bear market rallies. With investor sentiment leaning towards expected continued growth and stable inflation, public equities anchored the portfolio with a 16.67 percent return. Absolute return portfolios modestly gained 3.00 percent, as there was a shift towards "risk-off" strategies and alpha was gained from equities. Even with positive equity returns, the significant underperformance from commodities and fixed income weighed down the overall Risk Parity portfolio, resulting in a negative return of 2.59 percent. The underperformance in Fixed Income (Inflation-Linked) was caused by the sharp rises in discount rates and risk premiums, while high rates and slowing inflation led to a 5.18 percent drawdown in Commodities



1-Year Defined Benefit Asset Class Returns as of June 30, 2023

In fiscal year 2023, we observed a shift in economic trends as asset classes traditionally favoring higher growth and lower inflation conditions outperformed. As the markets shifted towards pricing in a soft landing, the asset classes that discounted falling inflation and rising growth (e.g., equities and nominal government bonds) outperformed those that perform well under higher inflation (e.g., commodities and inflation-linked bonds). The table that follows illustrates the similarities between the fiscal year 2023 environment and the dominant trend observed since 2012. Both periods predominantly benefited from the higher growth and low inflation economic environment.

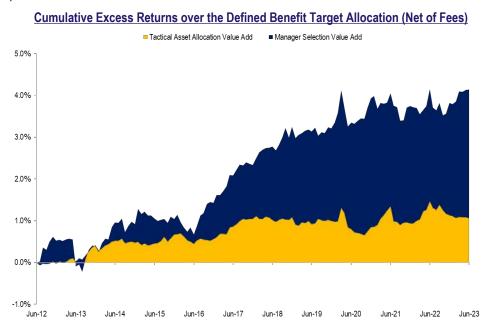
DB Public	<b>Asset Class</b>	Returns as	of June 30	, 2023
-----------	--------------------	------------	------------	--------

		FY 2023	Since July 2012
Asset Class Returns	Economic Environmental Bias		
Commodities	Higher Growth/Higher Inflation	-5.18%	-2.53%
Public Equity	Higher Growth/Lower Inflation	16.67%	10.01%
Fixed Income (Inflation-Linked)	Lower Growth/Higher Inflation	-2.66%	2.48%
Fixed Income (ex Inflation-Linked)	Lower Growth/Lower Inflation	-0.12%	2.17%
Risk Parity	Balanced Across Environments	-2.58%	3.47%

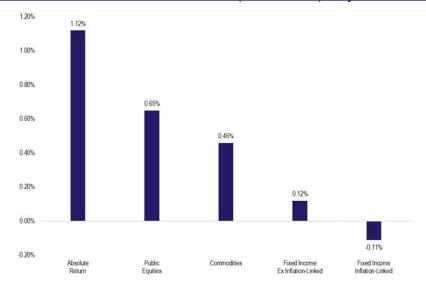
## **Report from the Chief Investment Officer, continued**

#### Performance Relative to the Benchmark

In fiscal year 2023, our investment team achieved a return that exceeded the Passive Target with Notional benchmark by 0.01 percent, after accounting for all fees. The benchmark is designed to represent the portfolio's performance if it had maintained target weights in each asset class throughout the entire year and invested solely in passive strategies like index funds. The value added in fiscal year 2023 came from the team's asset allocation, which positively contributed to the portfolio's performance. Our consistent outperformance since July 2012 has resulted in approximately \$1.2 billion in added value (comprising asset allocation and manager selection) compared to a portfolio consisting solely of passive investments.



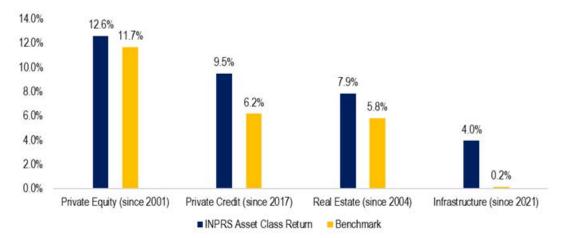
Breaking that result down further, you can see that manager selection has created a large portion of the outperformance over the past ten years because most public asset classes have outperformed their benchmarks.





INPRS's investments in private markets and real assets are not included in the value-add chart above because the managers in these asset classes control the timing of cash flows and, thus, we believe a different measure better captures their performance relative to a benchmark (i.e. internal rate of return or IRR). The chart below gives some perspective on their outperformance since inception.

## Report from the Chief Investment Officer, continued

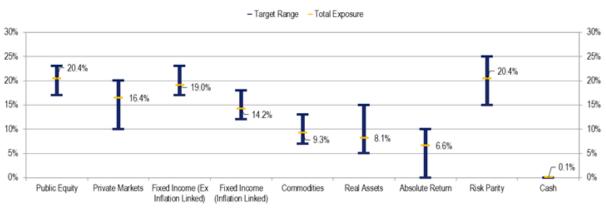


Annualized Performance (IRR) Relative to Benchmarks (Private Markets) Since Inception of Each Asset Class<sup>2</sup>

The year commenced against a backdrop of heightened economic volatility, largely driven by aggressive rate hikes by central banks and persistent inflation. Despite these challenges, the private equity portfolio continued its robust performance, returning an annualized 12.6 percent since 2001. This performance outpaced the benchmark return of 11.7 percent, reaffirming the resilience of the portfolio even in the face of market volatility and macroeconomic uncertainties. The portfolio's benchmark<sup>3</sup> outperformance can be attributed to the consistent pacing of investments through different market environments, the selection of a core group of quality managers, and a constant focus on lowering fees. The private credit portfolio, yielding an annualized return of 9.5 percent since 2017, has greatly surpassed its benchmark of 6.2 percent. The real estate portfolio also had another strong year, leading to a 7.9 percent return since 2004 and outperforming its 6.0 percent benchmark. The infrastructure portfolio returned 4.0 percent since its inception in 2021 and outperforming its benchmark by 3.4 percent highlighting a strong year.

#### **Current Portfolio Exposures**

As previously mentioned, INPRS set out on a course seeking more balance across economic and market environments starting in fiscal year 2012 with the approval of a new asset allocation strategy. Despite slight revisions to the asset allocation during the last asset-liability study in fiscal year 2021, the outcome reaffirmed the path of diversification that INPRS had previously chosen and continues to pursue. The allocation as of June 30, 2023 can be found in the chart below.



#### Defined Benefit Asset Allocation as of June 30, 2023

<sup>2</sup>As of June 30, 2023. Based on the first capital calls made by INPRS: Private Equity inception date is 5/14/2001; Private Credit inception date is 10/17/2017; and Real Estate inception date is 2/26/2004; and Infrastructure inception date is 7/30/2021.. The Private Equity custom benchmark is comprised of the following components lagged one quarter plus 3.00%. 60% Russell 2000 Index, 20% EAFE Small Cap Index, 15% CS High Yield Index, and 5% CS Western European High Index (Hedged). The Private Credit custom benchmark is comprised of the following components lagged one quarter plus 3.00%. 60% Russell 2000 Index, and 10% CS High Yield Index, and 5% CS Western European High Index (Hedged). The Private Credit custom benchmark is comprised of the following components lagged one quarter plus 1.50%: 50% Credit Suisse Leveraged Loan Total Return, 33% S&P BDC Index, and 17% Credit Suisse Western European Leveraged Loan. The Real Assets custom benchmark is comprised of the following components lagged one quarter: A.5% FTSE NAREIT All Equity REITS Index and 23,3% Barclays CMBS Index, 22.2% Global Property Research Index (Rounded).

<sup>3</sup> Source: INPRS's Aksia 1Q 2023 Private Equity Report. As of March 31, 2023. 10-year performance: INPRS = 14.2% and Cambridge (median) = 14.9%. Since 2001 inception: INPRS = 12.6% and Cambridge (median) = 12.1%.

## Liquidity

In light of the ongoing uncertainty surrounding the extent and impact of inflation, coupled with the implications of stringent monetary policy on economic expansion, our team at INPRS has consistently emphasized the importance of liquidity throughout fiscal year 2023. The investment team maintains a liquidity metric designed to evaluate the System's capacity to manage illiquidity risk at any given moment. This is done by measuring cash flow risk, comparing the liquid assets and anticipated cash inflows over the next five years against the projected cash outflows (such as retirement disbursements, plan expenditures, etc.) within the same period.

Through rigorous stress testing, our investment team is confident in the sufficiency of liquidity, even under various adverse market conditions. As of June 30, 2023, INPRS's liquid assets and forecasted inflows stand at 2.4 times the estimated outflows for the next five years. This sharp emphasis on liquidity management has empowered INPRS to maintain substantial exposure to less liquid asset classes. Currently, 31.0 percent is allocated across private markets, real assets, and absolute return, each of which, in our perspective, fulfills a distinct role within the allocation framework.

#### **INPRS's Defined Contribution Investment Imperatives**

Known as the defined contribution account of the Public Employees Hybrid retirement plan, the defined contribution account of the Indiana State Teachers Hybrid retirement plan, the My Choice: Retirement Savings Plan ("My Choice"), and the Legislator's Defined Contribution Plan, the defined contribution plans at INPRS provide members the ability to select their own asset allocation from a line-up of investment options approved by the Board. Established in fiscal year 2017, three long-term imperatives that are vital to the continued health of the System's defined contribution plans have served as the guide for the investment team.

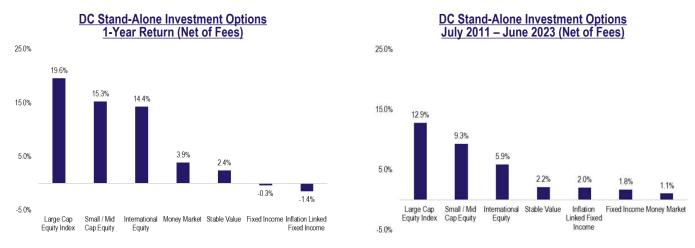
- 1. Provide a simple and diversified default option ("Allocate it for me" Target Date Options). Effective fiscal year 2011, INPRS's Board changed the default investment option for the ASA and My Choice plans to target date funds. This fund line-up was established to provide members with an auto-pilot allocation that targets an appropriate risk and return profile for their particular time horizon and automatically becomes more conservative as they approach retirement. Given how many members rely on INPRS to manage their asset allocation for them by defaulting to this option, it is crucial that we construct a target date fund line-up that is easy to understand yet sophisticated enough to help members achieve their savings goals.
- Provide a simple and diversified menu of stand-alone options ("Allocate it myself" Core and Specialty Options). For
  those members that want to select an allocation that is different than those offered in the target date funds, INPRS offers
  investment options for individual asset classes. This line-up of options allows members to construct an asset allocation that
  better suits their specific needs and objectives.
- 3. Leverage the defined benefit asset base to provide low cost investment options. One reason the multiple retirement plans under INPRS's management were originally consolidated was to reduce fees for all plans. As a result, it is critical that we maintain focus on utilizing the large asset base across the defined benefit and defined contribution plans to continually drive costs lower.

#### **Performance Attribution**

The defined contribution lineup is constructed using the basic building blocks of an asset allocation, which include various equity and fixed income portfolios. As such, INPRS's investment options were influenced by the same forces mentioned in the defined benefit section above. The large cap equity index emerged as the top performer in the defined contribution lineup, with an impressive return of 19.58 percent, while the small/mid cap equity and international equity portfolios also registered strong performances with returns of 15.26 percent and 14.35 percent, respectively. In contrast, the fixed income fund and inflation-linked bonds weathered challenges due to rising bond yields and underperformed, with slight losses of -0.31 percent and -1.43 percent. Amid the turbulence, INPRS's capital preservation options, the stable value and money market funds, proved reliable, delivering modest but positive returns.

Over a longer time period going back to July 2011, each stand-alone investment option has generated strong performance (right chart below). As expected, the higher-risk equity options have been the best performers while the fixed income related options have provided steady, positive returns.

## **Report from the Chief Investment Officer, continued**



#### Defined Contribution Investment Option Returns as of June 30, 2023

Given that INPRS's target date funds are constructed using different mixes of the INPRS stand-alone investment options, each such fund's return is merely an amalgamation of the returns shown above. The target date funds further from retirement have historically shown higher returns due to a larger equity allocation. The following charts illustrate these performance differences for INPRS's Target Date Funds.

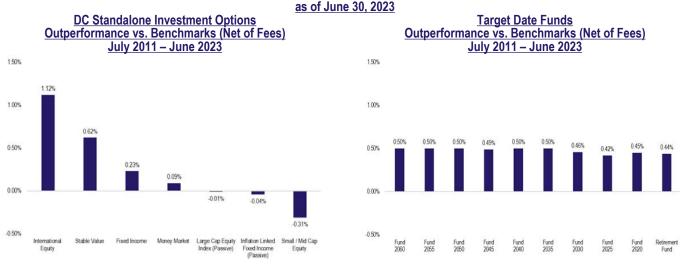


#### Defined Contribution Target Date Fund Returns as of June 30, 2023

INPRS's active management strategy continued to demonstrate its effectiveness, with four of the five funds outperforming their benchmarks over a ten-year period. Most notably, the International Equity fund outperformed its benchmark by 1.12 percent. Additionally, the Stable Value, Fixed Income, and Money Market funds surpassed their benchmarks, underscoring the success of active management<sup>4</sup> in volatile and uncertain economic conditions. On the other hand, the Small/Mid Cap Equity fund underperformed its benchmark by 0.31 percent. The Target Date funds continued their trend of outperformance across the glide path, further affirming the effectiveness of including diversified active management within the funds.

<sup>4</sup> The following DC investment options are only passively managed: Large Cap Equity Index Fund and Inflation-Linked Fixed Income Fund.

## **Report from the Chief Investment Officer, continued**



Defined Contribution Annualized Performance Relative to Benchmarks

### **Blocking Out the Noise**

In fiscal year 2023, short-term economic and market trends proved highly unpredictable, shaped extensively by domestic and international dynamics. Central banks, led by the Federal Reserve, implemented firm measures to manage inflation, leading to mark to market changes and increased economic volatility. Despite the restrictive monetary policy and persistent inflation, the economy showed its resilience. Fiscal year 2023 once again underscored the criticality of considering a broad range of economic and market scenarios when strategizing portfolio management

As we look toward the future, INPRS intends to strategically expand the asset allocation team, an initiative aimed at continuously improving and reaching our long-term investment goals. The expansion of the asset allocation team will address the critical influence economic trends has on long-term asset performance and risk exposure relative to our portfolio.

Key areas of focus for the team include:

- Scenario Analysis/Stress Testing: Forecast portfolio resilience under diverse economic conditions for adaptability and robustness.
- Inter-Relation of Economics and Markets: Analyze macroeconomic, policy, and market trends in real-time to determine if
  assets are behaving as we would have expected or if changes to our strategy are needed.
- Portfolio Monitoring/Rebalancing: Continuously evaluate risk and market influences on assets to maintain strategy alignment with short and long-term goals.

This strategic enhancement underscores INPRS's commitment to maximizing our target returns. We emphasize risk-adjusted decisionmaking, considering all costs and complexities, to navigate the fluctuating economic landscape effectively. As we continue to evolve, our investment philosophy still remains the same: generating sustainable, long-term returns to benefit all our stakeholders and beneficiaries.

Sincerely,

Scott B. Davis, CFA Chief Investment Officer

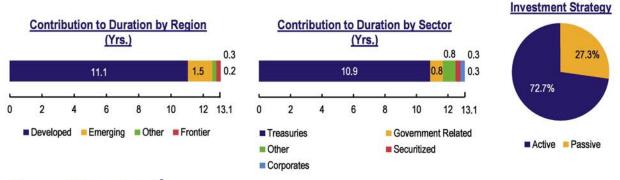
#### Public Equity<sup>1</sup>

The public equity portfolio seeks to provide long-term capital appreciation and income through exposure to public equity securities. INPRS uses a variety of external managers to create a globally diversified portfolio within the asset class. Historically, public equities have performed well in environments when actual economic growth came in higher than expectations and/or when actual inflation came in lower than expectations.



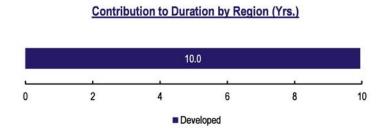
## Fixed Income (ex Inflation Linked)<sup>2</sup>

The fixed income - ex inflation-linked portfolio seeks to provide current income and long-term risk-adjusted return, in excess of the custom benchmark ("Benchmark"), through the investment in debt securities. A focus is placed on preservation of capital. To minimize the probability of substantial principal loss, INPRS staff seeks to reduce the volatility of the portfolio and enhance return from both contractual income and capital appreciation--in part, by investing in certain actively managed strategies.



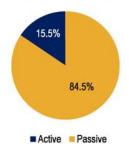
#### Fixed Income (Inflation-Linked)<sup>2</sup>

The fixed income - inflation-linked portfolio seeks to provide a long-term risk-adjusted return similar to that of the custom global inflation index ("Benchmark") and to, more broadly, provide protection against unanticipated inflation.



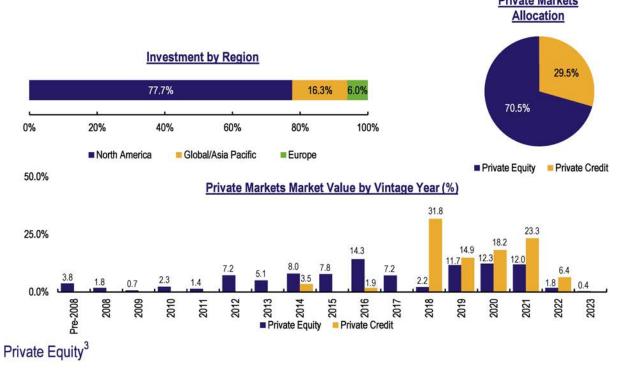
<sup>1</sup> Notional portfolio data provided by portfolio managers and BNY Mellon, INPRS's Custodian <sup>2</sup> Notional portfolio data provided by MSCI Barra One and BNY Mellon, INPRS's Custodian

#### Investment Strategy

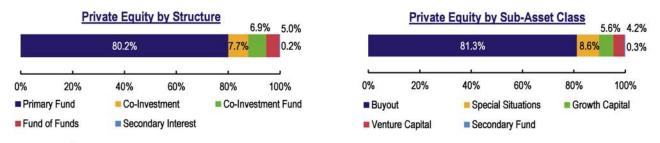


## Private Markets<sup>3</sup>

The private markets portfolio is comprised of Private Equity and Private Credit. More information on these asset classes is listed below.
Private Markets

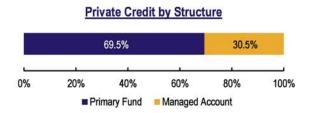


The private equity portfolio seeks to provide attractive risk-adjusted returns by investing in opportunities not typically available through public markets. These investments have historically delivered returns that are higher than public markets while attempting to reduce risk through diversification.



### Private Credit<sup>3</sup>

The private credit portfolio seeks to provide attractive risk-adjusted returns by acquiring the debt of private companies. Private credit, which is characterized by predictable and contractual returns, is relatively low risk compared to other alternative asset classes and offers a viable alternative to fixed income investing. These investments also seek to decrease the volatility of the investment portfolio through diversification.



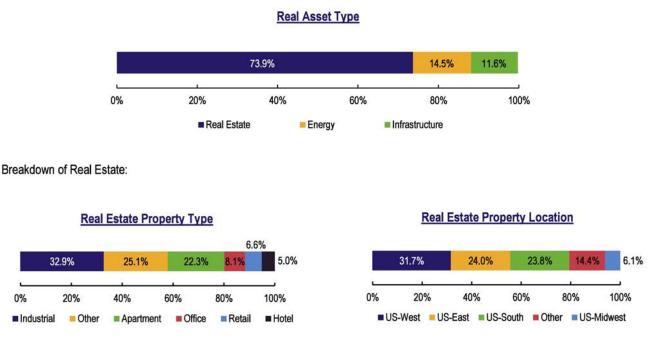
Private Credit by Sub-Asset Class



<sup>3</sup> Portfolio data provided by Aksia, INPRS's Private Markets consultant

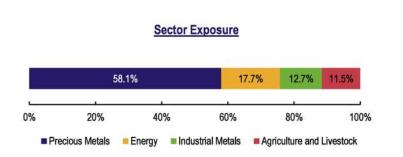
#### Real Assets<sup>4</sup>

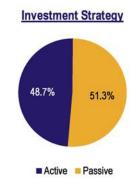
The real assets portfolio is comprised of real estate and infrastructure and seeks to provide attractive risk-adjusted returns by providing stable current income and preserving investment capital. The portfolio should also reduce volatility by providing a hedge against inflation and through the diversification benefits provided by real asset investments. The real asset portfolio is mostly comprised of investments in private real estate and infrastructure partnerships (energy is a sector of infrastructure), and the underlying exposures are a mix of debt and equity holdings.



#### Commodities<sup>5</sup>

The commodities portfolio seeks to provide long-term risk-adjusted returns by preserving investment capital and lowering overall volatility. The portfolio should also act as a hedge against unanticipated inflation. Commodity investments have historically delivered returns that are less correlated with equity and fixed income markets which may provide an opportunity to enhance returns and/or reduce volatility.



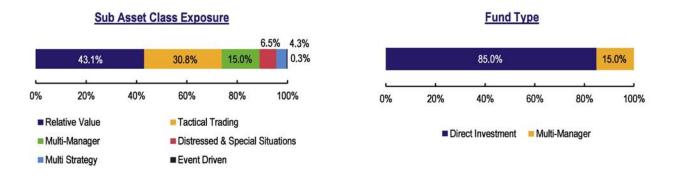


<sup>4</sup> Portfolio data provided by Mercer, INPRS's Real Assets consultant

<sup>5</sup> Portfolio portfolio data provided by portfolio managers and BNY Mellon, INPRS's Custodian

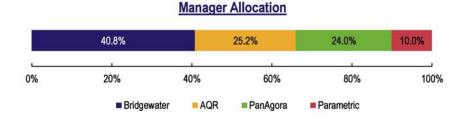
## Absolute Return<sup>6</sup>

The absolute return portfolio seeks to enhance the long-term risk adjusted returns of the plan by delivering alpha, providing diversification benefits, and preserving capital. Absolute return strategies generate returns by exploiting mispricing and inefficiencies in global capital markets, while attempting to reduce exposures to primary market factors (e.g. interest rates and equities) through various hedging techniques.



#### Risk Parity<sup>7</sup>

The risk parity portfolio seeks to provide consistent and high risk-adjusted rates of returns as a standalone investment through the allocation of capital that equalizes risks across a myriad of macroeconomic environments. While traditional asset allocation is highly dependent on favorable equity returns, risk parity can be considered an "all weather" portfolio to garner consistent, risk-balanced returns from multiple asset classes without long-term inclination towards any single asset class.



<sup>6</sup> Portfolio data provided by Aksia, INPRS's Absolute Return consultant

7 Portfolio data provided by BNY Mellon, INPRS's Custodian

### **Objective and Guiding Principles**

The Indiana Public Retirement System's (INPRS) Board serves as the ultimate fiduciary of INPRS. The Board establishes investment policies while the State of Indiana enacts guidelines on the investment of the System's assets. At all times, INPRS must invest its assets according to the "Prudent Investor" standard.

The Investment Policy Statement (IPS) ensures that INPRS will maintain funding for each retirement fund to pay the benefits or actuarially determined liabilities over time in a cost-effective manner. It is a dynamic document and periodic reviews are undertaken. The Investment Policy Statement was last revised on June 23, 2023.

Core tenets of the IPS are:

- Set investment policies that the Board judges to be appropriate and prudent.
- Develop clear, distinctive roles and responsibilities of the Board, staff and each service provider.
- Serve as a guide for continual oversight of the invested assets.
- Establish formal criteria to measure, monitor and evaluate the performance results of the investment managers.
- Communicate investment policies, directives and performance criteria to the external and internal stakeholders.

#### **Consolidated Defined Benefit Assets Objectives and Structure**

The Board recognizes that the allocation of defined benefit assets is the most important factor of investment returns over long periods of time. An asset liability study is conducted every five years to analyze the expected returns of various global asset classes, projected liabilities, risks associated with alternative asset mix strategies and their effect on the projected fair value of assets, funded status and contributions to the funds. With a long-term investment focus, the current defined benefit portfolio was invested across diverse asset classes.

To maximize the probability of achieving the target rate of return over a 30-year time horizon, INPRS's Board of Trustees approved a new asset allocation on May 7, 2021 that included the increased use of leverage. The explicit leverage enables the Plan to obtain additional investment exposure, which results in an asset allocation that exceeds 100% of invested assets. Beginning in fiscal year 2022, the plan's target allocation for total exposure is 115%. Further details of INPRS's leverage policy are available in the IPS:

Global Asset Class:	Current Ta Allocatio	•	Current Target Range	
Public Equity	20.0	%	17.0 to 23.0	%
Private Markets	15.0		10.0 to 20.0	
Fixed Income - Ex Inflation-Linked	20.0		17.0 to 23.0	
Fixed Income - Inflation-Linked	15.0		12.0 to 18.0	
Commodities	10.0		7.0 to 13.0	
Real Assets	10.0		5.0 to 15.0	
Absolute Return	5.0		0.0 to 10.0	
Risk Parity	20.0		15.0 to 25.0	

#### **Defined Contribution Assets Objectives and Structure**

The defined contribution plans are structured to provide members with a choice of diverse investment options that offer a range of risk and return characteristics appropriate for members. Members can self-direct their investment options or leave their contributions invested in the default target date retirement fund. The investment options undergo periodic reviews by the Board. The defined contribution investments are outlined in Investment Results - Consolidated Defined Contribution Assets. Additional DC Fund Facts are available online at: <a href="https://www.in.gov/inprs/publications/investment-fact-sheets/">https://www.in.gov/inprs/publications/investment-fact-sheets/</a>.

#### **Other Funds**

Other plans under the administration of the Board include the Special Death Benefit Fund (SDBF), Retirement Medical Benefits Account Plan (RMBA) and Local Public Safety Pension Relief Fund (LPSPR). The assets of SDBF and RMBA are invested in intermediate U.S. government and U.S. credit bonds. The assets of LPSPR are invested in short-term money market instruments, including but not limited to, commercial paper and securities issued or guaranteed by the U.S. government.

### Accompanying Notes to the Actual and Benchmark Returns

- Returns are time-weighted based on calculations made by the System's custodian, Bank of New York Mellon.
- Returns are net of fees.
- Defined Benefit asset class custom benchmark descriptions are as follows:

Global Asset Class	Benchmark Description
Public Equity	MSCI All Country World Investable Market Net Index
Private Markets	Benchmark comprised of two custom benchmarks for Private Equity and Private Credit. 100% Private Equity from July 2008-September 2017 and 96% Private Equity and 4% Private Credit from October 2017-Present. October 2017 marked the inception of Private Credit. Private Equity Benchmark is comprised of the following components: 60% Russell 2000 Index, 20% MSCI EAFE Small Cap Index, 15% CS High Yield Index, and 5% Credit Suisse Western European High Yield Index (Hedged) plus 3.00%. Private Credit Benchmark is comprised of the following components : 50% CS Leverage Loan Index, 33% S&P Business Development Company ("BDC") Index, and 17% CS Western European Leveraged Loan Index plus 1.50%.
Fixed Income - Ex Inflation-Linked	Benchmark comprised of 28.6% BB US Long Government, 28.6% WGBI ex-US 25% Japan Cap (USD Hedged), 14.3% JPM GBI EM, 14.3% JPM EMBI, 5.7% CS Leveraged Loan Total Return Index, 3.6% BofA ML US High Yield Total Return Index, 3.6% BofA ML Non-Financial Developed Markets High Yield Constrained Total Return Index, 1.4% CS Western Europe Leveraged Loan Total Return Index.
Fixed Income - Inflation-Linked	Benchmark comprised of 34.5% ICE BofA ML Treasury Inflation-Linked 15+ years, 34.5% BB US Treasury Inflation Notes 1-10 years, 17.2 % BlackRock: Bloomberg Global Inflation Linked 1 and 13.8% Custom weighted mix of country indices within the Barclays Capital World Government Inflation-Linked Bond Index, 100% Hedged to USD (Country weights: 45% US, 20% UK, 10% Canada, 10% France, 7% Germany, 5% Sweden, and 3% Australia).
Commodities	Benchmark comprised of 50% Bloomberg Commodity Excess Return Index and 50% Bloomberg Gold Excess Return.
Real Assets	Benchmark comprised of two benchmarks for Real Estate and Infrastructure. 100% Real Estate from February 2015 – June 2021, 87.5% Real Estate and 12.5% Infrastructure from July 2021 – June 2022, and 78% Real Estate and 22% Infrastructure from June 2022 – Present. July 2021 marked the inception of Infrastructure. Real Estate benchmark comprised of the following components: 70% FTSE NAREIT All Equity REITS and 30% Barclays CMBS. Infrastructure benchmark is 100% Global Property Research Index.
Absolute Return	Benchmark comprised of 40% HFRI Macro (Total) Index, 45% HFRI Relative Value (Total) Index, 5% HFRI Event Driven Index, 10% HFRI Fund of Funds Composite Index.
Risk Parity	Benchmark comprised of 60% MSCI ACWI IMI Index (equities) and 40% Barclays Global Aggregate Bond Index (bonds).
Cash + Cash Overlay	Benchmark comprised of the allocation to sub-asset class targets for the cash overlay starting in April 2016; prior to that, the 3-month LIBOR was the benchmark for cash.
Consolidated Defined Benefit Assets	The target index weights for each asset class benchmark are set by the target asset allocation. The return for Risk Parity, Real Assets, and Private Markets are equal to the asset class returns and not the benchmark.

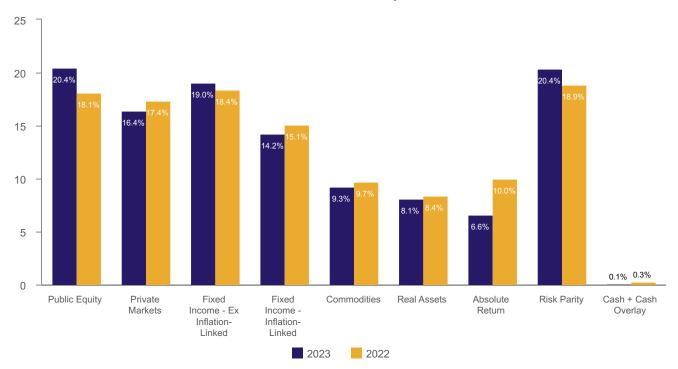
- Defined Contribution Target Date Fund benchmarks are comprised of performance data using a passive strategy with the same asset allocation glide path of each Target Date Fund.
- Defined Contribution Target Date Fund 2065 was added to the investment line-up May 1, 2020. Historical performance for the 5year period is not available.
- Defined Contribution Target Date Fund 2015 was added to the investment line-up July 1, 2019. Historical performance for the 5year period is not available.
- Defined Contribution International Equity Fund benchmark changed to MSCI ACWI ex US IMI Index on 02/01/2019. The prior benchmark was MSCI ACWI ex US Index.

#### Asset Allocation Summary: June 30, 2023 Actual vs. June 30, 2022 Actual

The Total Consolidated Defined Benefit Investments shown below are grouped by global asset classes approved in the Investment Policy Statement, whereas the investments in the Statement of Fiduciary Net Position are grouped in assets and liabilities according to GASB and the security type assigned to each investment.

(dollars in thousands)	June 30, 2023 Allowable		dollars in thousands)		 June 30,	2022	
Global Asset Class		Amount <sup>1</sup>	Percent	Target %	Range for Investments	 Amount	Percent
Public Equity	\$	8,129,954	20.4 %	20.0 %	17.0 to 23.0 %	\$ 6,545,173	18.1 %
Private Markets		6,530,975	16.4	15.0	10.0 to 20.0	6,279,811	17.4
Fixed Income - Ex Inflation-Linked		7,573,894	19.0	20.0	17.0 to 23.0	6,627,681	18.4
Fixed Income - Inflation-Linked		5,653,470	14.2	15.0	12.0 to 18.0	5,446,942	15.1
Commodities		3,690,114	9.3	10.0	7.0 to 13.0	3,504,850	9.7
Real Assets		3,236,138	8.1	10.0	5.0 to 15.0	3,014,102	8.4
Absolute Return		2,642,593	6.6	5.0	0.0 to 10.0	3,595,968	10.0
Risk Parity		8,113,999	20.4	20.0	15.0 to 25.0	6,829,025	18.9
Cash and Cash Overlay		25,836	0.1	N/A	N/A	104,165	0.3
Consolidated Defined Benefit Assets	\$	39,758,306	114.7 %	115.0 %		\$ 36,082,903	116.3 %

<sup>1</sup> The defined benefit plans target allocation for total exposure is 115%. Asset Classes are presented using exposure/notional amounts for Public Equity, Fixed Income - Ex Inflation-Linked, and Commodities.



### Percent of Total Investments by Asset Class

## Time-Weighted Rate of Return by Asset Class vs. Benchmark Returns <sup>1</sup> For the Year Ended June 30, 2023

Global Asset Class	Actual Return	Benchmark Return	Actual Over / (Under) Benchmark
Public Equity	16.7 %	16.1 %	0.6 %
Private Markets	3.2	(0.6)	3.8
Fixed Income - Ex Inflation-Linked	(0.1)	2.0	(2.1)
Fixed Income - Inflation-Linked	(2.7)	(2.0)	(0.7)
Commodities	(5.2)	(5.6)	0.4
Real Assets	(1.4)	(11.1)	9.7
Absolute Return	3.0	2.3	0.7
Risk Parity	(2.6)	9.9	(12.5)
Cash and Cash Overlay	3.0	2.9	0.1
Consolidated Defined Benefit Assets	2.5 %	2.4 %	0.1 %

#### **Historical Time-Weighted Investment Rates of Return**

### For the Years Ended June 30

(dollars in thousands)	Fair	Value of Assets	Rate of Return <sup>1</sup>	Target Return
2023	\$	39,758,306	2.5 %	6.25 %
2022		36,082,903	(6.6)%	6.25
2021		38,561,657	25.5 %	6.75
2020		30,657,831	2.6 %	6.75
2019		30,370,574	7.4 %	6.75
2018		28,475,760	9.3 %	6.75
2017		26,364,510	8.0 %	6.75
2016		24,775,551	1.2 %	6.75
2015		24,629,820	— %	6.75
2014		24,560,323	13.7 %	6.75

<sup>1</sup> See Accompanying Notes to the Actual and Benchmark Returns.

### Investment Results - Consolidated Defined Benefit Assets, continued

### Time-Weighted Rates of Return by Asset Class vs Benchmark Returns<sup>1</sup>

### As of June 30, 2023

		Annualized			
Global Asset Class	1-Year	3-Years	5-Years		
Public Equity	16.7 %	11.2 %	8.3 %		
Benchmark	16.1	11.0	7.7		
Private Markets	3.2	18.9	15.7		
Benchmark	(0.6)	22.9	9.9		
Fixed Income - Ex Inflation - Linked	(0.1)	(5.0)	0.6		
Benchmark	2.0	(4.4)	1.0		
Fixed Income - Inflation - Linked	(2.7)	(1.4)	3.0		
Benchmark	(2.0)	(1.6)	3.3		
Commodities	(5.2)	17.7	1.9		
Benchmark	(5.6)	15.4	1.2		
Real Assets	(1.4)	11.3	9.0		
Benchmark	(11.1)	8.0	5.7		
Absolute Return	3.0	7.4	5.3		
Benchmark	2.3	7.3	4.4		
Risk Parity	(2.6)	0.2	2.4		
Benchmark	9.9	5.5	5.3		
Cash + Cash Overlay	3.0	(5.3)	(0.3)		
Benchmark	2.9	3.4	4.3		
Consolidated Defined Benefit Assets	2.5	6.3	5.8		
Target Index	2.4	6.3	5.6		

<sup>1</sup> See Accompanying Notes to the Actual and Benchmark Returns.

### **Statistical Performance**

#### As of June 30, 2023

	_		Annualized	
Statistic	1-Year	3-Years	5-Years	10-Years
Time-Weighted Rate of Return	2.5 %	6.3 %	5.8 %	6.0 %
Standard Deviation	12.1	9.8	9.0	7.0
Sharpe Ratio <sup>1</sup>	_	0.5	0.5	0.7
Beta <sup>2</sup>	0.6	0.5	0.4	0.4
Correlation <sup>2</sup>	0.9	0.9	0.9	0.9

1 Risk Free Proxy is the Citigroup 3 Month T-Bill.

2 Market Proxy is the S&P 500.

#### **Definition of Key Terms:**

**Standard Deviation:** A statistic used to measure the dispersion in a distribution. Dispersion is measured relative to the mean, or average of the distribution. The greater the dispersion, the higher the risk associated with the pattern of observations. One standard deviation describes two-thirds of the observations in a normal or bell-shaped distribution. In an asset allocation context, standard deviation is a conventional proxy for risk or volatility.

**Sharpe Ratio**: Ratio used to measure risk-adjusted performance. The Sharpe Ratio is calculated by subtracting a risk-free rate (proxy) from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. The Sharpe Ratio provides insight on excess risk held in the portfolio. The greater a portfolio's Sharpe Ratio, the better its risk-adjusted performance has been. A negative Sharpe Ratio indicates that a risk-less asset would perform better than the security being analyzed.

**Beta:** A measure of the volatility, or systematic risk, of a security or portfolio in comparison to the market as a whole. Beta is the tendency of a security's return to respond to swings in the market. A Beta of less than one indicates less volatility than the market. A Beta of greater than one indicates greater volatility than the market.

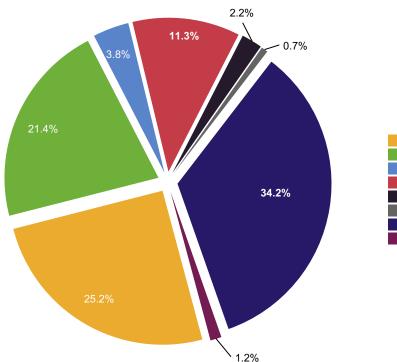
**Correlation:** A statistical measure of how two securities move in relation to each other. A correlation of positive 1.0 indicates similar magnitude and direction of change. A correlation of negative (1.0) indicates similar magnitude, but opposite direction. A correlation of zero indicates the relationship is purely random.

### Assets by Investment Option

### As of June 30, 2023

The Total Consolidated Defined Contribution Investments shown below are grouped by asset classes approved in the Investment Policy Statement, whereas the investments in the Statement of Fiduciary Net Position are grouped in assets and liabilities according to GASB and the security type assigned to each investment.

(dollars in thousands)	Р	lan Assets	Percent of Total Self-Directed Investments
		4 0 40 0 70	05.0.%
Consolidated Target Date Funds	\$	1,640,279	25.2 %
Large Cap Equity Index Fund		1,392,165	21.4
International Equity Fund		247,947	3.8
Small/Mid Cap Equity Fund		745,331	11.3
Fixed Income Fund		143,486	2.2
Inflation Linked - Fixed Income Fund		43,798	0.7
Stable Value Fund		2,227,788	34.2
Money Market Fund		76,569	1.2
Total Defined Contribution Assets	\$	6,517,363	100.0 %





### Investment Results - Consolidated Defined Contribution Assets, continued

### Rate of Return by Investment Option vs. Benchmark Returns<sup>1</sup>

### For the Year Ended June 30, 2023

	_	Annualiz	ed
Investment Option	1-Year	3-Year	5-Year
Target Date Funds:			
Fund 2065	14.0 %	9.1 %	n/a
2065 Fund Index	13.3	8.8	n/a
Fund 2060	14.0	9.1	7.6
2060 Fund Index	13.3	8.8	7.0
Fund 2055	14.0	9.1	7.6
2055 Fund Index	13.3	8.8	7.0
Fund 2050	13.6	9.0	7.5
2050 Fund Index	12.9	8.8	7.0
Fund 2045	12.7	8.4	7.2
2045 Fund Index	12.1	8.2	6.7
Fund 2040	11.4	7.7	6.9
2040 Fund Index	10.9	7.5	6.4
Fund 2035	9.6	6.5	6.4
2035 Fund Index	9.2	6.2	5.9
Fund 2030	8.3	5.3	5.9
2030 Fund Index	7.8	5.0	5.4
Fund 2025	7.1	4.6	5.5
2025 Fund Index	6.7	4.4	5.0
Fund 2020	5.5	3.5	4.7
2020 Fund Index	5.1	3.2	4.3
Fund 2015	3.8	2.2	n/a
2015 Fund Index	3.8	2.0	n/a
Retirement Fund	2.9	1.2	3.4
Retirement Fund Index	2.7	0.9	3.0
All Other Funds:			
Large Cap Equity Index Fund	19.6	14.6	12.3
S&P 500 Index	19.6	14.6	12.3
International Equity Fund	14.4	7.7	4.6
MSCI ACWI ex US IMI Index	12.5	7.3	3.5
Small/Mid Cap Equity Fund	15.3	10.2	6.4
Russell Small Cap Completeness Index	15.3	10.1	6.6
Fixed Income Fund	(0.3)	(3.5)	1.0
Bloomberg Barclays U.S. Aggregate Bond Index	(0.9)	(4.0)	0.8
Inflation - Linked Fixed Income Fund	(1.4)	(0.1)	2.5
Bloomberg Barclays U.S. TIPS Index	(1.4)	(0.1)	2.5
Stable Value Fund	2.4	2.2	2.3
Federal Reserve 3 Yr Constant Maturity	3.9	1.9	1.9
Money Market Fund	3.9	1.4	1.6
FTSE 3 Month U.S. T-Bill Index	3.8	1.3	1.6

<sup>1</sup> See Accompanying Notes to the Actual and Benchmark Returns.

### **Historical Annual Interest Crediting Rates**

#### For the Years Ended June 30

Interest crediting rates are used to calculate a return on contributions made by members who are exiting the fund prior to attaining eligibility for a pension benefit payment. Interest rates are approved by the Board on an annual basis.

	Annual Interest Crediting Rate					
	77 Fund	JRS	EG&C	PARF		
2023	1.98 %	1.98 %	1.98 %	1.98 %		
2022	1.43	1.43	1.43	1.43		
2021	1.11	1.11	1.11	1.11		
2020	2.59	2.59	2.59	2.59		
2019	2.78	2.78	2.78	2.78		
2018	2.40	2.40	2.40	2.40		
2017	1.82	1.82	1.82	1.82		
2016	1.87	1.87	1.87	1.87		
2015	2.69	2.69	2.69	2.69		
2014	1.90	1.90	1.90	1.90		

### Top 10 Holdings

### For the Year Ended June 30, 2023

### Equity Holdings by Fair Value<sup>1</sup>

(dollars in thousands)

Company	Shares	 Fair Value
APPLE INC	664,258	\$ 128,846
MICROSOFT CORP	338,993	115,441
TAIWAN SEMICONDUCTOR MANUFACTU	4,100,853	104,845
SAMSUNG ELECTRONICS CO LTD	1,418,246	77,712
SAP SE	402,931	55,011
ASML HOLDING NV	74,545	53,921
AMAZON.COM INC	397,881	51,868
MERCADOLIBRE INC	42,128	49,905
NVIDIA CORP	110,235	46,632
CIE FINANCIERE RICHEMONT SA	222,518	37,718

## Fixed Income Holdings by Fair Value<sup>1</sup>

(dollars in thousands)

Description	Coupon Rate	Maturity Date	 Par Value	 Fair Value
U.S. Treasury Bond	4.000 %	11/15/52	\$ 253,230	\$ 255,262
U.S. Treasury - CPI Inflation Index Bond	2.125	2/15/41	204,084	218,850
U.S. Treasury - CPI Inflation Index Bond	0.750	2/15/42	184,028	173,202
U.S. Treasury - CPI Inflation Index Bond	0.625	2/15/43	190,698	161,923
U.S. Treasury - CPI Inflation Index Bond	1.375	2/15/44	186,488	152,863
U.S. Treasury - CPI Inflation Index Bond	0.750	2/15/45	182,116	150,370
U.S. Treasury Bond	3.125	8/15/44	168,020	145,108
U.S. Treasury - CPI Inflation Index Bond	1.000	2/15/46	130,752	140,206
U.S. Treasury - CPI Inflation Index Bond	1.000	2/15/48	160,238	138,876
U.S. Treasury - CPI Inflation Index Bond	2.125	2/15/40	141,315	121,433

<sup>1</sup> A complete list of portfolio holdings is available upon request.

#### **Investment Management Fees**

#### For the Year Ended June 30, 2023

Private Markets and Real Asset managers provide account valuations on a net of fee basis. While management fees are disclosed in the Investment Management Fees schedule, for greater transparency, INPRS makes a good faith effort to provide realized carried interest and expenses that would not otherwise be disclosed. INPRS's consultants Aksia Torrey Cove and Mercer provided additional fee information on a calendar year basis as of December 31, 2022 resulting in reported realized carried interest and expenses for Private Markets of \$115.0 million and Real Assets of \$31.9 million. Reported realized carried interest and expenses exclude funds where data was not provided by the general partners.

(dollars in thousands)

Asset Class	 Fees Paid
Consolidated Defined Benefit Assets	
Public Equity <sup>1</sup>	\$ 14,116
Private Markets	56,766
Fixed Income - Ex Inflation-Linked <sup>1</sup>	28,930
Fixed Income - Inflation-Linked <sup>1</sup>	(1,895)
Commodities <sup>1</sup>	3,355
Real Assets	34,110
Absolute Return <sup>1</sup>	54,775
Risk Parity	20,893
Cash + Cash Overlay	 139
Total Consolidated Defined Benefit Assets	211,189
Defined Contribution Assets	8,112
OPEB Assets	 27
Total Investment Management Fees	\$ 219,328

<sup>1</sup> Includes both management fees and performance-based fees

#### **Brokers' Commission Fees**

#### For the Year Ended June 30, 2023

(dollars in thousands)

Broker	Fees	Paid
Morgan Stanley & Co. Inc.	\$	750
Goldman Sachs & Co.		629
J P Morgan Securities Ltd., New York		603
Newedge USA LLC		130
Merrilly Lynch International Equities		128
Instinet Clearing Services Inc.		116
Jefferies & Co. Inc.		72
Pershing LLC, Jersey City		61
J P Morgan Securities Ltd., London		58
Exane, Paris		55
Top Ten Brokers' Commission Fees		2,602
Other Brokers		1,453
Total Brokers' Commission Fees	\$	4,055

#### As of June 30, 2023

### **Consolidated Defined Benefit Assets**

#### Custodian

Bank of New York Mellon

#### Consultants

Aksia (Absolute Return, Private Equity, and Private Credit) Mercer (Real Assets) Verus (General: Defined Benefit) Strive (Investment Policy Statement Review)

#### **Public Equity Managers**

Altrinsic Global Advisors, LLC Arrowstreet Capital, LP Baillie Gifford & Company BlackRock Inc. Disciplined Growth Investors Leading Edge Investment Advisors Parametric RhumbLine Advisers TimesSquare Capital Management, LLC

#### Private Markets Managers

352 Capital 400 Capital Management A.M. Pappas & Associates **ABRY Partners** Accel-KKR Accent Equity Partners AB Actis Capital Advanced Technology Ventures Advent International Aisling Capital AlpInvest Partners Apax Partners Apollo Global Management **ARCH Venture Partners** Ares Management Ascribe Capital Austin Ventures **Bain Capital Partners** Baring Private Equity Asia (BPEA) Bertram Capital Black Diamond Capital Management BlackFin Capital Partners

Blackstone Group Bregal Sagemount Brentwood Associates Butterfly Equity Partners Caltius Capital Management Cardinal Partners Carlyle Group Centerfield Capital Partners Cerberus Capital Management Charterhouse Capital Partners CID Capital Cinven Coller Capital Columbia Capital Crescent Capital Group Crestview Partners **CVC** Capital Partners Doll Capital Management (DCM) **Escalate Capital Partners** Falcon Investment Advisors Forbion Capital Partners Fortress Investment Group Francisco Partners Gamut Capital Management Gilde Buyout Partners Globespan Capital Partners Goldman Sachs Asset Management GSO Capital Partners GTCR Golder Rauner H2 Equity Partners Hamilton Lane HarbourVest Hellman & Friedman Herkules Capital High Road Capital Partners Horsley Bridge **HPS Investments Partners** Insight Partners Intermediate Capital Group (ICG) JFM Management Kailai Investments Kennedy Lewis Investment Management Khosla Ventures Kohlberg Kravis Roberts & Co (KKR)

**KPS** Capital Partners Landmark Partners Leonard Green & Partners Lexington Partners Lion Capital MBK Partners Merit Capital Partners Mill Road Capital Neuberger Berman New Enterprise Associates New Mountain Capital Oak Hill Capital Management Oak Investment Partners Oaktree Capital Management **Opus Capital Venture Partners** Parthenon Capital Partners Pathlight Capital Peninsula Capital Partners Platinum Equity Portfolio Advisors Rho Capital Partners **RJD** Partners SAIF Management Scale Venture Partners Silver Cup Silver Lake Partners Sixth Street Partners SLR Capital Partners StepStone Group Stride Consumer Partners SVB Capital Sumeru Equity Partners Sun Capital Partners TA Associates TCG TCW Capital Partners Technology Crossover Ventures **Technology Partners** Terra Firma Capital Partners TowerBrook Financial **TPG** Capital **Trilantic Capital Partners Trinity Ventures** Triton Partners

#### Private Markets Managers, continued

**True Ventures TSG Consumer Partners** Veritas Capital Management Veronis Suhler Stevenson (VSS) Vestar Capital Partners Vintage Venture Partners Vision Capital Vista Equity Partners Walden Group of Venture Capital Funds Warburg Pincus Waterfall Asset Management Weston Presidio Capital WL Ross & Co. Xenon Private Equity York Capital Management

#### Fixed Income - Ex Inflation-Linked Managers

Goldman Sachs Asset Management, LP Oak Hill Advisors, LP Oak Tree Capital Management, LP Pacific Investment Management Company (PIMCO) Parametric State Street Global Advisors

#### Fixed Income - Inflation-Linked Managers

BlackRock Bridgewater Associates, Inc. Northern Trust Global Investments

#### **Commodities Managers**

CoreCommodity Management Gresham Investment Management, LLC Wellington Management Company, LLP

#### Real Asset Managers

Abacus Capital Group, LLC Ambrose Property Group Angelo Gordon LP Ardian Asana Partners, LP **Bain Capital Partners** Barings BlackRock Financial Management Blackstone Group Carlyle Group

CenterSquare Investment Management Digital Bridge EnCap Investments Energy Capital Partners Exeter Property Group, LLC First Reserve Corporation GSO Capital Partners H/2 Capital Partners H.I.G. Capital Hackman Harrison Street Real Estate Capital, LLC ICG iCon Infrastructure InfraVia JDM Partners Kayne Anderson Kohlberg Kravis Roberts & Co (KKR) LimeTree Capital Advisors Longpoint Realty Partners Mack Real Estate Group Mesa West Capital NGP Energy Capital Management Noble Investment Group Panda Power Funds Prologis Related Fund Management LLC Rockpoint Group LLC Stockbridge Capital Group TA Realty Associates Walton Street Capital, LLC

Warwick Energy Investment Group

#### **Absolute Return Managers**

White Deer Management

AHL Partners (Man Group) Aeolus Capital Management Blackstone Group Bridgewater Associates, Inc. Davidson Kempner Capital Management D.E. Shaw & Co **Eisler** Capital Garda Capital Partners Hudson Structured Capital Management King Street Capital Management Kirkoswald Capital Partners LLP

Mariner Investments Group LLC Nephila Capital PAAMCO Perella Weinberg Partners Pharo Management Rokos Global Macro **Tenaron Capital Management** Tilden Park Associates Two Sigma Advisers Voloridge Management Whitebox Advisors

#### **Risk Parity Managers**

AQR Capital Management Bridgewater Associates, Inc PanAgora Parametric

#### **Cash Overlay Managers**

Parametric

#### **Defined Contribution Assets and Other Funds**

#### Consultant

Capital Cities, LLC (General: Defined Contribution)

#### Custodian

Bank of New York Mellon

#### Large Cap Equity Index Fund Managers

BlackRock Inc.

#### **International Equity Fund Managers**

Altrinsic Global Advisors, LLC Arrowstreet Capital, LP Baillie Gifford & Company BlackRock Inc.

#### Small/Mid Cap Equity Fund Managers

RhumbLine Advisers TimesSquare Capital Management, LLC

#### **Fixed Income Fund Managers**

Loomis Sayles & Company, LP Northern Trust Global Investments Pacific Investment Management Company (PIMCO)

#### Inflation-Linked Fixed Income Fund Managers

Northern Trust Global Investments

#### **Stable Value Fund Managers**

Galliard Capital Management (Fund Advisor) Income Research + Management (Fund Sub-Advisor) Jennison Associates (Fund Sub-Advisor) Dodge & Cox (Fund Sub-Advisor) TCW (Fund Sub-Advisor)

#### **Money Market Fund Manager**

Bank of New York Mellon

#### **Retirement Medical Benefit Account**

State Street Global Advisors

Special Death Benefit Fund Assets Northern Trust Global Investments

Local Public Safety Pension Relief Fund Assets Bank of New York Mellon



# **Actuarial Section**

- 123 Introduction to Actuarial Information
- 124 Actuary's Certification Letter
- 127 Combined Defined Benefit Funds
- 131 Public Employees' Defined Benefit Account
- 140 Teachers' Pre-1996 Defined Benefit Account
- 148 Teachers' 1996 Defined Benefit Account
- 156 1977 Police Officers' and Firefighters' Retirement Fund
- 163 Judges' Retirement System
- 170 Excise, Gaming and Conservation Officers' Retirement Fund
- 178 Prosecuting Attorneys' Retirement Fund
- 185 Legislators' Defined Benefit Fund

### \$4.0 Billion Unfunded Actuarial Accrued Liability

Excluding TRF 'Pre 96 DB

### **126.6 Percent ADC Contributed**

For the four funds that are funded through percent of payroll contributions



### **Purpose of the Actuarial Section**

Funding methods used for the defined benefit retirement plans are not governed by and do not conform to GASB Statement No. 67, so the actuary prepares two actuarial valuations for each of the pension plans. One is an actuarial valuation used for financial reporting purposes, which conforms to GASB Statement No. 67 (Financial Section) and the second is an actuarial valuation used for funding purposes (Actuarial Section), which follows generally accepted actuarial principles and the Actuarial Standards of Practice issued by the Actuarial Standards Board. Actuarial methods and assumptions utilized to prepare the two actuarial valuations are nearly identical, with the primary difference being the method of valuation of the pension assets. In 2019, INPRS published an actuarial risk analysis report that highlights many of the actuarial-related risks faced by INPRS funds. It is available on the <u>actuarial reports page</u> of the INPRS website. Amounts presented in the Actuarial Section may differ from the amounts presented for financial reporting purposes in the Financial Section. For defined benefit pension plans that are administered through a trust or equivalent arrangement the actuarial section references the ten-year schedule of actuarially determined and actual contributions provided as required supplementary information.

Actuarial services are provided by Cavanaugh Macdonald Consulting, LLC.

#### Accompanying Notes to the Actuarial Schedules

The following details are intended to clarify certain values presented in the actuarial schedules:

- The Unfunded Actuarial Accrued Liability (UAAL) is calculated using the Actuarial Value of Assets (AVA), which is different from the Net Pension Liability in the Financial Section which uses the Plan Fiduciary Net Position, also known as the Fair Value of Assets (FVA).
- Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census assumptions. One factor was the unanticipated changes to the member census data. In JRS there was a 7.80% COLA, rather than the assumed COLA of 2.65%. In the '77 Fund there was a 3.00% COLA, rather than the assumed COLA of 1.95%.
- Covered Employee Payroll can also be found in the RSI Contribution Schedule in the Financial Section (LE DB is a closed plan with no Covered Employee Payroll).
- Valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.
- End of year benefits are not equal to prior year end annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases on the Schedule of Retirants and Beneficiaries.
- Annual Payroll figures shown on the Schedule of Active Members Valuation Data are the anticipated pay for the one-year period following the valuation date.
- In 2018 and 2023 there were changes in methodologies impacting Average Annual Pay.

For PERF DB, TRF Pre-'96 DB, and TRF '96 DB the additional information should be considered:

- Annual benefits include amounts for members who selected to annuitize their ASA (i.e. DC balance).
- Effective January 1, 2018, members can no longer use their DC balances to increase their DB payments. For the solvency test, DC account balances are treated as a separate DC plan.



October 11, 2023

Board of Trustees Indiana Public Retirement System 1 North Capitol, Suite 001 Indianapolis, IN 46204

Dear Members of the Board:

At your request, we performed the annual actuarial valuations of the eight defined benefit plans administered by the Indiana Public Retirement System (INPRS): the Public Employees' Retirement Fund (PERF DB), the Teachers' Pre-1996 Account (TRF Pre-'96 DB), the Teachers' 1996 Account (TRF '96 DB), the 1977 Police Officers' and Firefighters' Retirement Fund ('77 Fund), the Judges' Retirement System (JRS), the Excise, Gaming and Conservation Officers' Retirement Fund (EG&C), Prosecuting Attorneys' Retirement Fund (PARF), and the Legislators' Defined Benefit Fund (LE DB). These valuations are as of June 30, 2023, for the purpose of estimating the actuarial required contribution for the plan years ending in calendar year 2025 (either June 30 or December 31), along with the actuarial surcharge rate or equivalent amounts for applicable plans (PERF DB, TRF Pre-'96 DB, TRF '96 DB, EG&C, and LE DB) for the 2024 calendar year, and reflect the benefit and funding provisions in place on June 30, 2023.

#### **Basis of the Valuations**

In preparing our valuation, we relied, without audit, on information (some oral and some in writing) supplied by INPRS staff. This information includes, but is not limited to, statutory provisions, member data and financial information. We did review the data to ensure that it was reasonably consistent and comparable with data from prior years. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.

We certify that all costs and liabilities for the funds have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the plan and reasonable expectations); and which, in combination, offer the best estimate of anticipated experience affecting the plan. The cost determinations and the contribution policies of the Board are anticipated to systematically fund the promised benefits. 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.

3802 Raynor Pkwy, Suite 202, Bellevue, NE 68123 Phone (402) 905-4461 • Fax (402) 905-4464 www.CavMacConsulting.com Offices in Kennesaw, GA • Bellevue, NE Board of Trustees October 11, 2023 Page 2



#### **Actuarial Methods and Assumptions**

We believe the actuarial assumptions used herein are reasonable. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C of the valuation reports. Specifically, we presented the proposed assumptions for the 2023 valuations to the Board on February 24, 2023, and the Board subsequently adopted their use at its May 5, 2023 meeting. These assumptions are applicable to both the funding and Governmental Accounting Standards Board (GASB) Statement Number 67 valuation calculations, unless otherwise noted.

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. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

We prepared a Risk Report for the INPRS Board in August 2019 that contains information which is relevant for these plans and should be considered part of this valuation report. Although the report was prepared using the data, methods, and assumptions of the June 30, 2018 valuation report, it is our professional opinion that the general results of the risk report are applicable to the June 30, 2023 valuation report as well.

Actuarial computations presented in this report are for purposes of determining the funding rates for the Plan. The calculations in the enclosed report have been made on a basis consistent with our understanding of the Plan's funding requirements and goals as adopted by the Board and satisfy the guidance set forth in the applicable Actuarial Standards of Practice. Additionally, we have included actuarial computations for use in preparing certain reporting and disclosure requirements under Governmental Accounting Standards Board Statements Number 67 and Number 68. Determinations for purposes other than meeting these funding and disclosure requirements may be significantly different from the results contained in this report and require additional analysis.

#### Certification

We certify that the information presented herein accurately and fairly discloses the actuarial position of each fund and the System as a whole, based on the underlying census data and asset information provided by INPRS, using the assumptions and methods approved by the Board. This annual report, prepared as of June 30, 2023, provides data and tables that we prepared for use in the following sections of the ACFR:

Financial Section:

- Note 1 Tables of Plan Membership
- Note 8 Net Pension Liability and Actuarial Information Defined Benefit Plans
- · Schedule of Changes in Net Pension Liability and Plan Fiduciary Net Position
- Schedule of Contributions
- · Schedule of Notes to Required Supplementary Information

Board of Trustees October 11, 2023 Page 3

Actuarial Section:

- Summary of Funded Status
- · Historical Summary of Actuarial Valuation Results by Retirement Plan
- Summary of Actuarial Assumptions, Methods and Plan Provisions
- Analysis of Financial Experience
- Solvency Test
- · Schedule of Active Member Valuation Data
- · Schedule of Retirants and Beneficiaries

Statistical Section:

- Membership Data 10-Year Summary
- Ratio of Active Members to Annuitants
- · Schedule of Defined Benefit Recipients by Type of Benefit Option
- · Schedule of Average Benefit Payments

The consultants who worked on this assignment are pension actuaries. Cavanaugh Macdonald's advice is not intended to be a substitute for qualified legal or accounting counsel.

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 the assumptions and methods used meet the guidance provided in the applicable Actuarial Standards of Practice. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

The calculations were completed in compliance with applicable law and the calculations for GASB disclosure, in our opinion, meet the requirements of GASB 67 and GASB 68. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

We respectfully submit the following exhibits.

Sincerely,

Brent a Banute

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

Virginia Fritz, FSA, EA, FCA, MAAA Senior Actuary

Edward J. Hockel

Edward Koebel, FCA, EA, MAAA Chief Executive Officer





### Summary of Funded Status<sup>1</sup>

The following table shows the Actuarial Accrued Liabilities and Actuarial Value of Assets as of June 30, 2023 and June 30, 2022.

(dollars in thousands)	Actu	uarial Valuation a	is of June 30, 202	3	Ac	tuarial Valuation a	as of June 30, 202	2
Pre-Funded Defined Benefit Retirement Plans	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Actuarial Funded Status	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Actuarial Funded Status
PERF DB	\$ 18,415,248	\$ 15,735,668	\$ 2,679,580	85.4 %	\$ 18,002,194	\$ 15,275,804	\$ 2,726,390	84.9 %
TRF '96 DB	8,832,827	8,177,118	655,709	92.6	8,154,991	7,716,351	438,640	94.6
'77 Fund	8,796,329	8,196,320	600,009	93.2	8,281,865	7,844,324	437,541	94.7
JRS	728,137	674,766	53,371	92.7	676,859	651,415	25,444	96.2
EG&C	194,827	186,653	8,174	95.8	187,505	177,046	10,459	94.4
PARF	126,749	86,066	40,683	67.9	122,474	82,211	40,263	67.1
LE DB	2,676	3,167	(491)	118.4	2,835	3,184	(349)	112.3
Total Pre-Funded DB Retirement Plans	37,096,793	33,059,758	4,037,035	89.1	35,428,723	31,750,335	3,678,388	89.6
Pay-As-You-Go DB Retirement Plan								
TRF Pre-'96 DB	13,703,295	8,716,860	4,986,435	63.6	14,059,122	5,273,369	8,785,753	37.5
Total Defined Benefit Retirement Plans	\$ 50,800,088	\$ 41,776,618	\$ 9,023,470	82.2 %	\$ 49,487,845	\$ 37,023,704	\$ 12,464,141	74.8 %

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

### Reconciliation of the Change in the Unfunded Liability<sup>1</sup>

The following table reconciles the change in the unfunded liability from FY2022 to FY2023.

(dollars in thousa	ands)					(Gain) / L	.0\$\$		
Defined Benefit Retirement Plans	June 30, 2022 UAAL	Normal Cost and Interest, less Expected Contributions	Expected June 30, 2023 UAAL	Actuarial Value of Assets Experience	Actuarial Accrued Liabilities Experience	Actuarial Assumption & Methodology Changes	Plan Provision Changes	Total UAAL (Gain) / Loss	June 30, 2023 UAAL
PERF DB	\$ 2,726,390	\$ (27,815)	\$ 2,698,575	\$ (62,636)	\$ 43,641	\$ —	\$ —	\$ (18,995)	\$ 2,679,580
TRF Pre-'96 DB	8,785,753	(487,665)	8,298,088	(3,252,444)	(59,209)	_	_	(3,311,653)	4,986,435
TRF '96 DB	438,640	30,567	469,207	89,046	97,456	_	_	186,502	655,709
77 Fund	437,541	(12,754)	424,787	97,663	77,559	_	_	175,222	600,009
JRS	25,444	(1,835)	23,609	10,529	19,233	_	_	29,762	53,371
EG&C	10,459	315	10,774	(1,909)	(691)	_	_	(2,600)	8,174
PARF	40,263	(1,377)	38,886	1,181	616	_	_	1,797	40,683
LE DB	(349)	(6)	(355)	(140)	4			(136)	(491)
Total INPRS	\$ 12,464,141	\$ (500,570)	\$ 11,963,571	\$ (3,118,710)	\$ 178,609	\$	<u>\$                                    </u>	\$(2,940,101)	\$ 9,023,470

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

### **10-Year Schedule of Employer Counts**

### For the Years Ended June 30

The following table shows the historical number of employers by fund.

	Total DB	PERF DB	TRF Pre-'96 DB	<sup>2</sup> TRF '96 DB <sup>2</sup>	Total TRF DB	2 77 Fund	JRS	EG&C	PARF	LE DB
2023	1,308	1,244	334	384	N/A	186	1	1	1	1
2022	1,293	1,233	334	382	N/A	182	1	1	1	1
2021	1,282	1,226	335	383	N/A	175	1	1	1	1
2020	1,267	1,214	336	376	N/A	174	1	1	1	1
2019	1,244	1,187	345	373	N/A	168	1	1	1	1
2018	1,243	1,187	345	373	N/A	168	1	1	1	1
2017	1,234	1,183	341	368	N/A	167	1	1	1	1
2016	1,224	1,177	337	362	N/A	165	1	1	1	1
2015 <sup>3</sup>	1,212	1,167	339	360	N/A	165	1	1	1	1
2014 <sup>3</sup>	1,175	1,126	340	363	N/A	162	1	1	1	1

<sup>1</sup> Sum of employers does not equal total, as an employer may participate in multiple retirement funds.

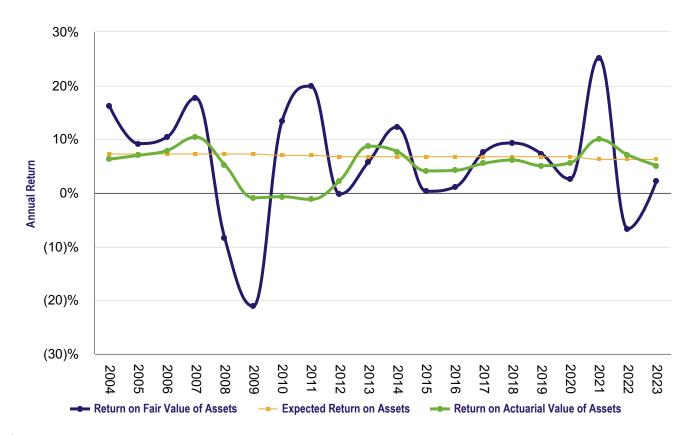
<sup>2</sup> Prior to 2014 participating employers for TRF were not split between TRF Pre-'96 DB and TRF '96 DB.

<sup>3</sup> The Total was adjusted to treat the State and its component units as one employer.

### **Demonstration of Asset Smoothing**

### Actuarial Valuation as of June 30<sup>1</sup>

INPRS's funding policy smooths asset gains and losses to form an actuarial value of assets. The graph below demonstrates the reduction in volatility from this smoothing by comparing the actuarial value of assets to the historical rates of return for the fair value of assets and expected return for PERF DB. PERF DB is shown as a representative example of all defined benefit funds.



<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

### **Historical Summary of Actuarial Valuation Results**

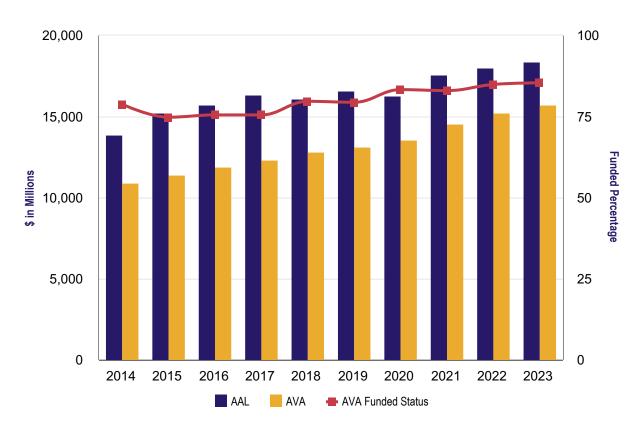
### Actuarial Valuation as of June 30<sup>1</sup>

The following table shows the history of the Unfunded Liability as a percentage of Covered Employee Payroll for PERF DB.

#### (dollars in thousands)

	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)		Unfunded Liability (AAL-AVA)	AVA Funded Status (AVA/AAL)	 Covered Employee Payroll	Unfunded Liability as a percentage of Covered Employee Payroll
2023	\$ 18,415,248	\$ 15,735,668	\$	2,679,580	85.4 %	\$ 6,149,915	43.6 %
2022	18,002,194	15,275,804		2,726,390	84.9	5,670,744	48.1
2021	17,563,157	14,577,352		2,985,805	83.0	5,482,242	54.5
2020	16,281,754	13,560,460	)	2,721,294	83.3	5,380,843	50.6
2019	16,576,060	13,157,802		3,418,258	79.4	5,205,243	65.7
2018	16,091,373	12,823,930		3,267,443	79.7	5,083,131	64.3
2017	16,335,253	12,327,958		4,007,295	75.5	4,997,555	80.2
2016	15,752,055	11,896,167	,	3,855,888	75.5	4,868,709	79.2
2015	15,263,395	11,414,710	)	3,848,685	74.8	4,804,145	80.1
2014	13,880,722	10,939,760	)	2,940,962	78.8	4,896,635	60.1

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



### Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the Public Employees' Defined Benefit Account were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available online at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

The full retirement benefit eligibility condition of age 70 and 20 years of credible service while still active in covered position was changed to age 65 and 20 years of creditable service while still active in a covered position. This change was deemed immaterial and has no impact on the actuarial liability.

#### **Actuarial Assumptions**

Actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting, except where noted.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding Accounting & Financial Reporting	<ul><li>6.25 percent (net of administrative and investment expenses)</li><li>6.25 percent (net of investment expenses)</li></ul>
Inflation:	2.00 percent per year
Cost of Living Increases:	0.4 percent beginning on January 1, 2026
	0.5 percent beginning on January 1, 2034
	0.6 percent beginning on January 1, 2039

#### Future Salary Increases:

#### Based on 2015-2019 experience.

Service	Wage Inflation	Productivity, Merit, and Promotion	Total Individual Salary Growth
0	2.65 %	6.00 %	8.65 %
1	2.65	5.00	7.65
2	2.65	4.00	6.65
3	2.65	3.00	5.65
4	2.65	2.50	5.15
5	2.65	2.00	4.65
6	2.65	1.75	4.40
7	2.65	1.50	4.15
8	2.65	1.25	3.90
9	2.65	1.00	3.65
10	2.65	0.75	3.40
11	2.65	0.50	3.15
12	2.65	0.25	2.90
13+	2.65	_	2.65

#### Demographic Assumptions: Based on 2015-2019 Experience

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	General Employee table with a 3 year set forward for males and a 1 year set forward for females.
Mortality (Retirees):	General Retiree table with a 3 year set forward for males and a 1 year set forward for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table with a 140% load.

### Public Employees' Defined Benefit Account, continued

Retirement:	Age	Eligible for Reduced Benefit	Eligible for Unreduced Benefit
	50-54	4 %	N/A
	55	5	14 %
	56-59	5	10
	60	N/A	12
	61	N/A	16
	62	N/A	22
	63	N/A	19
	64	N/A	24
	65-74	N/A	30
	75+	N/A	100

Benefit Commencement Timing:

Active Members

If eligible for a reduced early retirement benefit upon termination from employment, 30 percent commence immediately and 70 percent defer to earliest unreduced retirement age.

If eligible for an unreduced retirement benefit upon termination from employment, 100 percent commence immediately.

**Terminated Vested Members** 

100 percent defer to earliest unreduced retirement age. If currently eligible for an unreduced retirement benefit, 100 percent commence immediately.

Termination:

PSD, S	alary <\$20,00	0	PSD,	Salary <\$20	,000
Age	Male	Female	Age	Male	Female
15-22	34 %	40 %	35	25 %	22 %
23	34	38	36	25	21
24	34	36	37	25	20
25	34	34	38	25	19
26	34	32	39	25	18
27	34	30	40	24	17
28	34	29	41	24	16
29	34	28	42	24	15
30	29	27	43	24	14
31	29	26	44	24	13
32	29	25	45-49	21	12
33	29	24	50-60	17	12
34	29	23	61+	14	12

### Public Employees' Defined Benefit Account, continued

#### Termination, continued:

	State	PSD, Salary >\$20,000		State	PSD, Salary >\$20,000
Service	Unisex	Unisex	Service	Unisex	Unisex
0	24.00 %	18.00 %	14	5.50	5.50
1	20.00	16.00	15	5.25	5.25
2	18.00	14.00	16	5.00	5.00
3	16.00	12.00	17	4.75	4.75
4	14.00	10.00	18	4.50	4.50
5	12.00	8.00	19	4.25	4.25
6	11.00	7.50	20	4.00	4.00
7	10.00	7.00	21	4.00	3.75
8	9.00	6.50	22	4.00	3.50
9	8.00	6.50	23	4.00	3.25
10	7.00	6.50	24	4.00	3.00
11	6.50	6.25	25	4.00	3.00
12	6.00	6.00	26	4.00	3.00
13	5.75	5.75	27+	1.00	3.00

Disability:		Sample Rates	
	Age	Male	Female
	20	0.004 %	0.003 %
	25	0.008	0.006
	30	0.014	0.010
	35	0.024	0.018
	40	0.042	0.032
	45	0.080	0.061
	50	0.160	0.124
	55+	0.300	0.200
Spouse/Beneficiary:	a dependent bei	ale members and 6 neficiary. Male mer s are assumed to b	nbers are assu

Form of Payment 100 percent of members are assumed to elect the normal form of benefit payment, a single life annuity with a five-year certain period.

For active members, the Average Annual Compensation was increased by \$200 for additional wages received upon termination, such as severance or unused sick leave. Miscellaneous Adjustments:

#### Di

#### **Actuarial Methods**

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

0	
Actuarial Cost Method:	Entry Age Normal Level Percent of Payroll
	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.
	This method produces a cost of future benefit accruals that is a level percent of pay over time, which is more desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.
Amortization Method:	For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100 percent funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. Effective June 30, 2018, the bases are calculated without regard to the COLA provisions. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.
	For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.
COLA Surcharge:	The COLA Surcharge is developed by determining the assets needed at the start of the next biennium to fund the post-retirement benefit increases anticipated to be granted in that biennium. This amount is divided by the present value of expected payroll over which the accumulations will occur.
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <a href="https://www.in.gov/inprs/actuarialvaluation.htm">https://www.in.gov/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation.htm">https://www.ingv/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation">https://www.ingv/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation">https://www.ingv/inprs/actuarialvaluation</a>, or the state of the s

### Analysis of Financial Experience

(dollars in thousands)	UAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$2,726,390
Normal Cost and Interest, less Expected Contributions	(27,815)
Expected UAAL: June 30, 2023	2,698,575
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	(62,636)
Actuarial Accrued Liabilities Experience <sup>1</sup>	43,641
Actuarial Assumption & Methodology Changes	_
Plan Provision Changes	
Total UAAL (Gain) / Loss	(18,995)
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$2,679,580

### **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

(dollars in thousands)				Actuarial Acc	rued	Liabilities			Actuarial Accrued L Covered by Assets	iabilities
Actuarial Valuation as of June 30	-	etirees and eneficiaries	4	ctive Member (Employer Financed Portion)	т	otal Actuarial Accrued Liabilities	Actuarial Value of Assets	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities
2023	\$	9,287,725	\$	9,127,523	\$	18,415,248	\$ 15,735,668	100.0 %	70.6 %	85.4 %
2022		8,955,627		9,046,567		18,002,194	15,275,804	100.0	69.9	84.9
2021		8,655,768		8,907,389		17,563,157	14,577,352	100.0	66.5	83.0
2020		8,050,791		8,230,963		16,281,754	13,560,460	100.0	66.9	83.3
2019		8,068,490		8,507,570		16,576,060	13,157,802	100.0	59.8	79.4
2018		7,768,231		8,323,142		16,091,373	12,823,930	100.0	60.7	79.7
2017		7,834,962		8,500,291		16,335,253	12,327,958	100.0	52.9	75.5
2016		7,595,089		8,156,966		15,752,055	11,896,167	100.0	52.7	75.5
2015		6,981,308		8,282,087		15,263,395	11,414,710	100.0	53.5	74.8
2014		6,250,902		7,629,820		13,880,722	10,939,760	100.0	61.5	78.8

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

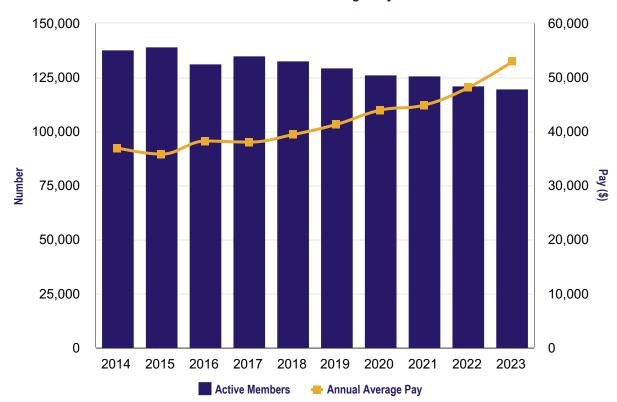
### Schedule of Active Members Valuation Data

### Actuarial Valuation as of June 30<sup>1</sup>

Active Members	An	nual Payroll	A	Annual verage Pay	Annual Percent Increase / (Decrease) in Average Pay
119,398	\$	6,312,888	\$	52,873	9.9 %
120,967		5,821,019		48,121	7.2
125,386		5,627,522		44,882	2.1
125,780		5,528,816		43,956	6.4
129,099		5,335,374		41,328	4.8
132,181		5,210,209		39,417	3.6
134,909		5,130,437		38,029	(0.5)
131,178		5,014,012		38,223	6.8
138,660		4,964,813		35,806	(3.0)
137,567		5,080,092		36,928	6.9
	119,398 120,967 125,386 125,780 129,099 132,181 134,909 131,178 138,660	119,398       \$         120,967       125,386         125,780       129,099         132,181       134,909         131,178       138,660	119,398         \$         6,312,888           120,967         5,821,019           125,386         5,627,522           125,780         5,528,816           129,099         5,335,374           132,181         5,210,209           134,909         5,130,437           131,178         5,014,012           138,660         4,964,813	119,398       \$       6,312,888       \$         120,967       5,821,019       \$       \$         125,386       5,627,522       \$       \$         125,780       5,528,816       \$       \$         129,099       5,335,374       \$       \$         132,181       5,210,209       \$       \$         134,909       5,130,437       \$       \$         138,660       4,964,813       \$       \$	Active MembersAnnual PayrollAverage Pay119,398\$6,312,888\$52,873120,9675,821,01948,121125,3865,627,52244,882125,7805,528,81643,956129,0995,335,37441,328132,1815,210,20939,417134,9095,130,43738,029131,1785,014,01238,223138,6604,964,81335,806

(dollars in thousands - except annual average pay)

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



#### Total Number of Active Members Per Year and Annual Average Pay

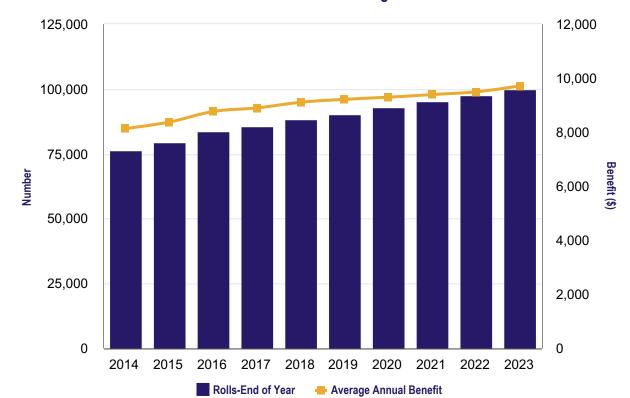
### Schedule of Retirants and Beneficiaries

### Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

Added	to Ro	olls	Removed	l from	Rolls	Rolls -	End o	f Year	Percent Increase /			Percent Increase /
Number			Number			Number			(Decrease) In Total Annual Benefits	Α	nnual	(Decrease) in Average Annual Benefit
6,075	\$	66,246	3,523	\$	26,018	99,635	\$	967,807	5.0 %	\$	9,714	2.3 %
5,658		56,959	3,426		24,240	97,083		922,040	3.5		9,497	1.1
5,502		55,399	3,087		21,538	94,851		891,168	3.7		9,395	1.0
5,194		50,481	2,690		18,520	92,436		859,427	3.7		9,298	0.9
5,077		50,319	3,135		21,565	89,932		829,035	3.4		9,218	1.2
5,249		55,236	2,389		15,609	87,990		801,551	5.8		9,110	2.3
4,855		49,980	2,913		18,808	85,130		757,851	3.9		8,902	1.5
6,478		78,487	2,488		15,597	83,188		729,366	9.9		8,768	4.6
5,489		60,538	2,241		14,107	79,198		663,767	7.4		8,381	3.0
_		_	_		_	75,950		617,977	_		8,137	_
	Number 6,075 5,658 5,502 5,194 5,077 5,249 4,855 6,478	Number         B           6,075         \$           5,658         \$           5,502         \$           5,194         \$           5,077         \$           5,249         4,855           6,478         \$	6,075         \$         66,246           5,658         56,959           5,502         55,399           5,194         50,481           5,077         50,319           5,249         55,236           4,855         49,980           6,478         78,487	NumberAnnual BenefitsNumber6,075\$66,2463,5235,65856,9593,4265,50255,3993,0875,19450,4812,6905,07750,3193,1355,24955,2362,3894,85549,9802,9136,47878,4872,488	Annual Benefits         Number         Annual Benefits           6,075         \$ 66,246         3,523         \$ 5,658         \$ 5,658         \$ 5,6959         \$ 3,426           5,6502         55,399         3,087         \$ 5,194         \$ 50,481         2,690           5,077         50,319         3,135         \$ 5,249         \$ 55,236         2,389           4,855         49,980         2,913         \$ 6,478         \$ 78,487         2,488	NumberAnnual BenefitsNumberAnnual Benefits6,075\$66,2463,523\$26,0185,65856,9593,42624,2405,50255,3993,08721,5385,19450,4812,69018,5205,07750,3193,13521,5655,24955,2362,38915,6094,85549,9802,91318,8086,47878,4872,48815,5975,48960,5382,24114,107	NumberAnnual BenefitsNumberAnnual BenefitsNumber6,075\$66,2463,523\$26,01899,6355,65856,9593,42624,24097,0835,50255,3993,08721,53894,8515,19450,4812,69018,52092,4365,07750,3193,13521,56589,9325,24955,2362,38915,60987,9904,85549,9802,91318,80885,1306,47878,4872,48815,59783,1885,48960,5382,24114,10779,198	NumberAnnual BenefitsNumberAnnual BenefitsNumberTo Benefits6,075\$66,2463,523\$26,01899,635\$5,65856,9593,42624,24097,083\$5,50255,3993,08721,53894,8515,19450,4812,69018,52092,4365,07750,3193,13521,56589,9325,24955,2362,38915,60987,9904,85549,9802,91318,80885,1306,47878,4872,48815,59783,1885,48960,5382,24114,10779,198	NumberAnnual BenefitsNumberAnnual BenefitsNumberTotal Annual Benefits6,075\$66,2463,523\$26,01899,635\$967,8075,65856,9593,42624,24097,083922,0405,50255,3993,08721,53894,851891,1685,19450,4812,69018,52092,436859,4275,07750,3193,13521,56589,932829,0355,24955,2362,38915,60987,990801,5514,85549,9802,91318,80885,130757,8516,47878,4872,48815,59783,188729,3665,48960,5382,24114,10779,198663,767	NumberAnnual BenefitsNumberAnnual BenefitsNumberTotal Annual BenefitsPercent Increase / (Decrease) In Total Annual Benefits6,075\$66,2463,523\$26,01899,635\$967,8075.0 %5,65856,9593,42624,24097,083922,0403.55,50255,3993,08721,53894,851891,1683.75,19450,4812,69018,52092,436859,4273.75,07750,3193,13521,56589,932829,0353.45,24955,2362,38915,60987,990801,5515.84,85549,9802,91318,80885,130757,8513.96,47878,4872,48815,59783,188729,3669.95,48960,5382,24114,10779,198663,7677.4	NumberAnnual BenefitsNumberAnnual BenefitsTotal Annual BenefitsPercent Increase / (Decrease) In Total Annual BenefitsAnnual Benefits6,075\$66,2463,523\$26,01899,635\$967,8075.0 %\$5,65856,9593,42624,24097,083922,0403.55,50255,3993,08721,53894,851891,1683.75,19450,4812,69018,52092,436859,4273.75,07750,3193,13521,56589,932829,0353.45,24955,2362,38915,60987,990801,5515.84,85549,9802,91318,80885,130757,8513.96,47878,4872,48815,59783,188729,3669.95,48960,5382,24114,10779,198663,7677.4	NumberAnnual BenefitsNumberAnnual BenefitsNumberTotal Annual BenefitsPercent Increase / (Decrease) In Total Annual BenefitsAverage Annual Benefits6,075\$66,2463,523\$26,01899,635\$967,8075.0 %\$9,7145,65856,9593,42624,24097,083922,0403.59,4975,50255,3993,08721,53894,851891,1683.79,3955,19450,4812,69018,52092,436859,4273.79,2985,07750,3193,13521,56589,932829,0353.49,2185,24955,2362,38915,60987,990801,5515.89,1104,85549,9802,91318,80885,130757,8513.98,9026,47878,4872,48815,59783,188729,3669.98,7685,48960,5382,24114,10779,198663,7677.48,381

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



#### Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

### **Historical Summary of Actuarial Valuation Results**

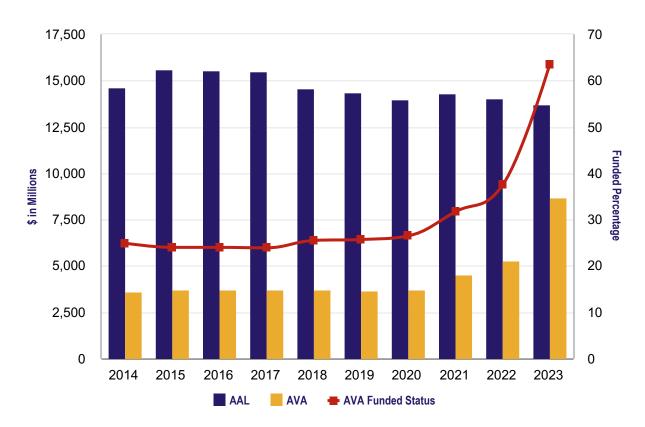
### Actuarial Valuation as of June 30<sup>1</sup>

The following table shows the history of the Unfunded Liability as a percentage of Covered Employee Payroll for TRF Pre-'96 DB.

#### (dollars in thousands)

	 Actuarial Accrued Liability (AAL)	 Actuarial Value of Assets (AVA)	 Unfunded Liability (AAL-AVA)	AVA Funded Status (AVA/AAL)	 Covered Employee Payroll	Unfunded Liability as a percentage of Covered Employee Payroll
2023	\$ 13,703,295	\$ 8,716,860	\$ 4,986,435	63.6 %	\$ 521,286	956.6 %
2022	14,059,122	5,273,369	8,785,753	37.5	575,523	1,526.6
2021	14,338,188	4,546,007	9,792,181	31.7	625,812	1,564.7
2020	13,968,703	3,707,851	10,260,852	26.5	693,965	1,478.6
2019	14,389,164	3,694,211	10,694,953	25.7	753,355	1,419.6
2018	14,583,189	3,721,323	10,861,866	25.5	824,770	1,317.0
2017	15,494,539	3,708,870	11,785,669	23.9	912,685	1,291.3
2016	15,575,072	3,743,861	11,831,211	24.0	989,093	1,196.2
2015	15,596,291	3,750,183	11,846,108	24.0	1,074,827	1,102.1
2014	14,639,876	3,643,011	10,996,865	24.9	1,262,828	870.8

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



#### Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the Teachers' Pre-1996 Defined Benefit Account were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available online at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

The full retirement benefit eligibility condition of age 70 and 20 years of credible service while still active in covered position was changed to age 65 and 20 years of creditable service while still active in a covered position. This change was deemed immaterial and has no impact on the actuarial liability.

#### **Actuarial Assumptions**

Actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting, except where noted.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding	6.25 percent (net of administrative and investment expenses)
Accounting & Financial Reporting	6.25 percent (net of investment expenses)
Inflation:	2.00 percent per year
Cost of Living Increases:	0.4 percent beginning on January 1, 2026
	0.5 percent beginning on January 1, 2034
	0.6 percent beginning on January 1, 2039

Future Salary Increases:

Based on 2015-2019 experience. Illustrative rates shown below:

Years of Service	Merit	Wage Inflation	Total Individual Salary Growth
0-1	9.25 %	2.65 %	11.90 %
2	4.25	2.65	6.90
3	2.75	2.65	5.40
4-14	1.75	2.65	4.40
15	1.50	2.65	4.15
16	1.25	2.65	3.90
17	1.00	2.65	3.65
18	0.75	2.65	3.40
19	0.50	2.65	3.15
20	0.25	2.65	2.90
21+	_	2.65	2.65

#### Demographic Assumptions: Based on 2015-2019 Experience

Retirement:

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	Teacher Employee table with a 1 year set forward for males and a 1 year set forward for females.
Mortality (Retirees):	Teacher Retiree table with a 1 year set forward for males and a 1 year set forward for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table with a 140% load.

	Eligible for Reduced Retirement	Eligible for Unreduced Retirement
Age	Probability	Probability
50-53	2.0 %	N/A
54	5.0	N/A
55-56	5.0	15.0 %
57	6.5	15.0
58	8.0	15.0
59	12.0	15.0
60	N/A	15.0
61	N/A	20.0
62	N/A	25.0
63	N/A	30.0
64	N/A	35.0
65-74	N/A	40.0
75+	N/A	100.0

30% of active members are assumed to retire at their earliest retirement date. 70% of active members are assumed to defer to their earliest unreduced retirement date.

Inactive vested members are assumed to commence their retirement benefit at their earliest unreduced retirement date.

## Teachers' Pre-1996 Defined Benefit Account, continued

-			
Terr	nin	ation	<b>^</b>
		αιιυι	1.

Service Based					
Years of Service	Male	Female			
0	15.00 %	12.50 %			
1	13.00	11.50			
2	11.00	10.50			
3	9.00	9.50			
4	8.00	8.50			
5	7.00	7.50			
6	6.00	6.50			
7	5.00	5.50			
8	4.50	5.00			
9	4.00	4.50			
10	3.75	4.00			
11	3.50	3.50			
12	3.25	3.25			
13	3.00	3.00			
14	2.75	2.75			
15	2.50	2.50			
16+	2.25	2.25			

Disability:	Age	Sample Rates	
	<=36	0.005 %	
	40	0.009	
	45	0.014	
	50	0.034	
	55	0.061	
	56-65	0.070	
	66+	0.000	
Spouse / Beneficiary:	80% of male members and 75% of female members are assumed to be married. Males are assumed to be three (3) years older and females are assumed to be two (2) years younger than their spouses.		
Form of Payment	100% of members are assumed to elect the normal form of benefit payment, a single life annuity with a five-year certain period.		
Miscellaneous Adjustments:	For active members, the Average Annual Compensation was increased by \$200 for additional wages received upon termination, such as severance or unused sick leave.		

#### **Actuarial Methods**

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

0	
Actuarial Cost Method:	Entry Age Normal – Level Percent of Payroll
	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.
	This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.
Actuarially Determined Contribution:	The Fund's actuarially determined contribution is based on the approach set out in IC - 5.10.4-2-5 that the Indiana Legislature has followed in actually appropriating funds. The basic contribution is the lesser of 3% above the prior year's basic contribution and the anticipated base benefit payments for the year. However, the contributed funds should not result in the funded ratio exceeding 100%.
Amortization Method:	For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.
COLA Funding Amount:	The COLA Funding Amount is developed by determining the assets needed at the start of the next biennium to fund the post-retirement benefit increases anticipated to be granted in that biennium. This amount is divided by a present value factor to determine the needed annual contribution.
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <a href="https://www.in.gov/inprs/actuarialvaluation.htm">https://www.in.gov/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingov/inprs/actuarialvaluation.htm">https://www.ingov/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingov/inprs/actuarialvaluation">https://www.ingov/inprs/actuarialvaluation</a>, or the applicable Indiana Code at <a href="https://www.ingov/inprs/actuarialvaluation">https://www.ingov/inprs/actuarialvaluation</a>,

# Analysis of Financial Experience

(dollars in thousands)	 UAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$ 8,785,753
Normal Cost and Interest, less Expected Contributions	 (487,665)
Expected UAAL: June 30, 2023	8,298,088
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	(3,252,444)
Actuarial Accrued Liabilities Experience <sup>1</sup>	(59,209)
Actuarial Assumption & Methodology Changes	_
Plan Provision Changes	 
Total UAAL (Gain) / Loss	 (3,311,653)
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$ 4,986,435

## **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

(dollars in thousands)		A	ctuarial Accru	ed Li	abilities		Portio		ctuarial Accrued L overed by Assets	iabilities
Actuarial Valuation as of June 30	ees and ficiaries	(	ive Member Employer Financed Portion)		tal Actuarial Accrued Liabilities	 Actuarial Value of Assets	Retirees an Beneficiarie		Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities
2023	\$ 11,434,274	\$	2,269,021	\$	13,703,295	\$ 8,716,860	76	5.2 %	— %	63.6 %
2022	11,435,773		2,623,349		14,059,122	5,273,369	46	5.1	_	37.5
2021	11,501,456		2,836,732		14,338,188	4,546,007	39	).5	_	31.7
2020	11,053,143		2,915,560		13,968,703	3,707,851	33	8.5	_	26.5
2019	11,245,919		3,143,245		14,389,164	3,694,211	32	2.8	_	25.7
2018	11,160,975		3,422,214		14,583,189	3,721,323	33	8.3	_	25.5
2017	11,653,674		3,840,865		15,494,539	3,708,870	31	.8	_	23.9
2016	11,358,156		4,216,916		15,575,072	3,743,861	33	8.0	_	24.0
2015	10,488,066		5,108,225		15,596,291	3,750,183	35	5.8	_	24.0
2014	9,686,391		4,953,485		14,639,876	3,643,011	37	.6	—	24.9

### **Schedule of Active Members Valuation Data**

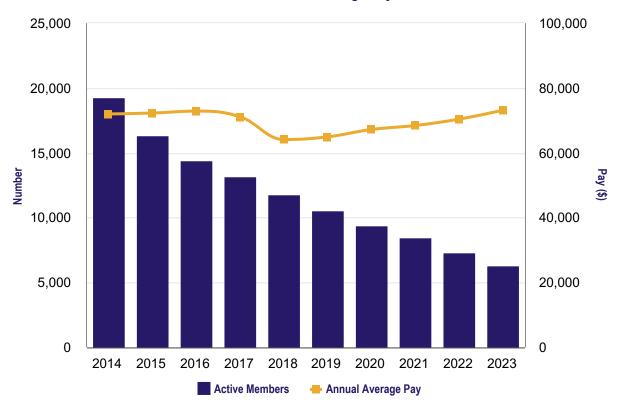
## Actuarial Valuation as of June 30<sup>1</sup>

	Active Members	An	nual Payroll	 Annual Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2023	6,287	\$	459,902	\$ 73,151	3.9 %
2022	7,291		513,393	70,415	2.9
2020	8,375		573,239	68,446	1.8
2019	9,338		627,740	67,224	3.5
2018	10,497		681,806	64,952	1.3
2017	11,710		750,691	64,107	(9.8)
2016	13,128		933,278	71,091	(2.4)
2015	14,327		1,044,096	72,876	0.8
2014	16,310		1,178,846	72,277	0.4
2013	19,210		1,383,242	72,006	_
Notes to the Actus	arial Schedules, included in the In	traduction to A	tuarial Information		

(dollars in thousands - except annual average pay)

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

### Total Number of Active Members Per Year and Annual Average Pay



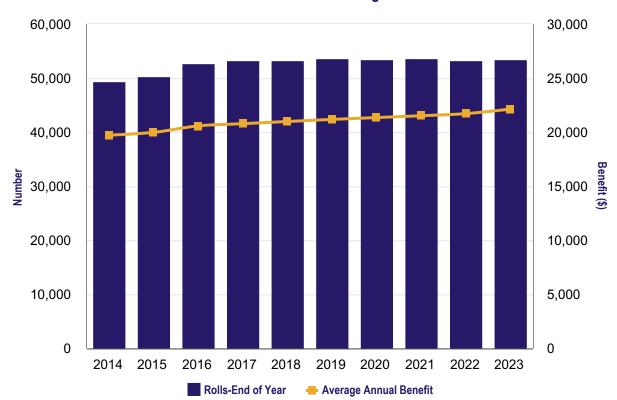
## Schedule of Retirants and Beneficiaries

## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

	Added	to Ro	olls	Removed	from	Rolls	Rolls –	End	of Year	Percent Increase /			Percent Increase /
	Number		Annual Senefits	Number		Annual Benefits	Number	T	otal Annual Benefits	(Decrease) In Total Annual Benefits	1	verage Annual Benefit	(Decrease) in Average Annual Benefit
2023	1,375	\$	37,851	1,250	\$	21,067	53,282	\$	1,180,022	2.2 %	\$	22,147	1.9 %
2022	1,173		30,221	1,553		25,669	53,157		1,154,855	0.2		21,725	0.9
2021	1,315		32,981	1,193		19,207	53,537		1,152,667	1.0		21,530	0.8
2020	1,195		29,710	1,278		20,560	53,415		1,140,771	0.6		21,357	0.8
2019	1,514		37,102	1,243		19,005	53,498		1,133,528	1.4		21,188	0.9
2018	1,483		33,330	1,496		20,240	53,227		1,117,463	0.9		20,994	1.0
2017	1,953		47,305	1,288		18,257	53,240		1,106,961	2.3		20,792	1.0
2016	3,466		95,994	1,105		14,677	52,575		1,082,306	7.8		20,586	3.0
2015	1,886		50,261	1,017		14,293	50,214		1,003,910	3.1		19,993	1.3
2014	_		93,605	_		14,524	49,345		973,635	_		19,731	_

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



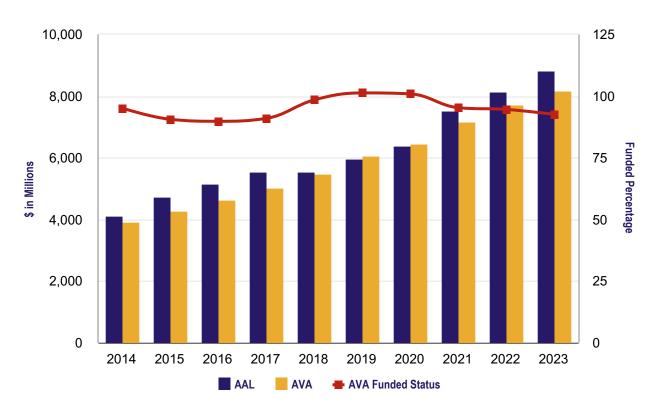
### Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

# Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30<sup>1</sup>

The following table shows the history of the Unfunded Liability as a percentage of Covered Employee Payroll for TRF '96 DB.

#### (dollars in thousands)

	Li	Actuarial Accrued iability (AAL)	 Actuarial Value of Assets (AVA)	 Unfunded Liability (AAL-AVA)	AVA Funded Status (AVA/AAL)	 Covered Employee Payroll	Unfunded Liability as a percentage of Covered Employee Payroll
2023	\$	8,832,827	\$ 8,177,118	\$ 655,709	92.6 %	\$ 4,199,773	15.6 %
2022		8,154,991	7,716,351	438,640	94.6	3,915,888	11.2
2021		7,517,702	7,162,958	354,744	95.3	3,634,649	9.8
2020		6,403,252	6,460,070	(56,818)	100.9	3,465,728	(1.6)
2019		5,980,426	6,056,317	(75,891)	101.3	3,257,918	(2.3)
2018		5,563,264	5,478,482	84,782	98.5	3,129,070	2.7
2017		5,536,094	5,035,991	500,103	91.0	3,020,463	16.6
2016		5,174,317	4,648,297	526,020	89.8	2,881,397	18.3
2015		4,734,777	4,290,258	444,519	90.6	2,742,187	16.2
2014		4,116,264	3,914,503	201,761	95.1	2,598,115	7.8



### Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the Teachers' 1996 Defined Benefit Account were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available online at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

The full retirement benefit eligibility condition of age 70 and 20 years of credible service while still active in covered position was changed to age 65 and 20 years of creditable service while still active in a covered position. This change was deemed immaterial and has no impact on the actuarial liability.

#### **Actuarial Assumptions**

Actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting, except where noted.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding	6.25 percent (net of administrative and investment expenses)
Accounting & Financial Reporting	6.25 percent (net of investment expenses)
Inflation:	2.00 percent per year
Cost of Living Increases:	0.4 percent beginning on January 1, 2026
	0.5 percent beginning on January 1, 2034
	0.6 percent beginning on January 1, 2039

Future Salary Increases:

Based on 2015-2019 experience. Illustrative rates shown below:

Years of Service	Merit	Wage Inflation	Total Individual Salary Growth
0-1	9.25 %	2.65 %	11.90 %
2	4.25	2.65	6.90
3	2.75	2.65	5.40
4-14	1.75	2.65	4.40
15	1.50	2.65	4.15
16	1.25	2.65	3.90
17	1.00	2.65	3.65
18	0.75	2.65	3.40
19	0.50	2.65	3.15
20	0.25	2.65	2.90
21+	_	2.65	2.65

#### Demographic Assumptions: Based on 2015-2019 Experience

Retirement:

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	Teacher Employee table with a 1 year set forward for males and a 1 year set forward for females.
Mortality (Retirees):	Teacher Retiree table with a 1 year set forward for males and a 1 year set forward for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table with a 140% load.

Eligible for Reduced Retirement	Eligible for Unreduced Retirement
Probability	Probability
2.0 %	N/A
5.0	N/A
5.0	15.0 %
6.5	15.0
8.0	15.0
12.0	15.0
N/A	15.0
N/A	20.0
N/A	25.0
N/A	30.0
N/A	35.0
N/A	40.0
N/A	100.0
	Probability 2.0 % 5.0 5.0 6.5 8.0 12.0 N/A N/A N/A N/A N/A N/A N/A

30% of active members are assumed to retire at their earliest retirement date. 70% of active members are assumed to defer to their earliest unreduced retirement date.

Inactive vested members are assumed to commence their retirement benefit at their earliest unreduced retirement date.

# Teachers' 1996 Defined Benefit Account, continued

-			
Terr	nin	ation	<b>^</b>
		αιιυι	1.

	Service Based	
Years of Service	Male	Female
0	15.00 %	12.50 %
1	13.00	11.50
2	11.00	10.50
3	9.00	9.50
4	8.00	8.50
5	7.00	7.50
6	6.00	6.50
7	5.00	5.50
8	4.50	5.00
9	4.00	4.50
10	3.75	4.00
11	3.50	3.50
12	3.25	3.25
13	3.00	3.00
14	2.75	2.75
15	2.50	2.50
16+	2.25	2.25

Disability:	Age	Sample Rates
	<=36	0.005 %
	40	0.009
	45	0.014
	50	0.034
	55	0.061
	56-65	0.070
	66+	0.000
Spouse / Beneficiary:		embers and 75% three (3) years o
Form of Payment	100% of memb with a five-year	ers are assumed certain period.

Miscellaneous Adjustments: For active members, the Average Annual Compensation was increased by \$200 for additional wages received upon termination, such as severance or unused sick leave.

### **Actuarial Methods**

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

0	5
Actuarial Cost Method:	Entry Age Normal – Level Percent of Payroll
	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.
	This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.
Amortization Method:	For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100 percent funded (based on Actuarial Value of Assets), the past amortized over a 30-year period with level payment each year. Effective June 30, 2018, the bases are calculated without regards to the COLA provisions. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.
	For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.
COLA Surcharge:	The COLA Surcharge is developed by determining the assets needed at the start of the next biennium to fund the post-retirement benefit increases anticipated to be granted in that biennium. This amount is divided by the present value of expected payroll over which the accumulations will occur.
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <a href="https://www.in.gov/inprs/actuarialvaluation.htm">https://www.in.gov/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation.htm">https://www.ingv/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation">https://www.ingv/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation">https://www.ingv/inprs/actuarialvaluation</a>, or the state of the s

# Analysis of Financial Experience

(dollars in thousands)	 UAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$ 438,640
Normal Cost and Interest, less Expected Contributions	 30,567
Expected UAAL: June 30, 2023	469,207
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	89,046
Actuarial Accrued Liabilities Experience <sup>1</sup>	97,456
Actuarial Assumption & Methodology Changes	_
Plan Provision Changes	 
Total UAAL (Gain) / Loss	 186,502
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$ 655,709

## **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

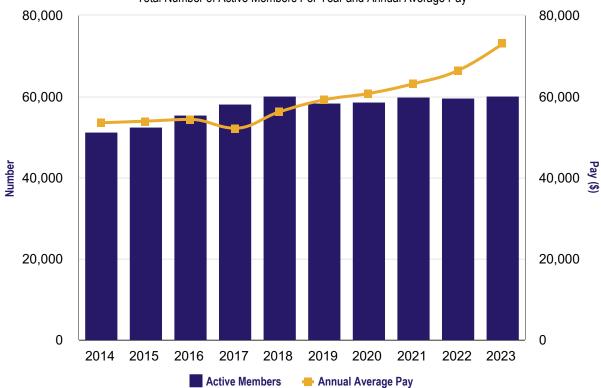
(dollars in thousands)	Actuarial Accrued Liabilities								Portion of Actuarial Accrued Liabilities Covered by Assets			
Actuarial Valuation as of June 30		etirees and eneficiaries	A	Active Member (Employer Financed Portion)		er Total Actuarial Accrued Liabilities		Actuarial Value of Assets	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2023	\$	2,037,487	\$	6,795,340	\$	8,832,827	\$	8,177,118	100.0 %	90.4 %	92.6 %	
2022		1,795,341		6,359,650		8,154,991		7,716,351	100.0	93.1	94.6	
2021		1,648,129		5,869,573		7,517,702		7,162,958	100.0	94.0	95.3	
2020		1,454,955		4,948,297		6,403,252		6,460,070	100.0	101.1	100.9	
2019		1,371,702		4,608,724		5,980,426		6,056,317	100.0	101.6	101.3	
2018		1,232,059		4,331,205		5,563,264		5,478,482	100.0	98.0	98.5	
2017		1,213,780		4,322,314		5,536,094		5,035,991	100.0	88.4	91.0	
2016		1,079,255		4,095,062		5,174,317		4,648,297	100.0	87.2	89.8	
2015		897,036		3,837,741		4,734,777		4,290,258	100.0	88.4	90.6	
2014		759,244		3,357,020		4,116,264		3,914,503	100.0	94.0	95.1	

# Number Schedule of Active Members Valuation Data

# Actuarial Valuation as of June 30<sup>1</sup>

	Active Members	An	nual Payroll	A	Annual verage Pay	Annual Percent Increase / (Decrease) In Average Pay
2023	60,057	\$	4,386,264	\$	73,035	10.0 %
2022	59,567		3,956,756		66,425	5.2
2021	59,866		3,781,122		63,160	3.9
2020	58,450		3,552,093		60,771	2.7
2019	58,308		3,451,731		59,198	5.2
2018	59,996		3,374,943		56,253	7.8
2017	58,097		3,032,299		52,194	(4.0)
2016	55,265		3,004,169		54,359	0.8
2015	52,424		2,827,311		53,932	0.8
2014	51,204		2,740,661		53,524	_

(dollars in thousands - except annual average pay)



Total Number of Active Members Per Year and Annual Average Pay

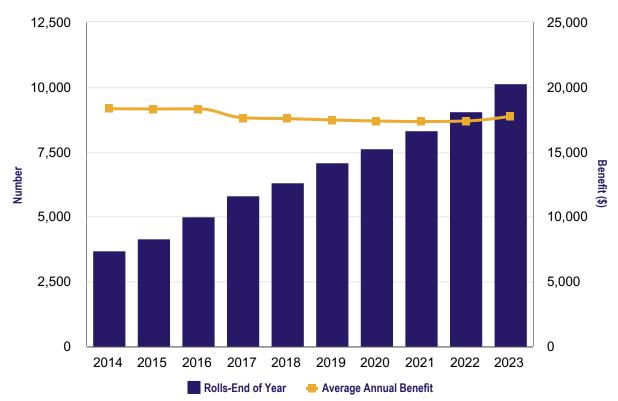
## Schedule of Retirants and Beneficiaries

## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

	Added to Rolls			Removed from Rolls			Rolls -	- End of	Deveent Increase /				
	Number		nual efits	Number		nnual enefits	Number		al Annual Senefits	Percent Increase / (Decrease) In Total Annual Benefits	ŀ	verage Annual Benefit	Percent Increase / (Decrease) in Average Annual Benefit
2023	1,171	\$ 2	22,491	79	\$	1,136	10,127	\$	179,664	14.4 %	\$	17,741	2.1 %
2022	824	1	14,602	76		1,044	9,035		157,030	9.3		17,380	0.2
2021	760	1	12,813	69		977	8,287		143,690	8.9		17,339	(0.2)
2020	619	1	10,236	64		927	7,596		132,004	7.4		17,378	(0.5)
2019	798	1	13,285	46		566	7,041		122,935	11.3		17,460	(0.6)
2018	710		9,562	217		1,002	6,289		110,423	8.1		17,558	(0.4)
2017	855	1	12,106	36		564	5,796		102,178	12.1		17,629	(3.8)
2016	858	1	16,075	17		305	4,977		91,160	20.4		18,316	0.1
2015	499		9,101	28		353	4,136		75,714	12.7		18,306	(0.1)
2014	_	1	12,216	_		251	3,665		67,169	_		18,327	_





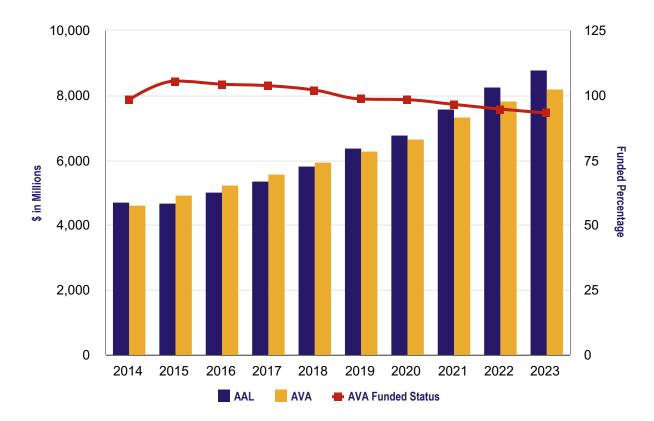
## **Historical Summary of Actuarial Valuation Results**

# Actuarial Valuation as of June 30<sup>1</sup>

The following table shows the history of the Unfunded Liability as a percentage of Covered Employee Payroll for '77 Fund.

(dollars in thousands)

	Lia	Actuarial Accrued ability (AAL)	A	Actuarial Value of ssets (AVA)	 Unfunded Liability (AAL-AVA)	AVA Funded Status (AVA/AAL)	 Covered Employee Payroll	Unfunded Liability as a percentage of Covered Employee Payroll
2023	\$	8,796,329	\$	8,196,320	\$ 600,009	93.2 %	\$ 1,072,187	56.0 %
2022		8,281,865		7,844,324	437,541	94.7	1,018,600	43.0
2021		7,598,774		7,331,655	267,119	96.5	951,301	28.1
2020		6,785,608		6,670,034	115,574	98.3	940,496	12.3
2019		6,389,002		6,299,749	89,253	98.6	866,299	10.3
2018		5,839,659		5,953,978	(114,319)	102.0	842,179	(13.6)
2017		5,385,753		5,587,551	(201,798)	103.7	809,382	(24.9)
2016		5,039,836		5,255,255	(215,419)	104.3	771,949	(27.9)
2015		4,680,694		4,939,330	(258,636)	105.5	745,336	(34.7)
2014		4,706,997		4,625,475	81,522	98.3	710,581	11.5



# 1977 Police Officers' and Firefighters' Retirement Fund, continued

### Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the 1977 Police Officers' and Firefighters' Retirement Fund were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available online at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

There were no changes to the plan provisions during the fiscal year.

#### **Actuarial Assumptions**

Actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting, except where noted.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding	6.25 percent (net of administrative and investment expenses)
Account & Financial Reporting	6.25 percent (net of investment expenses)
Interest on Member Contributions	3.30 percent per year
Inflation	2.00 percent per year
Cost of Living Increases:	1.95 percent per year in retirement
Future Salary Increases:	2.65 percent per year

#### Demographic Assumptions: Based on 2015-2019 Experience

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	Safety Employee table with a 3 year set forward for males and no set forward for females.
Mortality (Retirees):	Safety Retiree table with a 3 year set forward for males and no set forward for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table.

# 1977 Police Officers' and Firefighters' Retirement Fund, continued

Retirement:

Disability:

Retirem	ent Rate		Of those who re	etire
Ages	Rate	Service	Enter DROP	Commence Immediately
50-51	5.0%	<=20	35 %	65 %
52-55	15.0	21	40	60
56-58	20.0	22	45	55
59	22.5	23	50	50
60-64	25.0	24-26	55	45
65-69	50.0	27	60	40
70+	100.0	28	65	35
		29+	70	30

Active members who elect to enter DROP are assumed to be in DROP for a period of 3 years, upon which time they take the full lump sum and commence their annuity benefit.

Inactive vested members are assumed to commence their retirement benefit at their earliest eligible retirement date (age 50 or current age if greater).

Termination:	Service	Rate	Service	Rate
	0	10.0 %	6-8	2.0 %
	1	5.0	9-11	1.5
	2	4.0	12-19	1.0
	3-4	3.5	20+	2.0
	5	2.5		

Age	Sample Rates
<=30	0.10 %
35	0.20
40	0.30
45	0.40
50+	0.50

Rates for ages 30-50 increase by 0.02% per year.

Spouse / Beneficiary:	80 percent of male members and 60 percent of female members are assumed to be married or to have a dependent beneficiary. Male members are assumed to be three (3) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.
Disability Retirement:	For members hired after 1989 that become disabled, impairments are assumed to be one percent catastrophic Class 1, 59 percent Class 1,10 percent Class 2, and 30 percent Class 3.
Form of Payment	Members are assumed to elect either a single life annuity or a 70% joint and survivor benefit based on the marriage assumption.
Pre-Retirement Death:	Of active member deaths, 20 percent are assumed to be in the line of duty and 80 percent are other than in the line of duty. Additionally, all deaths among retired and disabled members are other than in the line of duty.

# 1977 Police Officers' and Firefighters' Retirement Fund, continued

#### **Actuarial Methods**

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

•	
Actuarial Cost Method:	Entry Age Normal – Level Percent of Payroll
	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.
	This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.
Amortization Method:	For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100 percent funded (based on Actuarial Value of Assets), the past amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.
	For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <a href="https://www.in.gov/inprs/actuarialvaluation.htm">https://www.in.gov/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingov/inprs/actuarialvaluation.htm">https://www.ingov/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingov/inprs/actuarialvaluation">https://www.ingov/inprs/actuarialvaluation</a>, or the applicable Indiana Code at <a href="https://www.ingov/inprs/actuarialvaluation">https://www.ingov/inprs/actuarialvaluation</a>,

# Analysis of Financial Experience

(dollars in thousands)	 UAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$ 437,541
Normal Cost and Interest, less Expected Contributions	 (12,754)
Expected UAAL: June 30, 2023	424,787
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	97,663
Actuarial Accrued Liabilities Experience <sup>1</sup>	77,559
Actuarial Assumption & Methodology Changes	_
Plan Provision Changes	 _
Total UAAL (Gain) / Loss	 175,222
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$ 600,009

## **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

(dollars in thousands)		Act	uarial Accrue	d Liabilities			Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Active Member htributions		etirees and eneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2023	\$ 883,960	\$	3,583,003	\$ 4,329,366	\$ 8,796,329	\$ 8,196,320	100.0 %	100.0 %	86.1 %	93.2 %	
2022	895,986		3,248,406	4,137,473	8,281,865	7,844,324	100.0	100.0	89.4	94.7	
2021	886,016		2,816,400	3,896,358	7,598,774	7,331,655	100.0	100.0	93.1	96.5	
2020	895,203		2,377,937	3,512,468	6,785,608	6,670,034	100.0	100.0	96.7	98.3	
2019	883,706		2,169,744	3,335,552	6,389,002	6,299,749	100.0	100.0	97.3	98.6	
2018	866,551		1,910,154	3,062,954	5,839,659	5,953,978	100.0	100.0	103.7	102.0	
2017	857,426		1,715,503	2,812,824	5,385,753	5,587,551	100.0	100.0	107.2	103.7	
2016	843,628		1,532,936	2,663,272	5,039,836	5,255,255	100.0	100.0	108.1	104.3	
2015	832,760		1,362,021	2,485,913	4,680,694	4,939,330	100.0	100.0	110.4	105.5	
2014	809,877		1,280,920	2,616,200	4,706,997	4,625,475	100.0	100.0	96.9	98.3	

# Schedule of Active Members Valuation Data

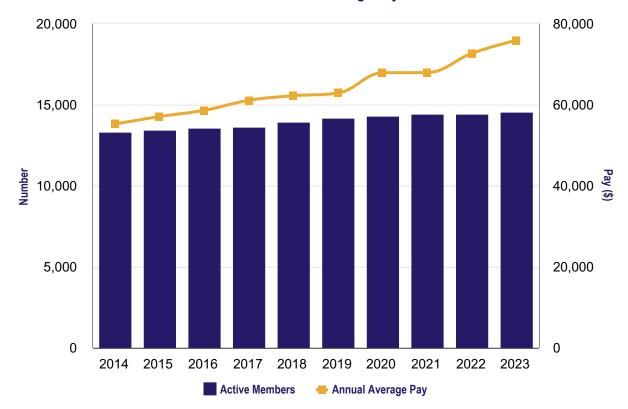
# Actuarial Valuation as of June 30<sup>1</sup>

Active Members		Annual Payroll <sup>2</sup>		Annual Average Pay	Annual Percent Increase / (Decrease) In Average Pay
14,503	\$	1,100,600	\$	75,888	4.4 %
14,387		1,045,593		72,676	7.0
14,378		976,510		67,917	0.1
14,242		966,359		67,853	7.9
14,119		887,957		62,891	1.1
13,879		863,233		62,197	1.8
13,587		829,736		61,068	4.2
13,506		791,508		58,604	2.7
13,390		764,215		57,074	3.4
13,295		734,024		55,211	3.8
	14,503 14,387 14,378 14,242 14,119 13,879 13,587 13,506 13,390	14,503 \$ 14,387 14,378 14,242 14,119 13,879 13,587 13,506 13,390	Active MembersPayroll 214,503\$14,3871,045,59314,378976,51014,242966,35914,119887,95713,879863,23313,587829,73613,506791,50813,390764,215	Active Members         Payroll <sup>2</sup> 14,503         \$ 1,100,600         \$           14,387         1,045,593         \$           14,378         976,510         \$           14,242         966,359         \$           14,119         887,957         \$           13,879         863,233         \$           13,506         791,508         \$           13,390         764,215         \$	Active MembersPayroll 2Average Pay14,503\$1,100,600\$75,88814,3871,045,59372,67614,378976,51067,91714,242966,35967,85314,119887,95762,89113,879863,23362,19713,587829,73661,06813,506791,50858,60413,390764,21557,074

(dollars in thousands - except annual average pay)

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

<sup>2</sup> Excludes payroll from members that are over the 32 year service cap.



## Total Number of Active Members Per Year and Annual Average Pay

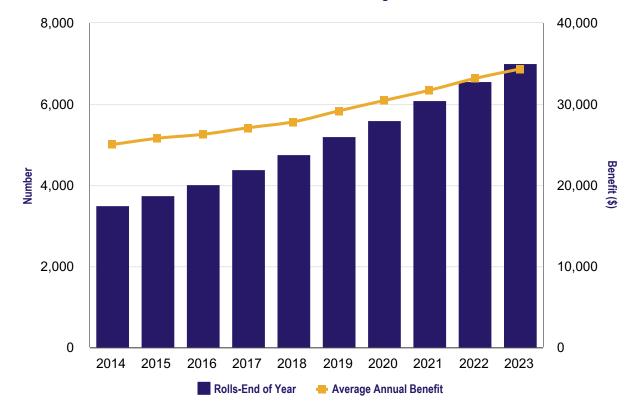
## Schedule of Retirants and Beneficiaries

## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

	Added to Rolls		ls	Removed from Rolls			Rolls – End of Year			Deveent Increase (			Deveent Increase /
	Number		nnual nefits	Number	Annual Benefits		Total Annual Number Benefits			Percent Increase / (Decrease) In Total Annual Benefits	A	verage Innual Senefit	Percent Increase / (Decrease) in Average Annual Benefit
2023	507	\$	21,139	69	\$	1,705	6,993	\$	240,052	10.4 %	\$	34,328	3.5 %
2022	569		23,179	94		2,268	6,555		217,397	12.7		33,165	4.6
2021	567		22,284	68		1,599	6,080		192,843	13.5		31,718	4.2
2020	444		16,965	50		1,036	5,581		169,933	12.3		30,449	4.4
2019	476		17,344	40		803	5,187		151,305	14.4		29,170	4.8
2018	429		14,914	52		1,002	4,751		132,207	11.6		27,827	2.7
2017	407		13,321	37		642	4,374		118,472	12.6		27,086	3.1
2016	312		10,074	44		834	4,004		105,218	9.2		26,278	1.9
2015	283		8,858	38		727	3,736		96,336	10.3		25,786	3.1
2014	_		_	_		_	3,491		87,301	_		25,008	_

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



### Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

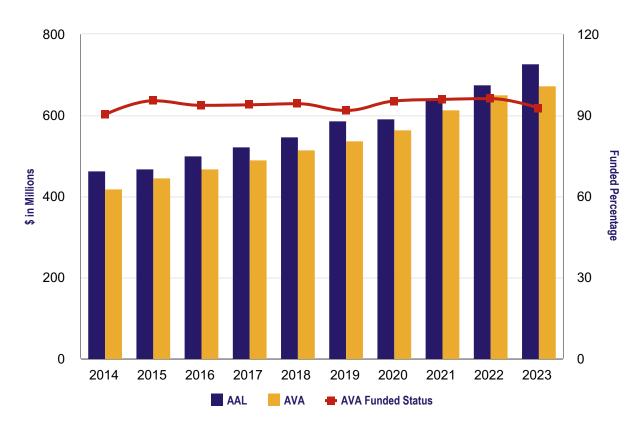
## **Historical Summary of Actuarial Valuation Results**

# Actuarial Valuation as of June 30<sup>1</sup>

The following table shows the history of the Unfunded Liability as a percentage of Covered Employee Payroll for JRS.

#### (dollars in thousands)

	Actuar Accru Liability (	ed	Actuarial Value of ssets (AVA)	 Unfunded Liability (AAL-AVA)	AVA Fundo Status (AVA/AAL		 Covered Employee Payroll	Unfunded Liab as a percenta of Covered Employee Pay	ige I
2023	\$	728,137	\$ 674,766	\$ 53,371		92.7 %	\$ 67,466		79.1 %
2022		676,859	651,415	25,444		96.2	65,159		39.0
2021		642,172	615,755	26,417		95.9	61,215		43.2
2020		592,510	564,741	27,769		95.3	58,189		47.7
2019		586,499	538,600	47,899		91.8	56,380		85.0
2018		547,694	516,749	30,945		94.4	53,350		58.0
2017		523,735	492,013	31,722		93.9	54,755		57.9
2016		501,126	469,378	31,748		93.7	51,382		61.7
2015		468,945	447,514	21,431		95.4	48,582		44.1
2014		464,855	419,568	45,287		90.3	46,041		98.5



### Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the Judges' Retirement System were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available online at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

There were no changes to the plan provisions during the fiscal year.

#### **Actuarial Assumptions**

Actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting, except where noted.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding	6.25 percent (net of administrative and investment expenses)
Account & Financial Reporting	6.25 percent (net of investment expenses)
Interest on Member Contributions	3.30 percent per year
Inflation	2.00 percent per year
Cost of Living Increases:	2.65 percent per year in deferral and retirement
Future Salary Increases:	2.65 percent per year

#### Demographic Assumptions: Based on 2015-2019 Experience

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	General Employee table with a 1 year setback for males and a 1 year setback for females.
Mortality (Retiree):	General Retiree table with a 1 year setback for males and a 1 year setback for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table with a 140% load.

Retirement:	Ages	Eligible for Reduced Benefit	Eligible for Unreduced Benefit
	55-61	N/A	20 %
	62-64	8 %	20
	65-74	N/A	30
	75+	N/A	100

Inactive vested members are assumed to commence their retirement benefit at their earliest eligible retirement date.

#### Termination:

3 percent per year for all members prior to retirement eligibility.

Disability:	Age	Sample Rates		
	20	0.057 %		
	25	0.081		
	30	0.105		
	35	0.140		
	40	0.210		
	44-64	0.300		
	65+	0.000		

#### Form of Payment

Members are assumed to elect either a single life annuity or a 50% joint survivor benefit base on the marriage assumption.

Spouse / Beneficiary:

90 percent of members are assumed to be married or to have a dependent beneficiary. Male members are assumed to be three (3) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.

### **Actuarial Methods**

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

•	
Actuarial Cost Method:	Entry Age Normal – Level Percent of Payroll
	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.
	This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.
Amortization Method:	For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100 percent funded (based on Actuarial Value of Assets), the past amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.
	For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <u>https://www.in.gov/inprs/</u> actuarialvaluation.htm, or the applicable Indiana Code at <u>http://iga.in.gov/</u>.

# Analysis of Financial Experience

(dollars in thousands)	 UAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$ 25,444
Normal Cost and Interest, less Expected Contributions	 (1,835)
Expected UAAL: June 30, 2023	23,609
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	10,529
Actuarial Accrued Liabilities Experience <sup>1</sup>	19,233
Actuarial Assumption & Methodology Changes	_
Plan Provision Changes	 _
Total UAAL (Gain) / Loss	 29,762
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$ 53,371

## **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

(dollars in thousands)	Actuarial Accrued Liabilities								Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Ν	Active lember tributions		tirees and neficiaries	l (E F	(		Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2023	\$	44,819	\$	372,583	\$	310,735	\$	728,137	\$ 674,766	100.0 %	100.0 %	82.8 %	92.7 %
2022		44,009		351,050		281,800		676,859	651,415	100.0	100.0	91.0	96.2
2021		41,003		308,070		293,099		642,172	615,755	100.0	100.0	91.0	95.9
2020		41,523		299,146		251,841		592,510	564,741	100.0	100.0	89.0	95.3
2019		38,165		269,886		278,448		586,499	538,600	100.0	100.0	82.8	91.8
2018		38,541		258,255		250,898		547,694	516,749	100.0	100.0	87.7	94.3
2017		36,385		245,177		242,173		523,735	492,013	100.0	100.0	86.9	93.9
2016		34,804		244,484		221,838		501,126	469,378	100.0	100.0	85.7	93.7
2015		32,383		210,020		226,542		468,945	447,514	100.0	100.0	90.5	95.4
2014		32,060		216,044		216,751		464,855	419,568	100.0	100.0	79.1	90.3

# Schedule of Active Members Valuation Data

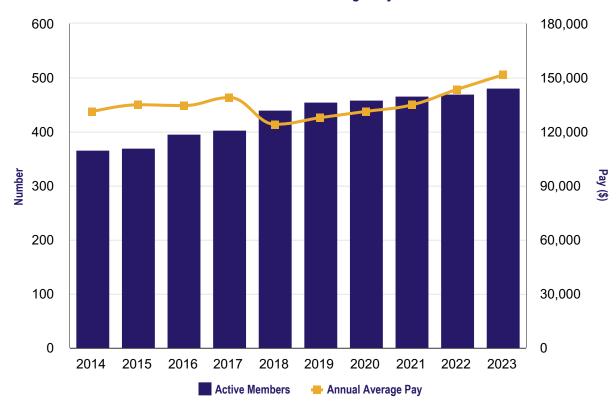
# Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands - except annual average pay)

	Active Members	 Annual Payroll <sup>2</sup>	 Annual Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2023	480	\$ 72,729	\$ 151,519	5.5 %
2022	469	67,328	143,557	6.4
2021	465	62,715	134,871	2.8
2020	458	60,109	131,242	2.7
2019	453	57,902	127,819	3.0
2018	439	54,470	124,078	(10.7)
2017	402	55,850	138,931	3.3
2016	394	52,975	134,454	(0.3)
2015	368	49,651	134,921	2.8
2014	365	47,883	131,186	2.0

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

 $^{\rm 2}$  Excludes payroll from members that are over the 22 year service cap.



### Total Number of Active Members Per Year and Annual Average Pay

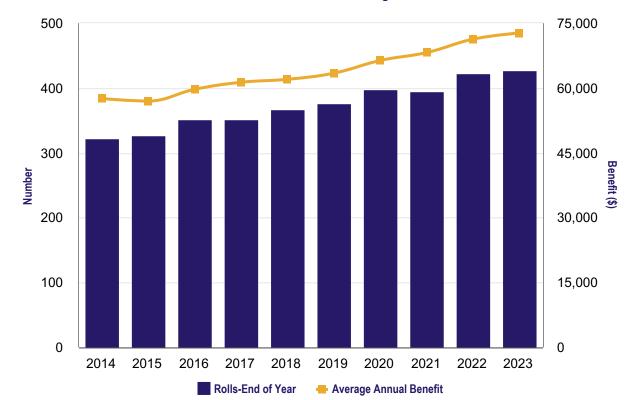
## Schedule of Retirants and Beneficiaries

# Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

	Added to Rolls		Removed from Rolls		Rolls -	- End of	Year	Percent Increase /			Percent Increase /
	Number	Annual Benefits	Number	Annual Benefits	Number		al Annual Benefits	(Decrease) In Total Annual Benefits	Α	verage Innual Senefit	(Decrease) in Average Annual Benefit
2023	13	\$ 918	8	\$ 2	99 426	\$	30,987	3.2 %	\$	72,740	2.0 %
2022	40	3,199	13	40	05 421		30,024	11.7		71,316	4.5
2021	10	729	12	4	92 394		26,877	2.2		68,216	2.8
2020	31	2,498	10	20	396		26,289	10.5		66,387	4.6
2019	18	1,340	8	1	91 375		23,794	5.1		63,450	2.3
2018	22	1,723	7	31	)9 365		22,637	5.5		62,019	1.1
2017	9	696	10	5	)9 350		21,465	2.4		61,329	2.7
2016	34	2,520	9	34	40 351		20,959	12.8		59,714	4.8
2015	10	494	5	1	95 326		18,578	0.6		56,987	(1.0)
2014	_	_	_		— 321		18,474	_		57,551	_

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



### Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

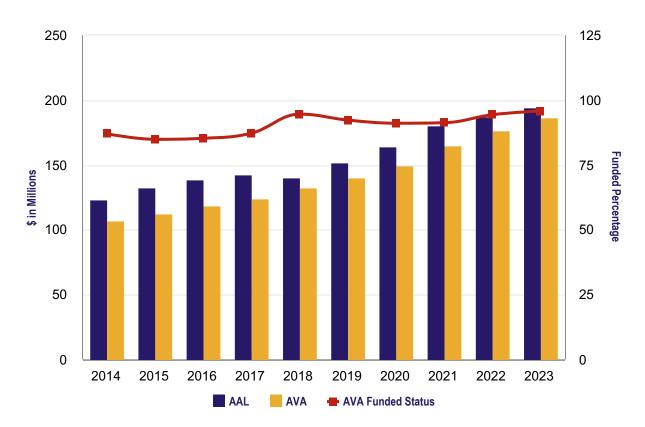
## **Historical Summary of Actuarial Valuation Results**

# Actuarial Valuation as of June 30<sup>1</sup>

The following table shows the history of the Unfunded Liability as a percentage of Covered Employee Payroll for EG&C.

#### (dollars in thousands)

	Ac	ctuarial ccrued lity (AAL)	 Actuarial Value of Assets (AVA)	 Unfunded Liability (AAL-AVA)	AVA Fundo Status (AVA/AAL		 Covered Employee Payroll	Unfunded Liab as a percenta of Covered Employee Pay	ige I
2023	\$	194,827	\$ 186,653	\$ 8,174		95.8 %	\$ 34,597		23.6 %
2022		187,505	177,046	10,459		94.4	32,356		32.3
2021		180,848	165,179	15,669		91.3	33,194		47.2
2020		163,978	149,360	14,618		91.1	32,491		45.0
2019		152,207	140,559	11,648		92.3	33,272		35.0
2018		140,056	132,441	7,615		94.6	29,387		25.9
2017		142,603	124,531	18,072		87.3	27,428		65.9
2016		138,965	118,515	20,450		85.3	25,526		80.1
2015		132,796	112,765	20,031		84.9	25,133		79.7
2014		123,601	107,563	16,038		87.0	25,825		62.1



# Excise, Gaming and Conservation Officers' Retirement Fund, continued

### Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the Excise, Gaming and Conservation Officers' Retirement Fund were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available online at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

There were no changes to the plan provisions during the fiscal year.

#### **Actuarial Assumptions**

Actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting, except where noted.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding	6.25 percent (net of administrative and investment expenses)
Accounting & Financial Reporting	6.25 percent (net of investment expenses)
Interest on Member Contributions:	3.30 percent per year
Inflation:	2.00 percent per year
Cost of Living Increases:	0.4 percent beginning on January 1, 2026
	0.5 percent beginning on January 1, 2034
	0.6 percent beginning on January 1, 2039

Future Salary Increases:	Based on 2015-2019 experience. Illustrative rates shown below:							
	Service	Wage Inflation	Merit	Salary Increase				
	0	2.65 %	2.25 %	4.90 %				
	1	2.65	2.00	4.65				
	2	2.65	1.75	4.40				
	3	2.65	1.50	4.15				
	4	2.65	1.25	3.90				
	5	2.65	1.00	3.65				
	6	2.65	0.75	3.40				
	7	2.65	0.50	3.15				
	8	2.65	0.25	2.90				
	9+	2.65	_	2.65				

#### **V**:

#### Demographic Assumptions: Based on 2014-2019 Experience

Pub-2010 Public Retirement Plans Mortality tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	Safety Employee table with a 3 year set forward for males and no set forward for females.
Mortality (Retirees):	Safety Retiree table with a 3 year set forward for males and no set forward for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table.

Retirement:	Age	Eligible for Reduced Benefit	Eligible for Unreduced Benefit
	45-54	2 %	20 %
	55-58	2	25
	59	2	35
	60	N/A	55
	61	N/A	65
	62-64	N/A	75
	65+	N/A	100

Active members who retire are assumed to enter DROP 50 percent of the time and retire immediately 50 percent of the time. Those who elect to enter DROP are assumed to be in DROP for a period of 3 years, upon which time they take the full lump sum and commence their annuity benefit.

Inactive vested members are assumed to commence their retirement benefit at their earliest eligible retirement date (age 45, or current age if greater).

Termination:	Years of Service	Rate	Years of Service	Rate
	0-1	10 %	6	5 %
	2	9	7	4
	3	8	8	3
	4	7	9	2
	5	6	10+	1

Age	Sample Rates
<=30	0.1 %
35	0.2
40	0.3
45	0.4
50+	0.5

Rates for ages 30-50 increase by 0.02 percent per year.

Active members who become disabled are assumed to receive 20% of their salary if they have less than five years of service and 40% of their salary if they have five or more years of service.

# Excise, Gaming and Conservation Officers' Retirement Fund, continued

Spouse / Beneficiary:	90 percent of members are assumed to be married or to have a dependent beneficiary. Males are assumed to be three (3) years older than females and females are assumed to be two (2) years younger than their spouses.
Form of Payment	Members are assumed to elect either a single life annuity or a 50% joint survivor benefit based on the marriage assumption.
Pre-Retirement Death:	Of active member deaths, 20 percent are assumed to be in the line of duty and 80 percent are other than in the line of duty. Additionally, all deaths among retired and disabled members are other than in the line of duty.

### **Actuarial Methods**

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

· · J · · · · · · · · ·	
Actuarial Cost Method:	Entry Age Normal – Level Percent of Payroll
	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.
	This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.
Amortization Method:	For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100 percent funded (based on Actuarial Value of Assets), the past amortized over a 30-year period with level payment each year. Effective June 30, 2018, the bases are calculated without regards to the COLA provisions. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.
	For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.
COLA Surcharge:	The COLA Surcharge is developed by determining the assets needed at the start of the next biennium to fund the post-retirement benefit increases anticipated to be granted in that biennium. This amount is divided by the present value of expected payroll over which the accumulations will occur.
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <u>https://www.in.gov/inprs/</u> actuarialvaluation.htm, or the applicable Indiana Code at <u>http://iga.in.gov/</u>.

## Analysis of Financial Experience

(dollars in thousands)	U	AAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$	10,459
Normal Cost and Interest, less Expected Contributions		315
Expected UAAL: June 30, 2023		10,774
UAAL (Gain) / Loss		
Actuarial Value of Assets Experience		(1,909)
Actuarial Accrued Liabilities Experience <sup>1</sup>		(691)
Actuarial Assumption & Methodology Changes		_
Plan Provision Changes		
Total UAAL (Gain) / Loss		(2,600)
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$	8,174

## **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

(dollars in thousands)		Actuarial Accrue	ed Liabilities			Portio	on of Actuarial Acc Covered by A		
Actuarial Valuation as of June 30	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities
2023	\$ 15,292	\$ 85,870	\$ 93,665	\$ 194,827	\$ 186,653	100.0 %	100.0 %	91.3 %	95.8 %
2022	14,101	79,628	93,776	187,505	177,046	100.0	100.0	88.8	94.4
2021	13,729	74,412	92,707	180,848	165,179	100.0	100.0	83.1	91.3
2020	12,927	70,363	80,688	163,978	149,360	100.0	100.0	81.9	91.1
2019	11,661	68,652	71,894	152,207	140,559	100.0	100.0	83.8	92.3
2018	10,715	68,750	60,591	140,056	132,441	100.0	100.0	87.4	94.6
2017	9,737	69,217	63,649	142,603	124,531	100.0	100.0	71.6	87.3
2016	9,085	67,424	62,456	138,965	118,515	100.0	100.0	67.3	85.3
2015	8,456	61,503	62,837	132,796	112,765	100.0	100.0	68.1	84.9
2014	8,042	54,626	60,933	123,601	107,563	100.0	100.0	73.7	87.0

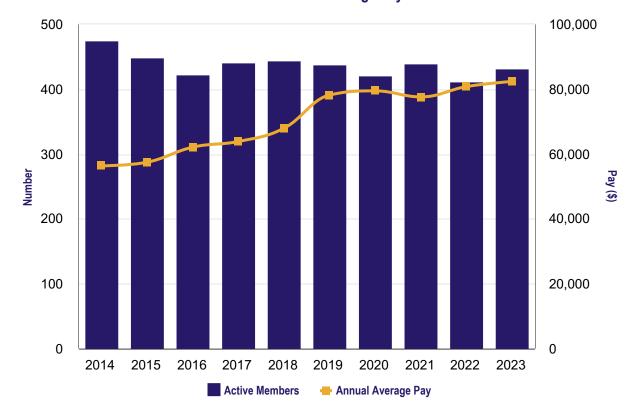
# Schedule of Active Members Valuation Data

# Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands - except annual average pay)

	Active Members	 Annual Payroll	Annual Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2023	431	\$ 35,514	\$ 82,399	2.0 %
2022	411	33,214	80,813	4.1
2021	439	34,073	77,616	(2.4)
2020	420	33,384	79,487	1.6
2019	436	34,103	78,219	15.0
2018	443	30,121	67,994	6.4
2017	440	28,114	63,895	2.8
2016	421	26,164	62,147	8.1
2015	448	25,761	57,502	2.0
2014	473	26,664	56,372	1.8

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



### Total Number of Active Members Per Year and Annual Average Pay

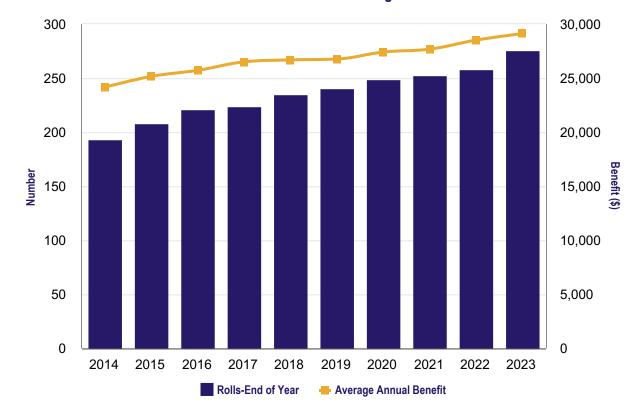
## Schedule of Retirants and Beneficiaries

## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

Addec	to Roll	s	Removed	I from R	olls	Rolls –	End of	Year	Percent Increase /		Percent Increase /
Number			Number			Number			(Decrease) In Total Annual Benefits	Average Annual Benefit	(Decrease) in Average Annual Benefit
22	\$	654	4	\$	38	275	\$	8,010	9.2 %	\$ 29,129	2.1 %
12		491	7		72	257		7,332	5.1	28,530	3.0
7		218	3		23	252		6,979	2.6	27,695	1.0
13		438	5		46	248		6,800	5.8	27,421	2.4
9		216	3		19	240		6,426	2.9	26,776	0.3
13		404	2		23	234		6,246	5.6	26,692	0.7
8		314	5		60	223		5,912	4.4	26,512	3.0
14		506	1		4	220		5,661	8.7	25,733	2.2
15		556	1		5	207		5,210	11.7	25,170	4.1
_		_	_		_	193		4,666	_	24,177	_
	Number 22 12 7 13 9 13 8 14	Number         An           22         \$           12         \$           7         13           9         13           8         14	22       \$       654         12       491         7       218         13       438         9       216         13       404         8       314         14       506	NumberAnnual BenefitsNumber22\$6544124917721831343859216313404283145145061	Number         Annual Benefits         Number         An Ber           22         \$         654         4         \$           12         491         7         7         218         3           13         438         5         9         216         3           13         404         2         8         314         5           14         506         1         1         1	NumberAnnual BenefitsNumberAnnual Benefits22\$6544\$381249177272183231343854692163191340422383145601450614	Annual Benefits         Number         Annual Benefits         Number           22         \$ 654         4         \$ 38         275           12         491         7         72         257           7         218         3         23         252           13         438         5         46         248           9         216         3         19         240           13         404         2         23         234           8         314         5         60         223           14         506         1         4         220           15         556         1         5         207	Annual Benefits         Number         Annual Benefits         Number         Tota Benefits           22         \$         654         4         \$         38         275         \$           12         491         7         72         257         \$           7         218         3         23         252           13         438         5         46         248           9         216         3         19         240           13         404         2         23         234           8         314         5         60         223           14         506         1         4         220           15         556         1         5         207	Number         Annual Benefits         Number         Annual Benefits         Number         Total Annual Benefits           22         \$         654         4         \$         38         275         \$         8,010           12         491         7         72         257         7,332           7         218         3         23         252         6,979           13         438         5         46         248         6,800           9         216         3         19         240         6,426           13         404         2         23         234         6,246           8         314         5         60         223         5,912           14         506         1         4         220         5,661           15         556         1         5         207         5,210	Annual Benefits         Number         Annual Benefits         Number         Total Annual Benefits         Percent Increase / (Decrease) In Total Annual Benefits           22         \$ 654         4         \$ 38         275         \$ 8,010         9.2 %           12         491         7         72         257         7,332         5.1           7         218         3         23         252         6,979         2.6           13         438         5         46         248         6,800         5.8           9         216         3         19         240         6,426         2.9           13         404         2         23         234         6,246         5.6           8         314         5         60         223         5,912         4.4           14         506         1         4         200         5,661         8.7           15         556         1         5         207         5,210         11.7	NumberAnnual BenefitsAnnual NumberAnnual BenefitsTotal Annual BenefitsPercent Increase / (Decrease) In Total Annual BenefitsAverage Annual Benefits22\$ 6544\$ 38275\$ 8,0109.2 %\$ 29,129124917722577,3325.128,53072183232526,9792.627,695134385462486,8005.827,42192163192406,4262.926,776134042232346,2465.626,69283145602235,9124.426,51214506142205,6618.725,73315556152075,21011.725,170

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



### Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

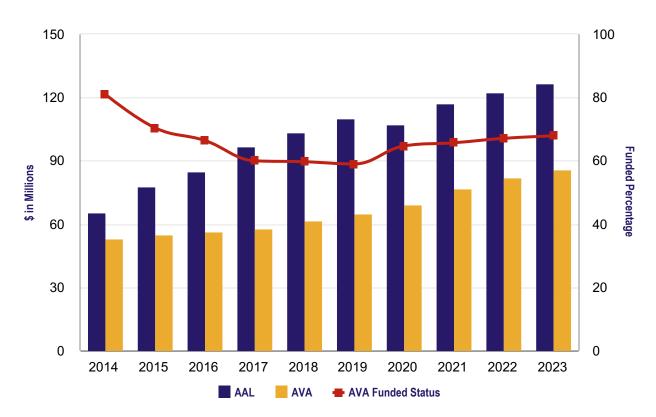
## **Historical Summary of Actuarial Valuation Results**

# Actuarial Valuation as of June 30<sup>1</sup>

The following table shows the history of the Unfunded Liability as a percentage of Covered Employee Payroll for PARF.

#### (dollars in thousands)

	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded Liability (AAL-AVA)	AVA Funded Status (AVA/AAL)	Covered Employee Payroll	Unfunded Liability as a percentage of Covered Employee Payroll
2023	\$ 126,749	\$ 86,066	\$ 40,683	67.9 %	\$ 25,515	159.4 %
2022	122,474	82,211	40,263	67.1	24,577	163.8
2021	117,023	76,897	40,126	65.7	24,323	165.0
2020	107,049	69,288	37,761	64.7	23,989	157.4
2019	110,082	64,909	45,173	59.0	21,791	207.3
2018	103,284	61,665	41,619	59.7	21,578	192.9
2017	96,655	57,967	38,688	60.0	22,635	170.9
2016	85,033	56,472	28,561	66.4	21,372	133.6
2015	77,861	54,848	23,013	70.4	21,145	108.8
2014	65,336	52,936	12,400	81.0	20,608	60.2



### Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the Prosecuting Attorneys' Retirement Fund were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

There were no changes to the plan provisions during the fiscal year.

#### **Actuarial Assumptions**

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding	6.25 percent (net of administrative and investment expenses)
Account & Financial Reporting	6.25 percent (net of investment expenses)
Interest on Member Contributions	3.30 percent per year
Inflation	2.00 percent per year
Cost of Living Increases:	N/A
Future Salary Increases:	2.65 percent per year

#### Demographic Assumptions: Based on 2015-2019 Experience

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	General Employee table with a 1 year setback for males and a 1 year setback for females.
Mortality (Retirees):	General retiree table with a 1 year setback for males and a 1 year setback for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table with a 140% load.

# Prosecuting Attorneys' Retirement Fund, continued

Retirement:	Ages	Eligible for Reduced Benefit	Eligible for Unreduced Benefit
	55-61	N/A	40 %
	62-64	20 %	40
	65-69	N/A	50
	70+	N/A	100

Inactive vested members are assumed to commence their retirement benefit at their earliest unreduced eligible retirement date (age 62, or current age if greater).

10 percent per year for all members prior to retirement eligibility

Sample Rates			
Age	Male	Female	
20	0.004 %	0.003 %	
25	0.008	0.006	
30	0.014	0.010	
35	0.024	0.018	
40	0.042	0.032	
45	0.080	0.061	
50	0.160	0.124	
55+	0.300	0.200	

Form of Payment

Termination:

Disability:

Members are assumed to elect either a single life annuity or a 50% joint survivor benefit base on the marriage assumption.

Spouse / Beneficiary:

90 percent of members are assumed to be married or to have a dependent beneficiary. Males are assumed to be three (3) years older than their spouses and females are assumed to be two (2) years younger than their spouses.

#### **Actuarial Methods**

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

-	
Actuarial Cost Method:	Entry Age Normal – Level Percent of Payroll
	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.
	This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.
Amortization Method:	For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100 percent funded (based on Actuarial Value of Assets), the past amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.
	For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <u>https://www.in.gov/inprs/</u> actuarialvaluation.htm, or the applicable Indiana Code at <u>http://iga.in.gov/</u>.

## Analysis of Financial Experience

(dollars in thousands)	 UAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$ 40,263
Normal Cost and Interest, less Expected Contributions	 (1,377)
Expected UAAL: June 30, 2023	38,886
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	1,181
Actuarial Accrued Liabilities Experience <sup>1</sup>	616
Actuarial Assumption & Methodology Changes	_
Plan Provision Changes	 
Total UAAL (Gain) / Loss	 1,797
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$ 40,683

## **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

(dollars in thousands)		Actuarial Accru	ed Liabilities			Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Active Member Contributions	ber Retirees and Financed		Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2023	\$ 27,409	\$ 54,465	\$ 44,875	\$ 126,749	\$ 86,066	100.0 %	100.0 %	9.3 %	67.9%	
2022	27,948	55,540	38,986	122,474	82,211	100.0	97.7	_	67.1	
2021	27,001	50,839	39,183	117,023	76,897	100.0	98.1	_	65.7	
2020	27,768	44,410	34,871	107,049	69,288	100.0	93.5	_	64.7	
2019	27,471	39,607	43,004	110,082	64,909	100.0	94.5	_	59.0	
2018	27,620	39,034	36,630	103,284	61,664	100.0	87.2	_	59.7	
2017	26,327	38,504	31,824	96,655	57,967	100.0	82.2	_	60.0	
2016	26,206	37,709	21,118	85,033	56,472	100.0	80.3	_	66.4	
2015	25,479	26,636	25,746	77,861	54,848	100.0	100.0	10.6	70.4	
2014	26,654	22,665	16,017	65,336	52,936	100.0	100.0	22.6	81.0	

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

## Schedule of Active Members Valuation Data

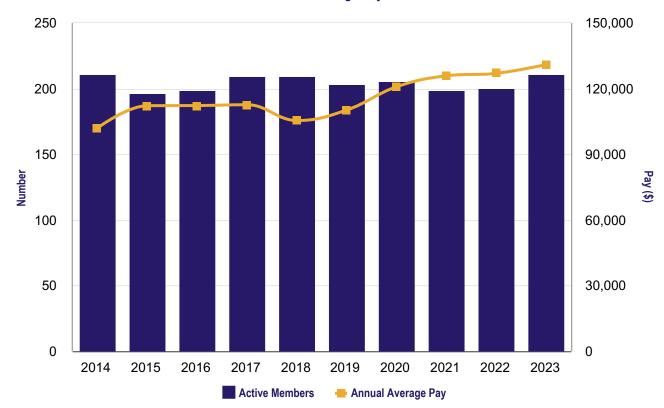
## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands - except annual average pay)

	Active Members	 Annual Payroll <sup>2</sup>	 Annual Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2023	210	\$ 27,506	\$ 130,981	3.2 %
2022	200	25,396	126,980	0.9
2021	198	24,918	125,851	4.1
2020	205	24,781	120,881	9.7
2019	203	22,379	110,242	4.6
2018	209	22,031	105,413	(6.4)
2017	209	23,540	112,632	0.3
2016	198	22,227	112,257	0.1
2015	196	21,991	112,198	9.9
2014	210	21,432	102,057	1.0

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

 $^{\rm 2}$  Excludes payroll from members that are over the 22 year service cap.



#### Total Number of Active Members Per Year and Annual Average Pay

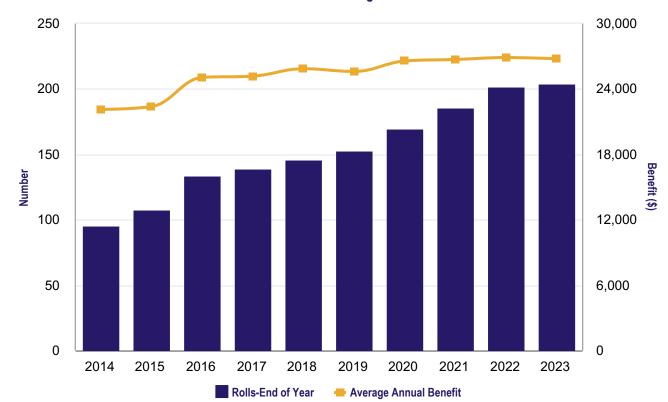
## Schedule of Retirants and Beneficiaries

## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

	Added to Rolls		Removed from Rolls		Rolls – End of Year			Percent Increase /			Percent Increase /		
	Number		nual efits	Number		nual 1efits	Number		II Annual enefits	(Decrease) In Total Annual Benefits	A	verage Annual Benefit	(Decrease) in Average Annual Benefit
2023	6	\$	136	4	\$	33	203	\$	5,434	0.6 %	\$	26,768	(0.4)%
2022	16		514	_		_	201		5,403	9.4		26,880	0.7
2021	19		595	3		63	185		4,940	10.0		26,703	0.5
2020	18		632	1		20	169		4,489	15.3		26,563	3.7
2019	9		168	2		25	152		3,892	3.8		25,605	(1.0)
2018	9		307	2		28	145		3,749	7.9		25,853	2.7
2017	5		140	_		_	138		3,474	4.3		25,176	0.5
2016	26		937	_		_	133		3,332	39.1		25,056	11.9
2015	14		319	2		14	107		2,395	14.0		22,385	1.2
2014	_		_	_		_	95		2,101	_		22,118	-

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



#### Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

## **Historical Summary of Actuarial Valuation Results**

## Actuarial Valuation as of June 30<sup>1</sup>

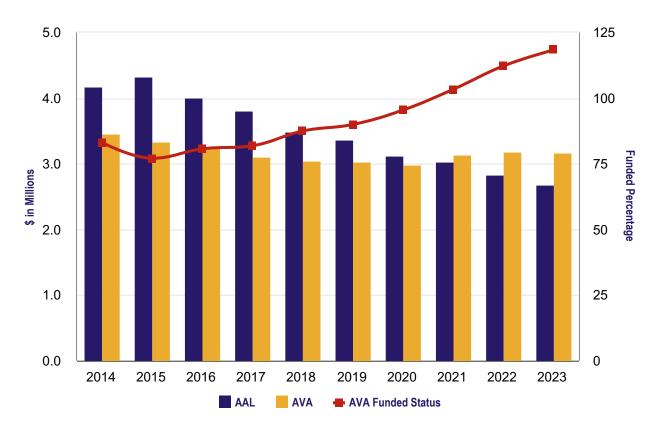
The following table shows the history of the Unfunded Liability for LE DB.

(dollars in thousands)

Actuarial Actuarial Accrued Value of Liability (AAL) Assets (AVA)		Unfunded Liability (AAL-AVA)	AVA Funded Status (AVA/AAL)	Covered Employee Payroll <sup>2</sup>	Unfunded Liability as a percentage of Covered Employee Payroll
\$ 2,676	\$ 3,167	\$ (491)	118.4 %	N/A	N/A
2,835	3,184	(349)	112.3	N/A	N/A
3,034	3,137	(103)	103.4	N/A	N/A
3,127	2,986	141	95.5	N/A	N/A
3,362	3,026	336	90.0	N/A	N/A
3,485	3,050	435	87.5	N/A	N/A
3,804	3,114	690	81.9	N/A	N/A
4,016	3,241	775	80.7	N/A	N/A
4,328	3,336	992	77.1	N/A	N/A
4,173	3,467	706	83.1	N/A	N/A
	Accrued Liability (AAL) \$ 2,676 2,835 3,034 3,127 3,362 3,485 3,804 4,016 4,328	Accrued Liability (AAL)Value of Assets (AVA)\$2,676\$3,1672,8353,1843,0343,1373,1272,9863,3623,0263,4853,0503,8043,1144,0163,2414,3283,336	Accrued Liability (AAL)         Value of Assets (AVA)         Liability (AAL-AVA)           \$         2,676         \$         3,167         \$         (491)           2,835         3,184         (349)         3,034         3,137         (103)           3,127         2,986         141         3,362         3,026         336           3,485         3,050         435         3,694         3,114         690           4,016         3,241         775         4,328         3,336         992	Accrued Liability (AAL)Value of Assets (AVA)Liability (AAL-AVA)Status (AVA/AAL)\$2,676\$3,167\$(491)118.4 %2,8353,184(349)112.33,0343,137(103)103.43,1272,98614195.53,3623,02633690.03,4853,05043587.53,8043,11469081.94,0163,24177580.74,3283,33699277.1	Accrued Liability (AAL)         Value of Assets (AVA)         Liability (AAL-AVA)         Status (AVA/AAL)         Employee Payroll <sup>2</sup> \$         2,676         \$         3,167         \$         (491)         118.4 %         N/A           2,835         3,184         (349)         112.3         N/A           3,034         3,137         (103)         103.4         N/A           3,127         2,986         141         95.5         N/A           3,362         3,026         336         90.0         N/A           3,485         3,050         435         87.5         N/A           3,804         3,114         690         81.9         N/A           4,016         3,241         775         80.7         N/A           4,328         3,336         992         77.1         N/A

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

<sup>2</sup> LE DB is a closed plan with no Covered Employee Payroll.



### Summary of Actuarial Assumptions, Actuarial Methods, and Plan Provisions

The actuarial assumptions and methods used in the June 30, 2023 valuation of the Legislators' Defined Benefit Fund were adopted by the INPRS Board in May 2023. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2014 through June 30, 2019, and were first used in the June 30, 2020 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in June 2022.

The funding policy is available online at: https://www.in.gov/inprs/files/INPRS\_Funding\_Policy.pdf.

#### **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions during the fiscal year.

#### **Changes in Actuarial Methods**

There were no changes to the actuarial methods during the fiscal year.

#### **Changes in Plan Provisions**

There were no changes to the plan provisions during the fiscal year.

#### **Actuarial Assumptions**

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

#### **Economic Assumptions**

Interest Rate / Investment Return:

Funding Accounting & Financial Reporting	<ul><li>6.25 percent (net of administrative and investment expenses)</li><li>6.25 percent (net of investment expenses)</li></ul>
Inflation:	2.00 percent per year
Cost of Living Increases:	0.4 percent beginning on January 1, 2026
	0.5 percent beginning on January 1, 2034
	0.6 percent beginning on January 1, 2039

#### Demographic Assumptions: Based on 2015-2019 Experience

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

Mortality (Healthy):	General Employee table with a 1 year setback for males and a 1 year setback for females.
Mortality (Retirees):	General Retiree table with a 1 year setback for males and a 1 year setback for females.
Mortality (Beneficiaries):	Contingent Survivor table with no set forward for males and a 2 year set forward for females.
Mortality (Disabled):	General Disabled table with a 140% load.

## Legislators' Defined Benefit Fund, continued

Retirement:	Age	Rate	_		
	55	10 %			
	56-57	8			
	58-61	2			
	62-64	5			
	65+	100			
	Inactive vested mem eligible retirement da		commence their retirement benefit at their e		
Termination:	None				
Disability:	None				
Form of Payment		Members are assumed to elect either a single life annuity or a 50% joint survivor benefit base on the marriage assumption.			
Spouse / Beneficiary:	90 percent of members are assumed to be married or to have a dependent beneficiary. Males are assumed to be three (3) years older than their spouses and females are assumed to be two (2) years younger than their spouses.				

#### **Actuarial Methods**

Actuarial Cost & Amortization Methods:

Funding:	Traditional Unit Credit							
	The normal cost is calculated separately for each active member and is equal to actuarial present value of additional benefits expected to be accrued during the year following the valuation date. The actuarial accrued liability on any valuation date is the actuarial present value of the benefits earned for service prior to the valuation date. Since the benefits for all members of the Legislators' Defined Benefit Fund are fixed and no longer increasing with future service credit or future salary increases, applying the Traditional Unit Credit cost method results in the Actuarial Accrued Liability being equal to the Present Value of Future Benefits (i.e. all benefits are treated as though they are attributable to past service) and the Normal Cost being equal to \$0. This is consistent with the actual status of member benefit accruals.							
	Gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a five-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new five-year period. However, when the plan is at or above 100 percent funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.							
Accounting & Financing Reporting:	Entry Age Normal - Level Percent of Payroll							
rteporting.	The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.							
	Gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a five-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.							
Data Measurement Date:	Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.							
COLA Funding Amount:	The COLA may be funded by either direct State appropriations or by allocation of a portion of the lottery proceeds. The COLA Funding Amount is developed by determining the assets needed at the start of the next biennium to fund the post-retirement benefit increases anticipated to be granted in that biennium. This amount is divided by a present value factor over which the accumulations will occur.							
Asset Valuation Method:	Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Fair Value of Assets (FVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the FVA.							
	Accounting and financial reporting uses the FVA in accordance with GASB Statement No. 67.							

#### **Plan Provisions**

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section, the actuarial valuation at <a href="https://www.in.gov/inprs/actuarialvaluation.htm">https://www.in.gov/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation.htm">https://www.ingv/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation">https://www.ingv/inprs/actuarialvaluation.htm</a>, or the applicable Indiana Code at <a href="https://www.ingv/inprs/actuarialvaluation">https://www.ingv/inprs/actuarialvaluation</a>, or the state of the s

## Analysis of Financial Experience

(dollars in thousands)	l	JAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2022	\$	(349)
Normal Cost and Interest, less Expected Contributions		(6)
Expected UAAL: June 30, 2023		(355)
UAAL (Gain) / Loss		
Actuarial Value of Assets Experience		(140)
Actuarial Accrued Liabilities Experience <sup>1</sup>		4
Actuarial Assumption & Methodology Changes		_
Plan Provision Changes		
Total UAAL (Gain) / Loss		(136)
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2023	\$	(491)

## **Solvency Test**

The solvency test compares aggregate actuarial liabilities by various categories with the plan's assets.

(dollars in thousands)	Actuarial Accrued Liabilities								Actuarial Accrued Lia Covered by Assets	bilities
Actuarial Valuation as of June 30		etirees and eneficiaries	Active Member (Employer Financed Portion)		tal Actuarial ued Liabilities		Actuarial Value of Assets	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities
2023	\$	2,361	\$ 315	\$	2,676	\$	3,167	100.0 %	256.0 %	118.4 %
2022		2,475	360		2,835		3,184	100.0	197.3	112.3
2021		2,554	480		3,034		3,137	100.0	121.6	103.4
2020		2,655	472		3,127		2,986	100.0	70.1	95.5
2019		2,747	615		3,362		3,026	100.0	45.3	90.0
2018		2,783	702		3,485		3,050	100.0	38.1	87.5
2017		3,013	791		3,804		3,114	100.0	12.9	81.9
2016		3,207	809		4,016		3,241	100.0	4.2	80.7
2015		3,213	1,115		4,328		3,336	100.0	11.1	77.1
2014		3,076	1,097		4,173		3,467	100.0	35.7	83.1

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.

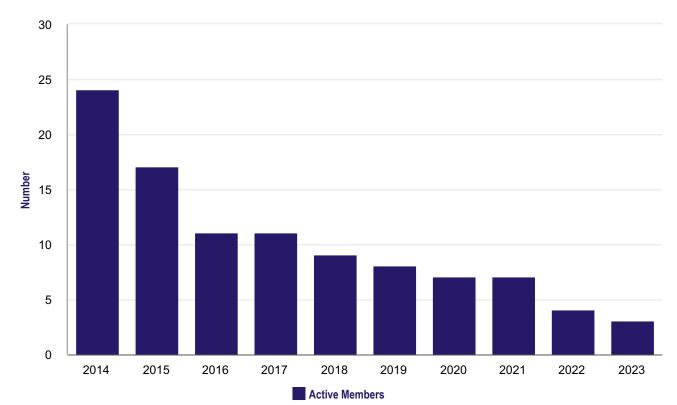
## Schedule of Active Members Valuation Data

## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands - except annual average pay)

	Active Members	Annual Payroll	Annual Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2023	3	N/A	N/A	N/A
2022	4	N/A	N/A	N/A
2021	7	N/A	N/A	N/A
2020	7	N/A	N/A	N/A
2019	8	N/A	N/A	N/A
2018	9	N/A	N/A	N/A
2017	11	N/A	N/A	N/A
2016	11	N/A	N/A	N/A
2015	17	N/A	N/A	N/A
2014	24	N/A	N/A	N/A

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



#### **Total Number of Active Members Per Year**

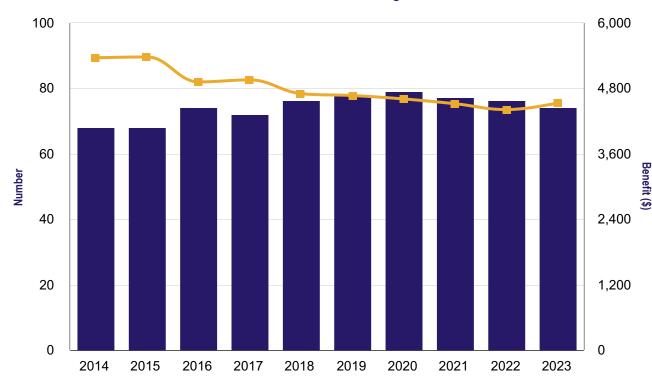
### Schedule of Retirants and Beneficiaries

## Actuarial Valuation as of June 30<sup>1</sup>

(dollars in thousands -- except average annual benefit)

	Added	to Rolls	Removed	d from Ro	lls	Rolls – End of Year		Percent Increase /			Percent Increase /		
	Number	Annual Benefits	Number	Ann Bene		Number		l Annual enefits	(Decrease) In Total Annual Benefits	Average Annual Benefit		(Decrease) in Average Annual Benefit	
2023	1	\$5	3	\$	6	74	\$	336	0.3 %	\$	4,534	2.8 %	
2022	3	11	4		19	76		335	(3.7)		4,411	(2.4)	
2021	_	_	2		11	77		348	(4.4)		4,518	(1.9)	
2020	4	15	3		9	79		364	_		4,606	(1.3)	
2019	2	7	_		_	78		364	2.0		4,669	(0.7)	
2018	4	16	_		_	76		357	_		4,704	(5.1)	
2017	_	_	2		7	72		357	(1.9)		4,956	0.8	
2016	8	23	2		14	74		364	(0.5)		4,919	(8.5)	
2015	1	2	1		1	68		366	0.5		5,377	0.3	
2014	_	_	_		_	68		364	_		5,362	_	

<sup>1</sup> See Accompanying Notes to the Actuarial Schedules, included in the Introduction to Actuarial Information.



#### Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

Rolls-End of Year

🖶 Average Annual Benefit



# **Statistical Section**

- <u>193</u> Introduction to Statistical Information
- 194 Combined Funds
- 204 Defined Benefit Funds
- 260 Defined Contribution Funds
- 272 OPEB and Custodial Funds

## **1.2 Active Defined Benefit Members**

To Annuitants

## 88.6 Percent

Of pension benefits payments remained within Indiana

## 36,857 Total RMBA Members

8,617 Retirees and Beneficiaries



### **Purpose of the Statistical Section**

The objectives of the Statistical Section are to provide additional historical perspective, context, and relevant details to assist readers in using information in the financial statements, notes to the financial statements, and required supplementary information in order to understand and assess INPRS's overall financial condition.

#### Accompanying Notes to the Statistical Schedules

The following notes are intended to clarify certain information presented in various schedules in the Statistical Section.

- For some funds, 10 years of historical information are not presented. INPRS intends to reflect 10 years of historical data as it becomes available.
- Defined benefit membership is calculated using the prior year census data, which is adjusted for certain activity during the year.
- Annuitant data includes retirees, beneficiaries, and disabled members.
- Within the Schedule of Benefit Recipients by Type of Benefit Option, members of PERF DB, TRF Pre-'96 DB, and TRF '96 DB may choose social security integration as a retiree between the ages of 50 and 62. Social security integration can be incorporated with Five-Year Certain & Life, Straight Life, Modified Cash Refund Plus Five-Year Certain & Life, Joint With 100% Survivor Benefits, Joint With Two-Thirds Survivor Benefits, or Joint With One-Half Survivor Benefits. The number of retirees electing social security integration is included in the number of retirees of the selected benefit option. The monthly benefit is reduced or terminated at age 62 depending on the estimated monthly benefit from social security at age 62.
- For those entities that have a January 1 to December 31 fiscal year, the information on historical contribution rates is presented on that basis.

**Financial Schedules** present trend information about the change in INPRS's assets for the past 10 years, including key sources of asset additions and deductions, which assist in providing a context framing how INPRS's financial position has changed over time. Financial trend schedules presented include:

- Schedule of Changes and Growth in Fiduciary Net Position
- Summary of Income and Expense Sources for a 10-Year Period (Combined Funds)
- Schedule of Historical Contribution Rates

**Demographic and Economic Information** is designed to assist in understanding the environment in which INPRS operates. The demographic and economic information presented include:

- Summary of Participating Employers
- Membership Data
- Ratio of Active Members to Annuitants
- Pension Benefits by Indiana County
- Retirees by Geographical Location
- Summary of Defined Benefit Retirement Benefits
- Schedule of Benefit Recipients by Type of Benefit Option
- Schedule of Average Benefit Payments
- Schedule of Participating Employers: Top 10
- Schedule of Average Death Benefit Payments

## **Combined Funds**

## Schedule of Changes and Growth in Fiduciary Net Position

## For the Years Ended June 30

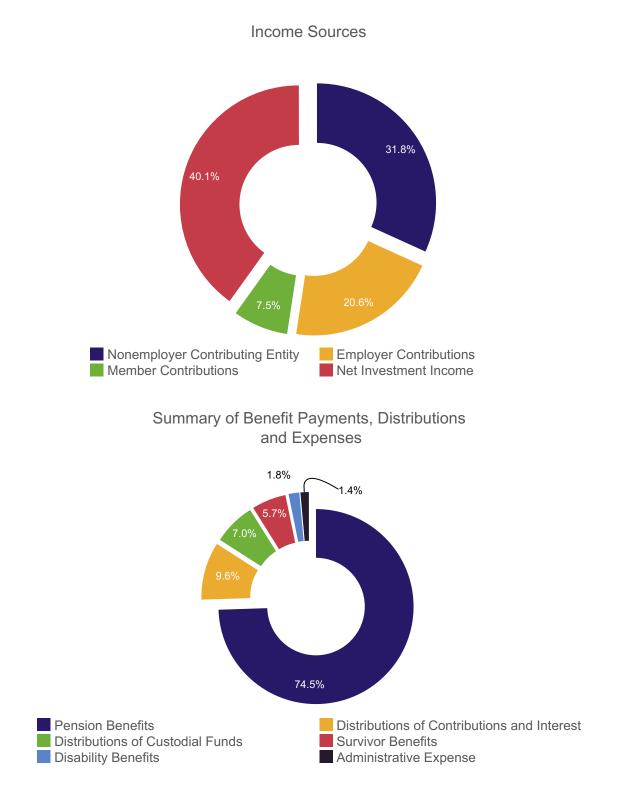
(dollars in thousands)	 2023	 2022	 2021	 2020	 2019
Fiduciary Net Position Restricted - Beginning of Year	\$ 42,411,915	\$ 45,790,292	\$ 36,862,974	\$ 36,068,353	\$ 34,182,563
Contributions / (Benefits and Expenses)					
Employer Contributions	1,182,680	1,076,370	1,058,451	1,010,981	1,161,582
Nonemployer Contributing Entity	4,442,174	1,760,372	1,800,274	1,172,724	1,145,125
Member Contributions	442,696	408,854	387,169	374,075	361,373
Member Reassignment Income	21,551	10,841	13,309	11,651	9,990
Transfer from SOI	_	_	_	435,947	_
Miscellaneous Income	 24	 69	 190	 371	 1,831
Total Contributions and Other	6,089,125	3,256,506	3,259,393	3,005,749	2,679,901
Pension Benefits	(2,432,444)	(2,324,025)	(2,315,815)	(2,261,487)	(2,185,371)
Disability Benefits	(54,637)	(51,351)	(48,423)	(45,831)	(47,576)
Survivor Benefits	(204,127)	(195,396)	(192,370)	(183,494)	(175,883)
Special Death Benefits	(2,787)	(4,542)	(3,030)	(1,919)	(2,001)
Retiree Health Benefits	(15,559)	(17,093)	(16,658)	(17,306)	_
Retiree Health Forfeitures	(12,835)	(17,295)	(10,722)	(18,969)	_
Distributions of Contributions and Interest	(419,224)	(512,706)	(580,409)	(423,885)	(447,103)
Distributions of Custodial Funds	(205,531)	(207,363)	(205,821)	(209,167)	(212,239)
Administrative Expenses	(49,149)	(43,187)	(41,527)	(43,018)	(41,398)
Member Reassignment Expenses	(21,551)	(10,841)	(13,309)	(11,651)	(9,990)
Miscellaneous Expenses	 _	 	 (70)	 (237)	 (284)
Total Benefits and Expenses	 (3,417,844)	 (3,383,799)	 (3,428,154)	 (3,216,964)	 (3,121,845)
Net Contributions / (Benefits and Expenses)	2,671,281	(127,293)	(168,761)	(211,215)	(441,944)
Net Investment Income / (Loss)	 1,652,821	 (3,251,084)	 9,096,079	 1,005,836	 2,327,734
Net Increase / (Decrease)	 4,324,102	 (3,378,377)	 8,927,318	 794,621	 1,885,790
Fiduciary Net Position Restricted - End of Year	\$ 46,736,017	\$ 42,411,915	\$ 45,790,292	\$ 36,862,974	\$ 36,068,353

## Schedule of Changes and Growth in Fiduciary Net Position, continued

## For the Years Ended June 30

(dollars in thousands)	 2018	 2017	 2016	 2015	 2014
Fiduciary Net Position Restricted - Beginning of Year	\$ 31,847,149	\$ 29,900,278	\$ 29,892,379	\$ 30,212,225	\$ 27,080,402
Contributions / (Benefits and Expenses)					
Employer Contributions	984,332	967,011	1,012,012	923,759	894,851
Nonemployer Contributing Entity	1,124,814	1,088,559	1,100,433	1,080,665	1,028,579
Member Contributions	349,246	347,622	334,079	348,789	341,609
Member Reassignment Income	13,446	16,669	16,187	17,591	15,582
Transfer from SOI	_	_	_	_	_
Miscellaneous Income	 695	 185	 1,078	 188	 172
Total Contributions and Other	2,472,533	2,420,046	2,463,789	2,370,992	2,280,793
Pension Benefits	(2,297,332)	(2,275,134)	(2,212,132)	(2,220,957)	(2,006,827)
Disability Benefits	(46,056)	(42,115)	(62,234)	(64,172)	(71,202)
Survivor Benefits	(171,381)	(163,155)	(154,804)	(144,767)	(138,027)
Special Death Benefits	(1,634)	(1,209)	(924)	(1,610)	(1,170)
Retiree Health Benefits	_	_	_	_	_
Retiree Health Forfeitures	_	_	_	_	_
Distributions of Contributions and Interest	(179,575)	(70,332)	(80,385)	(88,659)	(87,375)
Distributions of Custodial Funds	(212,634)	(213,256)	(215,816)	(217,663)	(219,440)
Administrative Expenses	(38,991)	(38,365)	(38,502)	(40,486)	(43,447)
Member Reassignment Expenses	(13,446)	(16,669)	(16,187)	(17,591)	(15,582)
Miscellaneous Expenses	 (437)	 (13)	 	 	 _
Total Benefits and Expenses	(2,961,486)	(2,820,248)	(2,780,984)	(2,795,905)	(2,583,070)
Net Contributions / (Benefits and Expenses)	(488,953)	(400,202)	(317,195)	(424,913)	(302,277)
Net Investment Income / (Loss)	 2,824,367	 2,347,073	 325,094	 105,067	 3,434,100
Net Increase / (Decrease)	 2,335,414	 1,946,871	 7,899	 (319,846)	 3,131,823
Fiduciary Net Position Restricted - End of Year	\$ 34,182,563	\$ 31,847,149	\$ 29,900,278	\$ 29,892,379	\$ 30,212,225

## Summary of Income and Expense Sources for a 10-Year Period Fiscal Years 2014 - 2023

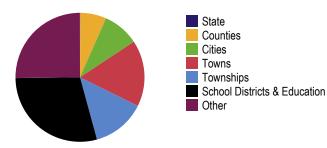


## **Summary of Participating Employers**

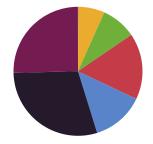
## For the Year Ended June 30, 2023

		Defined Benefit (DB)								
Employers	Total <sup>1</sup>	Total DB	PERF DB	TRF Pre-'96 DB	TRF '96 DB	77 Fund	JRS	EG&C	PARF	LE DB
State	1	1	1	1	1	_	1	1	1	1
Counties	86	86	86	_	_	_	_	_	_	_
Cities	120	120	113	_	_	119	_	_	_	_
Towns	219	216	213	_	_	41	_	_	_	_
Townships	177	177	171	_	_	22	_	_	_	_
School Districts & Education	383	383	337	333	383	_	_	_	_	_
Other	332	325	323			4				
Total	1,318	1,308	1,244	334	384	186	1	1	1	1

**DB Participating Employers** 



#### **DC Participating Employers**



#### **Defined Contribution (DC)**

Employers	Total DC <sup>1</sup>	PERF DC	PERF MC DC	TRF DC	TRF MC DC	LE DC
State	1	1	1	1	1	1
Counties	86	86	3	_	_	_
Cities	114	113	3	_	_	_
Towns	216	213	7	_	_	_
Townships	171	171	5	_	_	_
School Districts & Education	383	337	9	383	316	_
Other	330	323	17			
Total	1,301	1,244	45	384	317	1

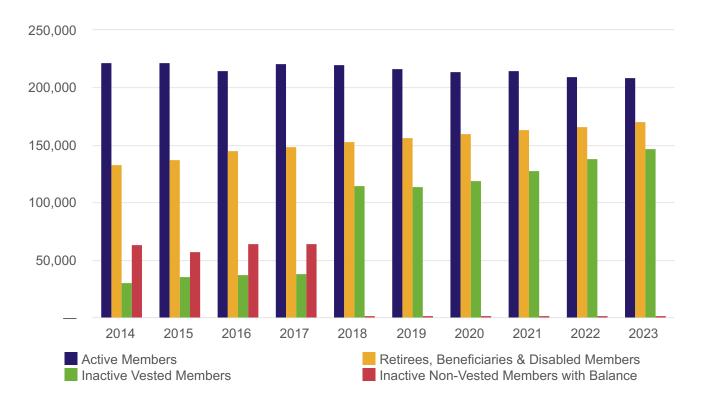
<sup>1</sup> Sum of employers does not equal total, as an employer may participate in multiple retirement funds.

## **Membership Data Summary**

#### For the Years Ended June 30

	Active Members	Retirees, Beneficiaries & Disabled Members	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members
2023	209,343	171,015	146,850	2,036	529,244
2022	210,077	166,785	138,453	1,834	517,149
2021	214,882	163,663	127,722	1,690	507,957
2020	213,919	159,920	119,647	1,615	495,101
2019	216,663	156,503	113,712	1,505	488,383
2018	220,505	153,077	114,612	1,453	489,647
2017	220,933	149,323	38,011	64,508	472,775
2016	215,450	145,522	37,592	64,381	462,945
2015	221,962	137,992	35,778	57,611	453,343
2014	222,497	133,128	30,792	63,767	450,184

<sup>1</sup>Total number of members based on adjusted prior year DB member census data and current year DC member data, excluding duplicates as members may participate in more than one fund.

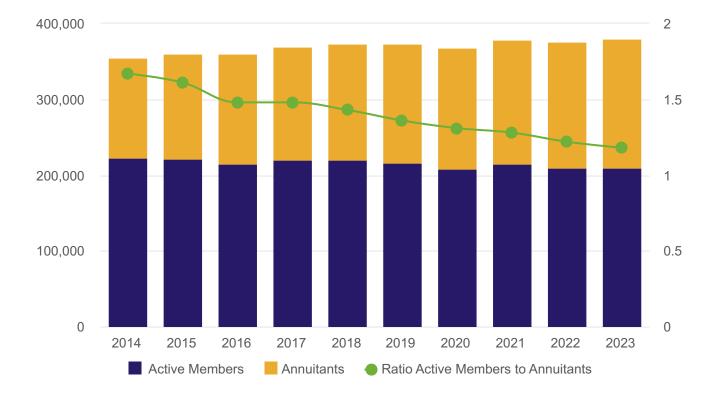


#### **Ratio of Active Members to Annuitants**

### For the Years Ended June 30

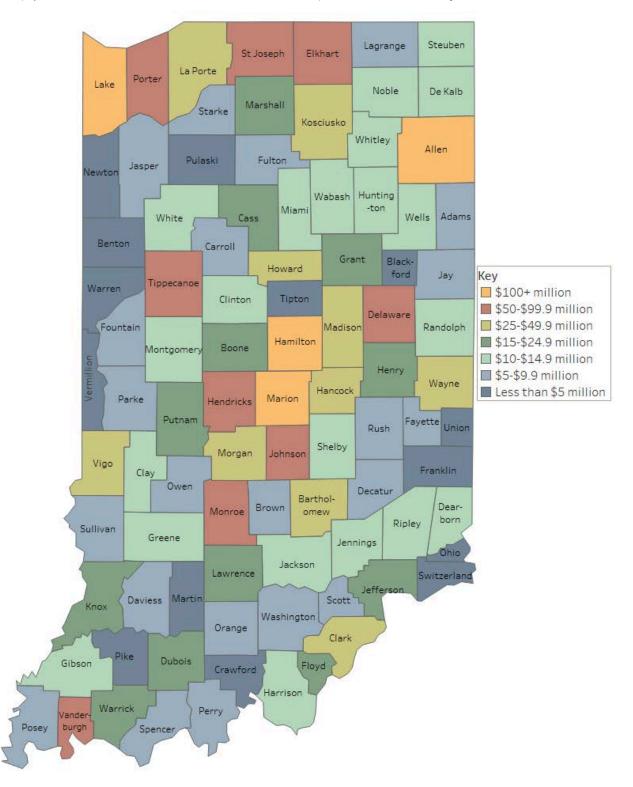
Active members and annuitants for this ratio only include the DB membership.

	Active Members	Annuitants	Ratio Active Members to Annuitants
2023	201,369	171,015	1.18
2022	203,296	166,785	1.22
2021	209,114	163,663	1.28
2020	208,900	159,920	1.31
2019	213,123	156,503	1.36
2018	218,866	153,077	1.43
2017	220,783	149,323	1.48
2016	215,300	145,522	1.48
2015	221,813	137,992	1.61
2014	222,348	133,128	1.67



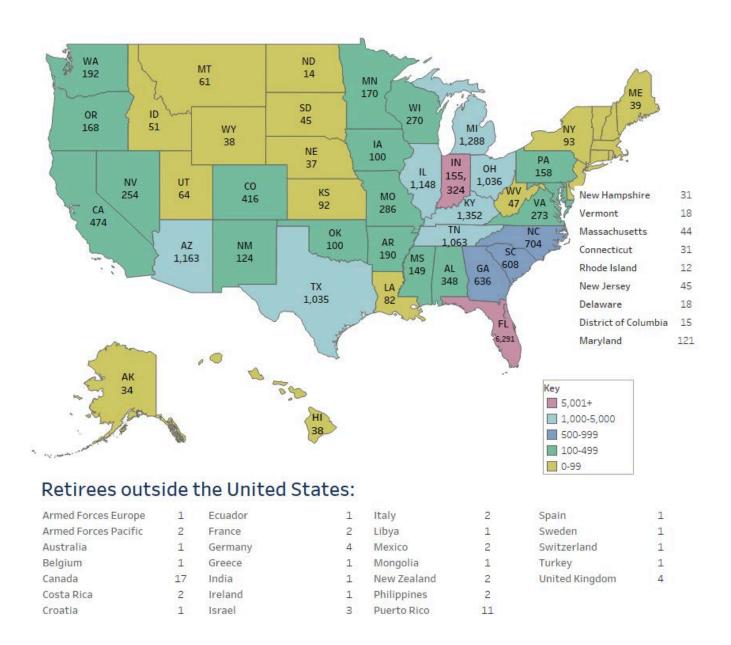
### Pension Benefits by Indiana County

Approximately 155 thousand of the 176 thousand fiscal year 2023 pension benefit recipients reside in Indiana. Of the \$2.5 billion in pension benefit payments, 88.6% remained within Indiana and was able to impact local economies throughout the state.



### **Retirees by Geographical Location**

During fiscal year 2023 more than 176 thousand retirees or their beneficiaries received benefits from INPRS.



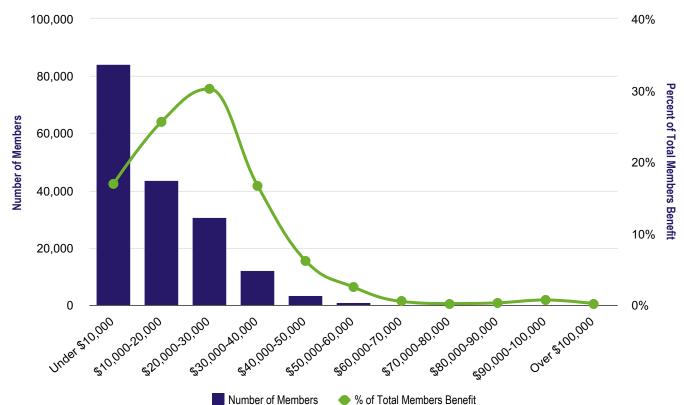
### **Summary of Defined Benefit Retirement Benefits**

#### As of June 30, 2023

For the year ending June 30, 2023, more than 176 thousand beneficiaries received benefits from INPRS administered defined benefit (DB) retirement plans with an average DB benefit of \$14,218 per year. The median DB benefit for all retirees receiving benefits was \$10,745. Retirees may also be eligible for Social Security.

	Members		Amount (in thousands)				
Annualized	#	%	\$	%			
Under \$10,000	84,145	47.6	424,163	16.9			
\$10,001-20,000	43,866	24.9	641,418	25.6			
\$20,001-30,000	30,849	17.5	759,694	30.2			
\$30,001-40,000	12,343	7.0	418,708	16.7			
\$40,001-50,000	3,529	2.0	155,294	6.2			
\$50,001-60,000	1,176	0.7	63,818	2.5			
\$60,001-70,000	177	0.1	11,321	0.5			
\$70,001-80,000	71	_	5,343	0.2			
\$80,001-90,000	95	0.1	8,119	0.3			
\$90,001-99,000	173	0.1	16,835	0.7			
Over \$100,000	35		4,250	0.2			
Grand Total	176,459	100.0	2,508,963	100.0			

**Annual Member Defined Benefits** 



This page is intentionally left blank.

## Schedule of Changes and Growth in Fiduciary Net Position

## For the Years Ended June 30<sup>1</sup>

(dollars in thousands)	2023	2022	2021	2020	2019
Fiduciary Net Position Restricted - Beginning of Year	\$ 14,848,361	\$ 16,247,310	\$ 13,261,360	\$ 13,270,996	\$ 12,694,328
Contributions / (Benefits and Expenses)					
Employer Contributions	682,854	629,001	627,315	599,100	581,873
Member Contributions	208	307	131	127	296
Member Reassignment Income	7,732	2,563	5,126	4,244	2,101
Miscellaneous Income	4	19	122	237	882
Total Contributions and Other	690,798	631,890	632,694	603,708	585,152
Pension Benefits	(885,338)	(854,624)	(850,726)	(830,372)	(796,009)
Disability Benefits	(17,459)	(17,120)	(17,353)	(16,811)	(20,036)
Survivor Benefits <sup>1</sup>	(81,962)	(78,211)	(78,028)	(75,006)	(72,467)
Distributions of Contributions and Interest	_	_	_	_	_
Administrative Expenses	(21,695)	(18,704)	(18,003)	(18,887)	(18,472)
Transfer to Defined Contribution	_	_	_	_	_
Member Reassignment Expenses	(13,609)	(8,277)	(8,183)	(7,407)	(7,888)
Miscellaneous Expenses					
Total Benefits and Expenses	(1,020,063)	(976,936)	(972,293)	(948,483)	(914,872)
Net Contributions / (Benefits and Expenses)	(329,265)	(345,046)	(339,599)	(344,775)	(329,720)
Net Investment Income / (Loss)	366,819	(1,053,903)	3,325,549	335,139	906,388
Net Increase / (Decrease)	37,554	(1,398,949)	2,985,950	(9,636)	576,668
Fiduciary Net Position Restricted - End of Year	\$ 14,885,915	\$ 14,848,361	\$ 16,247,310	\$ 13,261,360	\$ 13,270,996

<sup>1</sup> PERF DB and PERF DC were split effective January 1, 2018. As such, the Distribution of Contributions and Interest contains only six months of activity for fiscal year 2018.

## Schedule of Changes and Growth in Fiduciary Net Position, continued

## For the Years Ended June 30

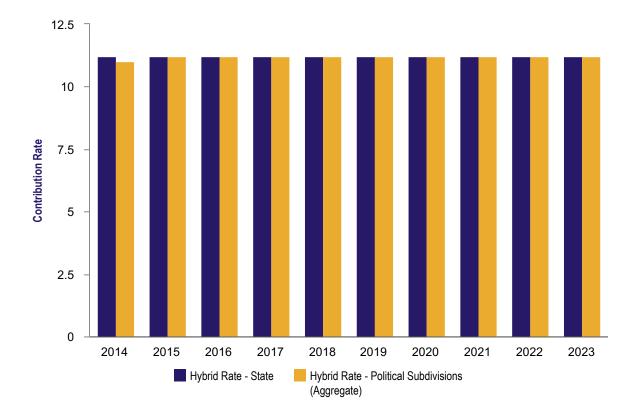
(dollars in thousands)	201	8	 2017	 2016	 2015	 2014
Fiduciary Net Position Restricted - Beginning of Year	\$ 14,6	44,671	\$ 13,870,502	\$ 13,907,666	\$ 14,104,288	\$ 12,720,601
Contributions / (Benefits and Expenses)						
Employer Contributions	5	571,374	558,891	615,773	538,059	526,090
Member Contributions		83,112	168,112	161,905	169,731	164,189
Member Reassignment Income		3,208	6,118	5,543	4,184	3,444
Miscellaneous Income		121	 55	 905	 83	 52
Total Contributions and Other	6	57,815	733,176	784,126	712,057	693,775
Pension Benefits	(8	25,808)	(830,750)	(782,197)	(756,484)	(668,789)
Disability Benefits		(19,816)	(17,754)	(32,855)	(34,984)	(39,837)
Survivor Benefits <sup>1</sup>		(71,095)	(68,530)	(64,036)	(59,208)	(56,701)
Distributions of Contributions and Interest		(21,490)	(47,822)	(57,184)	(62,732)	(63,031)
Administrative Expenses		(20,844)	(24,483)	(24,098)	(25,506)	(27,433)
Transfer to Defined Contribution	(2,8	49,380)	_	_	_	_
Member Reassignment Expenses		(10,238)	(10,555)	(10,814)	(13,403)	(7,690)
Miscellaneous Expenses		(65)	 _	 		 
Total Benefits and Expenses	(3,8	18,736)	 (999,894)	 (971,184)	 (952,317)	 (863,481)
Net Contributions / (Benefits and Expenses)	(3,1	60,921)	(266,718)	(187,058)	(240,260)	(169,706)
Net Investment Income / (Loss)	1,2	10,578	 1,040,887	 149,894	 43,638	 1,553,393
Net Increase / (Decrease)	(1,9	50,343)	 774,169	 (37,164)	 (196,622)	 1,383,687
Fiduciary Net Position Restricted - End of Year	\$ 12,6	94,328	\$ 14,644,671	\$ 13,870,502	\$ 13,907,666	\$ 14,104,288

#### **Schedule of Historical Contribution Rates**

#### For the Years Ended June 30

	PERF Hy	vbrid Rate	PERF MC DC Su	pplemental Rate <sup>1</sup>
	State	Political Subdivisions (Aggregate)	State	Political Subdivisions (Aggregate)
2023	11.2 %	11.2 %	7.5 %	6.8 %
2022	11.2	11.2	8.0	7.3
2021	11.2	11.2	8.0	7.2
2020	11.2	11.2	8.2	7.4
2019	11.2	11.2	7.8	7.0
2018	11.2	11.2	7.8	7.1
2017	11.2	11.2	7.9	7.2
2016	11.2	11.2	6.6	5.4
2015	11.2	11.2	6.6	_
2014	11.2	11.0	6.5	_
Memo:				
Effective Date	July 1	January 1	July 1	January 1

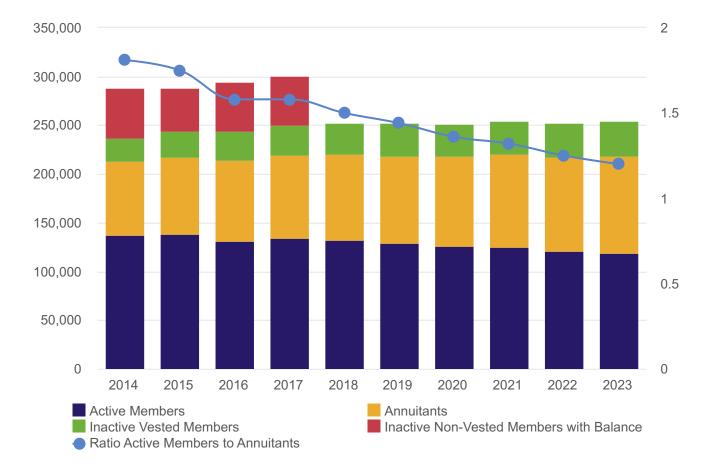
<sup>1</sup> Represents the portion of the Hybrid Rate that remains with PERF DB to cover the unfunded liability, with the difference potentially going to the member in PERF DC. New employers that participate in PERF My Choice are not required to pay the PERF My Choice Supplemental Rate.



## **Ratio of Active Members to Annuitants**

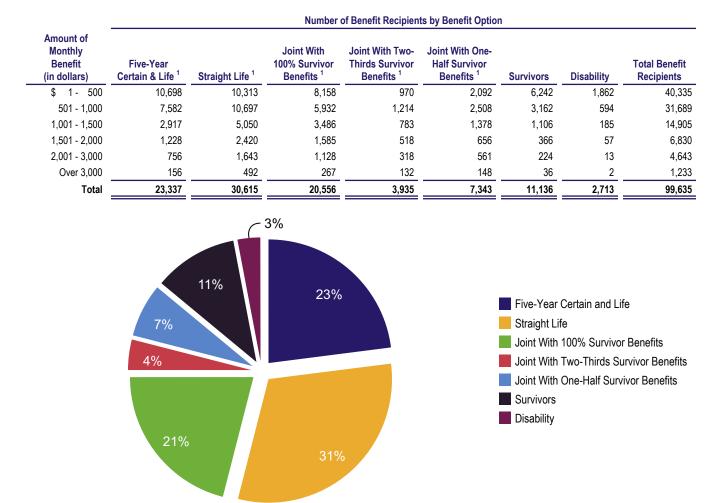
### For the Years Ended June 30

_	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	119,398	99,635	35,174	_	254,207	1.20
2022	120,967	97,083	34,413	_	252,463	1.25
2021	125,386	94,851	33,931	_	254,168	1.32
2020	125,780	92,436	33,575	_	251,791	1.36
2019	129,099	89,932	33,062	_	252,093	1.44
2018	132,181	87,990	31,924	_	252,095	1.50
2017	134,909	85,130	30,816	50,312	301,167	1.58
2016	131,178	83,188	29,702	50,212	294,280	1.58
2015	138,660	79,198	26,681	43,803	288,342	1.75
2014	137,567	75,950	24,013	50,997	288,527	1.81



### Schedule of Benefit Recipients by Type of Benefit Option

#### For the Year Ended June 30, 2023



Members applying for retirement benefits will receive a monthly benefit for the rest of their life. Survivors or qualified designated beneficiaries are subject to the provisions of the benefit option as follows:

**Five-Year Certain & Life** — Benefit ceases upon death of the retiree if the benefit has been received for five years; otherwise, the beneficiary continues to receive the benefit, monthly or lump sum, for the remainder of the five year period.

Straight Life — Benefit ceases upon the death of the retiree.

Joint With 100% Survivor Benefits — Survivor receives 100% of the member's monthly benefit for remainder of the survivor's life.

Joint With Two-Thirds Survivor Benefits — Survivor receives 66 2/3 percent of the member's monthly benefit for the remainder of the survivor's life.

Joint With One-Half Survivor Benefits — Survivor receives 50% of the member's monthly benefit for the remainder of the survivor's life.

Survivors — Members receiving a survivor benefit in accordance with the applicable statute. Benefit ceases upon death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. Member must have five or more years of creditable service to be eligibility.

<sup>1</sup> See Accompanying Notes to the Statistical Schedules for discussion on social security integration options.

### **Schedule of Average Benefit Payments**

## For the Years Ended June 30

	Years of Credited Service													
	 < 10 <sup>1</sup>	10 - 14			15 - 19		20 - 24	25 - 29		30+			Total	
2023														
Average Monthly Defined Benefit	\$ 161	\$	317	\$	445	\$	622	\$	868	\$	1,396	\$	710	
Average Monthly DC Annuity <sup>2</sup>	\$ 49	\$	113	\$	156	\$	213	\$	286	\$	493	\$	249	
Average Final Average Salary	\$ 26,567	\$	28,460	\$	30,457	\$	32,965	\$	36,683	\$	44,720	\$	34,419	
Number of Benefit Recipients	3,158		17,840		23,543		19,277		14,939		20,878		99,635	
2022														
Average Monthly Defined Benefit	\$ 156	\$	308	\$	431	\$	602	\$	843	\$	1,355	\$	686	
Average Monthly DC Annuity <sup>2</sup>	\$ 49	\$	112	\$	154	\$	211	\$	284	\$	490	\$	246	
Average Final Average Salary	\$ 26,331	\$	27,818	\$	29,754	\$	32,198	\$	35,885	\$	43,825	\$	33,639	
Number of Benefit Recipients	3,212		17,173		23,161		18,910		14,555		20,072		97,083	
2021														
Average Monthly Defined Benefit	\$ 155	\$	302	\$	423	\$	591	\$	828	\$	1,330	\$	672	
Average Monthly DC Annuity <sup>2</sup>	\$ 48	\$	111	\$	151	\$	208	\$	281	\$	486	\$	242	
Average Final Average Salary	\$ 26,038	\$	27,156	\$	29,199	\$	31,565	\$	35,182	\$	42,972	\$	32,947	
Number of Benefit Recipients	3,224		16,508		22,856		18,616		14,252		19,395		94,851	
2020														
Average Monthly Defined Benefit	\$ 152	\$	299	\$	415	\$	580	\$	813	\$	1,308	\$	658	
Average Monthly DC Annuity <sup>2</sup>	\$ 48	\$	109	\$	149	\$	206	\$	279	\$	483	\$	239	
Average Final Average Salary	\$ 25,808	\$	26,557	\$	28,596	\$	30,912	\$	34,538	\$	42,235	\$	32,285	
Number of Benefit Recipients	3,207		15,984		22,572		18,140		13,905		18,628		92,436	
2019														
Average Monthly Defined Benefit	\$ 151	\$	293	\$	407	\$	570	\$	799	\$	1,287	\$	646	
Average Monthly DC Annuity <sup>2</sup>	\$ 47	\$	107	\$	147	\$	204	\$	276	\$	480	\$	235	
Average Final Average Salary	\$ 25,474	\$	25,891	\$	28,012	\$	30,306	\$	33,884	\$	41,510	\$	31,643	
Number of Benefit Recipients	3,144		15,439		22,063		17,764		13,538		17,984		89,932	

<sup>1</sup> Members with less than 10 years of service are: (1) a member receiving a disability benefit from INPRS; (2) a member who has at least eight years of creditable service as a county clerk, county auditor, county recorder, county treasurer, county sheriff or county coroner eligible for a normal retirement after reaching age 65 (applies to only members retiring after June 30, 2002); (3) a member who has at least eight years of creditable service as a state auditor, state treasurer, or secretary of state (whose term commences after the November 5, 2002 election).

<sup>2</sup> Represents those retirees who elected to receive their defined contribution account as a supplemental monthly payment in addition to the monthly defined benefit payment. The option to annuitize the DC payment with the monthly defined benefit payment is no longer available as of January 1, 2018.

#### Schedule of Average Benefit Payments, continued

### For the Years Ended June 30

	Years of Credited Service													
		< 10 <sup>1</sup>		10 - 14		15 - 19		20 - 24		25 - 29		30+		Total
2018	_													
Average Monthly Defined Benefit	\$	150	\$	288	\$	400	\$	558	\$	784	\$	1,265	\$	633
Average Monthly DC Annuity <sup>2</sup>	\$	46	\$	106	\$	144	\$	201	\$	273	\$	477	\$	232
Average Final Average Salary	\$	25,035	\$	25,253	\$	27,427	\$	29,637	\$	33,189	\$	40,726	\$	30,974
Number of Benefit Recipients		3,113		14,854		21,774		17,528		13,272		17,449		87,990
2017	_													
Average Monthly Defined Benefit	\$	155	\$	282	\$	392	\$	548	\$	765	\$	1,241	\$	618
Average Monthly DC Annuity <sup>2</sup>	\$	45	\$	104	\$	142	\$	199	\$	273	\$	478	\$	230
Average Final Average Salary	\$	24,719	\$	24,631	\$	26,902	\$	29,142	\$	32,445	\$	39,990	\$	30,347
Number of Benefit Recipients		3,077		14,268		21,252		17,139		12,718		16,676		85,130
2016	_													
Average Monthly Defined Benefit	\$	153	\$	278	\$	385	\$	537	\$	751	\$	1,218	\$	604
Average Monthly DC Annuity <sup>2</sup>	\$	46	\$	103	\$	140	\$	197	\$	274	\$	479	\$	229
Average Final Average Salary	\$	24,269	\$	24,024	\$	26,337	\$	28,523	\$	31,831	\$	39,261	\$	29,693
Number of Benefit Recipients		2,951		13,952		20,992		16,918		12,346		16,029		83,188
2015	_													
Average Monthly Defined Benefit	\$	149	\$	293	\$	378	\$	525	\$	732	\$	1,182	\$	583
Average Monthly DC Annuity <sup>2</sup>	\$	43	\$	116	\$	129	\$	187	\$	255	\$	443	\$	211
Average Final Average Salary	\$	23,480	\$	23,252	\$	25,678	\$	27,754	\$	30,842	\$	37,941	\$	28,714
Number of Benefit Recipients		2,775		14,087		20,210		16,141		11,503		14,482		79,198
2014	_													
Average Monthly Defined Benefit	\$	154	\$	269	\$	370	\$	515	\$	715	\$	1,160	\$	569
Average Monthly DC Annuity <sup>2</sup>	\$	42	\$	94	\$	124	\$	180	\$	244	\$	425	\$	199
Average Final Average Salary	\$	22,762	\$	22,669	\$	25,080	\$	27,190	\$	30,044	\$	37,145	\$	28,019
Number of Benefit Recipients		2,670		12,866		19,825		15,757		11,079		13,753		75,950

<sup>1</sup> Members with less than 10 years of service are: (1) a member receiving a disability benefit from INPRS; (2) a member who has at least eight years of creditable service as a county clerk, county auditor, county recorder, county treasurer, county sheriff or county coroner eligible for a normal retirement after reaching age 65 (applies to only members retiring after June 30, 2002); (3) a member who has at least eight years of creditable service as a state auditor, state treasurer, or secretary of state (whose term commences after the November 5, 2002 election).

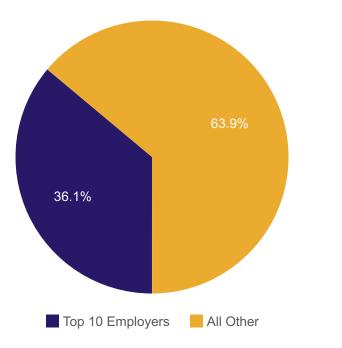
<sup>2</sup> Represents those retirees who elected to receive their defined contribution account as a supplemental monthly payment in addition to the monthly defined benefit payment. The option to annuitize the DC payment with the monthly defined benefit payment is no longer available as of January 1, 2018.

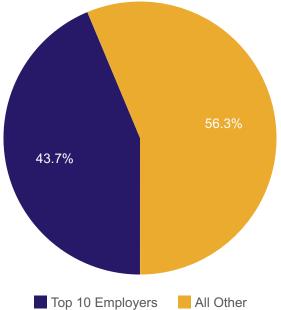
## Schedule of Participating Employers: Top 10

	J	lune 30, 202	3	June 30, 2014						
Top 10 Employers	Active Members	Rank	Percentage of Total	Active Members	Rank	Percentage of Total				
State of Indiana	39,212	1	26.8 %	42,755	1	31.1 %				
Health & Hospital Corporation Of Marion County	2,326	2	1.6	4,575	2	3.3				
Marion County	1,814	3	1.2	2,643	3	1.9				
Lake County	1,742	4	1.2	1,441	7	1.0				
Evansville-Vanderburgh School Corporation	1,493	5	1.0	1,183	9	0.9				
Fort Wayne Community Schools	1,268	6	0.9	1,497	6	1.1				
City Of Indianapolis	1,258	7	0.9	1,633	5	1.2				
Metropolitan School District Of Perry Township	1,248	8	0.9	_	_	_				
St Joseph County	1,237	9	0.8	_	_	_				
South Bend Community School Corp.	1,169	10	0.8	1,283	8	0.9				
Indianapolis Public Schools	_		_	1,946	4	1.4				
Allen County		_		1,182	10	0.9				
Total Top 10 Employers	52,767		36.1	60,138		43.7				
All Other	93,767	_	63.9	77,429	_	56.3				
Grand Total	146,534	_	100.0 %	137,567	_	100.0 %				

Active Members Breakout - 2023

Active Members Breakout - 2014





## Schedule of Changes and Growth in Fiduciary Net Position

## For the Years Ended June 30

(dollars in thousands)	2023	2022	2021	2020	2019
Fiduciary Net Position Restricted - Beginning of Year	\$ 5,113,121	\$ 5,074,751	\$ 3,661,151	\$ 3,759,145	\$ 3,711,347
Contributions / (Benefits and Expenses)					
Employer Contributions	2,467	2,205	2,254	2,356	3,505
Nonemployer Contributing Entity	4,235,000	1,550,410	1,598,375	971,132	943,900
Member Contributions	4	64	23	21	36
Member Reassignment Income	2,784	2,504	2,617	2,430	2,931
Miscellaneous Income		1		25	317
Total Contributions and Other	4,240,255	1,555,184	1,603,269	975,964	950,689
Pension Benefits	(1,078,763)	(1,074,507)	(1,089,080)	(1,087,928)	(1,081,875)
Disability Benefits	(1,510)	(1,363)	(1,494)	(1,862)	(2,143)
Survivor Benefits	(90,245)	(88,437)	(88,166)	(84,629)	(81,116)
Distributions of Contributions and Interest	_	_	_	_	_
Administrative Expenses	(5,761)	(5,067)	(5,039)	(5,341)	(5,329)
Transfer to Defined Contribution	_	_	_	_	_
Member Reassignment Expenses	(2,085)	(961)	(2,651)	(1,946)	(1,437)
Miscellaneous Expenses					
Total Benefits and Expenses	(1,178,364)	(1,170,335)	(1,186,430)	(1,181,706)	(1,171,900)
Net Contributions / (Benefits and Expenses)	3,061,891	384,849	416,839	(205,742)	(221,211)
Net Investment Income / (Loss)	297,891	(346,479)	996,761	107,748	269,009
Net Increase / (Decrease)	3,359,782	38,370	1,413,600	(97,994)	47,798
Fiduciary Net Position Restricted - End of Year	\$ 8,472,903	\$ 5,113,121	\$ 5,074,751	\$ 3,661,151	\$ 3,759,145

## Schedule of Changes and Growth in Fiduciary Net Position, continued

## For the Years Ended June 30<sup>1</sup>

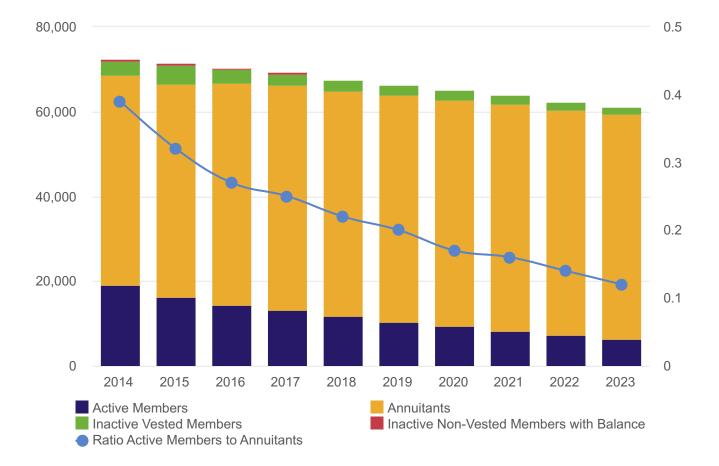
(dollars in thousands)	2018	2017	2016	2015	2014
Fiduciary Net Position Restricted - Beginning of Year	\$ 4,817,630	\$ 4,787,529	\$ 5,099,910	\$ 5,501,867	\$ 5,215,202
Contributions / (Benefits and Expenses)					
Employer Contributions	4,168	4,525	5,048	5,811	6,325
Nonemployer Contributing Entity	917,900	871,000	887,500	845,616	825,617
Member Contributions	12,765	28,836	31,529	41,740	47,028
Member Reassignment Income	3,107	4,206	4,057	6,273	3,250
Miscellaneous Income	229			21	19
Total Contributions and Other	938,169	908,567	928,134	899,461	882,239
Pension Benefits	(1,167,057)	(1,175,344)	(1,185,321)	(1,242,792)	(1,143,154)
Disability Benefits	(2,463)	(2,412)	(8,505)	(9,567)	(11,562)
Survivor Benefits	(79,600)	(75,495)	(73,124)	(69,350)	(66,150)
Distributions of Contributions and Interest	(3,404)	(4,993)	(6,004)	(7,145)	(8,435)
Administrative Expenses	(5,385)	(6,226)	(6,564)	(6,530)	(7,010)
Transfer to Defined Contribution	(1,205,277)	_	_	_	_
Member Reassignment Expenses	(1,678)	(4,859)	(3,426)	(2,919)	(6,844)
Miscellaneous Expenses	(116)				
Total Benefits and Expenses	(2,464,980)	(1,269,329)	(1,282,944)	(1,338,303)	(1,243,155)
Net Contributions / (Benefits and Expenses)	(1,526,811)	(360,762)	(354,810)	(438,842)	(360,916)
Net Investment Income / (Loss)	420,528	390,863	42,429	36,885	647,581
Net Increase / (Decrease)	(1,106,283)	30,101	(312,381)	(401,957)	286,665
Fiduciary Net Position Restricted - End of Year	\$ 3,711,347	\$ 4,817,630	\$ 4,787,529	\$ 5,099,910	\$ 5,501,867

<sup>1</sup> TRF DB and TRF DC were split effective January 1, 2018. As such the Distribution of Contributions and Interest contains only six months of activity for fiscal year 2018.

#### **Ratio of Active Members to Annuitants**

### For the Years Ended June 30

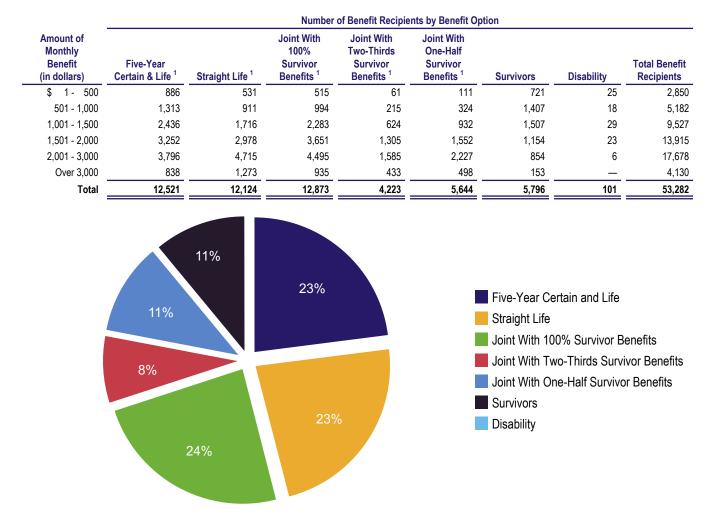
-	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	6,287	53,282	1,502	_	61,071	0.12
2022	7,291	53,157	1,875	_	62,323	0.14
2021	8,375	53,537	1,964	_	63,876	0.16
2020	9,338	53,415	2,272	_	65,025	0.17
2019	10,497	53,498	2,382	_	66,377	0.20
2018	11,710	53,227	2,635	_	67,572	0.22
2017	13,128	53,240	2,504	400	69,272	0.25
2016	14,327	52,575	3,119	394	70,415	0.27
2015	16,310	50,214	4,545	408	71,477	0.32
2014	19,210	49,345	3,314	546	72,415	0.39



214 | Statistical Section | INPRS Annual Comprehensive Financial Report, Fiscal Year June 30, 2023

### Schedule of Benefit Recipients by Type of Benefit Option

#### For the Year Ended June 30, 2023



Members applying for retirement benefits will receive a monthly benefit for the rest of their life. Survivors or qualified designated beneficiaries are subject to the provisions of the benefit option as follows:

**Five-Year Certain & Life** — Benefit ceases upon death of the retiree if the benefit has been received for five years; otherwise, the beneficiary continues to receive the benefit, monthly or lump sum, for the remainder of the five year period.

Straight Life — Benefit ceases upon the death of the retiree.

Joint With 100% Survivor Benefits — Survivor receives 100% of the member's monthly benefit for remainder of the survivor's life.

Joint With Two-Thirds Survivor Benefits — Survivor receives 66 2/3 percent of the member's monthly benefit for the remainder of the survivor's life.

Joint With One-Half Survivor Benefits — Survivor receives 50% of the member's monthly benefit for the remainder of the survivor's life.

**Survivors** — Members receiving a survivor benefit in accordance with the applicable statute. The benefit ceases upon the death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. For TRF Pre-'96 DB, five or more years of creditable service is required to be eligible for a disability benefit. This includes the Classroom Disability which provides a benefit of \$125 per month plus \$5 for each additional year of TRF-covered service over five years.

<sup>1</sup> See Accompanying Notes to the Statistical Schedules for discussion on social security integration options.

## Schedule of Average Benefit Payments

## For the Years Ended June 30

	Years of Credited Service												
	< 10 <sup>1</sup>		10 - 14		15 - 19		20 - 24		25 - 29		30+		Total
2023													
Average Monthly Defined Benefit	\$ 93	\$	333	\$	586	\$	968	\$	1,384	\$	1,998	\$	1,669
Average Monthly DC Annuity <sup>2</sup>	\$ 21	\$	228	\$	227	\$	309	\$	411	\$	662	\$	524
Average Final Average Salary	\$ 31,318	\$	27,402	\$	41,973	\$	52,194	\$	58,490	\$	63,646	\$	59,408
Number of Benefit Recipients	141		1,394		3,168		5,157		8,436		34,986		53,282
2022													
Average Monthly Defined Benefit	\$ 88	\$	320	\$	572	\$	952	\$	1,353	\$	1,955	\$	1,628
Average Monthly DC Annuity <sup>2</sup>	\$ 23	\$	219	\$	223	\$	305	\$	403	\$	653	\$	515
Average Final Average Salary	\$ 31,185	\$	26,950	\$	41,455	\$	51,739	\$	57,707	\$	62,880	\$	58,642
Number of Benefit Recipients	142		1,373		3,222		5,274		8,508		34,638		53,157
2021													
Average Monthly Defined Benefit	\$ 87	\$	316	\$	567	\$	942	\$	1,339	\$	1,937	\$	1,608
Average Monthly DC Annuity <sup>2</sup>	\$ 23	\$	215	\$	217	\$	297	\$	396	\$	642	\$	505
Average Final Average Salary	\$ 30,995	\$	26,238	\$	40,903	\$	50,994	\$	56,884	\$	62,098	\$	57,815
Number of Benefit Recipients	147		1,383		3,314		5,434		8,608		34,651		53,537
2020													
Average Monthly Defined Benefit	\$ 89	\$	406	\$	561	\$	932	\$	1,324	\$	1,918	\$	1,589
Average Monthly DC Annuity <sup>2</sup>	\$ 23	\$	212	\$	212	\$	289	\$	390	\$	634	\$	496
Average Final Average Salary	\$ 30,831	\$	25,809	\$	40,335	\$	50,316	\$	56,106	\$	61,436	\$	57,105
Number of Benefit Recipients	149		1,425		3,388		5,539		8,599		34,315		53,415
2019													
Average Monthly Defined Benefit	\$ 136	\$	388	\$	556	\$	922	\$	1,306	\$	1,901	\$	1,571
Average Monthly DC Annuity <sup>2</sup>	\$ 23	\$	210	\$	208	\$	284	\$	382	\$	624	\$	488
Average Final Average Salary	\$ 31,009	\$	25,539	\$	39,796	\$	49,609	\$	55,172	\$	60,697	\$	56,339
Number of Benefit Recipients	154		1,379		3,474		5,621		8,636		34,234		53,498

<sup>1</sup> Members with less than 10 years of service are primarily members receiving a disability benefit.

<sup>2</sup> Represents the average of only the retirees who elected to receive their Defined Contribution Account as a supplemental monthly payment in addition to the monthly Defined Benefit payment.

# Schedule of Average Benefit Payments, continued

### For the Years Ended June 30

			Year	's of	Credited Se	ervic	e		
	< 10 <sup>1</sup>	 10 - 14	 15 - 19		20 - 24		25 - 29	 30+	 Total
2018									
Average Monthly Defined Benefit	\$ 169	\$ 309	\$ 550	\$	910	\$	1,286	\$ 1,884	\$ 1,550
Average Monthly DC Annuity <sup>2</sup>	\$ 47	\$ 205	\$ 202	\$	278	\$	374	\$ 615	\$ 478
Average Final Average Salary	\$ 31,463	\$ 25,025	\$ 39,194	\$	48,790	\$	54,160	\$ 59,913	\$ 55,486
Number of Benefit Recipients	167	1,294	3,551		5,675		8,638	33,902	53,227
2017									
Average Monthly Defined Benefit	\$ 122	\$ 270	\$ 542	\$	897	\$	1,270	\$ 1,869	\$ 1,532
Average Monthly DC Annuity <sup>2</sup>	\$ 31	\$ 198	\$ 196	\$	270	\$	366	\$ 604	\$ 468
Average Final Average Salary	\$ 28,702	\$ 23,692	\$ 38,245	\$	47,641	\$	53,051	\$ 59,073	\$ 54,482
Number of Benefit Recipients	160	1,291	3,648		5,769		8,630	33,742	53,240
2016									
Average Monthly Defined Benefit	\$ 577	\$ 268	\$ 539	\$	884	\$	1,247	\$ 1,849	\$ 1,512
Average Monthly DC Annuity <sup>2</sup>	\$ 249	\$ 190	\$ 191	\$	263	\$	357	\$ 592	\$ 458
Average Final Average Salary	\$ 23,593	\$ 23,432	\$ 37,605	\$	46,482	\$	51,701	\$ 58,014	\$ 53,393
Number of Benefit Recipients	49	1,279	3,755		5,766		8,540	33,186	52,575
2015									
Average Monthly Defined Benefit	\$ 449	\$ 263	\$ 530	\$	854	\$	1,214	\$ 1,811	\$ 1,471
Average Monthly DC Annuity <sup>2</sup>	\$ 73	\$ 113	\$ 106	\$	133	\$	163	\$ 228	\$ 195
Average Final Average Salary	\$ 37,993	\$ 23,424	\$ 37,281	\$	45,256	\$	50,441	\$ 56,938	\$ 52,253
Number of Benefit Recipients	42	1,238	3,779		5,610		8,175	31,370	50,214
2014									
Average Monthly Defined Benefit	\$ 405	\$ 258	\$ 517	\$	834	\$	1,187	\$ 1,793	\$ 1,453
Average Monthly DC Annuity <sup>2</sup>	\$ 57	\$ 108	\$ 104	\$	128	\$	159	\$ 225	\$ 191
Average Final Average Salary	\$ 24,193	\$ 22,426	\$ 35,702	\$	43,604	\$	48,801	\$ 55,636	\$ 50,855
Number of Benefit Recipients	36	1,185	3,720		5,541		7,987	30,876	49,345

<sup>1</sup> Members with less than 10 years of service are primarily members receiving a disability benefit.

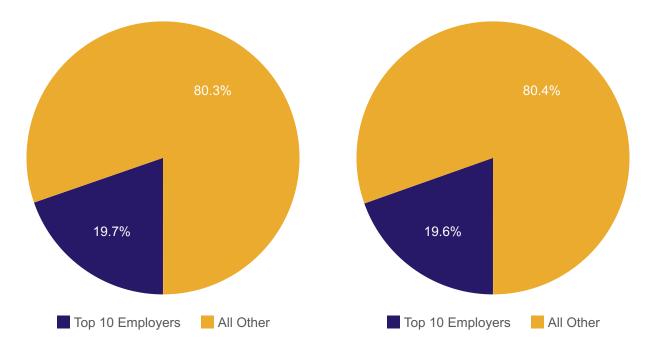
<sup>2</sup> Represents the average of all retirees, regardless if they elected to receive their Defined Contribution Account as a supplemental monthly payment in addition to the monthly Defined Benefit payment.

#### Schedule of Participating Employers: Top 10

		June 30, 20	23		14	
Top 10 Employers	Active Members	Rank	Percentage of Total	Active Members	Rank	Percentage of Total
Fort Wayne Community Schools	238	1	3.4 %	598	3	3.1 %
Evansville-Vanderburgh School Cop	202	2	2.9	604	2	3.1
Indianapolis Public Schools	167	3	2.4	730	1	3.8
South Bend Community School Corp.	138	4	2.0	423	4	2.2
Vigo County School Corp	120	5	1.7	352	5	1.8
Hamilton Southeastern Schools	111	6	1.6	185	9	1.0
Penn Harris Madison School	102	7	1.5	_	_	_
School City Of Hammond	102	7	1.5	260	6	1.4
Elkhart Community Schools	96	9	1.4	225	7	1.2
New Albany-Floyd County Consolidated School Corporation	88	10	1.3	_	_	_
Carmel Clay Schools				187	8	1.0
Msd Of Wayne Township		_		185	9	1.0
Total Top 10 Employers	1,364	-	19.7	3,749	-	19.6
All Other	5,559	_	80.3	15,461	_	80.4
Grand Total	6,923	-	100.0 %	19,210	-	100.0 %

### Active Membership Breakout - 2023

Active Membership Breakout - 2014



This page is intentionally left blank.

### Schedule of Changes and Growth in Fiduciary Net Position

(dollars in thousands)	 2023		2022	 2021	2020	2019		
Fiduciary Net Position Restricted - Beginning of Year	\$ 7,496,540	\$	7,987,495	\$ 6,325,311	\$ 6,124,086	\$	5,452,352	
Contributions / (Benefits and Expenses)								
Employer Contributions	244,600		210,665	202,489	188,789		393,172	
Member Contributions	379		433	464	104		127	
Member Reassignment Income	10,803		5,474	5,566	4,977		4,958	
Miscellaneous Income		3		 	 43		605	
Total Contributions and Other	255,782		216,575	208,519	193,913		398,862	
Pension Benefits	(176,125)		(160,214)	(148,629)	(137,082)		(126,636)	
Disability Benefits	(2,213)		(2,406)	(1,682)	(1,887)		(1,805)	
Survivor Benefits	(6,829)		(6,001)	(5,037)	(4,403)		(4,131)	
Distributions of Contributions and Interest	_		_	_	_		_	
Administrative Expenses	(6,319)		(5,292)	(4,966)	(5,090)		(5,038)	
Transfer to Defined Contribution	_		_	_	_		_	
Member Reassignment Expenses	(5,645)		(1,436)	(2,475)	(2,298)		(665)	
Miscellaneous Expenses	 		_	 _	 _		_	
Total Benefits and Expenses	 (197,131)		(175,349)	 (162,789)	 (150,760)		(138,275)	
Net Contributions / (Benefits and Expenses)	58,651		41,226	45,730	43,153		260,587	
Net Investment Income / (Loss)	 191,285		(532,181)	 1,616,454	 158,072		411,147	
Net Increase / (Decrease)	 249,936		(490,955)	 1,662,184	 201,225		671,734	
Fiduciary Net Position Restricted - End of Year	\$ 7,746,476	\$	7,496,540	\$ 7,987,495	\$ 6,325,311	\$	6,124,086	

#### Schedule of Changes and Growth in Fiduciary Net Position, continued

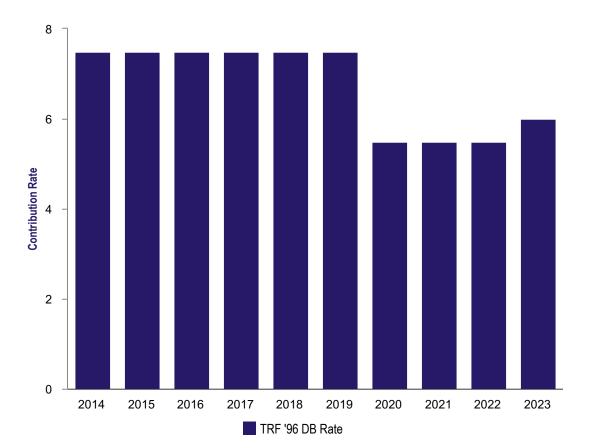
# For the Years Ended June 30<sup>1</sup>

(dollars in thousands)	2018	2017	2016	2015	2014
Fiduciary Net Position Restricted - Beginning of Year	\$ 6,252,040	\$ 5,611,230	\$ 5,379,113	\$ 5,189,442	\$ 4,433,677
Contributions / (Benefits and Expenses)					
Employer Contributions	235,819	227,207	215,626	205,763	194,751
Member Contributions	47,176	92,838	88,430	86,515	81,802
Member Reassignment Income	7,131	6,345	6,587	7,134	8,884
Miscellaneous Income	299	34	16	24	21
Total Contributions and Other	290,425	326,424	310,659	299,436	285,458
Pension Benefits	(140,199)	(127,618)	(119,754)	(112,533)	(94,615)
Disability Benefits	(1,700)	(1,717)	(1,942)	(1,692)	(1,790)
Survivor Benefits	(3,584)	(3,257)	(2,606)	(1,962)	(1,581)
Distributions of Contributions and Interest	(5,135)	(11,133)	(10,988)	(11,712)	(10,734)
Administrative Expenses	(5,208)	(5,553)	(5,603)	(6,184)	(6,707)
Transfer to Defined Contribution	(1,469,542)	_	_	_	_
Member Reassignment Expenses	(1,530)	(1,229)	(1,852)	(1,269)	(1,048)
Miscellaneous Expenses	(159)				
Total Benefits and Expenses	(1,627,057)	(150,507)	(142,745)	(135,352)	(116,475)
Net Contributions / (Benefits and Expenses)	(1,336,632)	175,917	167,914	164,084	168,983
Net Investment Income / (Loss)	536,944	464,893	64,203	25,587	586,782
Net Increase / (Decrease)	(799,688)	640,810	232,117	189,671	755,765
Fiduciary Net Position Restricted - End of Year	\$ 5,452,352	\$ 6,252,040	\$ 5,611,230	\$ 5,379,113	\$ 5,189,442

<sup>1</sup> TRF DB and TRF DC were split effective January 1, 2018. As such the Distribution of Contributions and Interest contains only six months of activity for fiscal year 2018.

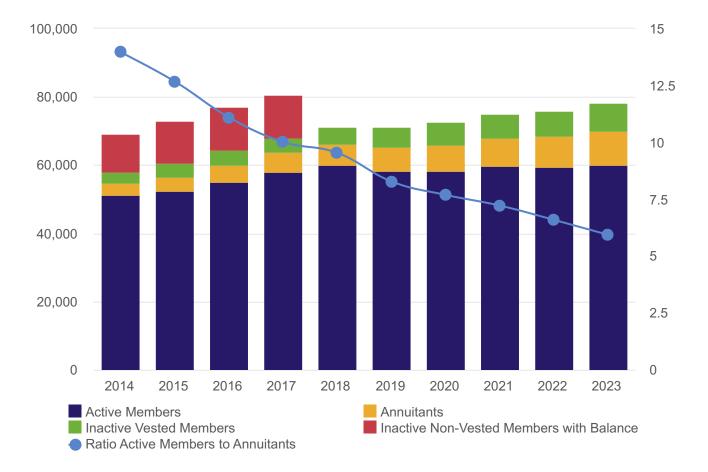
### **Schedule of Historical Contribution Rates**

	TRF '96 DB Rate	TRF MC DC Supplemental Rate
2023	6.00 %	— %
2022	5.50	0.20
2021	5.50	0.20
2020	5.50	0.20
2019	7.50	N/A
2018	7.50	N/A
2017	7.50	N/A
2016	7.50	N/A
2015	7.50	N/A
2014	7.50	N/A
Memo:		
Effective Date	July 1	July 1



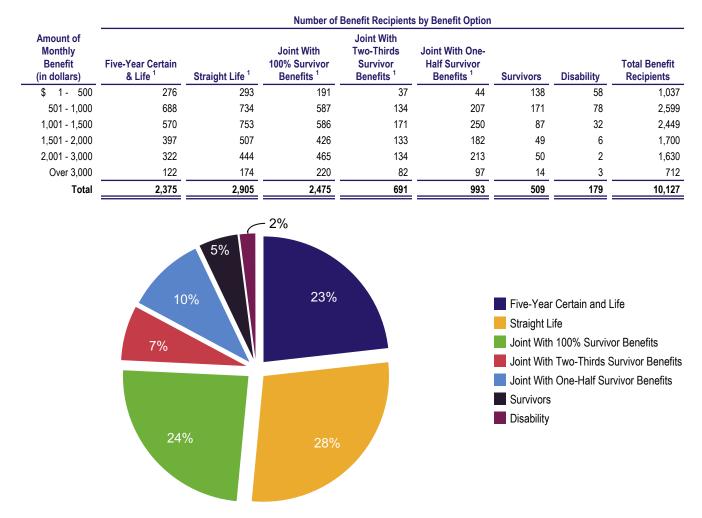
### **Ratio of Active Members to Annuitants**

_	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	60,057	10,127	8,029	_	78,213	5.93
2022	59,567	9,035	7,496	_	76,098	6.59
2021	59,866	8,287	6,827	_	74,980	7.22
2020	58,450	7,596	6,609	_	72,655	7.69
2019	58,308	7,041	5,778	_	71,127	8.28
2018	59,996	6,289	4,996	_	71,281	9.54
2017	58,097	5,796	4,252	12,494	80,639	10.02
2016	55,265	4,977	4,335	12,529	77,106	11.10
2015	52,424	4,136	4,132	12,292	72,984	12.68
2014	51,204	3,665	3,103	11,147	69,119	13.97



#### Schedule of Benefit Recipients by Type of Benefit Option

#### For the Year Ended June 30, 2023



Members applying for retirement benefits will receive a monthly benefit for the rest of their life. Survivors or qualified designated beneficiaries are subject to the provisions of the benefit option as follows:

**Five-Year Certain & Life** — Benefit ceases upon death of the retiree if the benefit has been received for five years; otherwise, the beneficiary continues to receive the benefit, monthly or lump sum, for the remainder of the five year period.

Straight Life — Benefit ceases upon the death of the retiree.

Joint With 100% Survivor Benefits — Survivor receives 100% of the member's monthly benefit for remainder of the survivor's life.

Joint With Two-Thirds Survivor Benefits — Survivor receives 66 2/3 percent of the member's monthly benefit for the remainder of the survivor's life.

Joint With One-Half Survivor Benefits — Survivor receives 50% of the member's monthly benefit for the remainder of the survivor's life.

Survivors — Members receiving a survivor benefit in accordance with the applicable statute. Benefit ceases upon death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. For TRF 1996 DB, five or more years of creditable service is required to be eligible for a disability benefit. This includes the Classroom Disability which provides a benefit of \$125 per month plus \$5 for each additional year of TRF-covered service over five years.

<sup>1</sup> See Accompanying Notes to the Statistical Schedules for discussion on social security integration options.

### Schedule of Average Benefit Payments

#### For the Years Ended June 30

					Year	s of (	Credited Se	ervic	e				
	< 10 <sup>1</sup>		10 - 14		15 - 19		20 - 24		25 - 29		30+		Total
_													
\$	168	\$	503	\$	820	\$	1,216	\$	1,657	\$	2,431	\$	1,385
\$	64	\$	153	\$	243	\$	337	\$	496	\$	750	\$	395
\$	38,967	\$	47,407	\$	56,815	\$	64,458	\$	70,770	\$	79,660	\$	64,788
	179		1,245		2,533		2,075		1,533		2,562		10,127
_													
\$	156	\$	494	\$	807	\$	1,190	\$	1,609	\$	2,366	\$	1,343
\$	65	\$	153	\$	242	\$	337	\$	496	\$	749	\$	394
\$	38,450	\$	46,978	\$	56,534	\$	63,875	\$	69,671	\$	78,720	\$	63,983
	181		1,131		2,311		1,812		1,311		2,289		9,035
_													
\$	158	\$	492	\$	800	\$	1,178	\$	1,585	\$	2,336	\$	1,329
\$	70	\$	152	\$	242	\$	337	\$	495	\$	744	\$	392
\$	38,226	\$	46,721	\$	56,490	\$	63,610	\$	68,661	\$	77,724	\$	63,464
	182		1,046		2,139		1,601		1,173		2,146		8,287
_													
\$	157	\$	525	\$	794	\$	1,163	\$	1,566	\$	2,314	\$	1,321
\$	68	\$	151	\$	241	\$	337	\$	495	\$	741	\$	391
\$	38,301	\$	46,690	\$	56,139	\$	63,083	\$	68,055	\$	76,919	\$	62,982
	181		986		1,989		1,383		1,036		2,021		7,596
_													
\$	150	\$	505	\$	788	\$	1,151	\$	1,546	\$	2,302	\$	1,317
\$	63	\$	151	\$	241	\$	336	\$	493	\$	741	\$	390
\$	38,401	\$	46,618	\$	55,639	\$	62,384	\$	67,164	\$	76,355	\$	62,506
	181		907		1,845		1,218		957		1,933		7,041
	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 168 \$ 64 \$ 38,967 179 \$ 156 \$ 65 \$ 38,450 181 \$ 158 \$ 70 \$ 38,226 182 \$ 38,226 182 \$ 38,226 182 \$ 38,226 182 \$ 38,301 181 \$ 150 \$ 63 \$ 38,401	\$       168       \$         \$       64       \$         \$       38,967       \$         179       179         \$       156       \$         \$       156       \$         \$       156       \$         \$       156       \$         \$       156       \$         \$       158       \$         \$       158       \$         \$       158       \$         \$       158       \$         \$       158       \$         \$       158       \$         \$       38,226       \$         \$       182       \$         \$       157       \$         \$       38,301       \$         \$       157       \$         \$       38,301       \$         \$       150       \$         \$       63       \$         \$       38,401       \$	\$       168       \$       503         \$       64       \$       153         \$       38,967       \$       47,407         179       1,245         \$       156       \$       494         \$       65       \$       153         \$       38,967       \$       46,978         \$       156       \$       494         \$       65       \$       153         \$       38,450       \$       46,978         181       1,131       1,131         \$       38,226       \$       46,721         182       1,046       \$         \$       157       \$       525         \$       68       \$       151         \$       38,301       \$       46,690         181       986       \$       151         \$       38,301       \$       46,690         \$       150       \$       505         \$       63       \$       151         \$       38,401       \$       46,618		< 10 $^{1}$ 10 - 1415 - 19\$168\$503\$820\$64\$153\$243\$38,967\$47,407\$56,8151791,2452,533\$156\$494\$807\$65\$153\$242\$38,450\$46,978\$56,5341811,1312,3112,311\$158\$492\$800\$70\$152\$242\$38,226\$46,721\$56,4901821,0462,139\$157\$525\$794\$68\$151\$241\$38,301\$46,690\$56,1391819861,989\$150\$505\$788\$63\$151\$241\$38,401\$46,618\$55,639	< 10 $^1$ 10 - 1415 - 19\$168\$503\$820\$\$64\$153\$243\$\$38,967\$47,407\$56,815\$1791,2452,533-\$156\$494\$807\$\$156\$494\$807\$\$156\$494\$807\$\$38,450\$46,978\$56,534\$\$158\$492\$800\$\$158\$492\$800\$\$158\$492\$800\$\$158\$46,721\$56,490\$\$157\$525\$794\$\$38,301\$46,690\$56,139\$\$150\$505\$788\$\$150\$505\$788\$\$38,401\$46,618\$55,639\$	$\begin{array}{ c c c c c c c c c } \hline < 10^{1} & 10 - 14 & 15 - 19 & 20 - 24 \\ \hline \\ \$ & 168 & \$ & 503 & \$ & 820 & \$ & 1,216 \\ \$ & 64 & \$ & 153 & \$ & 243 & \$ & 337 \\ \$ & 38,967 & \$ & 47,407 & \$ & 56,815 & \$ & 64,458 \\ & 179 & 1,245 & 2,533 & 2,075 \\ \hline \\ & & & & & & & & & & & & & & & & \\ & 179 & 1,245 & 2,533 & 2,075 \\ \hline \\ & & & & & & & & & & & & & & & & \\ & 156 & \$ & 494 & \$ & 807 & \$ & 1,190 \\ \$ & 65 & \$ & 153 & \$ & 242 & \$ & 337 \\ \$ & 38,450 & \$ & 46,978 & \$ & 56,534 & \$ & 63,875 \\ & 181 & 1,131 & 2,311 & 1,812 \\ \hline \\ & & & & & & & & & & & & & \\ & & 158 & \$ & 492 & \$ & 800 & \$ & 1,178 \\ \$ & 70 & \$ & 152 & \$ & 242 & \$ & 337 \\ \$ & 38,226 & \$ & 46,721 & \$ & 56,490 & \$ & 63,610 \\ & 182 & 1,046 & 2,139 & 1,601 \\ \hline \\ & & & & & & & & & & & & & \\ & & & &$	< 10 $^1$ 10 - 1415 - 1920 - 24\$168\$503\$820\$1,216\$\$64\$153\$243\$337\$\$38,967\$47,407\$56,815\$64,458\$1791,2452,5332,0757\$156\$494\$807\$1,190\$\$65\$153\$242\$337\$\$38,450\$46,978\$56,534\$63,875\$1811,1312,3111,8121111\$158\$492\$800\$1,178\$\$158\$492\$800\$1,178\$\$158\$492\$800\$1,178\$\$158\$492\$800\$1,178\$\$158\$492\$800\$1,178\$\$157\$525\$794\$1,163\$\$157\$525\$794\$1,163\$\$157\$505\$788\$1,151\$\$38,301\$46,690\$56,139\$63,083\$\$150\$505\$788\$1,151\$ <tr<tr>\$&lt;</tr<tr>	\$ 168       \$ 503       \$ 820       \$ 1,216       \$ 1,657         \$ 64       \$ 153       \$ 243       \$ 337       \$ 496         \$ 38,967       \$ 47,407       \$ 56,815       \$ 64,458       70,770         179       1,245       2,533       2,075       1,533         \$ 156       \$ 494       \$ 807       \$ 1,190       \$ 1,609         \$ 65       \$ 153       \$ 242       \$ 337       \$ 496         \$ 38,450       \$ 46,978       \$ 56,534       \$ 63,875       \$ 69,671         181       1,131       2,311       1,812       1,311         \$ 38,226       \$ 46,721       \$ 56,490       \$ 63,610       \$ 68,661         182       1,046       2,139       1,601       1,173         \$ 38,226       \$ 46,6721       \$ 56,490       \$ 63,610       \$ 68,661         182       1,046       2,139       1,601       1,173         \$ 38,301       \$ 46,690       \$ 56,139       \$ 63,083       \$ 68,055         181       986       1,989       1,383       1,036         \$ 38,301       \$ 46,690       \$ 56,139       \$ 63,083       \$ 68,055         181       986       1,989       1,383	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$

<sup>1</sup> Members with less than 10 years of service are primarily members receiving a disability benefit.

<sup>2</sup> Represents the average of only the retirees who elected to receive their Defined Contribution Account as a supplemental monthly payment in addition to the monthly Defined Benefit payment.

# Schedule of Average Benefit Payments, continued

### For the Years Ended June 30

			Year	s of (	Credited Se	ervice	e		
	 < 10 <sup>1</sup>	 10 - 14	 15 - 19		20 - 24		25 - 29	 30+	 Total
2018									
Average Monthly Defined Benefit	\$ 175	\$ 493	\$ 779	\$	1,133	\$	1,530	\$ 2,278	\$ 1,312
Average Monthly DC Annuity <sup>2</sup>	\$ 67	\$ 150	\$ 243	\$	334	\$	494	\$ 742	\$ 393
Average Final Average Salary	\$ 38,058	\$ 46,696	\$ 55,207	\$	61,506	\$	66,412	\$ 75,286	\$ 61,952
Number of Benefit Recipients	181	790	1,645		1,019		873	1,781	6,289
2017									
Average Monthly Defined Benefit	\$ 153	\$ 484	\$ 775	\$	1,131	\$	1,512	\$ 2,266	\$ 1,312
Average Monthly DC Annuity <sup>2</sup>	\$ 71	\$ 151	\$ 248	\$	343	\$	498	\$ 745	\$ 404
Average Final Average Salary	\$ 35,860	\$ 44,235	\$ 54,609	\$	61,152	\$	65,476	\$ 74,829	\$ 61,121
Number of Benefit Recipients	179	748	1,478		898		794	1,699	5,796
2016									
Average Monthly Defined Benefit	\$ 403	\$ 478	\$ 760	\$	1,113	\$	1,481	\$ 2,263	\$ 1,355
Average Monthly DC Annuity <sup>2</sup>	\$ 162	\$ 152	\$ 247	\$	346	\$	507	\$ 735	\$ 417
Average Final Average Salary	\$ 35,250	\$ 45,420	\$ 52,554	\$	59,740	\$	64,060	\$ 73,994	\$ 61,008
Number of Benefit Recipients	59	611	1,267		764		688	1,588	4,977
2015									
Average Monthly Defined Benefit	\$ 437	\$ 467	\$ 740	\$	1,085	\$	1,458	\$ 2,225	\$ 1,360
Average Monthly DC Annuity <sup>2</sup>	\$ 80	\$ 74	\$ 102	\$	130	\$	214	\$ 240	\$ 165
Average Final Average Salary	\$ 35,509	\$ 45,483	\$ 52,501	\$	58,946	\$	62,883	\$ 72,912	\$ 60,815
Number of Benefit Recipients	45	499	998		614		570	1,410	4,136
2014									
Average Monthly Defined Benefit	\$ 263	\$ 450	\$ 730	\$	1,041	\$	1,426	\$ 2,158	\$ 1,366
Average Monthly DC Annuity <sup>2</sup>	\$ 23	\$ 71	\$ 102	\$	124	\$	200	\$ 230	\$ 162
Average Final Average Salary	\$ 39,665	\$ 44,142	\$ 51,558	\$	57,665	\$	61,752	\$ 70,633	\$ 59,995
Number of Benefit Recipients	36	406	822		537		504	1,360	3,665

<sup>1</sup> Members with less than 10 years of service are primarily members receiving a disability benefit.

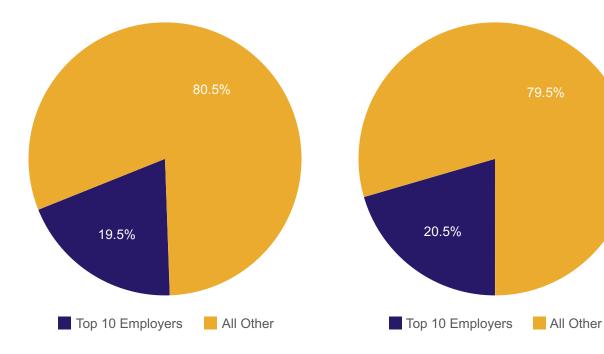
<sup>2</sup> Represents the average of all retirees, regardless if they elected to receive their Defined Contribution Account as a supplemental monthly payment in addition to the monthly Defined Benefit payment.

## Schedule of Participating Employers: Top 10

	J	une 30, 20	23	June 30, 2014						
Top 10 Employers	Active Members	Rank	Percentage of Total	Active Members	Rank	Percentage of Total				
Indianapolis Public Schools	2,070	1	2.9 %	1,929	1	3.8 %				
Fort Wayne Community Schools	2,068	2	2.9	1,583	2	3.1				
Evansville-Vanderburgh School Cop	1,506	3	2.1	952	5	1.9				
Hamilton Southeastern Schools	1,452	4	2.1	1,053	3	2.1				
South Bend Community School Corp.	1,322	5	1.9	975	4	1.9				
Msd Of Wayne Township	1,239	6	1.8	905	6	1.8				
Carmel Clay Schools	1,098	7	1.6	830	7	1.6				
Msd Of Perry Township	1,096	8	1.5	_	_	_				
Msd Lawrence Township	957	9	1.4	—	_	_				
Vigo County School Corp	954	10	1.3	689	10	1.3				
Elkhart Community Schools				810	8	1.6				
School City of Hammond				718	9	1.4				
Total Top 10 Employers	13,762		19.5	10,444		20.5				
All Other	56,964		80.5	40,760		79.5				
Grand Total	70,726	:	100.0 %	51,204	:	100.0 %				

Active Membership Breakout - 2023

Active Membership Breakout - 2014



#### Schedule of Changes and Growth in Fiduciary Net Position

(dollars in thousands)	2023	2022	2021	2020	2019		
Fiduciary Net Position Restricted - Beginning of Year	\$ 7,634,013	\$ 8,189,789	\$ 6,542,800	\$ 6,379,786	\$ 5,927,570		
Contributions / (Benefits and Expenses)							
Employer Contributions	192,972	177,035	166,436	162,302	155,051		
Member Contributions	62,932	58,921	55,703	54,175	52,811		
Member Reassignment Income	14	174	_	_	_		
Miscellaneous Income		17	19	20	2		
Total Contributions and Other	255,926	236,147	222,158	216,497	207,864		
Pension Benefits	(250,252)	(195,015)	(189,834)	(170,944)	(147,752)		
Disability Benefits	(33,081)	(30,135)	(27,570)	(24,978)	(23,328)		
Survivor Benefits	(20,492)	(18,384)	(17,080)	(15,683)	(14,457)		
Special Death Benefits	(1,212)	(1,392)	(1,080)	(919)	(951)		
Distributions of Contributions and Interest	(4,060)	(4,193)	(3,339)	(3,227)	(3,463)		
Administrative Expenses	(2,429)	(2,073)	(1,934)	(1,960)	(1,904)		
Member Reassignment Expenses	(210)	(165)	_	_	_		
Miscellaneous Expenses					(22)		
Total Benefits and Expenses	(311,736)	(251,357)	(240,837)	(217,711)	(191,877)		
Net Contributions / (Benefits and Expenses)	(55,810)	(15,210)	(18,679)	(1,214)	15,987		
Net Investment Income / (Loss)	193,695	(540,566)	1,665,668	164,228	436,229		
Net Increase / (Decrease)	137,885	(555,776)	1,646,989	163,014	452,216		
Fiduciary Net Position Restricted- End of Year	\$ 7,771,898	\$ 7,634,013	\$ 8,189,789	\$ 6,542,800	\$ 6,379,786		

#### Schedule of Changes and Growth in Fiduciary Net Position, continued

(dollars in thousands)	2018	2017	2016	2015	2014		
Fiduciary Net Position Restricted - Beginning of Year	\$ 5,401,179	\$ 4,950,999	\$ 4,828,415	\$ 4,757,978	\$ 4,116,861		
Contributions / (Benefits and Expenses)							
Employer Contributions	147,094	150,857	151,674	146,697	140,119		
Member Contributions	48,839	51,521	44,918	43,523	41,791		
Member Reassignment Income	_	_	_	_	_		
Miscellaneous Income	18	78	143	15	30		
Total Contributions and Other	195,951	202,456	196,735	190,235	181,940		
Pension Benefits	(133,791)	(112,282)	(97,445)	(83,239)	(76,462)		
Disability Benefits	(21,805)	(19,950)	(18,647)	(17,620)	(17,767)		
Survivor Benefits	(13,455)	(12,550)	(11,843)	(11,156)	(10,573)		
Special Death Benefits	(884)	(809)	(774)	(860)	(720)		
Distributions of Contributions and Interest	(2,973)	(3,274)	(4,037)	(3,615)	(3,572)		
Administrative Expenses	(1,643)	(1,607)	(1,651)	(1,708)	(1,787)		
Member Reassignment Expenses	_	_	(74)	_	_		
Miscellaneous Expenses							
Total Benefits and Expenses	(174,551)	(150,472)	(134,471)	(118,198)	(110,881)		
Net Contributions / (Benefits and Expenses)	21,400	51,984	62,264	72,037	71,059		
Net Investment Income / (Loss)	504,991	398,196	60,320	(1,600)	570,058		
Net Increase / (Decrease)	526,391	450,180	122,584	70,437	641,117		
Fiduciary Net Position Restricted- End of Year	\$ 5,927,570	\$ 5,401,179	\$ 4,950,999	\$ 4,828,415	\$ 4,757,978		

### **Schedule of Historical Contribution Rates**

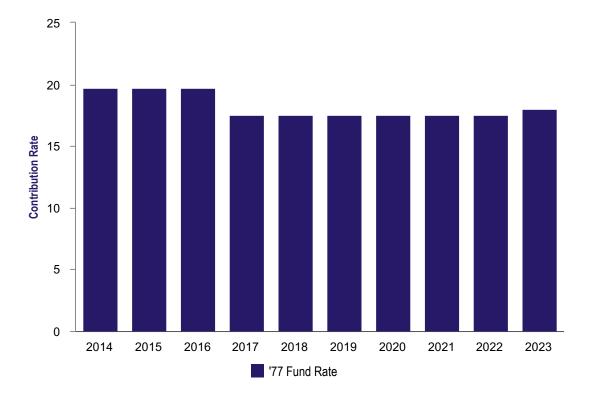
#### For the Years Ended June 30

	'77 Fund Rate
2023	18.0 %
2022	17.5
2021	17.5
2020	17.5
2019	17.5
2018	17.5
2017	17.5
2016	19.7
2015	19.7
2014	19.7

#### Memo:

Effective Date

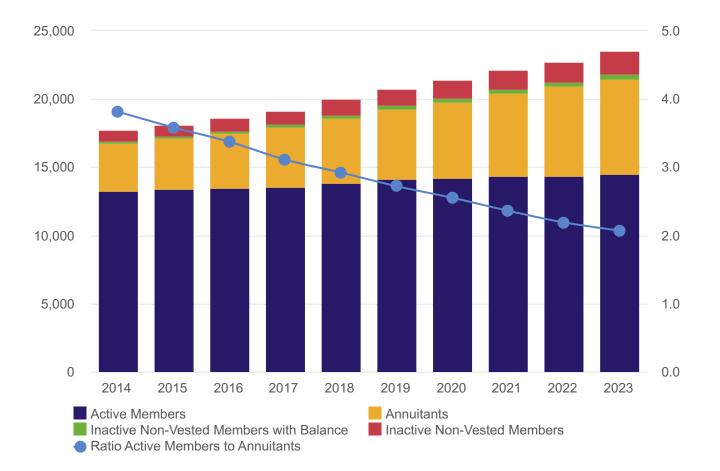
January 1



# 1977 Police Officers' and Firefighters' Retirement Fund, continued

#### **Ratio of Active Members to Annuitants**

_	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	14,503	6,993	315	1,710	23,521	2.07
2022	14,387	6,555	291	1,509	22,742	2.19
2021	14,378	6,080	300	1,381	22,139	2.36
2020	14,242	5,581	283	1,307	21,413	2.55
2019	14,119	5,187	243	1,200	20,749	2.72
2018	13,879	4,751	225	1,136	19,991	2.92
2017	13,587	4,374	195	1,005	19,161	3.11
2016	13,506	4,004	186	933	18,629	3.37
2015	13,390	3,736	155	822	18,103	3.58
2014	13,295	3,491	129	796	17,711	3.81



#### Schedule of Benefit Recipients by Type of Benefit Option

#### For the Year Ended June 30, 2023

	Numbe	er of Benefit Recip	pients by Benefit O	ption
Amount of Monthly Benefit (in dollars)	Retirees	Survivors	Disability	Total Benefit Recipients
\$ 1 - 500	_	16	_	16
501 - 1,000	1	84	20	105
1,001 - 1,500	51	338	37	426
1,501 - 2,000	291	259	136	686
2,001 - 3,000	2,118	154	465	2,737
Over 3,000	2,657	47	319	3,023
Total	5,118	898	977	6,993

**Retirees** — Provides a monthly benefit for the retiree's life. Upon the death of the retiree, a surviving spouse receives 60% of the monthly benefit for life and each surviving child receives 20% of the monthly benefit until age 18 or 23 if enrolled in a secondary school or accredited college or university. If no eligible surviving spouse or children, a dependent parent(s) may receive 50% of the monthly benefit for life.

Survivors — Members receiving a survivor benefit in accordance with the applicable statute. The benefit ceases upon the death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. For the '77 Fund, there is no minimum creditable service requirement.

### Schedule of Average Benefit Payments

#### For the Years Ended June 30

					Years of Credited Service							
	 < 10 <sup>1</sup>	1	0 - 14 <sup>1</sup>	15 - 19 <sup>1</sup>		20 - 24		25 - 29		30+		 Total
2023												
Average Monthly Defined Benefit	\$ 2,255	\$	2,483	\$	2,387	\$	2,382	\$	3,090	\$	3,658	\$ 2,861
Average Final Average Salary	\$ 49,008	\$	56,099	\$	54,484	\$	52,321	\$	55,073	\$	58,508	\$ 54,742
Number of Benefit Recipients	267		281		345		2,569		2,030		1,501	6,993
2022												
Average Monthly Defined Benefit	\$ 2,194	\$	2,425	\$	2,315	\$	2,290	\$	2,988	\$	3,551	\$ 2,764
Average Final Average Salary	\$ 47,220	\$	54,934	\$	52,943	\$	50,813	\$	53,827	\$	57,629	\$ 53,469
Number of Benefit Recipients	259		278		330		2,393		1,899		1,396	6,555
2021												
Average Monthly Defined Benefit	\$ 2,099	\$	2,319	\$	2,179	\$	2,213	\$	2,888	\$	3,391	\$ 2,643
Average Final Average Salary	\$ 45,982	\$	53,708	\$	51,567	\$	49,790	\$	52,980	\$	56,291	\$ 52,334
Number of Benefit Recipients	254		267		312		2,262		1,770		1,215	6,080
2020												
Average Monthly Defined Benefit	\$ 2,040	\$	2,213	\$	2,121	\$	2,132	\$	2,795	\$	3,261	\$ 2,537
Average Final Average Salary	\$ 44,866	\$	52,021	\$	50,391	\$	48,647	\$	51,914	\$	55,065	\$ 51,122
Number of Benefit Recipients	251		252		306		2,095		1,617		1,060	5,581
2019												
Average Monthly Defined Benefit	\$ 1,971	\$	2,097	\$	2,018	\$	2,056	\$	2,693	\$	3,137	\$ 2,431
Average Final Average Salary	\$ 43,865	\$	50,968	\$	49,157	\$	47,583	\$	50,796	\$	53,933	\$ 49,977
Number of Benefit Recipients	240		245		298		1,975		1,487		942	5,187
2018												
Average Monthly Defined Benefit	\$ 1,924	\$	1,993	\$	1,938	\$	1,984	\$	2,589	\$	2,984	\$ 2,319
Average Final Average Salary	\$ 43,021	\$	50,113	\$	47,985	\$	46,569	\$	49,576	\$	52,614	\$ 48,753
Number of Benefit Recipients	239		241		286		1,843		1,330		812	4,751
2017												
Average Monthly Defined Benefit	\$ 1,643	\$	1,975	\$	1,893	\$	2,010	\$	2,546	\$	2,892	\$ 2,257
Average Final Average Salary	\$ 42,129	\$	48,847	\$	47,060	\$	45,714	\$	48,551	\$	51,649	\$ 47,703
Number of Benefit Recipients	382		234		271		1,586		1,202		699	4,374
2016												
Average Monthly Defined Benefit	\$ 1,624	\$	1,901	\$	1,839	\$	1,969	\$	2,498	\$	2,799	\$ 2,190
Average Final Average Salary	\$ 41,299	\$	47,438	\$	45,587	\$	44,846	\$	47,841	\$	51,017	\$ 46,803
Number of Benefit Recipients	380		226		262		1,463		1,071		602	4,004
2015												
Average Monthly Defined Benefit	\$ 1,709	\$	1,862	\$	1,812	\$	1,953	\$	2,473	\$	2,714	\$ 2,149
Average Final Average Salary	\$ 40,564	\$	46,871	\$	44,876	\$	43,912	\$	47,030	\$	50,367	\$ 45,862
Number of Benefit Recipients	421		222		256		1,361		963		513	3,736
2014												
Average Monthly Defined Benefit	\$ 1,841	\$	1,748	\$	1,734	\$	1,864	\$	2,362	\$	2,553	\$ 2,084
Average Final Average Salary	\$ 42,408	\$	45,969	\$	44,636	\$	43,120	\$	46,421	\$	48,656	\$ 45,245
Number of Benefit Recipients	290		226		273		1,243		883		576	3,491

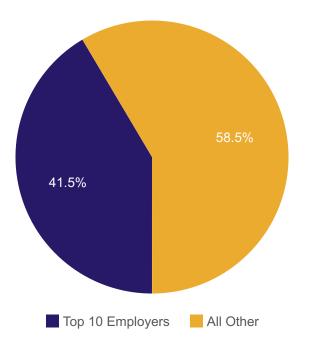
<sup>1</sup> Members with less than 20 years of service are primarily members receiving a disability benefit.

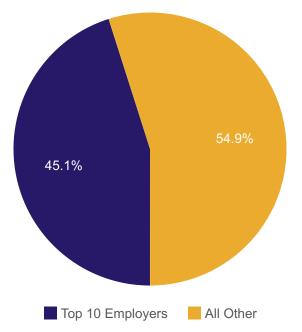
		June 30, 2023		June 30, 2014					
Top 10 Employers	Active Members	Rank	Percentage of Total	Active Members	Rank	Percentage of Total			
City Of Indianapolis	2,860	1	17.7 %	2,407	1	18.1 %			
City Of Fort Wayne	851	2	5.3	764	2	5.7			
City Of Evansville	591	3	3.7	547	3	4.1			
City Of South Bend	515	4	3.2	479	4	3.6			
City Of Hammond	378	5	2.3	351	6	2.6			
City Of Carmel	329	6	2.0	258	9	1.9			
City Of Gary	313	7	1.9	440	5	3.3			
City Of Terre Haute	299	8	1.8	262	7	2.0			
City Of Lafayette	291	9	1.8	261	8	2.0			
City Of Fishers	285	10	1.8	_	_	_			
City of Elkhart				239	10	1.8			
Total Top 10 Employers	6,712		41.5	6,008		45.1			
All Other	9,455		58.5	7,287		54.9			
Grand Total	16,167		100.0 %	13,295		100.0 %			

## Schedule of Participating Employers: Top 10

Active Membership Breakout - 2023

Active Membership Breakout - 2014





This page is intentionally left blank.

### Schedule of Changes and Growth in Fiduciary Net Position

(dollars in thousands)	2023	2022	2021	2020	2019		
Fiduciary Net Position Restricted - Beginning of Year	\$ 634,864	\$ 687,993	\$ 554,121	\$ 545,331	\$ 513,952		
Contributions / (Benefits and Expenses)							
Employer Contributions	18,047	17,564	18,621	18,167	16,031		
Member Contributions	4,122	4,632	4,041	3,549	3,476		
Member Reassignment Income	11	126	_	_	_		
Miscellaneous Income		16					
Total Contributions and Other	22,180	22,338	22,662	21,716	19,507		
Pension Benefits	(28,816)	(27,265)	(25,550)	(23,614)	(22,107)		
Disability Benefits	(197)	(150)	(147)	(142)	(115)		
Survivor Benefits	(3,547)	(3,438)	(3,116)	(3,043)	(3,014)		
Distributions of Contributions and Interest	(59)	(123)	(103)	(38)	(155)		
Administrative Expenses	(124)	(104)	(101)	(109)	(108)		
Total Benefits and Expenses	(32,743)	(31,080)	(29,017)	(26,946)	(25,499)		
Net Contributions / (Benefits and Expenses)	(10,563)	(8,742)	(6,355)	(5,230)	(5,992)		
Net Investment Income / (Loss)	15,906	(44,387)	140,227	14,020	37,371		
Net Increase / (Decrease)	5,343	(53,129)	133,872	8,790	31,379		
Fiduciary Net Position Restricted - End of Year	\$ 640,207	\$ 634,864	\$ 687,993	\$ 554,121	\$ 545,331		

### Schedule of Changes and Growth in Fiduciary Net Position, continued

(dollars in thousands)	2018	2017	2016	2015	2014		
Fiduciary Net Position Restricted - Beginning of Year	\$ 475,055	\$ 441,790	\$ 437,352	\$ 432,730	\$ 375,752		
Contributions / (Benefits and Expenses)							
Employer Contributions	15,117	16,824	16,946	21,020	20,895		
Member Contributions	3,418	3,468	3,239	3,292	2,856		
Member Reassignment Income	_	_	_	_	4		
Miscellaneous Income				9	6		
Total Contributions and Other	18,535	20,292	20,185	24,321	23,761		
Pension Benefits	(20,312)	(19,223)	(18,194)	(16,613)	(15,819)		
Disability Benefits	(126)	(136)	(90)	(230)	(134)		
Survivor Benefits	(2,926)	(2,696)	(2,627)	(2,578)	(2,574)		
Distributions of Contributions and Interest	(259)	(44)	(11)	(11)	_		
Administrative Expenses	(119)	(124)	(148)	(165)	(146)		
Total Benefits and Expenses	(23,742)	(22,223)	(21,070)	(19,597)	(18,673)		
Net Contributions / (Benefits and Expenses)	(5,207)	(1,931)	(885)	4,724	5,088		
Net Investment Income / (Loss)	44,104	35,196	5,323	(102)	51,890		
Net Increase / (Decrease)	38,897	33,265	4,438	4,622	56,978		
Fiduciary Net Position Restricted - End of Year	\$ 513,952	\$ 475,055	\$ 441,790	\$ 437,352	\$ 432,730		

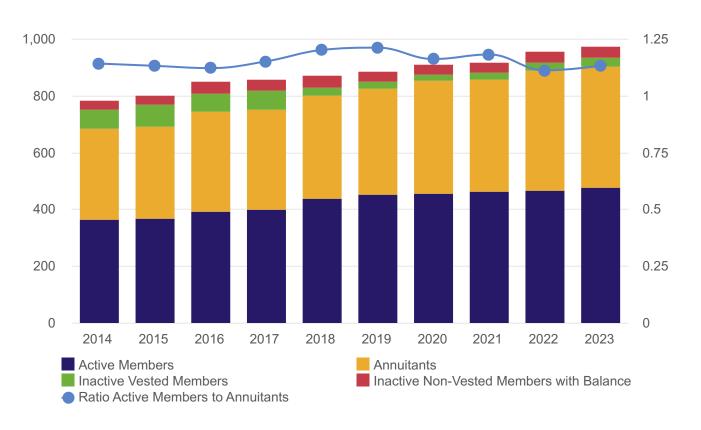
#### **Ratio of Active Members to Annuitants**

#### For the Years Ended June 30

-	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	480	426	30	38	974	1.13
2022	469	421	28	39	957	1.11
2021	465	394	24	34	917	1.18
2020	458	396	24	33	911	1.16
2019	453	375	22	36	886	1.21
2018	439	365	26	42	872	1.20
2017	402	350	67	39	858	1.15
2016	394	351	65	41	851	1.12
2015	368	326	78	32	804	1.13
2014	365	321	67	32	785	1.14



1.5



# Schedule of Benefit Recipients by Type of Benefit Option

#### For the Year Ended June 30, 2023

	Number of Benefit Recipients by Benefit Option										
Amount of Monthly Benefit (in dollars)	Retirees	Survivors	Disability	Total Benefit Recipients							
\$ 1 - 500	_	_	_	_							
501 - 1,000	_	_	_	_							
1,001 - 1,500	_	16	_	16							
1,501 - 2,000	_	9	_	9							
2,001 - 3,000	5	24	_	29							
Over 3,000	313	57	2	372							
Total	318	106	2	426							

**Retirees** — Provides a monthly benefit for the retiree's life. Upon the death of the retiree, the qualified designated survivor receives 50% of the member's monthly benefit for the remainder of the survivor's life.

**Survivors** — Members receiving a survivor benefit in accordance with the applicable statute. The benefit ceases upon the death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. For the Judges' Retirement System, there is no minimum creditable service requirement.

### Schedule of Average Benefit Payments

	Years of Credited Service												
		< 10		10 - 14		15 - 19 20 - 24		 25 - 29		30+		Total	
2023	_												
Average Monthly Defined Benefit	\$	2,302	\$	5,256	\$	6,273	\$	7,211	\$ 6,860	\$	7,068	\$	6,062
Average Final Average Salary	\$	116,010	\$	131,135	\$	131,946	\$	137,763	\$ 117,330	\$	129,682	\$	131,038
Number of Benefit Recipients		35		107		96		115	39		34		426
2022													
Average Monthly Defined Benefit	\$	2,147	\$	5,144	\$	6,117	\$	7,051	\$ 6,810	\$	7,013	\$	5,943
Average Final Average Salary	\$	112,905	\$	129,341	\$	132,281	\$	136,983	\$ 117,330	\$	129,682	\$	130,365
Number of Benefit Recipients		35		101		98		114	39		34		421
2021													
Average Monthly Defined Benefit	\$	2,191	\$	4,949	\$	5,918	\$	6,680	\$ 6,694	\$	6,795	\$	5,685
Average Final Average Salary	\$	107,521	\$	125,235	\$	130,524	\$	132,271	\$ 117,330	\$	128,801	\$	126,968
Number of Benefit Recipients		38		90		92		101	40		33		394
2020													
Average Monthly Defined Benefit	\$	2,035	\$	4,804	\$	5,807	\$	6,565	\$ 6,651	\$	6,739	\$	5,532
Average Final Average Salary	\$	108,475	\$	123,809	\$	128,881	\$	131,607	\$ 117,627	\$	128,801	\$	126,008
Number of Benefit Recipients	,	43		89		88		102	41		33		396
2019													
Average Monthly Defined Benefit	\$	2,017	\$	4,500	\$	5,619	\$	6,279	\$ 6,775	\$	6,541	\$	5,288
Average Final Average Salary	\$	107,961	\$	122,249	\$	126,629	\$	128,644	\$ 117,627	\$	125,976	\$	123,747
Number of Benefit Recipients		44		90		79		92	41		29		375
2018													
Average Monthly Defined Benefit	\$	2,035	\$	4,437	\$	5,613	\$	6,180	\$ 6,640	\$	6,656	\$	5,168
Average Final Average Salary	\$	108,346	\$	120,668	\$	124,939	\$	126,707	\$ 116,646	\$	125,976	\$	122,254
Number of Benefit Recipients		51		85		74		86	40		29		365
2017													
Average Monthly Defined Benefit	\$	2,095	\$	4,416	\$	5,589	\$	5,945	\$ 6,804	\$	6,788	\$	5,130
Average Final Average Salary	\$	98,954	\$	117,996	\$	120,010	\$	121,926	\$ 113,184	\$	124,489	\$	117,814
Number of Benefit Recipients		52		81		72		81	37		27		350
2016													
Average Monthly Defined Benefit	\$	2,158	\$	4,308	\$	5,125	\$	5,959	\$ 6,695	\$	6,707	\$	4,989
Average Final Average Salary	\$	98,226	\$	117,568	\$	119,378	\$	120,551	\$ 113,184	\$	123,658	\$	117,193
Number of Benefit Recipients	,	57		79		71		80	37		27		351
2015													
Average Monthly Defined Benefit	\$	2,046	\$	4,145	\$	5,297	\$	5,479	\$ 6,555	\$	6,558	\$	4,749
Average Final Average Salary	\$	59,251	\$	116,014	\$	117,354	\$	114,577	\$ 112,207	\$	122,815	\$	114,494
Number of Benefit Recipients		57		75		61		69	38		26		326
2014													
Average Monthly Defined Benefit	\$	3,519	\$	4,090	\$	5,039	\$	5,544	\$ 6,538	\$	6,545	\$	4,796
Average Final Average Salary	\$	108,307	\$	113,994	\$	113,254	\$	114,783	\$ 111.708	\$	122,579	\$	114,885

This page is intentionally left blank.

#### Schedule of Changes and Growth in Fiduciary Net Position

(dollars in thousands)	2023	 2022	2021		2020		2019			
Fiduciary Net Position Restricted - Beginning of Year	\$ 172	121	\$ 184,314	\$ 146,358		\$ 142,115		\$	131,491	
Contributions / (Benefits and Expenses)										
Employer Contributions	7	177	6,714	7,08	3	6,74	2		6,982	
Member Contributions	1	497	1,352	1,33	3	1,29	8		1,368	
Member Reassignment Income		207	_	-	_	-	_		_	
Miscellaneous Income		_	 						_	
Total Contributions and Other	8	881	8,066	8,41	6	8,04	0		8,350	
Pension Benefits	(7	682)	(7,148)	(6,93	9)	(6,72	6)		(6,705)	
Disability Benefits		(49)	(49)	(4	9)	(4	9)		(49)	
Survivor Benefits		580)	(575)	(63	9)	(49	5)		(495)	
Distributions of Contributions and Interest		(72)	(176)	(10	9)	(9	7)		(76)	
Administrative Expenses		(119)	(102)	(9	4)	(10	7)		(112)	
Member Reassignment Expenses		(2)	 _						_	
Total Benefits and Expenses	(8	504)	 (8,050)	(7,83	0)	(7,47	4)		(7,437)	
Net Contributions / (Benefits and Expenses)		377	16	58	6	56	6		913	
Net Investment Income / (Loss)	4	402	 (12,209)	37,37	0	3,67	7	9,711		
Net Increase / (Decrease)	4	779	 (12,193)	37,95	6	4,24	3	10,624		
Fiduciary Net Position Restricted - End of Year	\$ 176	900	\$ 172,121	\$ 184,31	4	\$ 146,35	8	\$	142,115	

#### Schedule of Changes and Growth in Fiduciary Net Position, continued

(dollars in thousands)	2018	2017	2016	2015	2014		
Fiduciary Net Position Restricted - Beginning of Year	\$ 120,016	\$ 111,329	\$ 110,038	\$ 110,657	\$ 97,019		
Contributions / (Benefits and Expenses)							
Employer Contributions	6,175	5,691	5,367	5,215	5,359		
Member Contributions	1,172	1,102	1,016	1,004	1,019		
Member Reassignment Income	_	_	_	_	_		
Miscellaneous Income	10						
Total Contributions and Other	7,357	6,793	6,383	6,219	6,378		
Pension Benefits	(6,288)	(6,223)	(5,639)	(6,068)	(5,379)		
Disability Benefits	(49)	(49)	(58)	(60)	(92)		
Survivor Benefits	(483)	(437)	(435)	(395)	(367)		
Distributions of Contributions and Interest	(115)	(117)	(113)	(85)	(100)		
Administrative Expenses	(136)	(123)	(139)	(159)	(141)		
Member Reassignment Expenses		(26)	(21)				
Total Benefits and Expenses	(7,071)	(6,975)	(6,405)	(6,767)	(6,079)		
Net Contributions / (Benefits and Expenses)	286	(182)	(22)	(548)	299		
Net Investment Income / (Loss)	11,189	8,869	1,313	(71)	13,339		
Net Increase / (Decrease)	11,475	8,687	1,291	(619)	13,638		
Fiduciary Net Position Restricted - End of Year	\$ 131,491	\$ 120,016	\$ 111,329	\$ 110,038	\$ 110,657		

### **Schedule of Historical Contribution Rates**

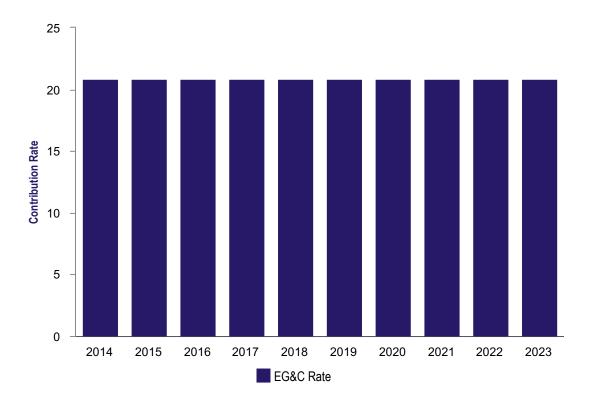
#### For the Years Ended June 30

	EG&C Rate
2023	20.75 %
2022	20.75
2021	20.75
2020	20.75
2019	20.75
2018	20.75
2017	20.75
2016	20.75
2015	20.75
2014	20.75

#### Memo:

Effective Date

January 1



# Excise, Gaming and Conservation Officers' Retirement Fund, continued

### **Ratio of Active Members to Annuitants**

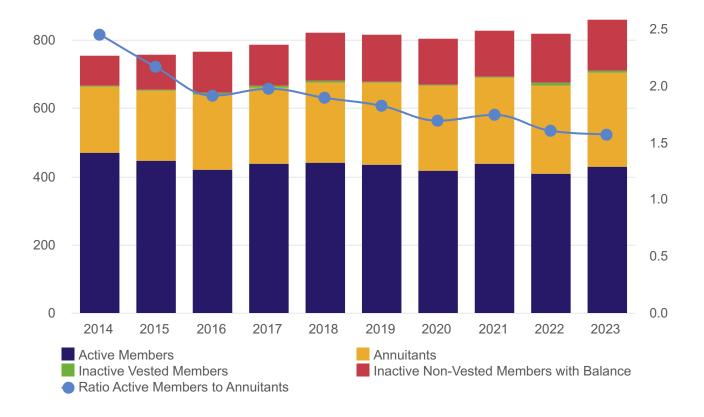
#### For the Years Ended June 30

_	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	431	275	7	148	861	1.57
2022	411	257	8	144	820	1.60
2021	439	252	5	134	830	1.74
2020	420	248	4	133	805	1.69
2019	436	240	4	137	817	1.82
2018	443	234	5	141	823	1.89
2017	440	223	6	120	789	1.97
2016	421	220	7	121	769	1.91
2015	448	207	3	101	759	2.16
2014	473	193	4	87	757	2.45



\_\_\_\_\_

3.0



# Schedule of Benefit Recipients by Type of Benefit Option For the Year Ended June 30, 2023

_	Number of Benefit Recipients by Benefit Option												
Amount of Monthly Benefit (in dollars)	Retirees	Survivors	Disability	Total Benefit Recipients									
\$ 1 - 500	2	4	1	7									
501 - 1,000	10	17	_	27									
1,001 - 1,500	24	17	1	42									
1,501 - 2,000	15	3	_	18									
2,001 - 3,000	88	2	1	91									
Over 3,000	90			90									
Total	229	43	3	275									

**Retirees** — Provides a monthly benefit for the retiree's life. Upon the death of the retiree, the qualified designated survivor receives 50% of the member's monthly benefit for the remainder of the survivor's life.

**Survivors** — Members receiving a survivor benefit in accordance with the applicable statute. The benefit ceases upon the death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. For EG&C, there is no minimum creditable service requirement.

### Schedule of Average Benefit Payments

	Years of Credited Service													
		< 10		10 - 14		15 - 19		20 - 24		25 - 29		30+		Total
2023	_													
Average Monthly Defined Benefit	\$	859	\$	1,532	\$	1,188	\$	1,147	\$	2,445	\$	2,997	\$	2,427
Average Final Average Salary	\$	51,086	\$	70,230	\$	53,982	\$	42,115	\$	57,683	\$	59,694	\$	58,414
Number of Benefit Recipients		2		21		23		17		88		124		275
2022														
Average Monthly Defined Benefit	\$	851	\$	1,429	\$	649	\$	1,066	\$	2,341	\$	2,942	\$	2,378
Average Final Average Salary	\$	51,086	\$	67,784	\$	35,224	\$	39,098	\$	56,063	\$	59,036	\$	56,345
Number of Benefit Recipients		2		17		14		18		82		124		257
2021														
Average Monthly Defined Benefit	- \$	1,509	\$	1,483	\$	586	\$	1,064	\$	2,292	\$	2,872	\$	2,308
Average Final Average Salary	\$	51,086	\$	66,864	\$	33,707	\$	39,323	\$	54,691	\$	58,086	\$	55,049
Number of Benefit Recipients		3		15		17		19		76		122		252
2020														
Average Monthly Defined Benefit	- \$	851	\$	1,386	\$	602	\$	1,064	\$	2,249	\$	2,860	\$	2,285
Average Final Average Salary	\$	51,086	\$	65,326	\$	33,535	\$	39,323	\$	54,691	\$	57,745	\$	54,522
Number of Benefit Recipients		2		11		18		19		78		120		248
2019														
Average Monthly Defined Benefit	\$	851	\$	1,366	\$	594	\$	1,064	\$	2,177	\$	2,830	\$	2,231
Average Final Average Salary	\$	51,086	\$	64,944	\$	33,535	\$	39,323	\$	53,322	\$	57,149	\$	53,507
Number of Benefit Recipients		2		7		21		19		75		116		240
2018														
Average Monthly Defined Benefit	- \$	851	\$	1,421	\$	561	\$	1,020	\$	2,162	\$	2,814	\$	2,224
Average Final Average Salary	\$	51,086	\$	67,123	\$	29,132	\$	39,323	\$	52,606	\$	56,496	\$	52,758
Number of Benefit Recipients		2		4		20		20		73		115		234
2017														
Average Monthly Defined Benefit	\$	504	\$	1,386	\$	615	\$	999	\$	2,101	\$	2,810	\$	2,209
Average Final Average Salary	\$	33,205	\$	66,535	\$	26,878	\$	37,858	\$	51,105	\$	56,019	\$	51,549
Number of Benefit Recipients		15		1		7		19		68		113		223
2016														
Average Monthly Defined Benefit	- \$	504	\$	_	\$	589	\$	983	\$	2,073	\$	2,746	\$	2,144
Average Final Average Salary	\$	33,205	\$	_	\$	26,025	\$	37,093	\$	50,468	\$	54,912	\$	50,294
Number of Benefit Recipients		15		_		8		21		66		110		220
2015														
Average Monthly Defined Benefit	- \$	504	\$	_	\$	562	\$	983	\$	2,031	\$	2,729	\$	2,097
Average Final Average Salary	\$	33,205	\$	_	\$	26,025	\$	37,093	\$	48,424	\$	54,007	\$	49,010
Number of Benefit Recipients		15		_		9		21		59		103		207
2014														
Average Monthly Defined Benefit	\$	2,141	\$	_	\$	439	\$	886	\$	1,816	\$	2,571	\$	2,015
Average Final Average Salary	\$	58.827	\$	_	\$	22.436	\$	36.499	\$	45,830	\$	52.650	\$	47,776
	Ψ	00,021	÷		Ψ	22,400	Ψ	30,433	Ψ	45,050	Ψ	52,050	Ψ	41,110

### Schedule of Changes and Growth in Fiduciary Net Position

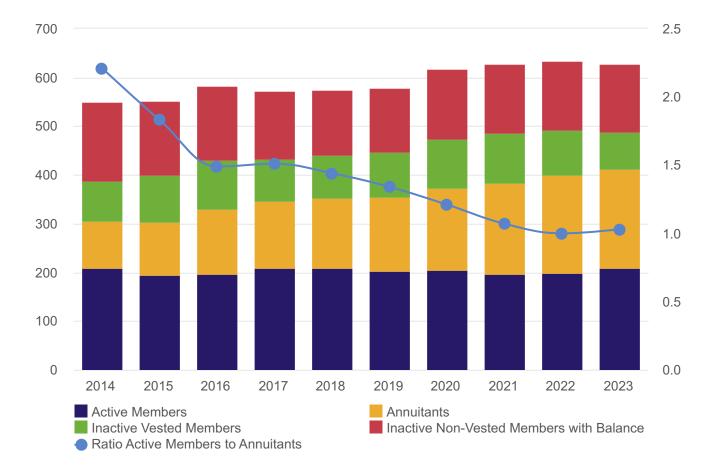
(dollars in thousands)		2023	 2022	2021	2020	2019			
Fiduciary Net Position Restricted - Beginning of Year	\$	80,035	\$ 85,869	\$ 67,876	\$ 65,523	\$ 61,019			
Contributions / (Benefits and Expenses)									
Employer Contributions		4,155	4,044	4,402	4,232	3,216			
Member Contributions		1,531	1,474	1,459	1,440	1,307			
Miscellaneous Income		_	 _						
Total Contributions and Other		5,686	5,518	5,861	5,672	4,523			
Pension Benefits		(5,181)	(4,968)	(4,766)	(4,528)	(3,985)			
Disability Benefits		(128)	(128)	(128)	(102)	(97)			
Survivor Benefits		(430)	(299)	(254)	(179)	(152)			
Distributions of Contributions and Interest		(334)	(304)	(141)	(166)	(199)			
Administrative Expenses		(108)	(69)	(71)	(74)	(75)			
Member Reassignment Expenses		_	 (2)						
Total Benefits and Expenses		(6,181)	 (5,770)	(5,360)	(5,049)	(4,508)			
Net Contributions / (Benefits and Expenses)		(495)	(252)	501	623	15			
Net Investment Income / (Loss)		2,045	 (5,582)	17,492	1,730	4,489			
Net Increase / (Decrease)		1,550	 (5,834)	17,993	2,353	4,504			
Fiduciary Net Position Restricted - End of Year	\$	81,585	\$ 80,035	\$ 85,869	\$ 67,876	\$ 65,523			

### Schedule of Changes and Growth in Fiduciary Net Position, continued

(dollars in thousands)	2018	2017	2016	2015	2014		
Fiduciary Net Position Restricted - Beginning of Year	\$ 55,575	\$ 52,792	\$ 53,424	\$ 54,507	\$ 47,920		
Contributions / (Benefits and Expenses)							
Employer Contributions	3,014	1,486	1,440	1,063	1,174		
Member Contributions	1,294	1,357	1,279	1,269	1,334		
Miscellaneous Income					4		
Total Contributions and Other	4,308	2,843	2,719	2,332	2,512		
Pension Benefits	(3,575)	(3,390)	(3,270)	(2,898)	(2,283)		
Disability Benefits	(97)	(97)	(136)	(19)	(20)		
Survivor Benefits	(181)	(137)	(87)	(78)	(44)		
Distributions of Contributions and Interest	(142)	(445)	(254)	(259)	(51)		
Administrative Expenses	(87)	(158)	(193)	(127)	(108)		
Member Reassignment Expenses							
Total Benefits and Expenses	(4,082)	(4,227)	(3,940)	(3,381)	(2,506)		
Net Contributions / (Benefits and Expenses)	226	(1,384)	(1,221)	(1,049)	6		
Net Investment Income / (Loss)	5,218	4,167	589	(34)	6,581		
Net Increase / (Decrease)	5,444	2,783	(632)	(1,083)	6,587		
Fiduciary Net Position Restricted - End of Year	\$ 61,019	\$ 55,575	\$ 52,792	\$ 53,424	\$ 54,507		

#### **Ratio of Active Members to Annuitants**

_	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	210	203	75	140	628	1.03
2022	200	201	91	142	634	1.00
2021	198	185	104	141	628	1.07
2020	205	169	101	142	617	1.21
2019	203	152	92	132	579	1.34
2018	209	145	87	134	575	1.44
2017	209	138	87	138	572	1.51
2016	198	133	100	151	582	1.49
2015	196	107	97	153	553	1.83
2014	210	95	83	162	550	2.21



#### Schedule of Benefit Recipients by Type of Benefit Option

#### For the Year Ended June 30, 2023

_	Number of Benefit Recipients by Benefit Option											
Amount of Monthly Benefit (in dollars)	Retirees	Survivors	Disability	Total Benefit Recipients								
\$ 1 - 500	\$ 1 - 500 6		_	11								
501 - 1,000	23	10	_	33								
1,001 - 1,500	26	5	_	31								
1,501 - 2,000	21	3	1	25								
2,001 - 3,000	43	4	1	48								
Over 3,000	53	1	1	55								
Total	172	28	3	203								

**Retirees** — Provides a monthly benefit for the retiree's life. Upon the death of the retiree, the qualified designated survivor receives 50% of the member's monthly benefit for the remainder of the survivor's life.

**Survivors** — Members receiving a survivor benefit in accordance with the applicable statute. The benefit ceases upon the death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. For PARF, five or more years of creditable service is required to be eligible for a disability benefit.

### Schedule of Average Benefit Payments

	Years of Credited Service													
		< 10	10 - 14			15 - 19		20 - 24		25 - 29		30+		Total
2023														
Average Monthly Defined Benefit	\$	1,353	\$	1,847	\$	2,406	\$	2,739	\$	3,100	\$	2,463	\$	2,231
Average Final Average Salary	\$	86,437	\$	74,978	\$	91,426	\$	98,759	\$	117,542	\$	127,002	\$	90,187
Number of Benefit Recipients		18		73		48		35		17		12		203
2022														
Average Monthly Defined Benefit	\$	1,373	\$	1,844	\$	2,401	\$	2,758	\$	3,066	\$	2,463	\$	2,240
Average Final Average Salary	\$	83,138	\$	74,167	\$	90,918	\$	96,670	\$	117,542	\$	127,002	\$	89,390
Number of Benefit Recipients		17		72		46		37		17		12		201
2021														
Average Monthly Defined Benefit	- \$	1,396	\$	1,834	\$	2,354	\$	2,713	\$	3,049	\$	2,463	\$	2,225
Average Final Average Salary	\$	83,138	\$	73,878	\$	86,973	\$	95,024	\$	117,542	\$	127,002	\$	88,414
Number of Benefit Recipients		16		65		41		34		17		12		185
2020														
Average Monthly Defined Benefit	- \$	1,432	\$	1,805	\$	2,321	\$	2,802	\$	3,030	\$	2,463	\$	2,214
Average Final Average Salary	\$	76,775	\$	74,449	\$	83,521	\$	94,117	\$	115,215	\$	127,002	\$	86,535
Number of Benefit Recipients	·	12		64		38		29		14		12		169
2019														
Average Monthly Defined Benefit	- \$	1,193	\$	1,776	\$	2,284	\$	2,705	\$	2,977	\$	2,307	\$	2,134
Average Final Average Salary	\$	73,391	\$	72,191	\$	81,704	\$	91,833	\$	108,040	\$	124,231	\$	83,509
Number of Benefit Recipients		12		57		34		27		11		11		152
2018														
Average Monthly Defined Benefit	\$	1,277	\$	1,802	\$	2,202	\$	2,651	\$	2,977	\$	2,307	\$	2,154
Average Final Average Salary	\$	69,684	\$	71,503	\$	81,176	\$	92,089	\$	108,040	\$	124,231	\$	83,440
Number of Benefit Recipients		9		51		36		27		11		11		145
2017														
Average Monthly Defined Benefit	\$	1,013	\$	1,735	\$	2,128	\$	2,704	\$	2,977	\$	2,423	\$	2,098
Average Final Average Salary	\$	64,922	\$	69,798	\$	77,790	\$	91,342	\$	108,040	\$	126,756	\$	81,499
Number of Benefit Recipients		10		50		32		25		11		10		138
2016														
Average Monthly Defined Benefit	\$	1,013	\$	1,729	\$	2,136	\$	2,665	\$	2,901	\$	2,423	\$	2,088
Average Final Average Salary	\$	64,922	\$	68,303	\$	77,439	\$	90,943	\$	108,734	\$	126,756	\$	80,869
Number of Benefit Recipients		10		47		31		24		11		10		133
2015														
Average Monthly Defined Benefit	\$	1,163	\$	1,498	\$	1,969	\$	2,467	\$	2,589	\$	1,693	\$	1,865
Average Final Average Salary	\$	83,896	\$	62,194	\$	73,614	\$	86,752	\$	99,686	\$	113,499	\$	76,315
Number of Benefit Recipients		8		38		27		20		8		6		107
2014														
Average Monthly Defined Benefit	\$	1,694	\$	1,445	\$	1,875	\$	2,340	\$	2,626	\$	2,187	\$	1,843
Average Final Average Salary	\$	77,001	\$	54,908	\$	71,821	\$	83,707	\$	103,220	\$	110,167	\$	72,709
Number of Benefit Recipients		28		22		22		14		5		4		95

This page is intentionally left blank.

(dollars in thousands)	2023		2022		2021		2020	2019	
Fiduciary Net Position Restricted - Beginning of Year	\$ 3,116		\$	3,515	\$ 2,9	24	\$ 3,026	\$	2,942
Contributions / (Benefits and Expenses)									
Employer Contributions		182		183	2	08	208		269
Nonemployer Contributing Entity		_		_		30			_
Total Contributions and Other		182		183	2	38	208		269
Pension Benefits		(287)		(284)	(2	91)	(293)		(302)
Disability Benefits		_		_		_	_		(3)
Survivor Benefits <sup>1</sup>		(42)		(51)	(	50)	(56)		(51)
Administrative Expenses		(36)		(30)	(	35)	(38)		(38)
Total Benefits and Expenses		(365)		(365)	(3	76)	(387)		(394)
Net Contributions / (Benefits and Expenses)		(183)		(182)	(1	38))	(179)		(125)
Net Investment Income / (Loss)		74		(217)	7	29	77		209
Net Increase / (Decrease)		(109)		(399)	5	91	(102)		84
Fiduciary Net Position Restricted - End of Year	\$	3,007	\$	3,116	\$ 3,5	15	\$ 2,924	\$	3,026

(dollars in thousands)	2018		2017		2016	2015	2014	
Fiduciary Net Position Restricted - Beginning of Year	\$ 2,865		\$	2,919	\$ 3,174	\$ 3,489	\$ 3,337	
Contributions / (Benefits and Expenses)								
Employer Contributions		237		135	138	131	138	
Nonemployer Contributing Entity		_						
Total Contributions and Other		237		135	138	131	138	
Pension Benefits		(303)		(304)	(311)	(331)	(324)	
Disability Benefits		—		_	—	_	(2)	
Survivor Benefits <sup>1</sup>		(56)		(53)	(48)	(39)	(37)	
Administrative Expenses		(64)		(53)	(61)	(71)	(62)	
Total Benefits and Expenses		(423)		(410)	(420)	(441)	(425)	
Net Contributions / (Benefits and Expenses)		(186)		(275)	(282)	(310)	(287)	
Net Investment Income / (Loss)		263		221	27	(5)	439	
Net Increase / (Decrease)		77		(54)	(255)	(315)	152	
Fiduciary Net Position Restricted - End of Year	\$	2,942	\$	2,865	\$ 2,919	\$ 3,174	\$ 3,489	

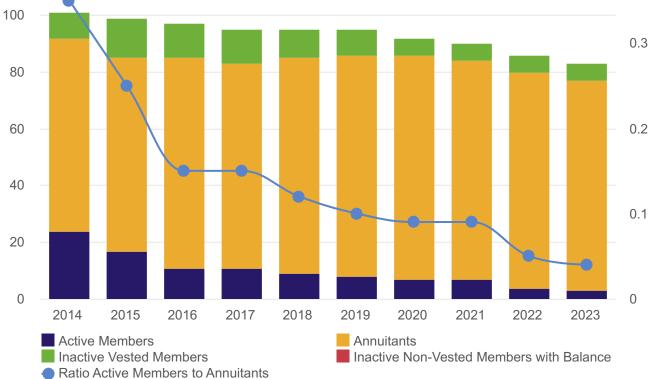
#### **Ratio of Active Members to Annuitants**

#### For the Years Ended June 30

-	Active Members	Annuitants	Inactive Vested Members	Inactive Non-Vested Members with Balance	Total Members	Ratio Active Members to Annuitants
2023	3	74	6	_	83	0.04
2022	4	76	6	_	86	0.05
2021	7	77	6	_	90	0.09
2020	7	79	6	_	92	0.09
2019	8	78	9	_	95	0.10
2018	9	76	10	_	95	0.12
2017	11	72	12	_	95	0.15
2016	11	74	12	_	97	0.15
2015	17	68	14	_	99	0.25
2014	24	68	9	_	101	0.35

0.4





# Schedule of Benefit Recipients by Type of Benefit Option

#### For the Year Ended June 30, 2023

	Number of Benefit Recipients by Benefit Option							
Amount of Monthly Benefit (in dollars)	Retirees	Survivors	Disability	Total Benefit Recipients				
\$ 1 - 500	40	13	_	53				
501 - 1,000	18	2	_	20				
1,001 - 1,500	1	_	_	1				
1,501 - 2,000	_	_	_	-				
2,001 - 3,000	_	_	_	-				
Over 3,000	_	_						
Total	59	15		74				

**Retirees** — Provides a monthly benefit for the retiree's life. Upon the death of the retiree, the qualified designated survivor receives 50% of the member's monthly benefit for the remainder of the survivor's life.

Survivors — Members receiving a survivor benefit in accordance with the applicable statute. The benefit ceases upon the death of the survivor.

**Disability** — Members receiving a disability benefit in accordance with the applicable statute. For LE DB, five or more years of creditable service is required to be eligible for a disability benefit.

#### Schedule of Average Benefit Payments

#### For the Years Ended June 30

		Years of Credited Service												
		< 10		10 - 14		15 - 19		20 - 24		25 - 29		30+		Total
2023														
Average Monthly Defined Benefit <sup>1</sup>	\$	207	\$	382	\$	632	\$	1,018	\$	582	\$	_	\$	378
Average Final Average Salary	\$	23,177	\$	25,342	\$	23,373	\$	_	\$	_	\$	_	\$	23,786
Number of Benefit Recipients		33		22		16		2		1		_		74
2022														
Average Monthly Defined Benefit <sup>1</sup>	\$	201	\$	374	\$	631	\$	1,008	\$	577	\$	_	\$	368
Average Final Average Salary	\$	23,450	\$	25,594	\$	23,373		N/A		N/A		N/A	\$	24,016
Number of Benefit Recipients		35		22		16		2		1		_		76
2021														
Average Monthly Defined Benefit <sup>1</sup>	\$	208	\$	382	\$	624	\$	1,008	\$	577	\$	_	\$	377
Average Final Average Salary	\$	23,450	\$	26,330	\$	24,244		N/A		N/A	,	N/A	\$	24,477
Number of Benefit Recipients		33		25		16		2		1		_		77
2020														
Average Monthly Defined Benefit <sup>1</sup>	\$	206	\$	388	\$	640	\$	1.008	\$	577	\$	784	\$	384
Average Final Average Salary	\$	23.833	\$	26,330	\$	24,244	Ŧ	N/A	Ŧ	N/A	Ŧ	N/A	\$	24,630
Number of Benefit Recipients	Ŷ	34	Ŧ	25	Ŧ	16		2		1		1	÷	79
2019														
Average Monthly Defined Benefit <sup>1</sup>	\$	186	\$	393	\$	646	\$	1,008	\$	577	\$	784	\$	389
Average Final Average Salary	\$	24,040	\$	26,330	\$	24,244		N/A		N/A		N/A	\$	24,709
Number of Benefit Recipients		31		26		17		2		1		1		78
2018														
Average Monthly Defined Benefit <sup>1</sup>	\$	191	\$	388	\$	646	\$	1,008	\$	577	\$	784	\$	392
Average Final Average Salary	\$	24,040	\$	26,330	\$	24,244		N/A		N/A		N/A	\$	24,709
Number of Benefit Recipients		30		25		17		2		1		1		76
2017														
Average Monthly Defined Benefit <sup>1</sup>	\$	247	\$	451	\$	667	\$	1,008	\$	577	\$	784	\$	413
Average Final Average Salary	\$	25,847	\$	22,383	\$	24,244		N/A		N/A		N/A	\$	24,709
Number of Benefit Recipients		37		16		15		2		1		1		72
2016														
Average Monthly Defined Benefit <sup>1</sup>	\$	250	\$	451	\$	667	\$	1,008	\$	577	\$	784	\$	410
Average Final Average Salary	\$	25,932	\$	22,383	\$	24,244		N/A		N/A		N/A	\$	24,785
Number of Benefit Recipients		39		16		15		2		1		1		74
2015														
Average Monthly Defined Benefit <sup>1</sup>	\$	255	\$	443	\$	679	\$	1,008	\$	577	\$	1,568	\$	448
Average Final Average Salary	\$	25,872	\$	22,383	\$	24,244		N/A		N/A		N/A	\$	24,781
Number of Benefit Recipients		31		17		16		2		1		1		68
2014														
Average Monthly Defined Benefit <sup>1</sup>	\$	386	\$	351	\$	459	\$	629	\$	472	\$	669	\$	447
Average Final Average Salary	\$	12,154	\$	19,636	\$	29,430	\$	32,868	\$	27,614	\$	31,870	\$	24,372
Number of Benefit Recipients		17		21		14		7		2		7		68

<sup>1</sup> Benefit calculations for the LE DB benefit recipients are based on years of service, not final average salary.

This page is intentionally left blank.

# For the Years Ended June 30<sup>1</sup>

(dollars in thousands)	2023	2022	2021	2020	2019	
Fiduciary Net Position Restricted - Beginning of Year	\$ 3,075,319	\$ 3,462,396	\$ 2,977,454	\$ 2,927,470	\$ 2,867,731	
Contributions / (Benefits and Expenses)						
Member Contributions	217,910	197,794	189,245	183,685	178,108	
Transfer from Defined Benefit	_	_	_	_	_	
Miscellaneous Income			4			
Total Contributions and Other	217,910	197,794	189,249	183,685	178,108	
Distributions of Contributions and Interest	(217,539)	(266,405)	(286,367)	(224,990)	(230,340)	
Administrative Expenses	(8,113)	(7,625)	(7,420)	(7,514)	(7,186)	
Miscellaneous Expenses			(45)	(135)	(155)	
Total Benefits and Expenses	(225,652)	(274,030)	(293,832)	(232,639)	(237,681)	
Net Contributions / (Benefits and Expenses)	(7,742)	(76,236)	(104,583)	(48,954)	(59,573)	
Net Investment Income / (Loss)	265,694	(310,841)	589,525	98,938	119,312	
Net Increase / (Decrease)	257,952	(387,077)	484,942	49,984	59,739	
Fiduciary Net Position Restricted - End of Year	\$ 3,333,271	\$ 3,075,319	\$ 3,462,396	\$ 2,977,454	\$ 2,927,470	

# For the Years Ended June 30<sup>1</sup>

(dollars in thousands)	2018			
Fiduciary Net Position Restricted - Beginning of Year	\$	-		
Contributions / (Benefits and Expenses)				
Member Contributions		88,052		
Transfer from Defined Benefit		2,849,380		
Miscellaneous Income				
Total Contributions and Other		2,937,432		
Distributions of Contributions and Interest		(106,749)		
Administrative Expenses		(3,839)		
Miscellaneous Expenses		(50)		
Total Benefits and Expenses		(110,638)		
Net Contributions / (Benefits and Expenses)		2,826,794		
Net Investment Income / (Loss)		40,937		
Net Increase / (Decrease)		2,867,731		
Fiduciary Net Position Restricted - End of Year	\$	2,867,731		

<sup>1</sup> PERF DC was split from PERF DB as of January 1, 2018, therefore 2018 represents only a half year of activity.

#### **Membership Data**

	PERF	DC	PERF MC DC			
	Active Members	Inactive Vested Members	Active Members	Inactive Vested Members		
2023	127,809	109,018	5,188	4,438		
2022	125,817	103,262	4,590	3,775		
2021	127,517	95,956	4,323	2,860		
2020	131,581	89,896	4,166	2,071		
2019	131,765	86,698	3,390	1,359		
2018	127,189	87,128	1,489	1,846		
2021 2020 2019	127,517 131,581 131,765	95,956 89,896 86,698	4,323 4,166 3,390	2,86 2,07 1,35		

#### **Schedule of Historical Contribution Rates**

#### For the Years Ended June 30

			PERF MC DC	
	PERF Hybrid Member Rate	State and Political Subdivision Member Rate	State Employer Rate	Political Subdivision <sup>1</sup> Employer Rate
2023	3.0%	3.0%	3.7%	4.4%
2022	3.0	3.0	3.2	3.9
2021	3.0	3.0	3.2	4.0
2020	3.0	3.0	3.0	3.8
2019	3.0	3.0	3.4	4.2
2018	3.0	3.0	3.4	4.1
2017	3.0	3.0	3.3	4.0
2016	3.0	3.0	4.6	5.8
2015	3.0	3.0	4.6	N/A
2014	3.0	3.0	4.7	N/A

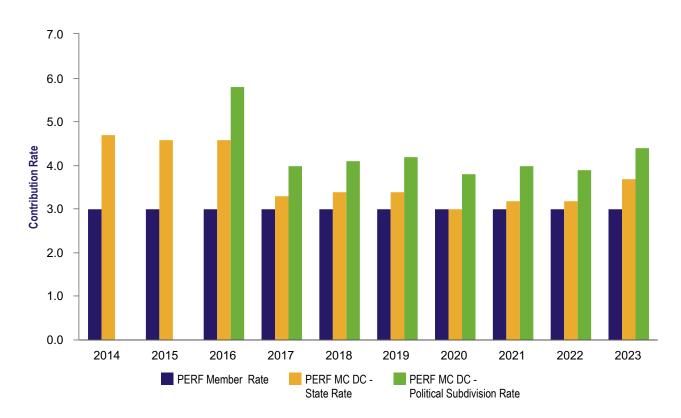
July 1

January 1

#### Memo:

Effective Date

<sup>1</sup> Represents the maximum rate employers may provide their members.



This page is intentionally left blank.

# Schedule of Changes and Growth in Fiduciary Net Position For the Years Ended June 30<sup>1</sup>

(dollars in thousands)	2023	2022	2021	2020	2019	
Fiduciary Net Position Restricted - Beginning of Year	\$ 2,887,745	\$ 3,355,272	\$ 2,812,991	\$ 2,784,126	\$ 2,744,103	
Contributions / (Benefits and Expenses)						
Member Contributions	153,657	143,427	134,314	129,252	123,437	
Transfer from Defined Benefit	—	_	_	_	_	
Miscellaneous Income			11			
Total Contributions and Other	153,657	143,427	134,325	129,252	123,437	
Distributions of Contributions and Interest	(193,364)	(238,587)	(285,134)	(193,711)	(209,642)	
Administrative Expenses	(3,459)	(3,255)	(3,125)	(3,158)	(3,127)	
Miscellaneous Expenses			(24)	(62)	(70)	
Total Benefits and Expenses	(196,823)	(241,842)	(288,283)	(196,931)	(212,839)	
Net Contributions / (Benefits and Expenses)	(43,166)	(98,415)	(153,958)	(67,679)	(89,402)	
Net Investment Income / (Loss)	308,295	(369,112)	696,239	96,544	129,425	
Net Increase / (Decrease)	265,129	(467,527)	542,281	28,865	40,023	
Fiduciary Net Position Restricted - End of Year	\$ 3,152,874	\$ 2,887,745	\$ 3,355,272	\$ 2,812,991	\$ 2,784,126	

# **Teachers' Defined Contribution Account, continued**

(dollars in thousands)	2018			
Fiduciary Net Position Restricted - Beginning of Year	\$	-		
Contributions / (Benefits and Expenses)				
Member Contributions		63,026		
Transfer from Defined Benefit		2,674,819		
Miscellaneous Income				
Total Contributions and Other		2,737,845		
Distributions of Contributions and Interest		(37,514)		
Administrative Expenses		(1,652)		
Miscellaneous Expenses		(22)		
Total Benefits and Expenses		(39,188)		
Net Contributions / (Benefits and Expenses)		2,698,657		
Net Investment Income / (Loss)		45,446		
Net Increase / (Decrease)		2,744,103		
Fiduciary Net Position Restricted - End of Year	\$	2,744,103		

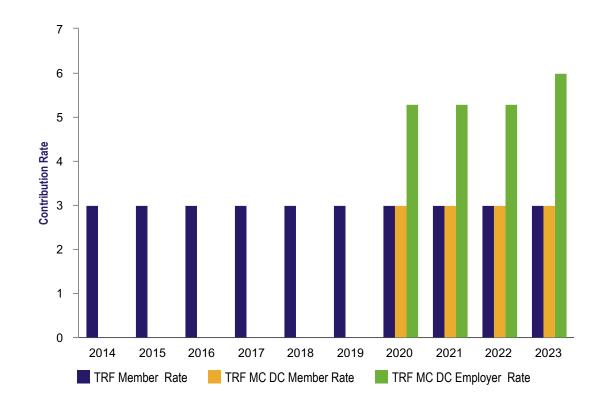
<sup>1</sup> TRF DC was split from PERF DB as of January 1, 2018, therefore 2018 represents only a half year of activity.

#### **Membership Data**

	TRF	DC	TRF MC DC			
	Active Members	Inactive Vested Members	Active Members	Inactive Vested Members		
2023	67,745	32,122	2,636	753		
2022	67,747	30,466	2,041	448		
2021	68,137	28,212	1,295	174		
2020	69,214	27,133	703	58		
2019	69,193	25,218	_	_		
2018	69,193	25,218	_	_		

# Schedule of Historical Contribution Rates For the Years Ended June 30

	-	TRF MC DC			
	TRF Hybrid Member Rate	Member Rate	Employer Rate		
2023	3.0%	3.0%	6.0%		
2022	3.0	3.0	5.3		
2021	3.0	3.0	5.3		
2020	3.0	3.0	5.3		
2019	3.0	N/A	N/A		
2018	3.0	N/A	N/A		
2017	3.0	N/A	N/A		
2016	3.0	N/A	N/A		
2015	3.0	N/A	N/A		
2014	3.0	N/A	N/A		
Memo:					
Effective Date	July 1	July 1	July 1		



This page is intentionally left blank.

(dollars in thousands)	2023	}	 2022	2021		2020	 2019
Fiduciary Net Position Restricted - Beginning of Year	\$	35,336	\$ 41,798	\$ 35,64	9	\$ 33,897	\$ 33,596
Contributions / (Benefits and Expenses)							
Employer Contributions		1,657	1,515	1,50	7	1,419	1,483
Member Contributions		456	450	45	6	424	407
Miscellaneous Income		12	 13	1	7	23	 25
Total Contributions and Other		2,125	1,978	1,98	0	1,866	1,915
Distributions of Contributions and Interest		(3,796)	(2,918)	(5,21	6)	(1,656)	(3,228)
Administrative Expenses		(8)	 (7)		(7)	(7)	 (8)
Total Benefits and Expenses		(3,804)	 (2,925)	(5,22	3)	(1,663)	 (3,236)
Net Contributions / (Benefits and Expenses)		(1,679)	(947)	(3,24	3)	203	(1,321)
Net Investment Income / (Loss)		3,485	 (5,515)	9,39	2	1,549	 1,622
Net Increase / (Decrease)		1,806	 (6,462)	6,14	9	1,752	 301
Fiduciary Net Position Restricted - End of Year	\$	37,142	\$ 35,336	\$ 41,79	8	\$ 35,649	\$ 33,897

(dollars in thousands)	2018	2017	2016	2015	2014
Fiduciary Net Position Restricted - Beginning of Year	\$ 30,772	\$ 28,410	\$ 28,288	\$ 29,103	\$ 25,322
Contributions / (Benefits and Expenses)					
Employer Contributions	1,334	1,395	_	_	_
Member Contributions	392	388	1,763	1,715	1,590
Miscellaneous Income	18	18	14	36	40
Total Contributions and Other	1,744	1,801	1,777	1,751	1,630
Distributions of Contributions and Interest	(1,794)	(2,504)	(1,794)	(3,100)	(1,452)
Administrative Expenses	(12)	(7)	(12)	(6)	(5)
Total Benefits and Expenses	(1,806)	(2,511)	(1,806)	(3,106)	(1,457)
Net Contributions / (Benefits and Expenses)	(62)	(710)	(29)	(1,355)	173
Net Investment Income / (Loss)	2,886	3,072	151	540	3,608
Net Increase / (Decrease)	2,824	2,362	122	(815)	3,781
Fiduciary Net Position Restricted - End of Year	\$ 33,596	\$ 30,772	\$ 28,410	\$ 28,288	\$ 29,103

#### **Schedule of Historical Contribution Rates**

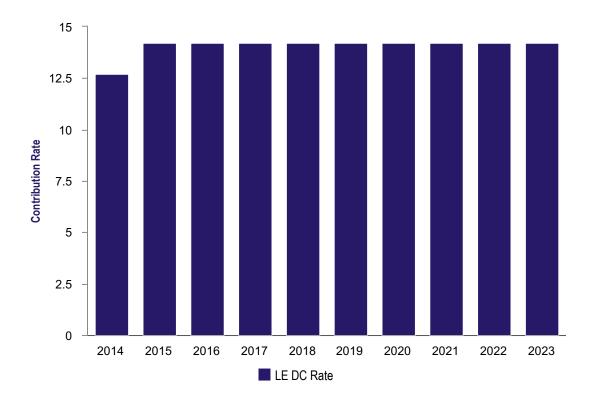
#### For the Years Ended June 30

	LE DC Rate
2023	14.2%
2022	14.2
2021	14.2
2020	14.2
2019	14.2
2018	14.2
2017	14.2
2016	14.2
2015	14.2
2014	12.7

#### Memo:

Effective Date

January 1



This page is intentionally left blank.

# For the Years Ended June 30<sup>1</sup>

(dollars in thousands)	2023		2022		2021	2020	 2019
Fiduciary Net Position Restricted - Beginning of Year	\$ 10,47	76	\$ 14,12	27	\$ 15,705	\$ 15,233	\$ 14,779
Contributions / (Benefits and Expenses)							
Nonemployer Contributing Entity	46	63	41	3	393	457	 515
Total Contributions and Other	46	63	41	3	393	457	515
Special Death Benefits	(1,57	75)	(3,15	50)	(1,950)	(1,000)	(1,050)
Administrative Expenses		37)	(3	32)	(31)	(32)	 (1)
Total Benefits and Expenses	(1,61	12)	(3,18	32)	(1,981)	(1,032)	 (1,051)
Net Contributions / (Benefits and Expenses)	(1,14	49)	(2,76	<b>69</b> )	(1,588)	(575)	(536)
Net Investment Income / (Loss)	(*	12)	(88)	32)	10	1,047	 990
Net Increase / (Decrease)	(1,16	61)	(3,65	51)	(1,578)	472	 454
Fiduciary Net Position Restricted - End of Year	\$ 9,31	15	\$ 10,47	6	\$ 14,127	\$ 15,705	\$ 15,233

<sup>1</sup> Effective July 1, 2017, the State Employees' Death Benefit and the Public Safety Officers' Special Death Benefit Fund were merged into the new Special Death Benefit Fund. The death benefit of the Local Public Safety Pension Relief Fund was also transferred to the Special Death Benefit Fund.

# For the Years Ended June 30<sup>1</sup>

(dollars in thousands)	2018	2017	2016	2015	2014
Fiduciary Net Position Restricted - Beginning of Year	\$ 15,098	\$ 14,651	\$ 13,609	\$ 13,091	\$ 12,336
Contributions / (Benefits and Expenses)					
Nonemployer Contributing Entity	506	564	611	506	525
Total Contributions and Other	506	564	611	506	525
Special Death Benefits	(750)	(100)	(150)	(150)	(150)
Administrative Expenses					
Total Benefits and Expenses	(750)	(100)	(150)	(150)	(150)
Net Contributions / (Benefits and Expenses)	(244)	464	461	356	375
Net Investment Income / (Loss)	(75)	(17)	581	162	380
Net Increase / (Decrease)	(319)	447	1,042	518	755
Fiduciary Net Position Restricted - End of Year	\$ 14,779	\$ 15,098	\$ 14,651	\$ 13,609	\$ 13,091

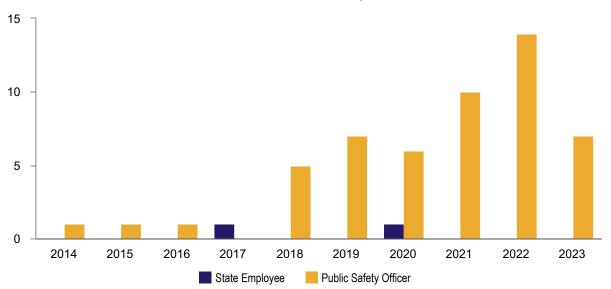
<sup>1</sup> Effective July 1, 2017, the State Employees' Death Benefit and the Public Safety Officers' Special Death Benefit Fund were merged into the new Special Death Benefit Fund. The death benefit of the Local Public Safety Pension Relief Fund was also transferred to the Special Death Benefit Fund.

#### Schedule of Average Death Benefit Payments

For the Year Ended June 30, 2023	Er	State nployee <sup>1</sup>	F	Public Safety Officer <sup>2</sup>	For the Year Ended June 30, 2018	Er	State nployee <sup>1</sup>	Pu	ublic Safety Officer <sup>2</sup>
Average Death Benefit	\$	_	\$	225,000	Average Death Benefit	\$	_	\$	150,000
Number of Benefit Recipients		_		7	Number of Benefit Recipients		_		5
For the Year Ended June 30, 2022					For the Year Ended June 30, 2017				
Average Death Benefit	\$	_	\$	225,000	Average Death Benefit	\$	100,000	\$	_
Number of Benefit Recipients		_		14	Number of Benefit Recipients		1		_
For the Year Ended June 30, 2021	_				For the Year Ended June 30, 2016	_			
Average Death Benefit	\$	_	\$	195,000	Average Death Benefit	\$	_	\$	150,000
Number of Benefit Recipients		_		10	Number of Benefit Recipients		_		1
For the Year Ended June 30, 2020	_				For the Year Ended June 30, 2015	_			
Average Death Benefit	\$	100,000	\$	150,000	Average Death Benefit	\$	_	\$	150,000
Number of Benefit Recipients		1		6	Number of Benefit Recipients		_		1
For the Year Ended June 30, 2019					For the Year Ended June 30, 2014				
Average Death Benefit	\$	_	\$	150,000	Average Death Benefit	\$	_	\$	150,000
Number of Benefit Recipients		_		7	Number of Benefit Recipients		_		1

<sup>1</sup> Lump sum death benefit of \$100,000 paid to the surviving spouse or child(ren) of a state employee who dies in the line of duty as defined in statute (IC 5-10-11).

<sup>2</sup> Lump sum death benefit of \$225,000 paid to the surviving spouse or child(ren) of a member of the '77 Fund who dies in the line of duty after June 30, 2020. A lump sum death benefit of \$150,000 will be paid in the member died in the line of duty before July 1, 2020, as defined in statute (IC 36-8-8-20). If there is no surviving spouse or child(ren), the benefit is paid to the parent(s).



#### Number of Death Benefit Recipients

# For the Year Ended June 30<sup>1</sup>

(dollars in thousands)	2023	2022	2021	2020
Fiduciary Net Position Restricted - Beginning of Year	\$ 412,779	\$ 449,759	\$ 448,914	\$ —
Contributions / (Benefits and Expenses)				
Employer	28,569	27,444	28,136	27,666
Transfer from SOI	_	_	_	435,947
Miscellaneous Income			17	23
Total Contributions and Other	28,569	27,444	28,153	463,636
Retiree Health Benefits	(15,559)	(17,093)	(16,658)	(17,306)
Retiree Health Forfeitures	(12,835)	(17,295)	(10,722)	(18,969)
Administrative Expenses	(795)	(699)	(577)	(573)
Miscellaneous Expenses				(17)
Total Benefits and Expenses	(29,189)	(35,087)	(27,957)	(36,865)
Net Contributions / (Benefits and Expenses)	(620)	(7,643)	196	426,771
Net Investment Income / (Loss)	(257)	(29,337)	649	22,143
Net Increase / (Decrease)	(877)	(36,980)	845	448,914
Fiduciary Net Position Restricted - End of Year	\$ 411,902	\$ 412,779	\$ 449,759	\$ 448,914

<sup>1</sup> RMBA transferred to INPRS from the State of Indiana during fiscal year 2020.

#### **Membership Data**

	RMBA							
	Active Members	<b>Retirees and Beneficiaries</b>						
2023	28,240	8,617						
2022	27,363	8,418						
2021	28,912	7,871						
2020	29,086	7,473						

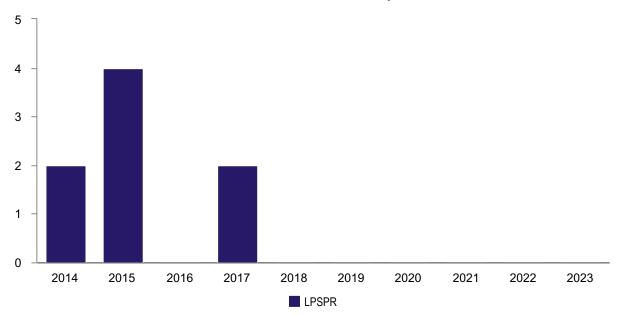
(dollars in thousands)	2023	2022	2021	2020	2019
Fiduciary Net Position Restricted - Beginning of Year	\$ 8,089	\$ 5,904	\$ 10,360	\$ 17,619	\$ 27,353
Contributions / (Benefits and Expenses)					
Nonemployer Contributing Entity	206,711	209,549	201,476	201,135	200,710
Total Contributions and Other	206,711	209,549	201,476	201,135	200,710
Special Death Benefits	_	_	_	_	_
Distributions of Custodial Funds	(205,531)	(207,363)	(205,821)	(209,167)	(212,239)
Administrative Expenses	(146)	(128)	(124)	(128)	_
Miscellaneous Expenses			(1)	(23)	(37)
Total Benefits and Expenses	(205,677)	(207,491)	(205,946)	(209,318)	(212,276)
Net Contributions / (Benefits and Expenses)	1,034	2,058	(4,470)	(8,183)	(11,566)
Net Investment Income / (Loss)	3,499	127	14	924	1,832
Net Increase / (Decrease)	4,533	2,185	(4,456)	(7,259)	(9,734)
Fiduciary Net Position Restricted - End of Year	\$ 12,622	\$ 8,089	\$ 5,904	\$ 10,360	\$ 17,619

(dollars in thousands)	2018	2017	2016	2015	2014
Fiduciary Net Position Restricted - Beginning of Year	\$ 32,248	\$ 28,127	\$ 31,390	\$ 15,073	\$ 32,375
Contributions / (Benefits and Expenses)					
Nonemployer Contributing Entity	206,408	216,995	212,322	234,543	202,437
Total Contributions and Other	206,408	216,995	212,322	234,543	202,437
Special Death Benefits	_	(300)	_	(600)	(300)
Distributions of Custodial Funds	(212,634)	(213,256)	(215,816)	(217,663)	(219,440)
Administrative Expenses	(2)	(31)	(33)	(30)	(48)
Miscellaneous Expenses	(25)	(13)			
Total Benefits and Expenses	(212,661)	(213,600)	(215,849)	(218,293)	(219,788)
Net Contributions / (Benefits and Expenses)	(6,253)	3,395	(3,527)	16,250	(17,351)
Net Investment Income / (Loss)	1,358	726	264	67	49
Net Increase / (Decrease)	(4,895)	4,121	(3,263)	16,317	(17,302)
Fiduciary Net Position Restricted - End of Year	\$ 27,353	\$ 32,248	\$ 28,127	\$ 31,390	\$ 15,073

# Schedule of Average Death Benefit Payments<sup>1</sup>

	For the Year Ended June 30, 2018		
N/A	Average Death Benefit		N/A
N/A	Number of Benefit Recipients		N/A
	For the Year Ended June 30, 2017		
N/A	Average Death Benefit	\$	150,000
N/A	Number of Benefit Recipients		2
	For the Year Ended June 30, 2016		
N/A	Average Death Benefit	\$	_
N/A	Number of Benefit Recipients		_
	For the Year Ended June 30, 2015		
N/A	Average Death Benefit	\$	150,000
N/A	Number of Benefit Recipients		4
	For the Year Ended June 30, 2014		
N/A	Average Death Benefit	\$	150,000
N/A	Number of Benefit Recipients		2
	N/A N/A N/A N/A N/A N/A	N/A       Number of Benefit Recipients         For the Year Ended June 30, 2017         N/A       Average Death Benefit         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2016         N/A       Average Death Benefit         N/A       Average Death Benefit         N/A       Average Death Benefit         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2015       Average Death Benefit         N/A       Average Death Benefit         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2015       For the Year Ended June 30, 2015         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2014       Average Death Benefit         N/A       Average Death Benefit	N/A       Number of Benefit Recipients         For the Year Ended June 30, 2017         N/A       Average Death Benefit         N/A       Average Death Benefit         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2016         N/A       Average Death Benefit         N/A       Average Death Benefit         N/A       Average Death Benefit         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2015       \$         N/A       Average Death Benefit         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2015       \$         N/A       Number of Benefit Recipients         For the Year Ended June 30, 2014       \$         N/A       Average Death Benefit

<sup>1</sup> Effective July 1, 2017 the death benefit was combined into the Special Death Benefit Fund.



#### **Number of Death Benefit Recipients**