

Highway Patrol Retirement System

2024

Annual Comprehensive Financial Report Year Ended December 31, 2024

A Component Unit of the State of Ohio





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Columbus, Ohio 43215
ContactUs@ohioauditor.gov
800-282-0370

Board of Trustees
Ohio Highway Patrol Retirement System
1900 Polaris Parkway, Suite 201
Columbus, Ohio 43240

We have reviewed the *Independent Auditor's Report* of the Ohio Highway Patrol Retirement System, Delaware County, prepared by Rea & Associates, Inc., for the audit period January 1, 2024 through December 31, 2024. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria, as reflected by the Ohio Constitution, and the Revised Code, policies, procedures and guidelines of the Auditor of State, regulations and grant requirements. The Ohio Highway Patrol Retirement System is responsible for compliance with these laws and regulations.

KEITH FABER
Ohio Auditor of State

Tiffany L. Ridenbaugh, CPA, CFE, CGFM
Chief Deputy Auditor

July 15, 2025

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2024

OHIO HIGHWAY PATROL RETIREMENT SYSTEM

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the year ended December 31, 2024

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Disclaimer

This audit report is subject to review and acceptance by the Auditor of State's office, and the requirements of Ohio Revised Code § 117.25 are not met until the Auditor of State certifies this report. This process takes approximately two weeks and reports are subject to change if the Auditor of State determines that modification of a report is necessary to comply with required accounting or auditing standards or the Uniform Guidance.

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Introductory Section



Government Finance Officers Association

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to

Ohio State Highway Patrol Retirement System

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

December 31, 2023

Christopher P. Morill

Executive Director/CEO

Introductory Section

Board of Trustees and Senior Staff



Major Matthew L. Them
Employee Trustee / Chair



Major (ret.) Darryl L. Anderson
Retiree Trustee / Vice-Chair



Sergeant Derek L. Malone
Employee Trustee



Lieutenant Christian J. Niemeyer
Employee Trustee



Sergeant Brice A. Nihiser
Employee Trustee



Trooper Cynthia D. Wilt
Employee Trustee



Colonel Charles A. Jones
Statutory Member



Sergeant (ret.) Michael P. Kasler
Retiree Trustee



Major (ret.) JP Allen
Governor's Investment Expert Appointee



Joseph H. Thomas
General Assembly's Investment Expert Appointee



Craig A. Warnimont
Treasurer of State's Investment Designee



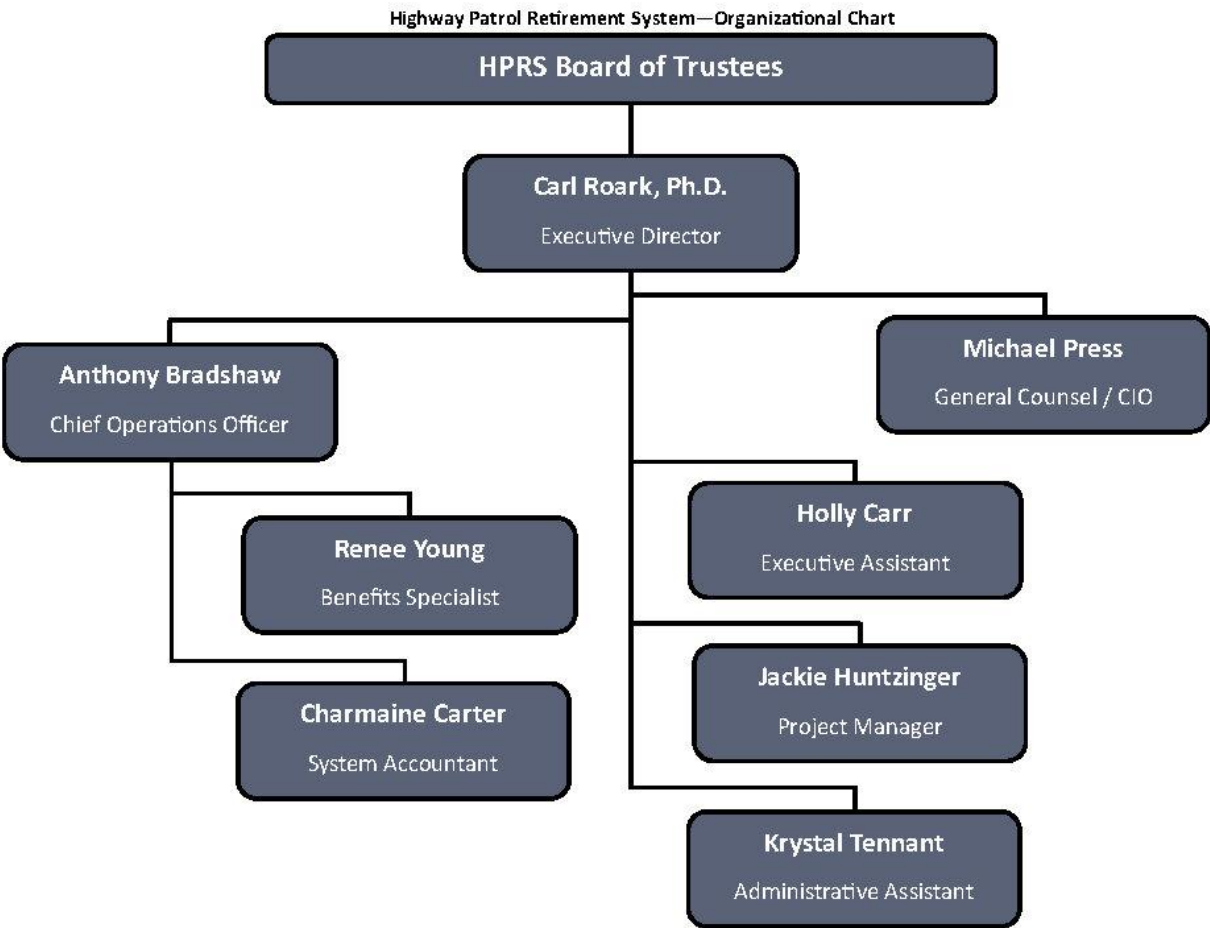
Captain (ret.) Carl Roark, Ph.D.
Executive Director



Michael D. Press
Chief Investment Officer / General Counsel



Anthony C. Bradshaw
Chief Operations Officer



See Page 9 for a list of consultants and investment managers.

Introductory Section

Consultants and Investment Managers

Consultants

Medical Advisor David A. Tanner, DO Columbus, Ohio	Actuary Foster & Foster Fort Myers, Florida	Investment Consultant Clearstead Cleveland, Ohio
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Investment Managers

Alpine General Partner VIII, LLC San Francisco, California <i>Private Equity</i>	Harrison Street Chicago, Illinois <i>Real Estate</i>	Proterra Investment Partners Minneapolis, Minnesota <i>Private Credit</i>
Baillie Gifford Overseas Limited Edinburgh <i>Global Equity - Growth</i>	H.I.G. WhiteHorse Miami, Florida <i>Fixed Income & Private Equity</i>	Quantum Energy Partners Houston, Texas <i>Private Equity</i>
Bain Capital Credit Boston, Massachusetts <i>Distressed Credit</i>	Invesco Trust Company Atlanta, Georgia <i>International Equity</i>	Silver Point Capital, L.P. Greenwich, Connecticut <i>Fixed Income</i>
Black Diamond Capital Management Stamford, Connecticut <i>Private Equity</i>	Johnson Institutional Management Cincinnati, Ohio <i>Core Fixed Income</i>	The Carlyle Group Washington, D.C. <i>Private Equity</i>
BlackRock Inc. New York, New York <i>Private Equity</i>	Kayne Anderson Capital Advisors Los Angeles, California <i>Energy/Mezzanine & Private Equity</i>	The Vanguard Group Wayne, Pennsylvania <i>Domestic Equity</i>
Blue Point Capital Partners Cleveland, Ohio <i>Private Equity</i>	Long Wharf Real Estate Partners Boston, Massachusetts <i>High Yield Fixed Income</i>	Westfield Capital Management Boston, Massachusetts <i>Small Cap Growth Equity</i>
Carlson Capital Dallas, Texas <i>Merger Arbitrage</i>	Marathon Asset Management New York, New York <i>Real Estate</i>	
Dimensional Fund Advisors Austin, Texas <i>Small Cap Blend / International Equity</i>	McGinty Road Partners Minneapolis, Minnesota <i>Private Credit</i>	
Driehaus Capital Management Chicago, Illinois <i>International Small Cap Growth Equity</i>	Mondrian Investment Group (U.S.), Inc. Wilmington, Delaware <i>Global Equity - Value</i>	
DSC Meridian Capital New York, New York <i>Credit Hedge Fund</i>	Ninety One North America, Inc. New York, New York <i>Global Equity - Core</i>	
Evanston Capital Management Evanston, Illinois <i>Fund of Hedge Funds</i>	Oaktree Capital Management New York, New York <i>Real Estate</i>	
GCM Grosvenor Chicago, Illinois <i>Private Equity</i>	Pacific Investment Management Co. Newport Beach, California <i>Real Estate</i>	
Genstar Capital San Francisco, California <i>Midmarket Buyout</i>	Pantheon Ventures San Francisco, California <i>Private Equity</i>	
HarbourVest Partners Boston, Massachusetts <i>Private Equity</i>	Partners Group (USA) New York, New York <i>Direct Infrastructure</i>	

See the Investment Section, Pages 81-83 for payments to investment managers and brokers.

Introductory Section

Legislative Summary

There was no legislation passed in 2024 that impacts HPRS.



June 27, 2025

Letter of Transmittal

To the Members of the Board of Trustees, and Active and Retired Members of HPRS:

We are pleased to present the Annual Comprehensive Financial Report (ACFR) for the Highway Patrol Retirement System (HPRS) for the fiscal year ending December 31, 2024. This report consolidates financial, investment, actuarial, and statistical data into a single, comprehensive publication. HPRS management, in collaboration with our dedicated staff and external consultants, assumes full responsibility for the accuracy and completeness of the information provided. The data contained herein reflects our commitment to prudent management of the system's assets, ensuring the Board can continue to deliver outstanding pension and health care benefits to our members.

Established by the Ohio Legislature in 1941, HPRS was created to provide retirement benefits to the sworn officers and communications personnel of the Ohio State Highway Patrol (OSHP). Before this, active-duty OSHP members participated in the Ohio Public Employees Retirement System. Today, only sworn officers, cadets in training, and communications personnel hired before November 2, 1989, are eligible to contribute to HPRS. In 1974, the Legislature further authorized HPRS to offer health care benefits to retirees, contingent upon the availability of excess funds.

Beyond pension benefits, HPRS also provides disability benefits to active-duty members—whether the disability occurred in the line of duty or not. Additionally, survivor and death benefits, along with health care benefits, are available to benefit recipients and their eligible dependents. A detailed overview of all benefits offered by HPRS can be found in the Summary of Plan Provisions section of the Actuarial Section.

Major Plan Initiatives and Changes in 2024

In 2024, HPRS completed its first full year transitioning to the Medicare and Pre-Medicare Health Reimbursement Arrangement (HRA). This program offers members a reimbursement allowance that can be used to cover insurance premiums—for themselves and their spouses—as well as co-pays and other out-of-pocket healthcare expenses. The HRA is designed to be a long-term solution and will be reviewed annually by the Board to assess whether adjustments to the reimbursement rates are necessary.

The employee contribution rate for 2024 and 2025 remained at 14% of payroll per the Board's funding policy and the Board approved a 0.00% COLA for each year.

Investments

The primary mission of the Highway Patrol Retirement System is to provide eligible members and beneficiaries with reliable pension benefits. To support this goal, the Board must develop and maintain an investment strategy that ensures the long-term security and sustainability of the plan.

Given increasing life expectancies, rising healthcare costs, and the potential for economic downturns—such as the 2008 recession—the investment strategy requires ongoing monitoring and adjustment.

In alignment with prudent standards for capital preservation and liquidity, the fund aims to achieve the highest possible return within HPRS's defined risk tolerance, as periodically reviewed by the Board in its fiduciary role. Asset diversification is essential to mitigate the impact of adverse or unexpected performance in any single asset class, thereby protecting the overall portfolio.

The Dow Jones Industrial Average gained 12.88%, the S&P 500 finished strong with a 23% increase, and the Nasdaq led the way again, surging 28.64% for the year. Internationally, the MSCI World Index also posted solid gains, finishing up approximately 19.19% in 2024.

As inflationary pressures continued to ease in the aftermath of the COVID-19 pandemic, the Federal Reserve adopted a measured approach. After maintaining the target federal funds rate at 5.25% to 5.50% through mid-2024, the Fed implemented its first rate cut in September 2024, signaling a shift in monetary policy. This was followed by two additional rate reductions in November and December, bringing the target range down to 4.25% to 4.50% by year-end.

HPRS' investment portfolio achieved a solid annual growth of 9.83%, net of fees, reflecting strong performance across most asset classes. Nearly all asset classes delivered impressive double- and single-digit returns, with real estate being the only exception. While the overall return was slightly below the benchmark of 11.37%, several asset classes met or exceeded their respective benchmarks, showcasing the portfolio's resilience and diversified strength.

A more detailed report on investment operations and performance can be found in the *Management's Discussion and Analysis* section, beginning on page 20, and the Investment Section, beginning on page 71.

Internal Controls

The management of HPRS has implemented and is responsible for a system of internal accounting controls, designed to provide reasonable assurance of the safeguarding of assets and the reliability of financial records. Again in 2024, the Summit County Internal Audit Department (SCIAD) was retained to perform internal auditing services, specifically a comprehensive risk assessment as recommended by the fiduciary performance audit. In 2025, SCIAD will again provide internal audit services for HPRS, including an audit of the HPRS' IT assets, and its retroactive pay process for union members.

Because the cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements. The internal accounting controls in place are adequate to meet the purpose for which they were intended and are reviewed annually by an external auditor. Please see the Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards* on page 68. The financial statements, supporting schedules, and statistical tables are presented fairly in all material respects.

Funding

The funding of pension and health care benefits of HPRS comes from a combination of employer and employee contributions and investment returns. Ohio law requires public pension plans to be able to amortize pension obligations within a 30-year period. At the close of 2009, HPRS was not able to amortize pension liabilities in 30 years or less. The funding status percentage dropped from 80.9% at the end of 2007 to 59.5% at the end of 2011. Due to changes that were enacted by the Board in 2013 and 2014, the amortization period no longer exceeds the 30-year limit. The funding status for the period ended December 31, 2023, as reflected in the annual actuarial valuation, was 74.5%, and the amortization period was 19 years. On the health care side, under intermediate actuarial assumptions regarding future health care cost trends, the fund is expected to be solvent until 2045, according to the December 31, 2023 actuarial report. The System's actuary, Foster & Foster will complete their valuation as of December 31, 2024, which will be issued around mid-year 2025.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Highway Patrol Retirement System for its Annual Comprehensive Financial Report for year ending December 31, 2023. 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 ACFR continues to meet the Certificate of Achievement program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Professional Services

To aid in efficient and effective management, professional services are provided to the HPRS by consultants appointed by the Board. The system's actuarial services are provided by Foster & Foster of Ft. Myers, FL. The investment advisor to the Board is Clearstead of Cleveland, Ohio. Under contract with the Auditor of State of Ohio, Rea and Associates of Dublin, Ohio, audited the financial records of the system. The Summit

County Internal Audit Department of Akron, Ohio, was retained to perform internal auditing services.

Acknowledgements

This report has been made possible through the collaborative efforts of the system's staff, guided by the leadership of the Board of Trustees. It is designed to offer accurate and comprehensive information to support informed management decisions, ensure compliance with legal requirements, and demonstrate responsible stewardship of the assets entrusted by members and their employer, the State of Ohio.

Upon publication of this report at www.ohprs.org, HPRS will notify interested parties of its availability, including all State Highway Patrol facilities, professional consultants, investment managers, ranking members of the appropriate Ohio House and Senate committees, the Ohio Retirement Study Council, and the Office of Budget and Management.

Submitted for your review,



Carl Roark, Ph.D.
Executive Director



Anthony Bradshaw
Chief Operations Officer



Financial Section

INDEPENDENT AUDITOR'S REPORT

To the Ohio Highway Patrol Retirement System Board
Delaware County, Ohio
1900 Polaris Parkway, Suite 201
Columbus, Ohio 43240

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Ohio Highway Patrol Retirement System (the HPRS), a component unit of the State of Ohio, as of and for the year ended December 31, 2024, and the related notes to the financial statements, which collectively comprise the HPRS'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 respective fiduciary net position of the Ohio Highway Patrol Retirement System as of December 31, 2024, and the respective 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) and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*). 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 HPRS, 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.

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 HPRS's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

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

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

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the HPRS'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 HPRS'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 management's discussion and analysis and the required supplementary information schedules, as listed in the table of contents, 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 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the HPRS' basic financial statements. The schedules of administrative expenses, investment expenses, and payments to consultants are presented for purposes of additional analysis and are 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 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 schedules of administrative expenses, investment expenses, and payments to consultants are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

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.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 27, 2025 on our consideration of the HPRS's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the HPRS's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering HPRS's internal control over financial reporting and compliance.

Rea & Associates, Inc.

Rea & Associates, Inc.
Dublin, Ohio
June 27, 2025

Financial Highlights

- As of December 31, 2024, HPRS had a net position of \$1,134,678,762. All assets are held in trust for pension and health care benefits and are available to meet HPRS's ongoing obligations to plan participants and their beneficiaries.
- During 2024, HPRS's fiduciary net position increased by \$65,418,688, or 6.1%.
- HPRS's funding objective is to meet long-term benefit obligations through contributions and investment income. At December 31, 2023, the date of the most recent actuarial valuation, HPRS' assets equaled 74.5% of the present value of pension obligations.
- Additions to fiduciary net position for the year were \$162,825,826, which includes member and employer contributions of \$53,070,902 and an investment gain of \$108,220,550.
- Deductions from fiduciary net position decreased 0.5% over the prior year. Of this amount, pension benefits increased by 0.9%, health care expenses decreased by 20.1% and administrative expenses decreased by 16.6%.

Overview of the Financial Statements

The financial statements consist of the following components:

1. Statement of Fiduciary Net Position
2. Statement of Changes in Fiduciary Net Position
3. Notes to the Financial Statements

This report also contains other supplementary information in addition to the basic financial statements themselves.

The Statement of Fiduciary Net Position provides a snapshot of account balances at year-end, indicating the assets available for future payments to benefit recipients, less any current liabilities of the system. The Statement of Changes in Fiduciary Net Position provides a summary of current-year additions and deductions to the plan.

The Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position report information about HPRS's activities and financial position. These statements reflect the full accrual basis of accounting, which is similar to the accounting method used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when cash is received or paid. All investment gains and losses are shown at trade date rather than settlement date. Investments are shown at fair value, reflecting both realized and unrealized gains and losses. Each capital asset is depreciated over its expected useful life.

The difference between HPRS' assets and liabilities is reported on these statements as the Net Position – Restricted for Pension and Post-Employment Health Care Benefits. Over time, increases and decreases in HPRS's net position are one indicator of whether the fund's financial health is improving or deteriorating. Other factors, such as market conditions, should be considered in measuring HPRS's overall health (see HPRS's financial statements on pages 24-25 of this report).

Management's Discussion and Analysis (Unaudited)

The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements (see the *Notes to the Financial Statements* on pages 26-56 of this report).

Other Information

In addition to the financial statements and accompanying notes, this report presents certain required supplementary information concerning HPRS's progress in funding its obligations to provide pension benefits to members (see the *Required Supplementary Schedules* on pages 57-65 of this report).

The schedules of administrative expenses, investment expenses, and payments to consultants are presented immediately following the required supplementary information.

HPRS Activities

Additions to Fiduciary Net Position

Employer and member contributions, as well as income from investments, provide reserves needed to finance retirement benefits and health care. In 2024, total contributions and investment returns resulted in positive additions of \$162.8 million. Employer contributions increased by 5.1% and member contributions increased by 13.2%.

Additions to Fiduciary Net Position (in thousands)				
	2024	2023	\$ Change	% Change
Net appreciation in fair value of investments	90,852	120,707	(\$29,855)	(24.7)
Interest and dividend income	24,993	23,283	1,710	7.3
Investment expenses	(7,625)	(8,028)	403	(5.0)
Employer contributions	34,726	33,040	1,686	5.1
Member contributions	18,345	16,212	2,133	13.2
Transfers from other Ohio systems	473	2,720	(2,247)	(82.6)
Health care premiums	656	2,473	(1,817)	(73.5)
Retiree drug subsidy	269	1	268	26800.0
Prescription drug rebates	136	494	(358)	(72.5)
Total additions	<u>\$162,825</u>	<u>\$190,902</u>	<u>(\$28,077)</u>	<u>(14.7)</u>

The *Investment Section* of this report summarizes the result of investment activity for the year ended December 31, 2024.

Deductions from Fiduciary Net Position

HPRS was created to provide retirement, disability, and survivor benefits to qualified members and their beneficiaries. The costs of these programs include benefit payments by the plan, refunded contributions, and the administrative costs of the system. In 2024, total deductions from the fiduciary net position decreased 0.5%, health care expenses decreased by 20.1%, and administrative expenses decreased by 16.6%. Refunds of member contributions decreased by 7.6%, and transfers of contributions to other Ohio retirement systems decreased by 50.7%.

Deductions from Fiduciary Net Position (in thousands)				
	2024	2023	\$ Change	% Change
Pension benefits	\$77,612	\$76,888	\$724	0.9
DROP benefits	8,943	7,528	1,415	18.8
Refunds of member contributions	502	543	(41)	(7.6)
Health care expenses	8,359	10,462	(2,103)	(20.1)
Administrative expenses	1,857	2,227	(370)	(16.6)
Transfers to other Ohio systems	134	272	(138)	(50.7)
Total deductions	<u>\$97,407</u>	<u>\$97,920</u>	<u>(\$513)</u>	<u>(0.5)</u>

Changes in Fiduciary Net Position

In 2024, the Net Position – Restricted for Pension and Post-Employment Health Care Benefits increased by \$65,418,688, or 6.1%. Investment income attributable to the increase in fair values of investments, interest and dividend income equaled \$115,845,195. All assets are available to meet HPRS's ongoing obligations to plan participants and their beneficiaries.

Changes in Fiduciary Net Position (in thousands)		
	2024	2023
Beginning balance	\$1,069,260	\$976,278
Ending balance	1,134,679	1,069,260
Total change	<u>\$65,419</u>	<u>\$92,982</u>
% change	6.1%	9.5%

Capital Assets

As of December 31, 2024, HPRS's investment in capital assets totaled \$4,680 (net of accumulated depreciation). This investment in capital assets includes office equipment, software, and furniture for administrative use. (See Note 4 on page 32 for additional information.)

Total Assets

In 2024, total assets increased by \$67,409,020, or 6.2%. The change in total assets was largely attributable to increases in the fair value of investments.

Assets (in thousands)				
	2024	2023	\$ Change	% Change
Cash and short-term investments	\$53,686	\$50,660	\$3,026	6.0%
Receivables	5,771	3,315	2,456	74.1
Investments, at fair value	1,090,715	1,028,902	61,813	6.0
Other assets	218	104	114	109.6
Total assets	\$1,150,390	\$1,082,981	\$67,409	6.2%

Total Liabilities

In 2024, total liabilities increased by \$1,719,921, or 12.0%.

Liabilities (in thousands)				
	2024	2023	\$ Change	% Change
Total liabilities	\$16,049	\$14,329	\$1,720	12.0%

Requests for Information

This financial report is designed to provide retirees, members, trustees, investment managers, and the public with a general overview of HPRS's finances and to show accountability for the money it receives. Questions concerning any of the information provided in this report or requests for additional financial information can be directed to:

Anthony Bradshaw, *Chief Operations Officer*
 State Highway Patrol Retirement System
 1900 Polaris Parkway, Suite 201, Columbus, OH 43240-4037
 Phone: 614.431.0781
 Email: a.bradshaw@ohprs.org

Financial Section

Basic Financial Statements

Statement of Fiduciary Net Position

December 31, 2024

	Pension	Post-Employment Health Care	Total
Assets			
Cash and Short-Term Investments	\$ 47,645,894	\$ 6,039,620	\$ 53,685,514
Receivables			
Employer Contributions Receivable	1,639,305	-	1,639,305
Member Contributions Receivable	1,319,218	-	1,319,218
Accrued Investment Income	2,476,567	313,931	2,790,498
Miscellaneous Receivable	22,936	-	22,936
Total Receivables	5,458,026	313,931	5,771,957
Investments, at Measurement Value			
Domestic Equity	224,886,985	29,178,879	254,065,864
International Equity	22,675,916	2,937,905	25,613,821
Fixed Income	140,866,349	18,250,729	159,117,078
Real Estate	64,658,587	8,377,205	73,035,792
Private Equity	219,393,578	28,424,764	247,818,342
Hedge Funds	49,886,433	6,463,316	56,349,749
Direct Infrastructure	22,069,108	2,859,287	24,928,395
Global Equity	221,135,744	28,650,480	249,786,224
Total Investments	965,572,700	125,142,565	1,090,715,265
Other Assets			
Property and Equipment Net	4,154	526	4,680
Net Pension Asset	125,713	-	125,713
Net Pension Asset OPEB	-	87,180	87,180
Total Other Assets	129,867	87,706	217,573
Total Assets	1,018,806,487	131,583,822	1,150,390,309
Deferred Outflows of Resources			
Deferred Outflows – Pension/OPEB	378,886	49,654	428,540
Liabilities			
Accounts Payable	189,702	24,047	213,749
Accrued Payroll Liabilities	303,398	38,459	341,857
Accrued Pension Liabilities	10,688,004	-	10,688,004
Accrued Health Care Liabilities	-	3,792,750	3,792,750
Net Pension Liability	969,199	-	969,199
Net OPEB Liability	-	43,590	43,590
Total Liabilities	12,150,303	3,898,846	16,049,149
Deferred Inflows of Resources			
Deferred Inflows – Pension/OPEB	60,930	30,008	90,938
Net Position – Restricted for Pension and Post-Employment Health Care Benefits	\$1,006,974,140	\$127,704,622	\$1,134,678,762

See the accompanying Notes to the Financial Statements, pages 26-56.

Financial Section

Basic Financial Statements

Statement of Changes in Fiduciary Net Position

Year ended December 31, 2024

	Pension	Post-Employment Health Care	Total
Additions			
Contributions			
Employer	\$34,725,774		\$34,725,774
Member	18,345,128	-	18,345,128
Transfers from Other Systems	473,390	-	473,390
Other income			
Health Care Premiums	-	655,953	655,953
Retiree Drug Subsidy	-	268,948	268,948
Prescription Drug Rebates	-	136,083	136,083
Total Contributions	53,544,292	1,060,984	54,605,276
Investment Activity			
Net Appreciation (Depreciation) in Fair Value of Investments	80,630,937	10,220,820	90,851,757
Interest and Dividend Income	22,181,676	2,811,762	24,993,438
	102,812,613	13,032,582	115,845,195
Less: Investment Expenses	(6,767,434)	(857,211)	(7,624,645)
Net Income from Investment Activity	96,045,179	12,175,371	108,220,550
Total Additions	149,589,471	13,236,355	162,825,826
Deductions			
Pension Benefits	77,612,045	-	77,612,045
DROP Benefits	8,943,519	-	8,943,519
Refunds of Member Contributions	502,078	-	502,078
Health Care Expenses	-	8,358,839	8,358,839
Administrative Expenses	1,648,184	208,926	1,857,110
Transfers to Other Systems	133,547	-	133,547
Total Deductions	88,839,373	8,567,765	97,407,138
Change in Fiduciary Net Position	60,750,098	4,668,590	65,418,688
Net Position – Restricted for Pension and Post-Employment Health Care Benefits			
Balance, December 31, 2023	946,224,042	123,036,032	1,069,260,074
Balance, December 31, 2024	\$1,006,974,140	\$127,704,622	\$1,134,678,762

See the accompanying Notes to the Financial Statements, pages 26-56.

Notes to the Financial Statements

Note 1 Summary of Significant Accounting Policies

Basis of Accounting

HPRS' financial statements are prepared using the accrual basis of accounting, under which expenses are recorded when incurred and revenues are recorded when earned and measurable. Member and employer contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Investment purchases and sales are recorded at the trade date. Administrative expenses are financed by investment income.

The accounting and reporting policies of HPRS conform to generally accepted accounting principles in the United States of America (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported assets and liabilities, disclosure of contingent assets and liabilities, and the reported revenues and expenses during the accounting period. Actual results could differ from these estimates.

The Governmental Accounting Standards Board (GASB) requires that plan assets be split between pension benefits and health care. To meet this requirement, plan assets and liabilities not specifically identifiable to a plan were proportionately allocated to the pension and post-employment health care plans. Additionally, a portion of the investment activity and administrative expenses are allocated to the health care fund. The amounts are derived from the health care projected allocation rate calculation. This calculation is the proportion of projected post-employment health care net position compared to the projected total net position.

Investment Accounting

Income on all investments is recognized on an accrual basis. Gains and losses on sales and exchanges, recognized at the trade date, are determined using the average cost of equity securities sold, and for all other investments, the specific cost of securities sold.

Certain investments are reported at fair value, which is the amount that the plan could reasonably expect to receive in a current sale between a willing buyer and a willing seller, other than in a forced or liquidation sale. Other investments are measured at Net Asset Value (NAV).

Securities traded on a national exchange are valued at the last reported sales price at the current exchange rate. Fair values of real estate and private equity investments are based on information provided by the fund's managers or by independent appraisals.

Net appreciation (or depreciation) in fair value of investments is determined by calculating the change in the fair value between the beginning of the year and the end of the year, less purchases at cost, plus sales at fair value. Investment expenses consist of expenses directly related to HPRS investment operations, as well as an allocation of certain administrative expenses.

Use of Estimates

In preparing financial statements in conformity with GAAP, the management of HPRS makes estimates and assumptions that affect: (1) the reported amounts of assets and liabilities; (2) disclosures of contingent assets and liabilities; and (3) the amount of revenues and expenses during the reporting period. Actual results could differ from those estimates and assumptions. Certain investment assets, including private equity and real estate, 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.

Capital Assets

When acquired, an item of property or equipment in excess of \$5,000 is capitalized at cost. An improvement in excess of \$5,000 that extends the useful life of an asset is capitalized as well. An expenditure for maintenance or repair of an asset is expensed as incurred. Depreciation is computed using the straight-line method over the useful life of each asset (typically, between three and ten years).

Accrued Health Care Liabilities

Accrued health care liabilities are based upon estimates furnished by the claim's administrators. These estimates have been developed from prior claims experience.

In general, costs of member health care benefits are recognized as claims are incurred and premiums are paid. Health care expenses of \$8,358,839 for 2024 are shown on the accompanying Statement of Changes in Fiduciary Net Position.

Contributions and Benefits

Based on statutory requirements, employer and employee contributions are recognized when due. In accordance with the terms of the plan, benefits and refunds are recognized when due and payable.

Federal Income Tax Status

HPRS is a qualified entity under Section 501(a) of the Internal Revenue Code and is, therefore, exempt from federal income taxes.

Recently Issued Accounting Pronouncements

For the year ended December 31, 2024, the HPRS has implemented certain provisions of GASB Statement No. 99, *Omnibus 2022*, GASB Statement No. 100, *Accounting Changes and Error Corrections-an amendment of GASB Statement No. 62*, and GASB Statement No. 101, *Compensated Absences*.

GASB issued Statement No. 99, *Omnibus 2022*. The Statement's objective is to enhance comparability in accounting and financial reporting and improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The implementation of certain provisions of GASB Statement No. 99 that relate to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement 53 did not have an effect on the financial statements of the HPRS.

GASB issued Statement No. 100, *Accounting Changes and Error Corrections-an amendment of GASB Statement No. 62*. The Statement's objective is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide a more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessment accountability. The implementation of GASB Statement No. 100 did not have an effect on the financial statements of the HPRS.

GASB issued Statement No. 101, *Compensated Absences*. The Statement updates the recognition and measurement guidance for compensated absences to promote consistency and better meet the information needs of financial statement users. The unified recognition and measurement model in this Statement will result in a liability for compensated absences that more appropriately reflects when a government incurs an obligation. The implementation of GASB Statement No. 101 did not have an effect on the financial statements of the HPRS.

GASB issued Implementation Guide No. 2023-1, *Implementation Guidance Update-2023*. This Implementation Guide amends Implementation Guide No. 2019-3, *Leases*, Question 4.16 and Implementation Guide No. 2021-1, *Implementation Guidance Update-2021*, Question 4.13. This Implementation Guide did not have an effect on the financial statements of the HPRS.

Compensated Absences

For the HPRS, compensated absences cover leave for which employees may receive cash payments either when used as time off or as a payout for unused leave upon termination of employment. These payments may occur during employment or at termination. Generally, compensated absences do not follow a fixed payment schedule.

Liabilities should be recognized for unused leave if it is attributable to services already rendered, the leave accumulates, and it is more likely than not that it will be used or paid out in cash. For the HPRS, this includes sick, vacation, and personal leave.

Liabilities for compensated absences should be recognized in financial statements prepared using the economic resources measurement focus for leave that has not been used and leave that has been used but not yet paid or settled.

A key component in determining the estimate of the amount of accumulated compensated absences that will be used as time off is the flows assumption. The flows assumption determines whether leave used by employees will be attributed first to (a) the recognized liability at the date of the financial statements (a first-in, first-out (FIFO) flows assumption) or (b) the leave earned in the next reporting period (a last-in, first-out (LIFO) flows assumption). The HPRS uses the LIFO flows assumption.

Note 2 Plan Description

Organization

HPRS is a single-employer retirement system for employees of the Ohio State Highway Patrol, including officers with arrest authority, cadets in training at the Highway Patrol Training Academy, and members of the radio division who were hired prior to November 2, 1989. HPRS was created by Ohio Revised Code Chapter 5505 and is administered by a Board of Trustees consisting of five active members, two retired members, three appointed members, and one ex-officio member. The Board appoints an executive director, chief investment officer, actuary, investment consultant, medical advisor, and internal auditor.

HPRS administers both a defined benefit pension plan and a post-employment health care plan, which is considered to be an “other post-employment benefit,” or OPEB. Financial information for pensions and OPEB is presented separately in the financial statements. HPRS, a separate financial reporting entity in accordance with criteria established by GASB Statements No. 39 (an amendment to No. 14), is a component unit of the State of Ohio. HPRS does not have financial accountability over any other entities.

Membership

HPRS membership consisted of the following at the end of 2023 and 2024:

Membership Data		
Year ended December 31		
	<u>2024</u>	<u>2023</u>
Pension & OPEB Benefits		
Retirees & other benefit recipients	1,910	1,887
Deferred retirees	44	45
Active members		
15 or more years of service	593	611
Less than 15 years of service	843	788

Benefits

Members are eligible for pension and health care benefits upon reaching both an age and a service requirement with the Ohio State Highway Patrol. The pension benefit is a percentage of the member's final average salary, which is defined as the average of the member's five highest salaried years. For 20 or more years of service, the percentage is determined by multiplying 2.5% times the first 20 years of service, plus 2.25% for the next 5 years of service, plus 2.0% for each year in excess of 25 years of service. A member's pension may not exceed 79.25% of the final average salary. Retirement with reduced benefits is available upon reaching age 48 with 20 years of service credit. Retirement with full benefits is available upon reaching age 48 with 25 years of service credit, or age 52 with 20 years of service credit. Beginning in 2020, new hires of the Ohio State Highway Patrol will be eligible for retirement with full

benefits upon reaching age 52 with 20 years of service credit. All members must retire upon attaining age 60. Ohio law permits, but does not require, HPRS to offer health care to its membership. HPRS currently offers medical, hospitalization and prescription drug coverage for its members and their dependents. In addition to pension and health care benefits, HPRS also provides for disability and survivor benefits.

In 2006, HPRS implemented the Deferred Retirement Option Plan (DROP). In general, a member who is eligible to retire with an unreduced pension benefit may enter the DROP. The member will continue to work for the Ohio State Highway Patrol. A DROP member does not accumulate additional pension service credit; however, instead of receiving a monthly pension benefit, the member accrues that benefit in a tax-deferred account until employment with the Ohio State Highway Patrol is terminated. The DROP activity is discussed in Note 11.

Former members with at least 15 years of service but less than 20 years of service are eligible for a pension upon reaching age 55. The percentage of final average salary is determined by multiplying 1.5% by the number of years of service credit. These members, though eligible to receive a pension, are not eligible for health care benefits.

Contributions

The Ohio Revised Code requires contributions by both active members and the Ohio State Highway Patrol. The employer contribution rate is established by the Ohio General Assembly. The HPRS Board sets the employee contribution rate between 10.0%-14.0% of payroll.

In 2024, the member contribution rate was 14.0% of payroll, and the employer contribution rate was 26.5%.

Based on the December 31, 2022 actuarial valuation, the Board allocated the employer contribution rate to pension benefits and OPEB effective January 1, 2023 as follows:

Pension	OPEB	Total
26.50%	0.0%	26.50%

Based on the December 31, 2023 actuarial valuation, the Board allocated the employer contribution rate to pension benefits and OPEB effective January 1, 2024 as follows:

Pension	OPEB	Total
26.50%	0%	26.50%

Upon request of a member who terminates employment with the Ohio State Highway Patrol, member contributions are refunded. If a member dies while active in the service of the Ohio State Highway Patrol, member contributions are refunded to the member's beneficiary, provided that no survivor benefits are payable.

A member with credited service in OPERS, School Employees Retirement System (SERS), State Teachers Retirement System (STRS), Ohio Police & Fire Pension Fund (OP&F), or Cincinnati Retirement System (CRS) may transfer that service credit to HPRS. Similarly, a member with credited service in HPRS may transfer that service to OPERS, SERS, STRS, OP&F, or CRS.

Note 3 Net Position

Chapter 5505 of the Revised Code requires that various funds be established to account for contributions, reserves, income, and expenses.

The Employees' Savings Fund was created to accumulate the contributions deducted from the salaries of members, less any refunds of member contributions. Upon retirement, a member's contributions are transferred to the Pension Reserve Fund.

Notes to the Financial Statements

The Employer's Accumulation Fund is the fund in which the state's contributions to HPRS are accumulated. Included in this fund are the reserves allocated to the payment of OPEB.

The Pension Reserve Fund is the fund from which all pensions are paid to members who retire on or after January 1, 1966.

The Survivors' Benefit Fund is the fund from which survivor benefits are paid to qualifying beneficiaries.

The Income Fund is used to accumulate all interest, dividends, distributions, and other income from deposits and investments. Gifts, bequests to the system, transfers, and any other income are also credited to the Income Fund.

The Expense Fund provides for the payment of administrative expenses with the necessary money allocated to it from the Income Fund.

At December 31, 2024, the fiduciary net position was allocated to the various funds as follows:

Fiduciary Net Position	
December 31, 2024	
Employees' Savings Fund	\$132,986,980
Employer's Accumulation Fund	127,704,622
Pension Reserve fund	873,987,160
Survivors' Benefit Fund	-
Income Fund	-
Expense Fund	-
Total	<u>\$1,134,678,762</u>

Note 4 Property and Equipment

The following is a summary of equipment, at cost, less accumulated depreciation, at December 31, 2024:

Capital Assets - Equipment	
December 31, 2024	
Cost, 12/31/2023	\$146,815
(+) Additions	-
(-) Retirements	-
Cost, 12/31/2024	<u>\$146,815</u>
Accumulated depreciation, 12/31/2023	\$140,887
(+) Additions	1,248
(-) Retirements	-
Accumulated depreciation, 12/31/2024	<u>\$142,135</u>
Book value, 12/31/2024	<u>\$4,680</u>

Notes to the Financial Statements

The following is a summary of furniture, at cost, less accumulated depreciation, at December 31, 2024:

Capital Assets - Furniture	
December 31, 2024	
Cost, 12/31/2023	\$82,710
(+) Additions	-
(-) Retirements	-
Cost, 12/31/2024	\$82,710
Accumulated depreciation, 12/31/2023	\$82,710
(+) Additions	-
(-) Retirements	-
Accumulated depreciation, 12/31/2024	\$82,710
Book value, 12/31/2024	\$0

Note 5 Fair Value Measurement

HPRS' investments measured and reported at fair value are classified according to the following hierarchy:

Level 1 – Investments reflect prices quoted in active markets.

Level 2 – Investments reflect prices that are based on a similar observable asset either directly or indirectly, which may include inputs in markets that are not considered to be active.

Level 3 – Investments reflect prices based upon unobservable sources.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as a measurement of investment's risk.

Debt and equities classified in Level 1 of the fair value hierarchy are valued by an external pricing vendor. Assets classified in Level 2 are subject to pricing by an alternative pricing source, due to lack of information available by the primary vendor.

Financial Section

Notes to the Financial Statements

Investments and Short-Term Holdings Measured at Fair Value				
Investments by Fair Value Level	12/31/2024	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Debt Securities				
Municipal Bonds	611,489	-	611,489	-
U.S. Agency Bonds	26,175,063	-	26,175,063	-
U.S. Corporate Bonds	37,495,542	-	37,495,542	-
U.S. Government	26,899,316	26,899,316	-	-
Total Debt Securities	91,181,410	26,899,316	64,282,094	-
Equity Securities				
Domestic Equity Mutual Funds	233,808,034	233,808,034	-	-
Global Equity Mutual Funds	58,009,286	58,009,286	-	-
Foreign Equity Mutual Funds	23,777,545	23,777,545	-	-
Foreign Stocks	1,836,276	1,836,276	-	-
U.S. Common and Preferred Stock	20,257,830	20,257,830	-	-
Total Equity Securities	337,688,971	337,688,971	-	-
Total Investments by Fair Value Level	\$428,870,381	364,588,287	64,282,094	-
Investments Measured at the Net Asset Value (NAV)				
Commingled Global Equity Funds	\$191,776,938			
Real Assets	49,284,243			
Direct Lending	67,935,668			
Hedge Funds	56,349,749			
Private Equity	223,462,494			
Private Real Estate Funds	73,035,792			
Total Investments Measured at the NAV	661,844,884			
Total Investments	\$1,090,715,265			

The valuation method for investments measured at the net asset value (NAV) per share, or equivalent, is presented in the next table.

Investments Measured at the Net Asset Value				
	12/31/2024	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Global Equity Funds ⁽¹⁾	191,776,938	-	Daily, Monthly	10 Days, by the 15 th of the month
Real Assets ⁽²⁾	49,284,243	22,407,498	-	-
Direct Lending ⁽³⁾	67,935,668	36,756,081	-	-
Hedge Funds ⁽⁴⁾	56,349,749	-	Quarterly	45 - 65 days
Private Equity ⁽⁵⁾	223,462,494	47,275,631	-	-
Private Real Estate Funds ⁽⁵⁾	73,035,792	29,009,999	Quarterly	30 days
Total Investments Measured at the NAV	<u>\$661,844,884</u>			

(1) Commingled Equity Funds: Three equity funds are commingled in nature. Each are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

(2) Direct Infrastructure / Real Assets: HPRS has committed to three global infrastructure limited partnerships and two other private energy real asset limited partnerships. Infrastructure and private real asset strategies offer strong return potential, consistent cash flow yield and defensive characteristics. The fair values of these funds are determined using net assets valued one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years.

(3) Direct Lending: HPRS has committed to seven direct lending limited partnerships. Direct lending funds generate strong cash flow, have variable interest rates, and are well protected through debt covenants. The fair values of these funds have been determined using net assets valued one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years.

(4) Hedge Fund: HPRS has three hedge fund positions. One multi-manager, multi-strategy "fund-of funds" investing predominantly in limited partnerships and similar pooled investment vehicles managed by independent portfolio managers that employ diverse alternative investment strategies across a variety of asset classes. The second position is a fund that invests in a variety of credit securities, including performing, stressed and distressed credits. HPRS also has a small remaining position in a liquidating merger arbitrage hedge fund.

(5) Private Equity and Real Estate Funds: HPRS currently has eight private real estate investments and twenty-six private equity investments in its portfolio. These strategies have exposure to several categories of investments, including real estate equity and debt, buyout, mezzanine debt, co-investment, and energy related private investments. The fair values of these funds have been determined using net assets valued one quarter in arrears plus current quarter cash flows. Only one of these funds is eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years.

Note 6 Deposits and Investment Risk

Investments

Ohio Revised Code Section 5505.06 grants “full power” to the Retirement Board to invest the system’s assets pursuant to a prudent person standard. This standard provides that “the board and other fiduciaries shall discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries; for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the system; with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.”

All investments, both domestic and international, are registered in the name of HPRS.

Deposits

HPRS cash balances consist of an operating cash account held at PNC Bank, cash on deposit with the State Highway Patrol Federal Credit Union, and excess investment cash held by the custodian, PNC Bank. Cash balances are either interest-bearing or invested in highly liquid debt instruments with an original maturity of six months or less. As of December 31, 2024, the carrying value of all deposits was \$53,685,514 (including money market funds of \$49,354,483), as compared to bank balances of \$53,826,146. The difference in the carrying amount and the bank balances is caused by outstanding warrants and deposits in transit.

Concentration of Credit Risk

Concentration of credit risk is the risk of inability to recover the value of deposits, investments, or collateral securities in the possession of an outside party.

Investment managers are expected to maintain diversified portfolios by sector and issuer. Pursuant to its investment policy, and excluding U.S. government securities, HPRS has no more than 10% of the fixed income portfolio invested in the securities of any one issuer, and no more than 5% in any one issue, with the exception of U.S. government securities.

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will be unable to fulfill its obligations. HPRS does not have a policy to limit credit risk.

HPRS exposure to credit risk on fixed income securities, based on S&P Quality Ratings, is as follows:

S&P Quality Ratings	
December 31, 2024	
AA	\$2,834,190
A	19,016,617
BBB	17,182,240
Unrated	52,148,362
Total Investments	<u>\$91,181,410</u>

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates between the U.S. dollar and foreign currencies could adversely affect an investment's fair value. HPRS does not have a policy to limit foreign currency risk. HPRS's exposure to foreign currency risk derives from its positions in foreign currency-denominated investments. As of December 31, 2024, HPRS had zero exposure to foreign currency risk.

Interest Rate Risk

Interest rate risk is the risk that an interest rate change could adversely affect an investment's fair value. HPRS does not have a policy to limit interest rate risk.

The reporting of effective duration in the table below quantifies, to the fullest extent possible, the interest rate risk of the system's fixed income assets.

Investment Maturities	
December 31, 2024	
Less than 1 year	\$621,801
1 - 5 years	22,451,870
Greater than 5, up to 10 years	29,619,513
Greater than 10 years	38,488,226
Total	<u>\$91,181,410</u>

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of a failure of a depository institution or counterparty to a transaction, HPRS will be unable to recover the value of deposits, investments, or collateral securities in the possession of an outside party.

As of December 31, 2024, the carrying amounts of HPRS's operating and investment cash deposits totaled \$53,685,514, and the corresponding bank balances totaled \$53,826,146. Of the bank balances, the Federal Deposit Insurance Corporation insured \$250,000. In accordance with state law, bank balances of \$4,095,863 were collateralized with securities held in the name of HPRS's pledging financial institution.

Investment Concentrations

The following is a list of investments in any one organization that represents 5% or more of the pension plan's net position held in trust for pension benefits:

Vanguard Mutual Funds - \$210,027,966
Mondrian Investment Group - \$104,734,861
Johnson Institutional - \$91,181,410
Ninety-One - \$87,042,077
Baillie Gifford - \$58,009,286

Money-Weighted Rate of Return

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested. For the fiscal year ended December 31, 2024, the annual money-weighted rate of return on pension plan investments, net of investment expense was 9.59%.

Commitments

As of December 31, 2024, unfunded commitments related to the real estate, private equity, direct infrastructure, and direct lending investment portfolios totaled \$135,449,209.

Note 7 Derivatives

A derivative is an investment vehicle that derives its value from another instrument or index. Derivatives are primarily used to maximize yields and offset volatility caused by interest rate and currency fluctuations. These instruments leave investors exposed to various credit, market, and legal risks.

As of December 31, 2024, HPRS did not have any direct investments in derivatives; however, it held shares in commingled funds that had incidental exposure to derivatives.

Notes to the Financial Statements

Note 8 Net Pension Liability and Actuarial Information

The components of the net pension liability as of December 31, 2024:

Schedule of Net Pension Liability						
Year ended December 31						
Year	Total Pension Liability	Fiduciary Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll ¹	Net Pension Liability as a % of Covered Payroll
2015	1,111,064,399	704,225,034	406,839,365	63.38%	99,983,224	406.91%
2016	1,137,269,498	721,685,656	415,583,842	63.46%	108,788,871	382.01%
2017	1,178,543,088	786,354,140	392,188,948	66.72%	112,705,188	347.98%
2018	1,472,338,067	715,480,960	756,857,107	48.59%	116,009,622	652.41%
2019	1,263,838,541	817,859,488	445,979,053	64.71%	118,370,595	376.77%
2020	1,299,260,233	907,391,508	391,868,725	69.84%	117,996,230	332.10%
2021	1,314,958,872	1,000,315,787	314,643,085	76.07%	111,621,001	281.89%
2022	1,348,840,676	861,142,491	487,698,185	63.84%	112,476,672	433.60%
2023	1,388,487,763	952,865,676	435,622,087	68.63%	118,412,014	367.89%
2024	1,437,117,955	1,006,974,140	430,143,815	70.07%	135,141,845	318.29%

Source: GRS/F&F

¹Includes members of DROP

The Total Pension Liability was determined by an actuarial valuation as of December 31, 2023, using the key actuarial assumptions, methods, and other inputs listed below as of December 31, 2024 and projected to that date assuming no Plan membership gains or losses.

Actuarial Assumptions	
Valuation Date	December 31, 2023, projected to December 31, 2024
Inflation	2.75% wage inflation; 2.50% price inflation
Salary Increases	3.90% to 20.50% including inflation
Investment Rate of Return	7.25%

Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of

expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocations as of December 31, 2024 were provided by the system's investment consultant. The development of the expected long-term rate of return based on the Plan's asset allocation and the best estimates of geometric real rates of return for each major asset class as of December 31, 2024 is as follows:

Asset Allocation		
December 31, 2024		
Asset Class	Target Allocations	Long-Term Expected Real Rate of Return
Cash	3.00%	0.50%
Domestic Equity	22.00	3.50
Global Equity	23.00	7.50
Opportunistic Fixed Income	9.00	4.20
Core Fixed Income	8.00	2.10
Real Estate	5.00	6.00
Private Equity	20.00	7.40
Absolute Return	5.00	4.30
Real Assets	5.00	6.00
Total	100.00%	

Source: Foster &
Foster

Single Discount Rate

A single discount rate of 7.25% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.25% and the municipal bond rate of 4.28%. The projection of cash flows used to determine this single discount rate assumed that:

- (1) Plan member contributions will be 14.0% of payroll for 2024 and each year thereafter
- (2) The employer contribution rate allocated to the pension program will be 26.50% of payroll
- (3) Administrative expenses as of December 31, 2024 were projected to future period using an assumed growth rate of 2.50%

Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability. The resulting single equivalent discount rate was 7.25% as of December 31, 2024, and this discount rate was used, as

prescribed, in the measurement of the Plan's Total Pension Liability under GASB accounting rules.

Regarding the sensitivity of the net pension liability to changes in the Single Discount Rate, the following presents the plan's net pension liability, calculated using a Single Discount Rate of 7.25%, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is 1 percentage-point lower or 1 percentage-point higher:

NPL Sensitivity			
	1% Decrease 6.25%	Current Single Discount Rate Assumption 7.25%	1% Increase 8.25%
Net Pension Liability	\$593,093,157	\$430,133,114	\$294,165,686
			<i>Source: Foster & Foster</i>

Mortality Rates for Pension

The pre-retirement mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the PubS-2010 healthy public safety employee below median amount-weighted mortality adjusted by a factor of 100.4% of gender-specific table rates at each age, with generational improvements using 75% of the most recent projection scale (currently scale MP-2021) and a base year of 2010. For spouses of deceased members, Pub-2010 contingent survivor above-median amount-weighted adjusted by a factor of 109.7% of gender-specific table rates at each age, with generational improvements using 75% of most recent projection scale (currently Scale Mp-2021) and a base year of 2010.

The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the PubS-2010 total healthy public safety annuitant amount-weighted mortality, adjusted by a factor of 94.5% of gender-specific table rates at each age, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a base year of 2010. For spouses of retired members, Pub-2010 contingent survivor above-median amount-weighted mortality, adjusted by a factor of 109.7% of gender-specific table rates at each age rates, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a base year of 2010.

The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the PubS-2010 total disabled public safety annuitant amount-weighted mortality, adjusted by a factor of 101.6% of

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gender-specific table rates at each age rates, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a

base year of 2010. For spouses of disabled members, Pub-2010 contingent survivor above-median amount-weighted mortality, adjusted by a factor of

109.7% of gender-specific table rates at each age rates, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a base year of 2010.

Experience Study

The rates of retirement, disability incidence and classification, withdrawal, mortality improvement, and salary increases used in this report were updated to better reflect anticipated plan experience based on the results of an actuarial experience study for the period December 31, 2017 through December 31, 2022.

Note 9 Net Other Postemployment Benefits (OPEB) Liability and Actuarial Information

The components of the net OPEB liability as of December 31, 2024:

Schedule of Net OPEB Liability						
Year ended December 31						
Year	Total OPEB Liability	Fiduciary Net Position	Net OPEB Liability	Plan Net Position as a % of Total OPEB Liability	Covered Payroll¹	Net OPEB Liability as a % of Covered Payroll
2017	\$566,130,019	\$111,798,820	\$454,331,199	19.75%	\$112,705,188	403.11%
2018	459,600,937	101,827,574	357,773,363	22.16%	116,009,622	308.40%
2019	581,436,281	110,986,378	470,449,903	19.00%	118,370,595	397.44%
2020	752,036,057	118,622,893	633,413,164	15.77%	117,996,230	536.81%
2021	510,842,828	130,128,730	380,714,098	25.47%	111,621,001	341.08%
2022	353,427,147	115,135,796	238,291,351	32.58%	112,476,672	211.86%
2023	342,145,634	123,899,283	218,246,351	36.21%	122,123,467	178.71%
2024	245,673,516	127,704,622	117,968,894	51.98%	125,481,862	94.01%

Source: GRS/Foster & Foster

The Total OPEB Liability was determined by an actuarial valuation as of December 31, 2023, using the key actuarial assumptions, methods, and other inputs listed below as of December 31, 2024 and projected to that date

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assuming no changes in the projected eligible member population during the measurement period.

Actuarial Assumptions

Valuation Date	December 31, 2023, projected to December 31, 2024
Inflation	2.75% wage inflation; 2.50% price inflation
Salary Increases	3.90% to 20.50% including inflation
Investment Rate of Return	7.25%
Health Care Cost Trend	Medicare Eligible (HRA): 5.60% for 2023, decreasing to an ultimate rate of 4.75% by 2030 Pre-Medicare Eligible (HRA): 2.50% for all years Dental: 4.00% for all years Vision: 3.25% for all years

Long-Term Expected Return on Plan Assets

The long-term expected return on OPEB net assets is determined by a model that uses expected arithmetic returns for a given investment horizon to determine the underlying log-normally distributed (i.e., “geometric”) returns for each asset class and for the entire portfolio and reflects certain inputs and assumptions such as long-term inflation rate and the System’s Annual Investment Plan and long-term asset allocation. The resulting long-term expected rate of return is equal to the geometric combination of the allocation-weighted average expected real rate of return of the portfolio and the expected long-term rate of inflation. The development of the expected long-term rate of return based on the OPEB Plan’s asset allocation and the estimates of arithmetic real rates of return for each major asset class as is:

Asset Allocation

December 31, 2024

Asset Class	Target Allocations	Long-Term Expected Real Rate of Return
Cash	3.00%	0.50%
Domestic Equity	22.00	3.50
Global Equity	23.00	7.50
Opportunistic Fixed Income	9.00	4.20
Core Fixed Income	8.00	2.10
Real Estate	5.00	6.00
Private Equity	20.00	7.40
Absolute Return	5.00	4.30
Real Assets	5.00	6.00
Total	100.00%	

Source: Foster &
Foster

Single Discount Rate

A single discount rate of 4.75% was used to measure the total OPEB liability. This single discount rate was a blended rate based on the expected rate of return on pension plan investments of 7.25% and the municipal bond rate of 4.28%. The municipal bond rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index as published by the S&P Dow Jones Indices and prescribed it for use in determining the Plan's discount rate under GASB accounting rules as of the Measurement Date. The projection of cash flows used to determine this single discount rate assumed that:

- (1) Total payroll for the initial projection year consists of the payroll of the active membership as of the Valuation Date who are expected to be actively employed on the Measurement Date. In subsequent years, total payroll was assumed to increase annually by a rate of 2.75%
- (2) The System is assumed to make no projected contributions to the Plan
- (3) Active employees do not explicitly contribute to the Plan
- (4) The average administrative expenses of the two most recent years were projected to increase 2.50% annually and were allocated to current and future employees based on the change in the percentage of total membership attributable to each group during each future period and are assumed to be paid in the middle of each fiscal year

Based on these assumptions, the OPEB Plan's fiduciary net position was projected to fund expected benefit payments through 2042, and as a result, the municipal bond rate was used to determine the discount rate. Therefore, the long-term expected rate of return on pension plan investments of 7.25% was used to discount projected benefit payments for roughly 17 years, and the remaining benefit payments were discounted using the S&P municipal bond rate. The resulting single equivalent discount rate was 4.75% as of December 31, 2024, and this discount rate was used, as prescribed, in the measurement of the Plan's Total Pension Liability under GASB accounting rules.

Regarding the sensitivity of the net OPEB liability to changes in the single discount rate, the following presents the plan's net OPEB liability, calculated using a single discount rate of 4.75%, as well as what the plan's net OPEB liability would be if it were calculated using a single discount rate that is 1 percentage-point lower or 1 percentage-point higher:

Net OPEB Liability Sensitivity			
	1% Decrease 3.75%	Current Single Discount Rate Assumption 4.75%	1% Increase 5.75%
Net OPEB Liability	\$157,239,319	\$117,967,537	\$86,852,992
Source: Foster & Foster			

Regarding the sensitivity of the net OPEB liability to changes in the health care cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is 1 percentage point lower or 1 percentage point higher:

Net OPEB Liability Sensitivity			
	1% Decrease	Current Health Care Cost Trend Rate Assumption	1% Increase
Net OPEB Liability	\$82,065,862	\$117,967,537	\$164,089,438
Source: Foster & Foster			

Mortality Rates for OPEB

The pre-retirement mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the PubS-2010 healthy public safety employee below median amount-weighted mortality, adjusted by a factor of 100.4% of gender-specific table rates at each age, with generational improvements using 75% of the most recent projection scale (currently scale MP-2021) and a base year of 2010. For spouses of deceased members, Pub-2010 contingent survivor above-median amount-weighted adjusted by a factor of 109.7% of gender-specific table rates at each age, with generational improvements using 75% of most recent projection scale (currently Scale Mp-2021) and a base year of 2010.

The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the PubS-2010 total healthy public safety annuitant amount-weighted mortality, adjusted by a factor of 94.5% of gender-specific table rates at each age, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a base year of 2010. For spouses of retired members, Pub-2010 contingent survivor above-median amount-weighted mortality, adjusted by a factor of 109.7% of gender-specific table rates at each age rates, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a base year of 2010.

The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the PubS-2010 total disabled public safety annuitant amount-weighted mortality, adjusted by a factor of 101.6% of gender-specific table rates at each age rates, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a base year of 2010. For spouses of disabled members, Pub-2010 contingent survivor above-median amount-weighted mortality, adjusted by a factor of 109.7% of gender-specific table rates at each age rates, with generational improvements using 75% of most recent projection scale (currently Scale MP-2021) and a base year of 2010.

Experience Study

The actuarial assumptions used in this report were last reviewed and updated as part of the five-year experience study for the period December 31, 2017 through December 31, 2022.

Note 10 Pension and OPEB Benefits for Employees

Plan Description – Ohio Public Employees Retirement System (OPERS)

The employees of HPRS are members of OPERS. OPERS administers three separate pension plans: The Traditional Pension Plan – a cost-sharing, multiple-employer defined benefit pension plan; the Member-Directed Plan – a defined contribution plan; and the Combined Plan – a cost-sharing, multiple-employer defined benefit pension plan that has elements of both a defined benefit and defined contribution plan. Effective January 1, 2022, new members may no longer select the Combined Plan, and current members may no longer make a plan change to this plan.

OPERS maintains a cost-sharing, multiple-employer defined benefit post-employment health care trust, which funds multiple health care plans including medical coverage, prescription drug coverage and deposits to a Health Reimbursement Arrangement to qualifying benefit recipients of both the Traditional Pension and the Combined plans. This trust is also used to fund health care for Member-Directed Plan participants, in the form of a Retiree Medical Account (RMA). At retirement or refund, Member-Directed Plan participants may be eligible for reimbursement of qualified medical expenses from their vested RMA balance.

To qualify for health care coverage, age-and-service retirees under the Traditional Pension and Combined plans must have 20 or more years of qualifying Ohio service credit. Health care coverage for disability benefit recipients and qualified survivor benefit recipients is available. The health care coverage provided by OPERS meets the definition of an Other Post Employment Benefit (OPEB) as described in GASB Statement 75. Please see the Plan Statement in the OPERS 2023 Annual Comprehensive Financial Report for details.

The Ohio Revised Code permits, but does not require, OPERS to provide health care to its eligible benefit recipients. Authority to establish and amend health care coverage is provided to the OPERS Board of Trustees (OPERS Board) in Chapter 145 of the Ohio Revised Code.

OPERS issues a stand-alone financial report. Interested parties may obtain a copy by visiting <https://www.opers.org/financial/reports.shtml>, by writing to OPERS, 277 East Town Street, Columbus, OH 43215-4642, or by calling 614.222.5601 or 800.222.7377.

Funding Policy

The Ohio Revised Code provides the statutory authority requiring public employers to fund health care through their contributions to OPERS. A portion of each employer's contribution to OPERS is set aside to fund OPERS health care plans.

Employer contribution rates are expressed as a percentage of the earnable salary of active members. In 2024, State and Local employers contributed at a rate of 14.0% of earnable salary and Public Safety and Law Enforcement employers contributed at 18.1%. These are the maximum employer contribution rates permitted by the Ohio Revised Code. Active member contributions do not fund health care.

HPRS employer contributions to OPERS for the years ended December 31, 2024, 2023, and 2022 were \$123,772, \$119,717, and \$116,816, respectively, which were equal to the required contributions for each year.

Each year, the OPERS Board determines the portion of the employer contribution rate that will be set aside to fund health care plans. As recommended by OPERS' actuary, the portion of employer contributions allocated to health care beginning January 1, 2018 decreased to 0.0% for both the Traditional and Combined plans. The OPERS Board is also authorized to establish rules for the retiree or their surviving beneficiaries to pay a portion of the health care provided. Payment amounts vary depending on the number of covered dependents and the coverage selected. The employer contribution as a percentage of covered payroll deposited for Member-Directed Plan for 2023 was 4.0%.

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

At December 31, 2024, HPRS reported a liability of \$969,199 for its proportionate share of the Traditional Plan's net pension liability and an asset of \$125,713 for its proportionate share of the Combined Plan's net pension asset. The net pension liability and asset were measured as of December 31,

Notes to the Financial Statements

2023, and the total pension liability used to calculate the net pension liability and asset was determined by an actuarial valuation as of that date. HPRS's proportion of the net pension liability was based on a projection of the system's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. At December 31, 2023, HPRS's proportions were as follows:

Traditional Plan	0.003702%
Combined Plan	0.040898%

For the year ended December 31, 2024, HPRS recognized pension expense of \$88,147.

At December 31, 2024, HPRS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Deferred Outflows and Inflows of Resources		
	<u>Deferred Outflows</u>	<u>Deferred Inflows</u>
	<u>of Resources</u>	<u>of Resources</u>
Difference between expected and actual experience	\$20,935	\$12,434
Net difference between projected and actual earnings on pension plan investments	216,072	-
Assumption changes	4,665	-
Changes in proportion	18,392	48,496
Contributions subsequent to the measurement date	118,821	-
Total	<u>378,886</u>	<u>60,930</u>

*\$118,821 reported as deferred outflows of resources related to pensions resulting from HPRS' contributions subsequent to the measurement date will be recognized as a reduction of net pension liability in the year ending December 31, 2025.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended December 31:	
2025	31,259
2026	60,414
2027	131,934
2028	(32,301)
2029	343
2030	439
2031	(152)

Actuarial Assumptions – OPERS Pension

The total pension liability in the December 31, 2023 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Assumption - OPERS December 31, 2023 Valuation Date		
	Traditional Pension Plan	Combined Plan
Investment Rate of Return	6.90%	6.90%
Wage Inflation	2.75%	2.75%
	2.75% - 10.75%	2.75% - 8.25%
Projected Salary Increases	(includes wage inflation at 2.75%)	(includes wage inflation at 2.75%)
Cost-of-Living Adjustments	Pre 1/7/2013 Retirees: 3.00% Simple; Post 1/7/2013 Retirees: 2.30% Simple through 2024, then 2.05% Simple	Pre 1/7/2013 Retirees: 3.00% Simple; Post 1/7/2013 Retirees: 2.30% Simple through 2024, then 2.05% Simple

Pre-retirement mortality rates are based on 130% of the Pub-2010 General Employees mortality tables (males and females) for State and Local Government divisions and 170% of the Pub-2010 Safety Employee mortality tables (males and females) for the Public Safety and Law Enforcement divisions. Post-retirement mortality rates are based on 115% of the PubG-2010 Retiree mortality tables (males and females) for all divisions. Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled Retiree mortality table (males and females) for all divisions. For all of the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all of these tables.

The discount rate used to measure the total pension liability was 6.90% for the Traditional Pension Plan, Combined Plan and Member-Directed Plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments for the Traditional Pension Plan, Combined Plan and Member-Directed Plan was applied to all periods of projected benefit payments to determine the total pension liability.

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The following table presents HPRS' proportionate share of the net pension liability or asset calculated using the discount rate of 6.90%, as well as what HPRS's proportionate share of the net pension liability 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:

Sensitivity of HPRS' proportionate share of the Net Pension Liability (Asset)			
	1% Decrease – 5.9%	Current Rate – 6.9%	1% Increase – 7.9%
Traditional Plan HPRS	\$1,525,779	\$969,199	\$506,286
Combined Plan HPRS	(76,070)	(125,713)	(164,819)

The allocation of investment assets within the Defined Benefit portfolio is approved by the Board as outlined in the annual investment plan. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The following table displays the Board-approved asset allocation policy for 2023 and the long-term expected real rates of return.

OPERS Asset Allocation		
December 31, 2023		
Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return (Geometric)
Fixed Income	24.00%	2.85%
Domestic Equities	21.00	4.27
Real Estate	13.00	4.46
Private Equity	15.00	7.52
International Equities	20.00	5.16
Risk Parity	2.00	4.38
Other Investments	5.00	3.48
Total	100.00%	

The long-term expected rate of return on defined benefit investment assets was determined using a building-block method in which best estimate ranges of expected future real rates of return are developed for each major asset class.

These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation. Best estimates of geometric rates of return were provided by the Board's investment consultant.

During 2023, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio, and the Defined Contribution portfolio. The Defined Benefit portfolio contains the investment assets the Traditional Pension Plan, the defined benefit component of the Combined Plan and the annuitized accounts of the Member-Directed Plan. Within the Defined Benefit portfolio, contributions into the plans are recorded at the same time, and benefit payments all occur on the first of the month. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Defined Benefit portfolio was a gain of 11.2% for 2023.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At December 31, 2024, HPRS reported a liability of \$43,590 for its proportionate share of OPERS net OPEB liability. The net OPEB liability was measured as of December 31, 2023, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. HPRS’s proportion of the net OPEB liability was based on a projection of the system’s long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. At December 31, 2023, HPRS’ proportion was as follows:

OPEB	0.004830%
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For the year ended December 31, 2024, HPRS recognized OPEB income of \$5,334.

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At December 31, 2024, HPRS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

Deferred Outflows and Inflows of Resources		
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected and actual experience	\$-	\$6,204
Net difference between projected and actual earnings on pension plan investments	26,179	-
Assumption changes	11,223	18,738
Changes in proportion	7,301	5,066
Contributions subsequent to the measurement date	4,951	-
Total	<u>49,654</u>	<u>30,008</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in pension expense as follows:

Year ended December 31:	
2024	370
2025	2,786
2026	20,378
2027	(8,840)

Actuarial Assumptions – OPERS OPEB

The total OPEB liability was determined by an actuarial valuation as of December 31, 2022, rolled forward to the measurement date of December 31, 2023. The actuarial valuation used the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB 74:

Actuarial Assumption - OPERS	
December 31, 2022 Valuation Date (rolled forward to December 31, 2023)	
	OPEB
Single Discount Rate	5.70%
Investment Rate of Return	6.00%
Municipal Bond Rate	3.77%
Wage Inflation	2.75%
Projected Salary Increases	2.75% - 10.75% (includes wage inflation at 2.75%)
Health Care Cost Trend Rate	5.50% Initial 3.50% Ultimate in 2038

Pre-retirement mortality rates are based on 130% of the Pub-2010 General Employee mortality tables (males and females) for State and Local Government divisions and 170% of the Pub-2010 Safety Employee mortality tables (males and females) for the Public Safety and Law Enforcement divisions. Post-retirement mortality rates are based on 115% of the PubG-2010 Retiree mortality tables (males and females) for all divisions. Post-retirement mortality rates for disabled retirees are based on the Pub NS-2010 Disabled mortality tables (males and females) for all divisions. For all of the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scale to all of these tables.

A single discount rate of 5.70% was used to measure the total OPEB liability on the measurement date of December 31, 2023; however, the single discount rate used at the beginning of the year was 5.22%. Projected benefit payments are required to be discounted to their actuarial present value using a single discount rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the health care fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate are not met). This single discount rate was based on an expected rate of return on the health care investment portfolio of 6.00% and a municipal bond rate of 3.77%. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the health care fiduciary net position and future contributions were sufficient to finance health care costs through 2070. As a result, the long-term expected rate of return on health care investments was applied to projected costs through the year 2070, and the municipal bond rate was applied to all health care costs after that date.

The following table presents HPRS's proportionate share of the net OPEB asset or liability calculated using the discount rate of 5.70%, as well as what HPRS's proportionate share of the net OPEB asset or liability 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:

Sensitivity of HPRS' proportionate share of the Net OPEB Liability/Asset			
	1% Decrease – 4.70%	Current Rate – 5.70%	1% Increase – 6.70%
Net OPEB Liability/Asset	\$23,957	(\$43,590)	(\$99,546)

Retiree health care valuations use a health care cost-trend assumption that changes over several years built into the assumption. The near-term rates reflect increases in the current cost of health care; the trend starting in 2024 is 5.50%. If this trend continues for future years, the projection indicates that years from now virtually all expenditures will be for health care. A more reasonable alternative is that the health plan cost trend will decrease to a level at, or near, wage inflation. On this basis, the actuaries project premium rate increases will continue to exceed wage inflation for approximately the next decade, but by less each year, until leveling off at an ultimate rate, assumed to be 3.50% in the most recent valuation.

Changes in the health care cost trend rate may also have a significant impact on the net OPEB liability or asset. The following table presents HPRS' proportionate share of the net OPEB liability calculated using the assumed trend rates, as well as what HPRS's proportionate share of the net OPEB liability would be if it were calculated using a health care cost trend rate that is one percentage point lower or one percentage point higher than the current rate:

Sensitivity of HPRS' proportionate share of the Net OPEB Liability/Asset			
	1% Decrease	Current Rate	1% Increase
Net OPEB Liability/Asset	(\$45,402)	(\$43,590)	(\$41,538)

The allocation of investment assets within the Health Care portfolio is approved by the Board as outlined in the annual investment plan. Assets are managed on a total return basis with a long-term objective of continuing to offer a sustainable health care program for current and future retirees. The System's primary goal is to achieve and maintain a fully funded status for benefits provided through the defined pension plans. Health care is a discretionary benefit. The table below displays the Board-approved asset allocation policy for 2023 and the long-term expected real rates of return:

OPERS OPEB Asset Allocation December 31, 2023		
Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return (Geometric)
Fixed Income	37.00%	2.82%
Domestic Equities	25.00	4.27
Real Estate	5.00	4.68
International Equities	25.00	5.16
Risk Parity	3.00	4.38
Other Investments	5.00	2.43
Total	100.00%	

The long-term expected rate of return on health care investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation. Best estimates of geometric rates of return were provided by the Board's investment consultant.

During 2023, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio, and the Defined Contribution portfolio. The Health Care portfolio includes the assets for health care expenses for the Traditional Pension Plan, Combined Plan and Member-Directed Plan eligible members. Within the Health Care portfolio, contributions into the plans are assumed to be received continuously throughout the year based on the actual payroll payable at the time contributions are made, and health care-related payments are assumed to occur mid-year. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Health Care portfolio was a loss of 14.0% for 2023.

Note 11 DROP Activity

DROP Activity Year ended December 31, 2024	
Beginning Balance	\$36,044,419
Contributions	8,943,519
Distributions	(4,171,050)
Net Adjustments	3,957,494
Ending Balance	<u>\$44,774,382</u>

Notes to the Financial Statements

Note 12 Risk Management

HPRS purchases insurance coverage for general liability, property damage, cyber, and employee and public official liability with varying policy limits. In the past three years, no settlements have exceeded insurance coverage, and coverage has not been significantly reduced.

Note 13 Contingent Liabilities

At any given time, HPRS is a party to various litigation actions. While the final outcome of any action cannot be determined, management does not expect that the liability, if any, for these legal actions will have a material adverse effect on the financial position of HPRS.

Financial Section

Required Supplementary Information Schedules

Schedule of Changes in Net Pension Liability and Related Ratios Years ended December 31, 2015-2024										
	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total Pension Liability										
Service Cost	19,425,466	18,710,927	\$19,112,038	\$19,853,117	\$20,462,293	\$29,856,107	\$19,678,759	\$19,634,876	\$18,094,205	\$17,805,023
Interest on the Total Pension Liability	98,913,967	96,062,795	93,506,132	92,394,742	90,170,736	85,534,239	89,298,391	85,936,111	84,194,909	81,577,033
Benefit Changes	-	42,714	-	-	-	-	-	(5,681,779)	-	-
Difference between Expected & Actual Experience	17,456,049	13,217,351	9,925,954	(7,142,981)	5,921,752	(7,402,798)	537,872	17,854,158	(8,632,852)	(6,365,985)
Assumption Changes	-	(3,291,639)	-	-	-	(241,353,490)	256,572,285	-	-	40,773,369
Benefit Payments/Refunds	(87,165,290)	(85,095,061)	(88,662,320)	(89,406,239)	(81,133,089)	(75,133,584)	(72,294,328)	(76,467,776)	(67,451,163)	(67,070,879)
Net Change in Total Pension Liability	48,630,192	39,647,087	33,881,804	15,698,639	35,421,692	(208,499,526)	293,792,979	41,275,590	26,205,099	66,718,561
Total Pension Liability – Beginning	1,388,487,763	1,348,840,676	1,314,958,872	1,299,260,233	1,263,838,541	1,472,338,067	1,178,545,088	1,137,269,498	1,111,064,399	1,044,345,838
Total Pension Liability – Ending (a)	1,437,117,955	1,388,487,763	1,348,840,676	1,314,958,872	1,299,260,233	1,263,838,541	1,472,338,067	1,178,545,088	1,137,269,498	1,111,064,399
Plan Fiduciary Net Position										
Employer Contributions	34,725,774	33,039,696	28,972,464	30,089,578	32,855,342	33,107,047	26,014,314	26,109,836	25,383,684	22,895,242
Employee Contributions	18,684,971	18,659,600	18,004,154	16,489,483	18,106,460	16,252,737	14,451,649	14,504,919	14,101,171	13,686,292
Pension Plan Net Investment Income	96,152,827	127,085,384	(96,156,340)	136,722,435	121,225,640	129,802,232	(37,810,306)	101,482,224	46,423,125	(5,701,922)
Benefit Payments/Refunds	(87,165,290)	(85,095,061)	(88,662,320)	(89,406,239)	(81,146,074)	(75,133,584)	(72,294,328)	(76,467,776)	(67,451,163)	(67,070,879)
Pension Plan Administrative Expense	(1,648,184)	(1,996,434)	(1,331,254)	(970,978)	(1,509,348)	(1,649,904)	(1,435,864)	(1,437,267)	(1,352,722)	(1,084,161)
Other	-	-	-	-	-	-	199,355	478,548	356,527	838,582
Net Change in Plan Fiduciary Net Position	60,750,098	91,693,185	(139,173,296)	92,924,279	89,532,020	102,378,528	(70,875,180)	64,670,484	17,460,622	(36,436,846)
Plan Fiduciary Net Position - Beginning	952,865,676	861,142,491	1,000,315,787	907,391,508	817,859,488	715,480,960	786,356,140	721,685,656	704,225,034	740,661,880
Adjustment to beginning of year	(6,641,634)	-	-	-	-	-	-	-	-	-
Plan Fiduciary Net Position – Ending (b)	1,006,974,140	952,865,676	861,142,491	1,000,315,787	907,391,508	817,859,488	715,480,960	786,356,140	721,685,656	704,225,034
Net Pension Liability – Ending (a) – (b)	430,143,815	435,622,087	\$487,698,185	\$314,643,085	\$391,868,725	\$445,979,053	\$756,857,107	\$392,188,948	\$415,583,842	\$406,839,365
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	70.07%	68.63%	63.84%	76.07%	69.84%	64.71%	48.59%	66.72%	63.46%	63.38%
Covered Payroll	135,141,845	118,412,014	112,476,672	\$111,621,001	\$117,996,230	\$118,370,595	\$116,009,622	\$112,705,188	\$108,788,871	\$99,983,221
Net Pension Liability as a Percentage of Covered Payroll	318.29%	367.89%	433.60%	281.89%	332.10%	376.77%	652.41%	347.98%	382.01%	406.91%
Notes to Schedule:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: GRS/F&F

Financial Section

Required Supplementary Information Schedules

Schedule of Employer Contributions - Pension

Years ended December 31, 2015 - 2024

Year	Actuarially Calculated Employer Contribution	Actual Contributions	Annual Contribution Deficiency	Covered Payroll	Annual Contributions as a % of Covered Payroll	% Contributed
2015	22,446,316	22,895,242	448,926	99,983,224	22.90	102
2016	24,407,389	25,383,684	976,295	108,788,871	23.33	104
2017	25,349,355	26,109,836	760,481	112,705,188	23.17	103
2018	26,014,314	26,014,314	0	116,009,622	22.42	100
2019	31,269,882	33,107,047	1,837,165	118,370,595	27.97	106
2020	32,265,286	32,855,342	590,056	117,996,230	27.84	102
2021	31,938,478	30,089,578	(1,848,900)	111,621,001	26.96	94
2022	28,708,522	28,972,464	263,942	112,476,672	25.76	100
2023	30,818,072	33,039,696	(2,221,624)	118,412,014	27.90	107
2024	32,100,344	34,725,774	(2,625,430)	135,141,845	25.70	108

Source: GRS/F&F

Schedule of Investment Returns

Year ended December 31

	<u>Annual Return¹</u>
2024	9.59%
2023	14.14
2022	(9.46)
2021	16.43
2020	16.90
2019	18.22
2018	(5.23)
2017	14.15
2016	6.60
2015	(0.61)

Source: Clearstead

¹Annual money-weighted rate of return, net of investment expenses

Notes to the Trend Data - Pension

Valuation Date	December 31, 2023
Actuarial Cost Method	Entry Age Normal (Level Percent of Pay)
Amortization Method	Level-Percentage Closed
Remaining Amortization Period	19 years
Asset Valuation Method	Four-year smoothed market with a 20% Corridor
Inflation	3.00% wage inflation; 2.50% price inflation
Salary Increases	3.80% to 13.50% including inflation
Investment Rate of Return	7.25%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	<p>Healthy Active Lives: PubS-2010 (amount-weighted) employee tables.</p> <p>Retiree and Vested Terminated Lives: PubS-2010 (amount-weighted) healthy retiree tables adjusted by 94.5%.</p> <p>Contingent Survivor Lives: PubS-2010 (amount-weighted, above-median) contingent survivor tables adjusted by 109.7%.</p> <p>Disabled Lives: PubS-2010 (amount-weighted) disabled retiree tables adjusted by 101.6%.</p> <p>The mortality assumptions for all participants are sex distinct with mortality improvement projected five years beyond the valuation date using scale MP-2021 and a base year of 2010.</p>

Financial Section

Required Supplementary Information Schedules

Schedule of Changes in Net OPEB Liability and Related Ratios
Years ended December 31, 2017-2024

	2024	2023	2022	2021	2020	2019	2018	2017
Total OPEB Liability								
Service Cost	\$6,305,415	\$9,307,666	\$18,271,163	\$29,981,189	\$19,270,150	\$18,125,171	\$26,136,968	\$23,656,819
Interest on the Total OPEB liability	10,903,746	16,114,845	12,959,444	15,920,330	19,149,833	16,991,685	19,662,580	19,242,920
Changes of benefit terms	(100,252,745)	-	-	(142,052,226)	-	-	-	709,187
Difference between Expected and Actual Experience	10,172,806	(1,715,893)	(5,746,989)	5,300,713	(26,653,702)	(26,860,308)	(74,912,273)	(1,203,916)
Assumption Changes	(16,303,485)	(27,494,916)	(177,048,514)	(144,181,853)	167,136,540	122,197,501	(68,877,841)	46,862,079
Benefit payments, including refunds of employee contributions	(7,297,855)	(7,493,215)	(5,850,785)	(6,161,382)	(8,303,045)	(8,618,705)	(8,538,516)	(9,433,745)
Net Change in Total OPEB Liability	(96,472,118)	(11,281,513)	(157,415,681)	(241,193,229)	170,599,776	121,835,344	(106,529,082)	79,833,344
Total OPEB Liability - Beginning	342,145,634	353,427,147	510,842,828	752,036,057	581,436,281	459,600,937	566,130,019	486,296,675
Total OPEB Liability - Ending (a)	245,673,516	342,145,634	353,427,147	510,842,828	752,036,057	581,436,281	459,600,937	566,130,019
Plan Fiduciary Net Position								
Employer Contributions	-	-	3,890,000	-	-	-	4,623,201	4,640,177
Employee Contributions	-	-	-	-	-	-	-	-
Net investment income	12,175,535	16,512,479	(12,854,216)	17,793,515	16,140,521	18,006,553	(5,852,119)	14,467,179
Benefit payments, including refunds of employee contributions	(7,297,855)	(7,493,215)	(5,850,785)	(6,161,382)	(8,303,045)	(8,618,705)	(8,538,516)	(9,433,745)
OPEB plan administrative expense	(208,926)	(255,777)	(177,933)	(126,296)	(200,961)	(229,044)	(203,812)	(204,198)
Net Change in Plan Fiduciary Net Position	3,805,339	8,763,487	(14,992,934)	11,505,837	7,636,515	9,158,804	(9,971,246)	9,469,413
Plan Fiduciary Net Position - Beginning	123,899,283	115,135,796	130,128,730	118,622,893	110,986,378	101,827,574	111,798,820	102,329,407
Plan Fiduciary Net Position - Ending (b)	127,704,622	123,899,283	115,135,796	130,128,730	118,622,893	110,986,378	101,827,574	111,798,820
Net OPEB Liability - Ending (a) - (b)	\$117,968,894	\$218,246,351	\$238,291,351	\$380,714,098	\$633,413,164	\$470,449,903	\$357,773,363	\$454,311,199
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability Covered Payroll²	51.98%	36.21%	32.58%	25.47%	15.77%	23.59%	22.16%	19.75%
	125,481,862	122,123,467	\$112,476,672	\$111,621,001	\$117,996,230	\$118,370,595	\$116,009,622	\$112,705,188
Net OPEB Liability as a Percentage of Covered Payroll	94.01%	178.71%	211.86%	341.08%	536.81%	397.44%	308.40%	403.11%

Source: GRS/F&F

Schedule of Employer Contributions - OPEB

Years ended December 31, 2017-2024

Year	Actuarially Calculated Employer Contribution	Actual Contributions	Annual Contribution Deficiency (Excess)	Covered Payroll	Annual Contributions as a % of Covered Payroll	% Contributed
2017	30,774,152	4,640,177	26,133,975	112,705,188	4.12%	15.08%
2018	22,105,633	4,623,201	17,482,432	116,009,622	3.99%	20.91%
2019	15,228,377	-	15,228,377	118,370,595	0.00%	0.00%
2020	17,303,902	-	17,303,902	117,996,230	0.00%	0.00%
2021	15,435,382	-	15,435,382	111,621,001	0.00%	0.00%
2022	10,787,780	3,890,000	6,897,780	112,476,672	3.46%	36.05%
2023	9,146,859	-	9,146,859	122,123,467	0.00%	0.00%
2024	5,750,208	-	5,750,208	125,481,862	0.00%	0.00%

Source: GRS / F&F

Schedule of Investment Returns	
Year ended December 31	
	<u>Annual Return</u>
2024	9.59%
2023	14.14
2022	(9.46)
2021	16.43
2020	16.90
2019	18.22
2018	(5.23)
2017	14.15
2016	6.60
2015	(0.61)
<i>Source: Clearstead</i>	

Notes to the Trend Data – OPEB

Valuation Date	December 31, 2023
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percent of pay – open
Equivalent Single Amortization Period	30 years
Asset Valuation Method	Four-year smoothed market with a 20% Corridor
Inflation	2.75% wage inflation; 2.50% price inflation
Salary Increases	3.90% to 20.50% including inflation
Investment Rate of Return	7.25%, net to OPEB plan investment expense, including inflation
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.

Financial Section

Required Supplementary Information Schedules

Schedule of HPRS' Proportionate Share of the Net Pension Liability – Last 10 Years¹

**Ohio Public
Employees
Retirement
System –
Traditional
Pension Plan**

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
HPRS' proportion of the net pension liability (asset)	0.003702%	0.003932%	0.003889%	0.003991%	0.004088%	0.004527%	0.004786%	0.004728%	0.004710%	0.005055%
HPRS' proportionate share of the net pension liability (asset)	\$969,199	\$1,161,515	\$338,359	\$590,980	\$808,021	\$1,239,854	\$750,831	\$1,073,648	\$815,831	\$609,690
HPRS' covered payroll	610,507	610,622	564,480	562,179	575,112	611,504	632,469	611,150	586,187	619,711
HPRS' proportionate share of the net pension liability (asset) as a % of its covered payroll	159%	190%	60%	105%	140%	203%	119%	176%	139%	98%
Plan fiduciary net position as a % of the total pension liability	79.01%	75.74%	92.62%	86.88%	82.17%	74.70%	84.66%	77.25%	81.08%	86.45%

**Ohio Public
Employees
Retirement
System –
Combined
Pension Plan**

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
HPRS' proportion of the net pension liability (asset)	0.040898%	0.039372%	0.037338%	0.037444%	0.034801%	0.017626%	0.011893%	0.011169%	0.010530%	0.010396%
HPRS' proportionate share of the net pension liability (asset)	(125,713)	(92,796)	(147,114)	(108,087)	(72,437)	(19,710)	(16,190)	(6,216)	(5,124)	(4,003)
HPRS' covered payroll	161,872	170,164	170,220	165,016	154,720	75,384	48,708	43,475	38,320	36,600
HPRS' proportionate share of the net pension liability (asset) as a % of its covered payroll	78%	55%	86%	66%	47%	26%	33%	14%	13%	11%
Plan fiduciary net position as a % of the total pension liability	144.55%	137.14%	169.88%	157.67%	145.28%	126.64%	137.28%	116.55%	116.90%	114.83%

Financial Section

Required Supplementary Information Schedules

Schedule of Contributions - Last 10 Years¹

Ohio Public

Employees

Retirement System

- Traditional

Pension Plan

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually required contribution	\$85,471	\$85,487	\$79,028	\$78,705	\$80,516	\$85,611	\$82,221	\$73,338	\$70,343	\$74,365
Contributions in relation to the contractually required contribution	84,471	85,487	79,028	78,705	80,516	85,611	82,221	73,338	70,343	74,365
Contribution deficiency (excess)	-	-	-	-	-	-	-	-	-	-

HPRS' covered payroll	610,507	610,622	564,480	562,179	575,112	611,504	632,469	611,150	586,187	619,711
Contributions as a % of covered payroll	14%	14%	14%	14%	14%	14%	13%	12%	12%	12%

Ohio Public

Employees

Retirement System

- Combined

Pension Plan

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually required contribution	22,662	23,823	23,831	23,102	21,689	10,554	6,332	5,217	4,598	4,560
Contributions in relation to the contractually required contribution	22,662	23,823	23,831	23,102	21,689	10,554	6,332	5,217	4,598	4,560
Contribution deficiency (excess)	-	-	-	-	-	-	-	-	-	-

HPRS' covered payroll	161,872	170,164	170,220	165,016	154,720	75,384	48,708	43,475	38,320	36,600
Contributions as a % of covered-employee payroll	14%	14%	14%	14%	14%	14%	13%	12%	12%	12%

Required Supplementary Information Schedules

Notes to Required Supplementary Information Schedules

Schedule of Changes in Net Pension Liability and Net OPEB Liability

The total pension liability and total OPEB liability contained in these schedules were provided by HPRS's actuary, Foster & Foster. The net pension liability is measured as the total pension liability, less the amount of the fiduciary net position of the Retirement System related to Pension. The net OPEB liability is measured as the total OPEB liability, less the amount of the fiduciary net position of the Retirement System related to OPEB.

Schedule of Administrative Expenses	
Year ended December 31, 2024	
Personnel	\$1,190,932
Professional and technical services	
Computer services	62,757
Actuary	160,001
Education	17,906
Medical consulting	7,200
Audit	46,555
Legal	33,332
Miscellaneous services	27,286
Medical services	6,435
Total professional and technical services	361,472
Communications	
Printing	429
Postage	8,959
Telephone	4,018
Internet	5,934
Total communications	19,340
Other expenses	
Office rent	136,024
Depreciation	1,248
Insurance	62,424
Supplies	2,695
Miscellaneous	22,442
Ohio Retirement Study Council	3,430
Travel	21,296
Memberships and subscriptions	21,659
New equipment	4,989
Computer Service – Offsite server	5,100
Cable	3,994
Write Off	65
Total other expenses	285,366
Total administrative expenses	\$1,857,110

Above amounts do not include investment-related administrative expenses.

Schedule of Investment Expenses	
Year ended December 31, 2024	
Personnel	\$163,566
Professional services	
Investment services	7,134,835
Monitoring services	312,741
Total professional services	7,447,576
Other expenses	
Due diligence	827
Computer services	6,973
Memberships and subscriptions	5,655
Printing and supplies	48
Total other expenses	13,503
Total investment expenses	\$7,624,645

Payments to Consultants		
Year ended December 31, 2024		
Consultant	Fee	Service
Attorney General's Office	\$17,703	Legal
Clearstead	312,741	Investment
County of Summit, Ohio	17,518	Auditing
David Tanner, MD	7,200	Medical
Foster & Foster	160,001	Actuarial
Ohio Auditor of State	1,037	Auditing
Rea & Associates	28,000	Auditing
Seyfarth Shaw, LLP	15,628	Legal
Total	\$559,828	

See the Investment Section, pages 81-83 for payments to investment managers and brokers.

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT
OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT
AUDITING STANDARDS***

To the Ohio Highway Patrol Retirement System Board
Delaware County, Ohio
1900 Polaris Parkway, Suite 201
Columbus, Ohio 43240

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*), the financial statements of the Ohio Highway Patrol Retirement System (the HPRS), a component unit of the State of Ohio, as of and for the year ended December 31, 2024, and the related notes to the financial statements, which collectively comprise the HPRS's basic financial statements, and have issued our report thereon dated June 27, 2025.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the HPRS' internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the HPRS's internal control. Accordingly, we do not express an opinion on the effectiveness of the HPRS's internal control.

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

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

Report on Compliance and Other Matters

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

Purpose of this Report

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

Rea & Associates, Inc.

Rea & Associates, Inc.
Dublin, Ohio
June 27, 2025

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Investment Section

Investment Overview

Introduction

Chapter 5505 of the Ohio Revised Code and the Board-adopted *Investment Policy* govern investment activity at HPRS. In accordance with Ohio Revised Code 5505.06, “The Board shall have full power to invest the funds. The Board and other fiduciaries shall discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries; for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the system; with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.”

HPRS’s total investment portfolio, as reflected in the *Statement of Fiduciary Net Position* (page 24), is comprised of the Pension (Defined Benefit) and Post-Employment Health Care portfolios’ assets. Defined Benefit portfolio assets originate from member and employer contributions to the system. The management of these assets is the responsibility of the HPRS Investment Committee, under the direction of the Board of Trustees, and HPRS’s Investment Consultant, Clearstead. Clearstead assists the Board with the construction and diversification of HPRS’s investment portfolio and manager selection. Additionally, Clearstead assists with matters of investment policy and asset allocation recommendations and provides monthly and quarterly performance reviews.

Investment Policy

The Board-adopted *Investment Policy* (pages 84-94) provides information on HPRS’s investment policies and performance objectives. The policy establishes asset allocation targets, risk tolerances, return objectives, and other guidelines, such as defining the responsibilities of the fiduciaries who implement the strategies and manage HPRS’s investment portfolio.

Investment Summary

HPRS’s *Investment Summary* (page 73) includes the total fund assets of the Pension and Post-Employment Health Care portfolios. All investments are reported at fair value, which is the amount that the plan could reasonably expect to receive in a current sale between a willing buyer and a willing seller, other than in a forced or liquidation sale.

A complete listing of assets held as of December 31, 2024 is available from HPRS upon request.

Investment Performance

As shown in the *Schedule of Investment Results* (page 77), performance information is reported gross-of-fees (net-of-fees for alternative investments) versus benchmark for the total fund and each asset class over selected periods. All returns are calculated in U.S. Dollars using a time-weighted rate of return. Net-of-fees returns are available from HPRS upon request.

Source: HPRS Investment Staff

Investment Summary

December 31, 2024

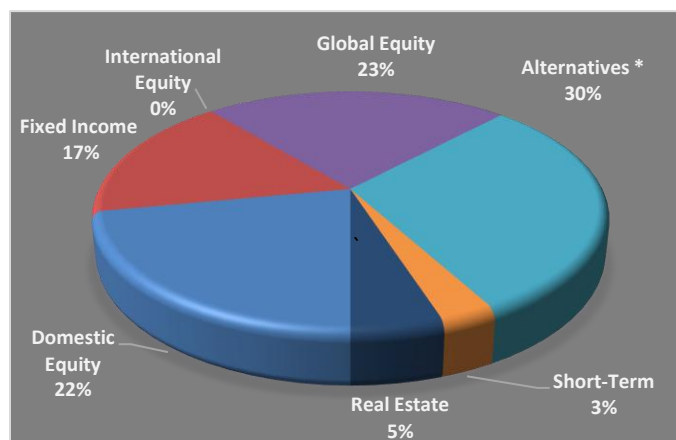
	Fair Value	Actual	Target	Range
Domestic equity	\$254,065,864	22.2%	22.0%	17 - 27%
Fixed income	159,117,078	13.9	17.0	10 - 30
Alternatives *	329,096,486	28.8	30.0	20 - 40
International equity	25,613,821	2.2	0.0	0 - 5
Global equity	249,786,224	21.8	23.0	18 - 28
Short-term	53,685,514	4.7	3.0	0 - 8
Real estate	73,035,792	6.4	5.0	0 - 10
Net portfolio value	<u>\$1,144,400,779</u>	<u>100.0%</u>	<u>100.0%</u>	

* Alternatives include private equity, fund of hedge funds, and direct infrastructure investments

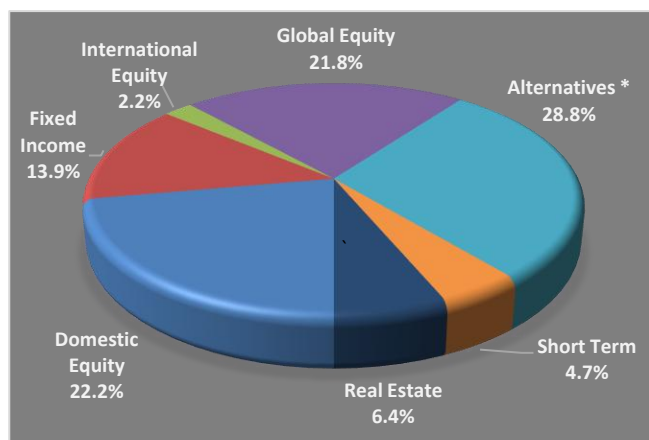
Asset Allocation – Total Fund

December 31, 2024

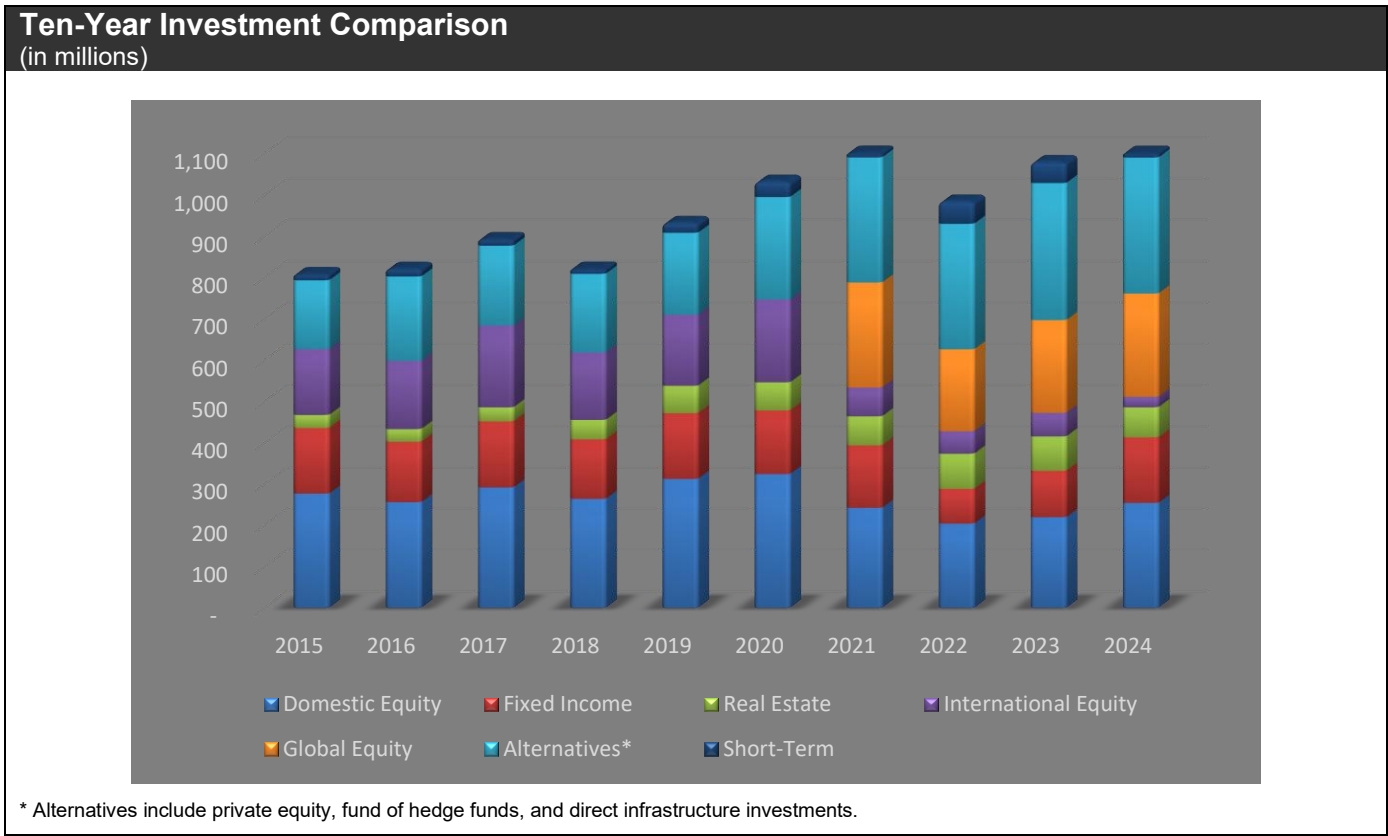
Policy Allocation



Actual Allocation



* Alternatives include private equity, fund of hedge funds, and direct infrastructure investments



Economic & Market Review – 2024

Despite an abundance of uncertainties heading into the year, 2024 turned out to be a good year for the market. Both the US economy and US risk assets performed better than expected. As 2024 started, market watchers were fretting about the Fed's mantra of a higher for longer interest rate policy. There were fears that US economic growth would underwhelm amidst a worsening fiscal backdrop and that the myriad of geopolitical risks—wars in the Middle East and Ukraine, and elections in over a dozen major countries (including the US)—would provide a negative global shock. Expectations for the S&P 500 were tepid amidst fears that profits and margins would disappoint or that once again only a few tech stocks would be making gains. However, none of those fears came to pass, amplifying the importance of being able to balance the opposing ideas of macro risks with a fundamental backdrop that may contradict those macro concerns.

While much of the rest of the world's large economies under-delivered in 2024, the US economy outperformed. The US created 180,000 new jobs on average every month in 2024 (as of November's employment report), while unemployment claims for the full year were lower than last year and the fourth lowest on record since 1969.¹ Given that the vast majority of Americans were employed, retail sales remained solid and US corporations saw levels of productivity growth above their pre-Covid trend.

In contrast, Germany and France struggled with sub-1 percent growth in recent quarters and both had to navigate political gridlock. France could not pass a new budget for 2025, which caused the Prime Minister to step down at the end of the year. Germany held elections in early 2025 leading to the ousting of the country's Chancellor. Throughout Europe, growth expectations for 2025 are being revised lower from already modest levels. Meanwhile, China continued to waffle on its economic policies and continues to struggle to put a floor under its real estate market and boost consumer and business sentiment.

The S&P 500 had the best two-year stretch since 1998-1999 as domestic markets responded positively to stronger than anticipated economic conditions and mega cap tech breakthroughs, particularly around advancements in artificial intelligence. In 2024, the "Magnificent Seven" – Apple, Microsoft, Amazon, Google, Nvidia, Tesla, Meta – contributed >50% of the S&P 500's return. This marked the second consecutive year of 25%+ return for the S&P 500. Similar to 2023, it was once again an extremely narrow market and domestic equity performance relative to benchmark was heavily dependent on exposure to the Magnificent Seven technology stocks. Only 28% of stocks beat the S&P 500, the lowest in over 50 years. Small cap stocks lagged large cap stocks; however, they did outperform large caps in the second half of 2024 thanks to a strong November following the US election. International and global equity experienced similar success throughout the year, but did not keep pace with domestic equities as both developed and emerging markets ended the year up +18.0% and +7.5%, respectively.

Volatility was a consistent theme in US Treasury markets throughout 2024. The 10-Year US Treasury yield started the year at 3.9% before increasing to 4.6% to close out the year—the highest 10-Year yield to end a calendar year since 2006.² Broad bond market

¹ FRED - Federal Reserve Bank of St. Louis, 12/31/2024.

returns were weighed on by rising treasury yields, with the Bloomberg Aggregate Bond index and the Bloomberg Municipal bond index eking out gains of +1.3% and 1.1% for the year, respectively.² Corporate credit indexes, meanwhile, were positive as credit spreads remained relatively stable. Investment grade bonds (Bloomberg US Corporate Bond index) gained +2.1% in 2024 while the less interest rate sensitive high yield bond market (Bloomberg High Yield index) jumped +8.2% for the year.

Credit spreads remain extremely narrow versus history, with investment grade and high yield option adjusted spreads (OAS) both well below their respective long-run averages, with investment grade credit spreads in the top 15% of all observations and high yield in the top decile of all observations²—both reflecting the strength of the economy and of corporate America. Given the economic backdrop, favorable consumer and corporate fundamentals heading into 2025, we do not see big risks with respect to upticks in default rates though a widening of credit spreads would not come as a surprise given their relatively ‘rich’ starting points.

Last year at this time, there were numerous geopolitical risks at play in the world. Those included ongoing and intensifying conflicts in the Middle East and Eastern Europe, over 2 billion people going to the polls to vote in new governments, and simmering tensions between the US and China. At the dawn of 2024, the risks to all these geopolitical challenges looked clearly skewed to the downside, but as we head into 2025, it is worth noting the risks look more balanced. Further escalation and even more risk is still possible in many areas of the world, but there is a plausible—but by no means assured—path to several of these geopolitical challenges to recede rather than become more acute. There has been progress in ceasefire developments in both the Middle East and in Ukraine. The success of any of these measures is highly uncertain, but compared to the beginning of 2024, at least there is a pathway for de-escalation.

Market Benchmark Returns: As of 12/31/2024					
Universe	Benchmark	1M	3M	12M	YTD
US Large Cap	S&P 500	-2.39%	2.39%	25.00%	25.00%
US Small Cap	Russell 2000	-8.26%	0.33%	11.53%	11.53%
Developed Intl	MSCI EAFE	-2.27%	-8.11%	3.82%	3.82%
Emerging Intl	MSCI Em Mkt	-0.14%	-8.01%	7.50%	7.50%
Real Estate	NAREIT	-6.93%	-9.45%	2.00%	2.00%
Core Fixed	Blmbg Agg	-1.64%	-3.06%	1.25%	1.25%
Short Fixed	Blmbg 1-3 Yr	0.21%	-0.02%	4.36%	4.36%
Long Fixed	Blmbg LT G/C	-4.79%	-7.42%	-4.15%	-4.15%
Corp Debt	Blmbg US Credit	-1.89%	-3.00%	2.00%	2.00%

Source: Bloomberg; Source: Clearstead

² Bloomberg LP, 12/31/2024

Schedule of Investment Results

Year ended December 31, 2024

	2024	2023	3-Year	5-Year
Domestic Equity	22.1%	25.4%	8.2%	14.8%
Russell 3000	23.8	26.0	8.0	13.9
International Equity	3.5	13.1	-3.0	2.0
MSCI ACWI ex US IMI	5.8	11.0	-2.2	1.1
Global Equity	11.7	24.6	2.6	-
MSCI AC World Index (Net)	17.5	22.2	5.4	10.1
Fixed Income	5.89	11.0	4.3	4.9
Barclays Capital Aggregate/Opp. Blend	5.89	10.0	2.2	2.8
Real Estate	-3.5	-4.5	-0.3	3.2
NCREIF	-4.4	-5.7	-1.5	2.0
Alternatives ▲	7.5	10.2	7.2	12.1
HFRI Fund of Funds Composite Blend	8.0	9.7	7.5	11.5
Total Fund	10.3	15.0	5.0	10.0
Absolute Objective	7.25	7.25	7.25	7.25
Relative/Composite Benchmark ►	11.4	14.4	5.0	8.8

▲ Includes private equity, direct infrastructure and fund of hedge funds. Performance results for private equity classes are typically reported on a quarter lag basis, adjusted for cash flow activity during the fourth quarter.

► Relative Composite Benchmark: Russell 3000, 31%; MSCI ACWI ex USA IMI, 20%; BBgBarc US Aggregate TR, 10%; HPRS Opportunistic Benchmark, 9%; BofA Merrill Lynch 91-Day T-Bill, 1%; HFRI Fund of Funds Composite Index, 12%; NCREIF Timberland, 3%; Alerian MLP, 2%; HPRS Private Equity Benchmark, 7%; NCREIF Property Index, 5%.

The HPRS Total Fund performance returns consist of all assets of the fund. All returns are calculated in U.S. Dollars using a time-weighted rate of return based on market values.

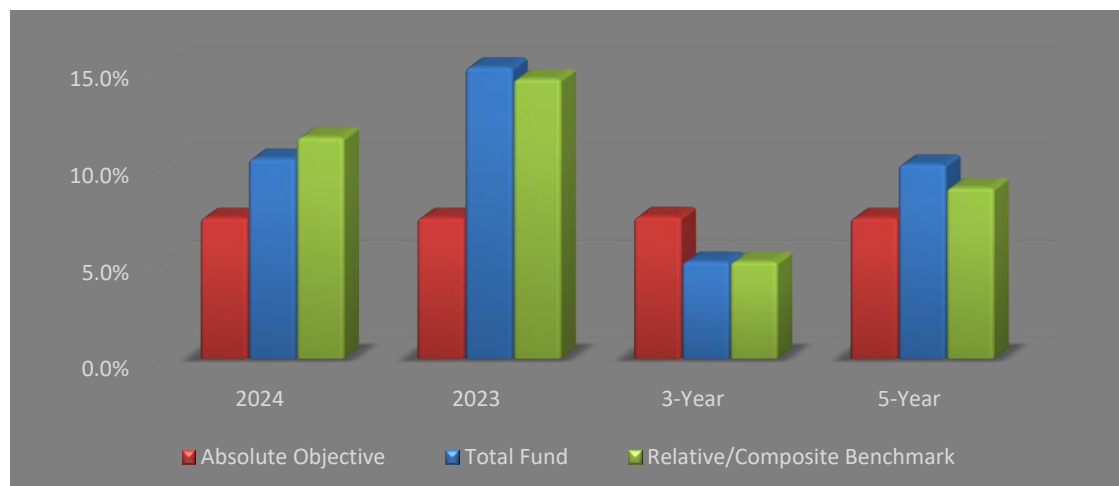
Performance is net of fees for alternative investments and gross of fees on all other investments. Net of fees returns are available upon request, and investment management fees vary among asset classes.

Market value adjustments made as of December 31 will be reflected in the investment returns in the next financial statement.

Source: Clearstead

Total Fund Rates of Return vs Policy Benchmark

(Gross of fees)



Investment Section

Domestic Equity Holdings

December 31, 2024

Security	Shares	Market Price	Fair Value
Comfort Systems USA Inc.	2,025	\$424.06	\$858,722
FTAI Aviation LTD.	5,610	144.04	808,064
Casella Waste Systems Inc.	6,060	105.81	641,209
ITT Inc.	4,270	142.88	610,098
Abercrombie & Fitch Co.	3,670	149.47	548,555
Vaxcyte Inc.	6,610	81.86	541,095
Procore Technologies Inc.	6,780	74.93	508,025
Dynatrace Inc.	8,730	54.35	474,476
Option Care Health Inc.	19,130	23.20	443,816
Axalta Coating Systems LTD.	12,870	34.22	440,411
Other	<u>275,128</u>		<u>14,383,359</u>
Total domestic equity securities	350,883		\$20,257,830

Domestic Equity Commingled Funds

Vanguard Institutional Index Fund			\$210,027,966
DFA Small Cap Subtrust			<u>23,780,068</u>
Total domestic equity commingled funds			<u>233,808,034</u>
Total domestic equity			<u>\$254,065,864</u>

International Equity Holdings

December 31, 2024

Security	Shares	Market Price	Fair Value
Ascendis Pharmaceuticals A/S ADR	6,900	\$137.67	\$949,924
Lightspeed Commerce Inc.	20,990	15.23	319,678
Wix.com LTD	1,430	214.55	306,807
Bicycle Therapeutics PLC.	10,740	14.00	150,360
Genius Sports LTD	12,660	8.65	109,509
Other	<u>-</u>		<u>-</u>
Total international equity securities	52,720		\$1,836,277
<u>International Equity Commingled Funds</u>			
Driehaus International Small Cap Growth			13,693,340
DFA International Small Cap Value			<u>10,084,204</u>
Total international equity commingled funds			<u>23,777,544</u>
Total international equity			<u>\$25,613,821</u>

Global Equity Holdings

December 31, 2024

Global Equity Commingled Funds

Mondrian Global All Countries World Equity	\$104,734,861
Ninety-One Global Franchise	87,042,077
Baillie Gifford Long Term Global Growth	58,009,286
Total global equity commingled funds	249,786,224
Total global equity	\$249,786,224

Fixed Income Holdings

December 31, 2024

Security	Par Value	Fair Value
USA Treasury Notes 1.375% Due 11/15/2031	\$6,050,000	\$4,943,512
USA Treasury Notes 4.000% Due 02/15/2034	4,750,000	4,548,311
USA Treasury Notes 2.250% Due 05/15/2041	6,375,000	4,529,238
USA Treasury Notes 4.250% Due 05/05/2039	4,755,000	4,514,092
FHLMC 2.000% Due 09/01/2041	3,911,804	3,258,003
USA Treasury Notes 4.500% Due 11/15/2033	3,240,000	3,225,825
USA Treasury Bonds 2.500% Due 02/15/2045	3,960,000	2,750,808
Freddie Mac SD1069 3.500% Due 06/01/2045	2,779,233	2,493,026
USA Treasury Notes 2.375% Due 02/15/2042	3,350,000	2,387,529
FNMA Pool MA4501 2.000% Due 12/01/2041	2,526,482	2,098,380
Other	60,702,616	56,432,686
Total fixed income securities	\$102,400,135	\$91,181,410

Fixed Income Commingled Funds

Silver Point Specialty Lending Fund	\$19,705,124
HIG Whitehorse Principal Lending Fund	17,272,644
BlackRock Global Credit Opportunities II Fund	7,113,641
HIG Whitehorse Direct Lending Adv Fund	2,855,643
Proterra Credit Fund 2	7,382,607
Silver Point Specialty Credit Fund III	5,245,208
McGinty Road Partners	8,360,801
Total fixed income commingled funds	\$67,935,668
Total fixed income	\$159,117,078

Real Estate Holdings

December 31, 2024

Real Estate Commingled Funds

Harrison Street Core Property	\$25,241,193
Long Wharf Real Estate Partners Fund V	9,399,066
Long Wharf Real Estate Partners Fund VI	9,871,827
Marathon European Credit Opportunity Fund III	6,407,135
Oaktree Real Estate Opportunities Fund V	11,692
Oaktree Real Estate Opportunities Fund VI	1,779,090
Oaktree Real Estate Opportunities Fund VII	5,728,923
Oaktree Real Estate Opportunities Fund VIII	<u>14,596,866</u>
Total real estate commingled funds	<u>\$73,035,792</u>
Total real estate	\$73,035,792

Private Equity Holdings

December 31, 2024

<u>Asset</u>	<u>Fair Value</u>
Alpine Investors VIII, LP	\$10,928,996
Bain Capital Distressed and Special Situations 2019 (A), LP	13,970,882
BDCM Opportunity Fund V, LP	9,970,252
Blue Point Capital Partners Fund III	4,128,100
Blue Point Capital Partners Fund IV	14,398,841
Carlyle Global Infrastructure Opportunity Fund, LP	10,981,140
Genstar X LP	15,668,802
HarbourVest Partners 2013 Direct Fund LP	3,043,642
HarbourVest Partners Co-Investment Fund IV LP	11,929,818
HarbourVest Partners Co-Investment Fund IV LP AIV	(271,739)
HarbourVest Partners Co-Investment Fund V LP	15,989,267
HarbourVest Partners Co-Investment Fund V LP AIV	1,038,314
HarbourVest Partners Co-Investment Fund VI LP	20,909,628
HIG Advantage Buyout Fund, LP	22,311,484
HIG Middle Market LBO Fund III LP	12,680,818
HIG Middle Market LBO Fund IV LP	394,845
HIG Whitehorse Equity Sidecar LP	2,965,441
Kayne Anderson Energy Fund III	1,075,932
Kayne Anderson Energy Fund V	441,998
Kayne Anderson Energy Fund VI	184,644
Kayne Anderson Private Energy Income Fund	3,934,322
Kayne Anderson Private Energy Income Fund II	9,440,386
Pantheon Multi-Strategy Program 2014	34,052,363
Pantheon USA Fund VII, LP	1,665,935
PIMCO Corporate Opportunities Fund II	12,052,418
Quantum Energy Partners VII, LP	12,321,698
Quantum Energy Partners VII Co-Investment Fund, LP	<u>1,610,115</u>
Total private equity	\$247,818,342

Fund of Hedge Funds Holdings

December 31, 2024

<u>Asset</u>	<u>Fair Value</u>
Evanston Capital Weatherlow Offshore Fund II	\$35,138,227
Carlson Black Diamond Arbitrage Partners LP	362,445
DSC Meridian Credit Opportunities Onshore Fund LP	<u>20,849,077</u>
Total fund of hedge funds	<u>\$56,349,749</u>

Direct Infrastructure Holdings

December 31, 2024

<u>Asset</u>	<u>Fair Value</u>
Partners Group Direct Infrastructure 2016 (USD) A, LP	\$11,646,032
Partners Group Direct Infrastructure III (USD) A, LP	<u>13,282,363</u>
Total direct infrastructure	<u>\$24,928,395</u>

All values are stated in U.S. dollars. A complete list of holdings is available upon request.

Summary Schedule of Investment Manager Fees

Year ended December 31, 2024

Manager	Strategy	Assets Managed	Fees	Performance Fees
Domestic Equity				
Dimensional Fund Advisors	Small Cap Blend	23,780,068	71,058	-
Vanguard Institutional Index Fund	Large Cap Blend	210,027,966	39,728	-
WA Account	Miscellaneous	2,980	-	-
Westfield Capital Management	Small Cap Growth	22,091,126	232,843	-
International Equity				
Dimensional Fund Advisors	Small Cap Value	10,084,204	43,308	-
Driehaus Capital Management	Small Cap Growth	13,693,340	163,748	-
Invesco Trust Company	Emerging Markets	-	66,296	-
Fixed Income				
BlackRock	Global Credit	7,113,641	103,956	217,759
WhiteHorse Capital	Direct Lending	20,128,285	520,904	267,691
Johnson Institutional Management	Intermediate-Term	91,181,410	130,919	-
Proterra Investment Partners LP	Private Credit	7,382,607	151,836	50,381
Silver Point Capital LP	Specialty Credit	24,950,332	191,809	358,364
McGinty Road Partners	Specialty Credit	8,360,801	46,899	102,700

Summary Schedule of Investment Manager Fees (con't.)

Real Estate

Harrison Street Real Estate Capital LLC	Specialty Real Estate	25,241,193	349,255	-
Long Wharf Real Estate Partners	Specialty Real Estate	19,270,293	285,142	-
Marathon Asset Management	Credit Opportunity	6,407,135	112,642	-
Oaktree Capital Management	Specialty Real Estate	22,116,571	388,146	14,106

Private Equity

Alpine Investors		10,928,996	141,988	-
Bain Capital Credit, LP	Specialty Credit	13,970,882	137,533	-
Black Diamond Capital Management		9,970,252	115,538	-
Blue Point Capital Partners	Mid-Market Buyout	18,526,941	237,090	264,990
The Carlyle Group		10,981,140	75,208	269,413
Genstar Capital Partners		15,668,802	224,045	-
HarbourVest Partners	Co-Investment	52,638,928	358,102	302,285
HIG Capital		38,352,587	869,072	956,867
Kayne Anderson	Energy, MLP, & Mezzanine	15,077,283	158,541	1,985,772
Capital Advisors LP	Fund of Funds	35,718,298	126,308	(26,150)
Pantheon Ventures LP				
Pacific Investment Management Co. LLC	Corporate Opportunities	12,052,418	55,372	(3,228)
QEM Management LLC	Energy	13,931,813	137,759	384,093

Hedge Funds

Carlson Capital LP	Arbitrage	362,445	48,806	-
DSC Meridian Capital		20,849,072	190,534	195,598
Evanston Capital Management	Fund of Funds	35,138,227	321,213	-

Direct Infrastructure

Partners Group		24,928,395	314,575	-
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Global Equity

Bailie Gifford		58,009,286	378,253	-
Mondrian		104,734,861	442,643	-
Ninety-One		87,042,077	319,007	-

Total		\$1,090,715,265	\$7,550,076	\$5,340,641
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Summary Schedule of Broker Fees

Year ended December 31, 2024

Broker	Fees	Shares	Average Cost
StoneX Group Inc.	-	15,057,327	0.000
Goldman Sachs & Co.	286	12,314,630	0.003
Wells Fargo Bank Minnesota	-	6,335,000	0.000
Citigroup Global Markets Inc. /Salomon Brothers	-	4,875,000	0.000
Jefferies LLC	467	3,073,420	0.014
Keybank Capital Markets Inc.	-	2,526,482	0.000
Morgan Stanley & Co. LLC	-	1,964,240	0.000
J.P. Morgan Securities LLC/JPMC	-	1,600,000	0.000
Cantor Fitzgerald & Co./Debt Capital Markets	-	1,317,600	0.000
Tradeweb Direct LLC	-	1,175,000	0.000
J.P. Morgan Securities LLC	-	1,060,000	0.000
Jane Street Execution Serv LLC	-	940,000	0.000
Merrill Lynch Professional Clearing Corp.	-	825,000	0.000
Citadel Securities Inst. LLC	-	800,000	0.000
Headlands Holdings LLC	-	470,000	0.000
BOFA Securities Inc/Fixed Income	-	350,000	0.004
Abel Noser	1,260	125,975	0.019
Capital Institutional Services Inc-Equities	1,091	72,710	0.050
Robert W. Baird & CO. Incorporated	1,029	68,610	0.030
Instinet LLC	33	1,640	0.131
Liquidnet Inc.	22	870	0.209
Cowen And Company LLC	10	510	0.096
Bernstein Institutional Serv LLC	3	160	0.120
Instinet			
Total	\$4,201	54,954,173	\$0.03

Brokerage commissions do not include commissions paid by external investment managers utilizing commingled fund structures. HPRS maintains a commission recapture program with Abel / Noser Corporation.

HPRS Investment Policy

INTRODUCTION:

The State Highway Patrol Retirement System ("System") was established by section 5505.02 of the Ohio Revised Code (ORC) for State Highway Patrol employees, as defined in division (A) of ORC section 5505.01.

Pursuant to ORC section 5505.04, the administration and management of the Highway Patrol Retirement System are vested in the State Highway Patrol Retirement Board ("Board"). Members of the State Highway Patrol Retirement Board are the trustees of the funds created by ORC section 5505.03. The Board has full power to create and adopt, in regular meetings, an investment committee, policies, objectives, or criteria for the operation of the investment program that include asset allocation targets and ranges, risk factors, asset class benchmarks, time horizons, total return objectives, and performance evaluation guidelines.

SYSTEM OBJECTIVE:

The primary objective of the State Highway Patrol Retirement System is to provide eligible members and beneficiaries with scheduled pension benefits. To reach this objective, the Board and other System fiduciaries will comply with the duty detailed in ORC section 5505.06; to exercise care, skill, prudence, and diligence -- under the circumstances then prevailing -- that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character with like aims. A secondary objective of the fund is to maintain a sufficient degree of liquidity in order to meet unanticipated demands and changing environments. Members of the Retirement Board and other fiduciaries of the Retirement System fully accept the duty to incur only reasonable expenses in the operation of the State Highway Patrol Retirement System.

INVESTMENT POLICY PURPOSE:

This Investment Policy Statement ("Statement") details the policies, procedures, asset allocation and guidelines for investment of the System, as established by the Board. It defines and assigns the responsibilities of all involved parties. The policy is intended to be sufficiently specific to be meaningful, yet flexible enough to be practical.

The investment policies and restrictions presented in this Statement serve as a framework to achieve the investment objectives at a level of risk deemed acceptable. These policies and restrictions are designed to minimize interference with efforts to attain overall objectives and to minimize the potential of excluding any appropriate investment opportunities.

INVESTMENT OBJECTIVES:

The overall long-term investment objective for the System is to earn 7.25% over a market cycle. Meeting this return objective among other factors will help the System achieve full funded status in the future. This investment objective should be achieved with the least required level of portfolio volatility.

DUTIES AND RESPONSIBILITIES:

Board

The role of the Board is supervisory, and discretion is delegated to investment managers who must adhere to the general guidelines established by the Board. The primary role of the Board is to:

- Establish performance goals
- Identify and review appropriate investment policy and guidelines
- Retain outside investment and actuarial counsel
- Review the results of the fund on a regular basis and implement necessary changes in the investment policies, objectives, asset allocation, and investment managers as needed

Investment Committee

As delegated by the Board, the Investment Committee is responsible for ensuring that the investment process is managed in a prudent manner, seeking to meet the System's return objectives.

The Investment Committee will, at least quarterly, review the performance of the overall portfolio and selected components against their investment goals and policies.

The Investment Committee will, in accordance with the Manager Review Policy, consider whether the manager continues to operate in the manner represented when retained and outlined in the agreement between the System and the investment manager. The Committee will have the discretion to accept, reject or modify, in accordance with the Manager Review Policy, any recommendation to terminate an investment manager. The elected Chair, or Vice-Chair, will report to the Board at regularly scheduled meetings.

Other roles of the Investment Committee include the following:

- Approve the initiation of a search in accordance with the Selection of Investment Managers and Agents Policy as well as the Manager Search and Termination Policy
- Validate that the search process was carried out appropriately
- Attend manager presentations when necessary
- Request additional information, if warranted

Investment Objectives, Policies, and Guidelines

Chief Investment Officer and Staff

The Chief Investment Officer (CIO), who is responsible for the day-to-day management of the investment program, is employed by, and is directly responsible to, the Retirement Board. A complete job description is available from HPRS upon request.

Other roles of the staff include the following:

- Rebalance the investment portfolio within the asset allocation guidelines of the Statement
- Implement tactical asset allocation positioning within the asset allocation guidelines of the Statement
- Raise cash for the payment of pension benefits and other commitments
- Post RFPs to HPRS' website
- Oversee the work of the Investment Consultant
- Ensure processes are completed in an appropriate manner
- Ensure the Investment Committee and Board receive appropriate information
- Coordinate the development and execution of manager contracts and guidelines
- Conduct on-site due diligence with firms if deemed appropriate

Investment Consultant

An Investment Consultant is employed by, and is directly responsible to, the Retirement Board. The consultant is a fiduciary to the System, attends Investment Committee and Board meetings, provides monthly investment monitoring reports, and works with the CIO to implement the Investment Policy of the Retirement Board.

Other roles of the investment consultant include the following:

- Reviewing asset allocation and investment strategy to determine if the current strategy meets the investment objective of the System
- Monitoring the performance of the total portfolio to determine if the collective investment strategy is outperforming the established benchmarks over rolling time periods
- Recommending strategic and tactical changes to asset allocation from time to time
- Communicating with investment managers to determine portfolio composition and ascertain information concerning organizational change
- Performing an annual fee assessment of the investment portfolio
- Identify the need for new managers
- Develop any request for proposals (RFP) for new managers
- Conduct on-site due diligence with candidate firms when necessary
- Conduct on-site due diligence with existing managers when necessary
- Attend the ORSC or other legislative meetings as needed

Custodian

As provided in ORC section 5505.11, the Treasurer of State is the custodian of HPRS funds. The Treasurer appoints a banking institution as a sub-custodian, which acts as the custodian of HPRS funds. All disbursements are processed under the direction of the Treasurer after authorization by the Board. The custodian will physically maintain possession of securities owned by the System, collect dividend and interest payments, redeem maturing securities, and affect receipt and delivery following purchases and sales. The custodian shall also perform regular accounting of all assets owned, purchased, or sold, as well as movement of assets into and out of the System accounts. The custodian is also responsible for providing monthly statements to the System and investment consultant.

Investment Managers

Each investment manager has discretion to purchase, sell, or hold the specific securities that will be used to meet the System's investment objectives. Each investment manager will be held responsible and accountable to achieve the objectives herein stated. While it is not believed that the limitations will hamper any investment manager, the investment manager should request modifications that it deems appropriate.

Managers are expected to:

- Act as a fiduciary to the System
- Meet with the Board or Investment Committee when requested, to review investment activity and results
- Hold and maintain errors and omissions insurance and provide proof of this insurance
- Provide frequent communication with HPRS and the Investment Consultant on all significant matters pertaining to the investment of assets
- Promptly notify HPRS and the Investment Consultant of any significant changes in the manager's investment strategy, organizational structure, financial condition, or personnel assigned to manage HPRS assets

ADDITIONAL PROVIDERS:

Additional specialists such as attorneys, auditors, and others may be employed by the Investment Committee to assist in meeting its responsibilities and obligations to administer the System prudently. All expenses for such experts must be customary and reasonable and will be borne by the System as deemed appropriate and necessary.

ASSET ALLOCATION GUIDELINES:

The asset allocation targets for the System are as follows:

Long-Term Targets			
		<u>Sub Category</u>	<u>Range</u>
Public Equity	45.0%		35% - 55%
Global Equity		23.0%	18% - 28%
U.S. Equity		22.0%	17% - 27%
International Equity		0.0%	0% - 5%
Alternative Investments	30.0%		20% - 40%
Absolute Return		5.0%	0% - 10%
Private Equity		20.0%	15% - 25%
Real Assets		5.0%	0% - 10%
Real Estate	5.0%	5.0%	0% - 10%
Fixed Income	20.0%		10% - 30%
Core Fixed Income		8.0%	3% - 13%
Opportunistic		9.0%	4% - 14%
Cash		3.0%	0% - 8%
Total	100.0%		

ASSET CLASS PURPOSE:

- The purpose of the public equity allocation is to provide a total return that will simultaneously provide for growth in principal and current income sufficient to support the System, while at the same time preserve the purchasing power of the System's assets. It is recognized that the public equity allocation entails the assumption of greater market variability and risk.
- The purpose of the alternative investment allocation is to provide diversification, risk reduction, hedge inflation, as well as enhance the performance of the System. These purposes will vary by investment.
 - Absolute Return: The purpose of this allocation is to provide diversification, risk reduction and moderate growth.
 - Private Equity: The purpose of this allocation is to provide diversification and growth above public equity.
 - Real Assets: The purpose of this allocation is to provide diversification, income, and to hedge inflation.
- The purpose of the real estate component is to provide for growth of principal while at the same time preserving the purchasing power of the portfolio's assets. In addition, the real

estate component seeks to enhance the overall portfolio by providing income, a hedge on inflation and modest diversification.

- The purpose of the fixed income allocation is to provide a deflation hedge, to reduce the overall volatility of the System, and to produce income.
- The purpose of the cash allocation is to provide liquidity for short-term obligations. All cash and equivalent investments should be made with concern for quality. High return is desirable, but the highest possible investment return should be sacrificed where quality is considered questionable.

PERMISSIBLE INVESTMENTS:

System assets may invest in the following types of investments:

Equity Securities

- Common stocks
- Convertible preferred stocks
- American depository receipts (ADRs) of non-U.S. companies
- Stocks of non-U.S. companies (Ordinary shares)
- Equity collective pools, mutual funds, and exchange traded funds

Alternative Investments

- Tactical asset allocation strategies
- Absolute return strategies
- Long-short strategies
- Hedge funds or hedge fund-of-fund strategies
- Private equity and debt strategies
- Timber investments
- Energy master limited partnerships
- Infrastructure strategies
- Alternative collective pools, mutual funds, and exchange traded funds

Real Estate

- U.S. and non-U.S. public real estate (REITS)
- U.S. and non-U.S. private real estate
- Real estate collective pools, mutual funds, and exchange traded funds

Fixed Income Securities

- U.S. government and agency securities
- Municipal bonds
- Corporate notes and bonds
- Convertible notes and bonds
- Mortgage-backed bonds
- Preferred stock
- Fixed income securities of foreign governments and corporations
- Below investment grade corporate bonds
- Tactical fixed income strategies
- Private lending strategies
- Fixed income collective pools, mutual funds, and exchange traded funds

Cash Equivalents

- Treasury bills
- Commercial paper
- Banker's acceptances
- Repurchase agreements
- Certificates of deposit
- Money market collective pools, mutual funds, and exchange traded funds

PERFORMANCE BENCHMARKS:

Performance results will be measured in three ways over a full business cycle:

1. The investment objective of the System: 7.25% (actuarial rate of return)
2. A blended benchmark of market indices based on the targeted asset allocation for the System portfolio:

Asset Class	Benchmark(s)	Weight
U.S. Equity	Russell 3000 Index	22%
Global Equity	MSCI ACWI Index	23%
Absolute Return	HFRI Fund of Funds Composite Index	5%
Real Assets	Real Assets Composite	5%
Private Equity	Private Equity Composite	20%
Real Estate	Real Estate Composite	5%
Core Fixed Income	Bloomberg U.S. Aggregate Bond Index	8%
Global Opportunistic Fixed Income	Credit Suisse Leveraged Loans Index	9%
Cash	ML 91-Day T-Bill Index	3%

3. The System will be compared to a peer universe of similar sized public pension funds

SEPARATE ACCOUNT PORTFOLIO GUIDELINES:

The following guidelines only apply to separately managed accounts. Mutual funds and collective vehicles are not expected to comply with these guidelines but rather are bound to their fund prospectus for mutual funds and ETFs or the governing documents for collective pools.

Equity

An equity manager may not:

- Hold more than 15% of the account value in a single issuer
- Where a sector is greater than 10% of the benchmark, allow that sector to exceed 60% of the portfolio
- Where a sector is 10% or less of the benchmark, allow that sector to exceed 40% of the portfolio
- Invest in international-domiciled securities exceeding 20% of portfolio value in a domestic mandate
- Allow one country to be more than 20 percentage points above the country weighting of the relative benchmark in an international mandate
- Invest in emerging markets exceeding 35% of portfolio value in a developed international mandate

Equity managers are prohibited from investing in the following:

- Private placements
- Unregistered or restricted stock
- Derivatives
- Margin Trading/Short Sales
- Commodities
- Real Estate Property (excluding REITs)
- Guaranteed Insurance Contracts
- Securities issued by Highway Patrol Retirement System or its affiliates

Core Fixed Income

A core fixed income allocation will be diversified as to type of security, issuer, coupon, and maturity. Qualifying bonds, at the time of purchase, will be rated as investment-grade by at least two nationally recognized bond rating services. Generally, the average maturity of a fixed income allocation will be ten years or less, although individual securities may be longer.

No more than ten percent of a fixed income allocation will be invested in the securities of any one issuer and no more than five percent in any one issue, with the exception of U.S. government securities. Diversification of the bond portfolio will be accomplished by investing in a combination of U.S. government bonds, U.S. agency bonds, U.S. corporate bonds, high yield bonds, and non-U.S. bonds.

Managers are prohibited from using derivative instruments.

Manager Selection

Investment Managers shall be selected in accordance with the Selection of Investment Managers and Agents Policy as well as the Manager Search and Termination Policy.

The Board will consider investments that enhance the welfare of the State of Ohio, and Ohio citizens, where such investments offer safety and quality of return comparable to other investments currently available. Equal consideration will be given to investments otherwise qualifying under this section that involve minority-owned and controlled firms, or firms owned and controlled by women, either alone or in joint venture with other firms.

The Board will, at least annually, establish a policy with the goal to increase utilization of Ohio-qualified investment managers, when an Ohio-qualified investment manager offers quality, services, and safety comparable to other investment managers otherwise available.

Investment Objectives, Policies, and Guidelines

The Board will, at least annually, establish a policy with the goal to increase utilization of Ohio-qualified agents for the execution of domestic equity and fixed income trades on behalf of the System, when an Ohio-qualified agent offers quality, services, and safety comparable to other agents otherwise available.

Voting of Proxies

Investment managers are responsible for voting proxies and should be made in the best interest of investors.

Execution of Security Trades

The Investment Committee expects the purchase and sale of its securities to be made in a manner designed to receive the combination of best price and execution.

Directed Brokerage

In separately managed equity accounts, HPRS investment managers are encouraged to use brokers that are under contract with HPRS to provide execution-only brokerage. Every five years, these brokers will be reviewed; the Board may consider issuing a Request for Proposal if it is deemed necessary. An investment manager may be excused from the directed brokerage requirement if it can document favorable execution.

Periodic Portfolio and Policy Reviews

Asset allocation should be reviewed at least annually to ensure that the plan is on track to achieve the investment goals and that all the major assumptions used to establish the plan remain reasonable. A comprehensive review of asset allocation in the form of asset-liability modeling should be conducted every five years, or whenever a major structural change occurs in liabilities or investment assets.

An asset allocation plan may require reconsideration when it becomes apparent that the assets are not keeping pace with the liabilities of a plan. This may occur not only as a result of the assets not performing as expected but also because the liabilities may not be behaving as expected.

To assure the continued relevance of the guidelines and objectives, as established in this investment policy statement, the Board should review the investment policy annually, or as deemed necessary.

Investment Policy Revisions

Approved, w/ Revisions, December 19, 2024
Approved, w/ Revisions, December 21, 2023
Approved and Revised, December 16, 2022
Approved and Revised, December 16, 2021
Approved and Revised, December 17, 2020
Approved and Revised, December 19, 2019
Approved and Revised, February 21, 2019
Approved and Revised, December 20, 2018
Revised, December 14, 2017
Revised December 15, 2016
Revised, December 17, 2015
Revised, December 18, 2014
Approved, No Revisions, December 19, 2013
Revised, February 21, 2013
Revised, February 23, 2012
Revised, October 27, 2011
Revised, August 26, 2010
Revised, April 22, 2010
Revised, February 25, 2010
Revised, April 23, 2009
Revised, October 25, 2007
Revised, June 16, 2005
Revised, June 26, 2003
Revised, November 15, 2001
Revised, June 22, 1999
Revised, March 13, 1997
Adopted and approved, September 7, 1994
Revised, June 29, 1994
Revised, September 5, 1990
Revised, June 1, 1988
Adopted and approved, June 11, 1986



Actuarial Section

June 27, 2025

Board of Trustees
Ohio State Highway Patrol Retirement System
1900 Polaris Parkway, Suite 201
Columbus, OH 43240-4037

Dear Board:

Each year, an actuarial funding valuation is performed by a qualified actuary to determine the current financial status of the plan and calculate the contribution requirement that, combined with future investment returns, will ensure that all future obligations of the plan are satisfied. In these calculations, the actuary uses assumptions to estimate future experience and methods that serve as a budgeting mechanism to allocate contributions to the appropriate generation of taxpayers. The most recent funding valuation was completed based on the personnel data, assets, and plan provisions as of December 31, 2024.

In addition to the funding valuation, the actuary provides separate reports that contain the related results for GASB Statements No. 67 (pension) and No. 74 (retiree healthcare). The total pension/OPEB liability, net pension/OPEB liability, and certain sensitivity information shown in the GASB results are based on an actuarial valuation performed as of the December 31, 2023 measurement date. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 74. Use of these results for other purposes may not be applicable and produce significantly different results.

DATA SOURCES

The plan administrative staff provided the actuary with the personnel data used in the analysis. The actuarial value of assets was determined based on financial statements supplied by plan administrative staff. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results.

EXPERIENCE

The experience of the Fund over the last year is outlined in the funding report. Overall, the Fund experienced an actuarial loss of \$25.6 million, which consists of a \$8.3 million loss on the Fund's actuarial value of assets and a \$17.3 million loss on the System's actuarial accrued liability. Based on the actuarial value of assets, the Fund earned 6.40% compared to the assumed 7.25% return. For funding purposes, investment gains/losses are smoothed over a four-year period, subject to an 80% and 120% corridor on market value.

BENEFIT CHANGES SINCE PRIOR REPORT

The valuation reflects a change in benefits from pre-Medicare retiree medical to a Health Reimbursement Arrangement (HRA) for retirees before and after Medicare eligibility.

ASSUMPTIONS

There were no changes to the assumptions in the December 31, 2024 GASB Statements No. 67.

The changes to the assumptions in the December 31, 2024 GASB Statements No. 74 (retiree healthcare) are as follows:

- The discount rate was changed from 4.28% to 4.75%. This change is driven by the 20-year municipal bond index rate.
- Dental premiums, vision premiums, and HRA contribution rates have also been updated to use rates effective January 1, 2024.

In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated fund experience.

SCHEDULES FOR COMPREHENSIVE ANNUAL FINANCIAL REPORT

The following schedules in the Actuarial Section of the Annual Financial Report were prepared based on information presented in the actuarial valuation reports. For more details on the development of these results, please see the complete valuation reports.

- Statement of Actuarial Assumptions and Methods
- Short-Term Solvency Test
- Active Membership Data
- Retirees and Beneficiaries Added to and Removed from Rolls
- Number of Retired Lives Covered by Medical Mutual & Aetna Medicare Advantage – Added to and Removed from Rolls
- Summary of Plan Provisions

ACTUARIAL CERTIFICATION

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapter 5505 of the Ohio Revised Code, as well as applicable federal laws and regulations. Future actuarial measurements may differ significantly from the current measurements for a variety of reasons including changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations.

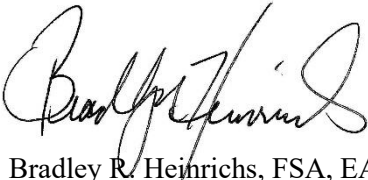
In our opinion, the assumptions and method used to determine the annual required contribution, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Further, it is our opinion that all assumptions and methods used for funding purposes meet parameters set by Actuarial Standards of Practice.

In our opinion, the valuation results fairly represent the financial condition of the Ohio State Highway Patrol Retirement System as of December 31, 2024 and the GASB Statement Nos. 67 and 74 results as of December 31, 2024.

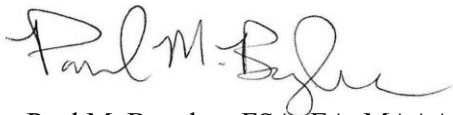
The undersigned are familiar with the immediate and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All the sections of each valuation report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on this report has any direct financial interest or indirect material interest in the Ohio State Highway Patrol Retirement System, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Ohio State Highway Patrol Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

Regards,



Bradley R. Heinrichs, FSA, EA, MAAA



Paul M. Baugher, FSA, EA, MAAA

Statement of Actuarial Assumptions and Methods

After consulting with the actuary, these assumptions have been adopted by the Highway Patrol Retirement System Board of Trustees, effective for the year ended December 31, 2020, following a five-year experience study covering the period January 1, 2014 through December 31, 2018. The assumptions used for funding purposes are based on the December 31, 2023 actuarial valuation, while the assumptions used for financial reporting purposes are based on the December 31, 2024 reports issued in accordance with GASB Statements 67 and 68 and Statements 74 and 75.

Funding Method

An entry age normal actuarial cost method of valuation is used in determining benefit liabilities and normal cost. Differences between assumed experience and actual experience ("actuarial gains and losses") become part of actuarially accrued liabilities. Unfunded actuarially accrued liabilities are amortized to produce payments (principal and interest) that are a level percent of payroll contributions.

Asset Valuation Method

The asset valuation method fully recognizes assumed investment income each year. Differences between actual and expected investment income are phased-in over a closed four-year period.

Investment Return

The investment return rates used in making valuations are 7.25% for both pension and OPEB assets, compounded annually (net of investment expenses).

Payroll Growth

Base pay increases are assumed to be 2.75% annually, attributable to broad economic effects such as inflation and real wage growth.

Payroll Growth			
Service Years	Merit & Seniority	Base (Economic)	Total
0	17.75	2.75%	20.5%
1	7.75	2.75	10.5
2 - 3	6.75	2.75	9.5
4	5.75	2.75	8.5
5	4.25	2.75	7.0
6 - 11	2.25	2.75	5.0
12 +	1.15	2.75	3.9

Other Assumptions

80% of active participants are assumed to be married for purposes of death-in-service benefits and for purposes of retiring with the automatic joint and survivor benefit.

Health care costs for Medicare-eligible members are assumed to increase between 4.75% and 7.60% per year until 2033, ultimately declining to 4.75% for future years. Pre-Medicare members are assumed to have an annual increase of 2.50% until the year 2033.

Each benefit recipient is assumed to be eligible for Medicare at age 65.

Statement of Actuarial Assumptions and Methods

Post-employment mortality is based on the MP-2021 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2010. Mortality rates for a particular calendar year are determined by applying the MP-2021 mortality improvement scale to the above-described tables.

Rates of separation from active service before retirement are developed on the basis of actual plan experience.

Probabilities of Separation from Active Employment before Age & Service Retirement <i>Percentage of Active Members Separating Within Next Year</i>			
Sample Age	Disability	Service	Other
20	0.06%	0	12.50%
25	0.06	1 - 2	6.50
30	0.16	3 - 4	6.50
35	0.29	5	5.00
40	0.49	6 - 8	3.50
45	0.59	9-10	2.50
50	0.78	11-17	1.00
55	0.85	18	1.25
60	0.00	19-20	1.75
		21 & up	4.00

Probabilities of Age & Service Retirement <i>Percentage of Eligible Members Retiring Within Next Year</i>		
Retirement Ages	Unreduced Benefit	Reduced Benefit
48	22%	7.5%
49	15	7.5
50	16	7.5
51	22	13.5
52	20	--
53	15	--
54	20	--
55	30	--
56	40	--
57	35	--
58	35	--
59	60	--
60+	100	--

Summary of Unfunded Actuarial Liabilities

Each time a new benefit is added which applies to service already rendered, an “unfunded actuarial accrued liability” is created. In addition, if actual financial experiences are less favorable than assumed financial experiences, the difference is added to unfunded actuarial accrued liabilities.

In an inflationary economy, the value of the dollar is decreasing. This environment results in employee pays increasing in dollar amounts resulting in unfunded actuarial accrued liabilities increasing in dollar amounts, all at a time when the actual substance of these items may be decreasing. Looking at just dollar amounts of unfunded actuarial accrued liabilities can be misleading. Unfunded actuarial accrued liabilities divided by active employee payroll provides an index, which aids understanding. The smaller ratio of unfunded liabilities to active member payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

Summary of Assets and Actuarial Liabilities for Retirement, Survivor, and Disability Allowances

Years Ended December 31

Year	Actuarially Accrued Liability (AAL)	Actuarial Valuation of Assets (AVA)	Unfunded Actuarially Accrued Liability (UAAL)	Ratio of AVA to AAL	Active Member Payroll	UAAL as % of Active Member Payroll
2014	1,012,752,337	712,285,604	300,466,733	70.3	99,211,756	302.9
2015►	1,078,984,597	739,848,920	339,135,677	68.6	99,983,224	339.2
2016	1,127,927,927	763,667,712	364,260,215	67.7	108,788,871	334.8
2017▲	1,153,619,256	774,670,663	378,948,593	67.2	112,705,188	336.2
2018▲	1,158,179,566	769,097,204	389,082,362	66.4	116,009,622	335.4
2019	1,173,155,313	796,284,462	376,870,851	67.9	118,370,595	318.4
2020	1,203,886,606	907,391,508	359,142,477	70.2	117,996,230	304.4
2021	1,233,493,873	1,000,315,787	339,064,208	72.5	111,621,001	303.8
2022	1,263,806,590	861,142,491	329,312,962	73.9	112,476,672	292.8
2023	1,301,525,066	952,865,676	332,382,171	74.5	122,123,467	272.2

▲ Plan Amendment
► Assumption or method change

Short-Term Solvency Test

The HPRS financing objective is to pay for benefits through contributions that remain approximately level from year-to-year as a percent of member payroll. If the contributions to the system are level in concept and soundly executed, the system will pay all promised benefits when due, which is the ultimate test of financial soundness.

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (cash and investments) are compared with (1) active member contributions on deposit, (2) the liabilities for future benefits to present retired lives, and (3) the liabilities for service already rendered by active members. In a system that has been following the discipline of level percent financing, the liabilities for active member contributions on deposit (column 1 below) and the liabilities for future benefits to present retired lives (column 2 below) will be fully covered by present assets, except in rare circumstances. In addition, the liabilities for service already rendered by active members (column 3 below) will be partially covered by the remainder of the present assets. Generally, if the system has been using level cost financing, the funded portion of column 3 will increase over time.

Short-Term Solvency Test							
Accrued Liabilities and Assets Allocated to Retirement, Survivor, and Disability Allowances							
Year	(1) Active Member Contributions	(2) Retirees, Beneficiaries, & Deferrals	(3) Active Members (Employer Financed Portion)	Valuation Assets	% of Accrued Liabilities Covered by Reported Assets		
					(1)	(2)	(3)
2014	117,441,639	622,719,141	272,591,557	712,285,604	100	96	-
2015►	122,286,821	662,562,480	294,135,296	739,848,920	100	93	-
2016	127,311,764	688,936,795	311,679,368	763,667,712	100	92	-
2017▲	130,494,700	717,621,283	305,503,273	774,670,663	100	90	-
2018▲	138,101,643	706,952,911	313,125,012	769,097,204	100	89	-
2019►	143,160,097	719,452,018	310,543,198	796,284,462	100	91	-
2020	147,608,705	748,539,825	307,738,076	844,744,129	100	93	-
2021	144,993,174	797,843,018	290,657,681	894,429,665	100	94	-
2022	144,460,309	830,076,790	289,269,491	934,493,628	100	95	-
2023	150,265,962	842,330,905	308,928,199	969,142,895	100	97	-
▲ Plan Amendment							
► Assumption or method change							

In a short term OPEB solvency test, the plan's present assets (cash and investments) are compared with (1) the liabilities for future benefits to present retired lives, and (2) the liabilities for service already rendered by active members. In a system that has been following the discipline of level percent financing, the liabilities for active member

contributions on deposit (column 1 below) and the liabilities for future benefits to present retired lives (column 1 below) will be fully covered by present assets, except in rare circumstances. In addition, the liabilities for service already rendered by active members (column 2 below) will be partially covered by the remainder of the present assets. Generally, if the system has been using level cost financing, the funded portion of column 2 will increase over time.

Short-Term Solvency Test

Accrued Liabilities and Assets Allocated to Retirement, Survivor, and Disability Health Care

Year	(1) Retirants, Beneficiaries, & Vested Deferreds	(2) Active Members (Employer Financed Portion)	Health Care Valuation Assets	% of Accrued Liabilities Covered by Reported Assets	
				(1)	(2)
2014▲	177,574,474	199,108,639	103,812,807	58%	-
2015▶	195,195,607	217,156,476	106,550,139	55	-
2016	187,123,383	216,579,635	108,282,136	58	-
2017▲▶	125,764,087	122,323,654	110,137,458	88	-
2018▶	120,357,969	141,646,686	109,458,262	91	-
2019	168,752,009	134,575,043	108,058,572	64	-
2020	162,432,699	122,895,230	110,433,029	68	-
2021	130,826,489	98,410,633	116,354,253	89	-
2022	132,026,693	85,678,413	124,942,932	95	-
2023	112,155,993	62,920,193	126,015,778	100	22

▲ Plan Amendment

Additional years will be displayed as they become available. Ultimately 10 years of data will be shown.

Active Member Valuation Data

Years Ended December 31

Year	Active Members	Annual Payroll (\$)	Average Annual Salary (\$)	% Increase in Average Pay
2014	1,622	99,211,756	61,166	0.1%
2015	1,621	99,983,224	61,680	0.8
2016	1,670	108,788,871	65,143	5.6
2017	1,650	112,705,188	68,306	4.9
2018	1,668	116,009,622	69,550	1.8
2019	1,614	118,370,595	73,340	5.4
2020	1,542	117,996,230	76,522	4.3
2021	1,454	111,621,001	76,768	0.3
2022	1,380	112,476,672	81,505	6.2
2023	1,399	122,123,467	87,293	7.1

Retirees and Beneficiaries Added to and Removed from Rolls

Years Ended December 31

Year	Added to Rolls		Removed from Rolls		Rolls at End of Year	
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances
2014	66	3,008,568	31	723,492	1,558	58,292,436
2015	73	3,102,744	83*	1,671,876	1,548	59,723,304
2016	69	3,576,372	37	841,200	1,580	62,458,476
2017	83	3,878,244	26	675,084	1,637	65,661,636
2018	72	3,127,464	38	1,066,116	1671	67,722,984
2019	63	2,881,148	35	772,944	1699	69,831,187
2020	83	3,372,681	52	1,649,076	1730	71,554,792
2021	120	4,613,439	43	1,344,674	1807	74,823,557
2022	99	5,358,174	54	1,816,998	1,852	78,364,733
2023	82	4,392,480	47	1,386,906	1,887	81,370,307

*Includes Alternate Payee records, which were combined with Participant records beginning with December 31, 2015

Number of Retired Lives Covered by Medical Mutual & Added and Removed from Rolls

Years Ended December 31

Year	Added to Rolls	Removed from Rolls	Retirees with Health Care, Dental, or Vision Coverage
	Number	Number	Number
2018	42	77	1,351
2019	88	46	1,393
2020	83	52	1,730
2021	120	43	1,807
2022	38	112	391
2023	-	391	-

The number of lives was compiled from data files provided by HPRS staff. This is the number of retired members covered and will differ from the number of actual lives covered based on the type of coverage elected. Additional years will be displayed as they become available. Ultimately 10 years of data will be shown.

Purpose

In 1941, the Highway Patrol Retirement System (HPRS) was created by the Ohio General Assembly to provide for retirement and survivor benefits for members and dependents.

Administration

The general administration and management of HPRS are vested in the Highway Patrol Retirement System Board of Trustees under Ohio Revised Code Chapter 5505. The eleven-member Board consists of the Superintendent of the State Highway Patrol, three appointed members, five elected active members, and two elected retired members.

The appointed members are investment experts designated by the Governor, the Treasurer of State, and the General Assembly. The active members are elected to four-year terms by members of the plan. Any contributing member is eligible to become an active member candidate, and each contributing member is eligible to vote in the active member election process. Any retiree who is an Ohio resident and who has not served as a statutory or active member of the Board during the past three years is eligible to become a retired member candidate. Each retiree is eligible to vote in the retired member election.

The Superintendent of the State Highway Patrol serves by virtue of the office held. A chairperson and vice-chairperson are elected by the Board annually. All regular Board meetings are public meetings. While the Board members serve without compensation, they are not expected to suffer any loss because of absence from regular employment while engaged in official Board duties. In addition, the members of the Board are reimbursed for actual and necessary expenses.

Employer Contributions

Ohio law requires that the Board certify the employer contribution rate to the Office of Budget and Management in even-numbered years. The employer rate may not be lower than the member rate, nor may it exceed three times the member rate. The employer contribution rate was 26.5% in 2024.

Member Contributions

Each member of HPRS, through payroll deduction, must contribute the legally established contribution rate as a percentage of salary. Individual member accounts are maintained by HPRS and, upon termination of employment, the amount contributed is refundable in lieu of the payment of a pension benefit. The member contribution rate was 14.0% in 2024.

Service Credit

Prior to retirement, the following types of additional service credit may be purchased: (1) military service, (2) prior refunded full-time service as a contributing member of the State Highway Patrol Retirement System, the Ohio Police & Fire Pension Fund, the State Teachers Retirement System of Ohio, the School Employees Retirement System of Ohio, the Ohio Public Employees Retirement System, and the Cincinnati Retirement System. Military service and prior refunded full-time service in HPRS and the Ohio Police & Fire Pension Fund may be used to meet the minimum service requirement in order to qualify

Summary of Plan Provisions

for unreduced pension benefits. In the case of prior service credit that was not refunded, service credit may be transferred directly from another Ohio retirement system to HPRS.

Retirement

Age and Service Retirement

Upon retirement from active service, a member is eligible to receive a pension by achieving a minimum age and service requirement, as follows:

Age	Service Credit
52	20 years
48*	25 years

*Age 52 for troopers hired after January 1, 2020

A member may retire at age 52 to age 60, provided he has 20 or more years of service, or at age 48 with 25 or more years of contributing service. For members hired after January 1, 2020, 52 is the minimum retirement age. The member's pension equals the sum of 2.5% of final average salary times years of service not in excess of 20, 2.25% of final average salary times years of service in excess of 20 but not in excess of 25, and 2% of final average salary times years of service in excess of 25. The maximum pension payable is 79.25% of the member's final average salary. A member must retire upon attainment of age 60.

The final average salary, which includes base pay, longevity pay, hazard duty pay, shift differential, and professional achievement pay, is the average of a member's five highest years of salary.

Benefit payments become effective the day following the last day of employment and are payable monthly throughout the retiree's lifetime.

Deferred Retirement

A member who has acquired 20 years of service and retires is eligible to receive a pension computed in the same manner as an age and service pension at the attainment of age 52. A reduced benefit is payable if the retirant elects to receive a benefit after age 48 and prior to age 52. The reduction is waived for members with 25 or more years of service.

Reduced Retirement

A member who has acquired at least 20 but less than 25 years of service and is between the ages of 48 and 52 is eligible to receive a pension computed in the same manner as an age and service pension but reduced as follows:

Age	Percent of Age & Service Pension
48	75%
49	80%
50	86%
51	93%
52	100%

Summary of Plan Provisions

The election to receive a reduced pension may not be changed once a retiree has received a benefit payment.

Other Pension

A member who has acquired 15 years of service and who voluntarily resigns or is discharged is eligible to receive a pension equal to 1.5% of final average salary multiplied by total service. The pension shall begin the first month after attainment of age 55, provided the member does not withdraw his accumulated contributions from the employees' savings fund.

Resignation or Discharge

With less than 20 years of service credit, a member may not collect a pension if "dishonesty, cowardice, intemperate habits, or conviction of a felony" was the basis for discharge or resignation from the Ohio State Highway Patrol.

Disability Retirement

A member who retires as the result of a disability that was incurred in the line of duty is eligible to receive a pension that is the larger of (1) 61.25% of average final salary, or (2) the age and service pension. A member who retires as the result of a disability that was not incurred in the line of duty is eligible to receive a pension that is the larger of (1) 30% of average annual salary or (2) the age and service pension.

Deferred Retirement Option Plan (DROP)

A member who is eligible to retire with an unreduced pension benefit may enter the DROP. The member will continue to work for the Ohio State Highway Patrol. For actuarial purposes, a DROP member is considered retired; however, instead of receiving a monthly pension benefit, the member begins to accrue funds in a tax-deferred account. The DROP account is funded by the member's continuing active contributions and a pension accrual, as well as interest that accrues on these amounts.

A member may participate in DROP until age 60, but for no more than eight years. The minimum participation period is two years for members who enter the DROP at age 52 or more and three years for members who enter the DROP before age 52. A member who terminates employment earlier than the minimum participation period will forfeit any accrued interest.

When a DROP member terminates employment with the Ohio State Highway Patrol, the member will begin to receive the monthly pension benefit that had previously been funding the DROP account. In addition, after the minimum participation period, the proceeds of the DROP account will be rolled over into a qualified plan or paid to the member in a lump sum, an annuity, or a combination of these distribution types.

Payment Plans

Each retirement applicant must select a benefit payment plan. Regardless of the plan selected, a survivor benefit is paid to an eligible survivor of a deceased active member or retiree. The plan options are as follows:

Summary of Plan Provisions

Plan 1 - Single Life Annuity

This plan pays the highest monthly benefit, calculated as a percentage of final average salary, and is limited to the lifetime of the retiree. A member who receives a disability retirement may only receive a single life annuity.

Plan 2 - Joint and Survivor Annuity

This plan pays a reduced monthly benefit for a member's lifetime and provides for a monthly benefit to a surviving beneficiary.

Plan 3 - Life Annuity Certain and Continuous

This plan is an annuity, payable for a guaranteed minimum period. If a retiree dies before the end of the period, the pension benefit is paid to the designated beneficiary for the remainder of the period.

Partial Lump-Sum (PLUS) Distribution

In addition to selecting one of the three retirement payment plans, a retiree may elect to receive a lump-sum cash payment, either as a taxable distribution, or as a rollover to a tax-qualified plan. Following this payment, a retiree will receive a reduced monthly benefit for life. To be eligible for a PLUS distribution, a retiree must have attained age 51 with at least 25 years of total service, or age 52 with at least 20 years of total service. The lump-sum amount may not be less than six times the monthly single life pension and not more than 60 times the monthly single life pension.

Survivor Benefits

A surviving spouse of a deceased retiree, or of an active member who was eligible to receive a retirement pension at the time of death, who retired or entered DROP prior to the effective date of House Bill 362 (May 11, 2018) receives a monthly benefit equal to one-half the deceased member's monthly pension benefit (minimum \$900). A surviving spouse of an active member who was not eligible for a retirement benefit at the time of death, or a deceased member who retired after May 11, 2018 receives a monthly survivor benefit of \$900, subject to annual review and increase by the Board.

Each surviving dependent child receives \$150 monthly until age 18. If the child is a full-time student, this benefit continues until age 23. A surviving qualified disabled child receives this benefit for life, or recovery from the qualifying disability.

Health Care

Pre-Medicare and Medicare-eligible members are allocated a monthly amount pursuant to a Health Reimbursement Arrangement (HRA) to purchase individual plans on a vendor-operated exchange. HPRS no longer reimburses Part B premiums.

Dental and vision coverage is also available to benefit recipients and dependents. The Board, which has the authority to implement changes, annually evaluates the premiums and plan design.

Summary of Plan Provisions

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Dental and vision coverage is also available to benefit recipients and dependents. The Board, which has the authority to implement changes, annually evaluates the premiums and plan design.

Cost of Living (COLA)

The Board has been vested with the responsibility to establish the COLA rate each year between 0.0 and 3.0%. In October 2023, the Board set a COLA rate of 0.00%, effective January 1, 2024. Various benefit recipients are eligible for a COLA according to the table below:

Cost of Living Adjustment Eligibility		
Type of Benefit Recipient	Pension Effective Date Prior to January 7, 2013	Pension Effective Date on or After January 7, 2013
Service Retirant / DROP Participant	The later of age 53 or the 13 th month after benefit commences	The later of age 60 or the 13 th month after benefit commences
Disability Retirant	The earlier of age 53 or the 61 st month after the benefit commences	
Beneficiary / Survivor	The 13 th month after the benefit commences	

Death After Retirement

Upon the death of a retiree, a lump-sum payment of \$5,000 is paid to the surviving spouse or to the retiree's estate if there is no surviving spouse.

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Statistical Section

Introduction

The objectives of the statistical section are to provide financial statement users with additional historical perspective, context, and relevant details that will assist in using information in the financial statements, notes to the financial statements, and required supplementary information in order to better understand and assess HPRS's overall financial condition.

The schedules, beginning on page 113, show financial trend information that will assist users in understanding and assessing how HPRS's financial condition has changed over the past ten years. The financial trend schedules presented are --

- Changes in Fiduciary Net Position - Pension
- Changes in Fiduciary Net Position - OPEB
- Benefit Deductions from Net Position by Type - Pension
- Benefit Deductions from Net Position by Type - OPEB

The schedules, beginning on page 114, show demographic and economic information. This information is designed to assist in understanding the environment in which HPRS operates. The demographic and economic information and the operating information presented include --

- Principal Participating Employer
- Benefit Recipients by Type of Benefit
- Average Benefit Payments

Changes in Fiduciary Net Position – Pension

Years Ended December 31

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Additions										
Employer contributions	\$34,725,774	\$33,039,696	\$28,972,464	\$30,089,578	\$32,855,342	\$33,107,047	\$26,014,314	\$26,109,836	\$25,383,684	\$22,895,242
Member contributions	18,345,128	16,212,050	17,361,370	15,896,368	17,334,068	15,618,020	14,451,649	14,504,919	14,101,170	12,711,676
Transfers from other systems	473,390	2,719,652	804,605	638,854	826,595	781,873	410,250	619,110	773,206	947,265
Investment income, net	96,045,179	120,311,768	(96,172,186)	136,798,307	121,225,640	129,709,247	(37,806,872)	101,528,022	48,099,287	(4,465,153)
Total additions	\$149,589,471	\$172,283,166	\$(49,033,747)	\$183,423,107	\$172,241,645	\$179,216,187	\$3,069,341	\$142,761,87	\$88,357,347	\$32,089,030
Deductions										
Benefits paid to participants	86,555,564	84,415,775	84,861,348	85,884,437	78,593,402	73,484,448	71,581,420	75,395,901	67,439,444	65,828,374
Member contribution refunds	502,078	543,483	3,785,126	3,597,674	2,552,672	1,556,151	716,739	1,074,973	1,730,725	857,626
Administrative expenses	1,648,184	1,970,255	1,331,254	970,978	1,509,348	1,649,904	1,435,864	1,436,879	1,352,567	1,084,161
Transfers to other systems	133,547	272,102	161,821	45,739	54,203	147,156	210,895	140,562	416,679	160,888
Total deductions	\$88,839,373	\$87,201,615	\$90,139,549	\$90,498,828	\$82,709,625	\$76,837,659	\$73,944,918	\$78,048,315	\$70,939,415	\$67,931,049
Change in pension net position	\$60,750,098	\$85,081,551	(\$139,173,29)	\$92,924,279	\$89,532,020	\$102,378,528	(\$70,875,577)	\$64,713,572	\$17,417,932	(\$35,842,01)

Changes in Fiduciary Net Position – OPEB

Years Ended December 31

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Additions										
Employer contributions	\$-	\$-	\$3,890,000	\$-	\$-	\$-	\$4,623,201	\$4,640,177	\$4,511,127	\$4,068,887
Investment income, net	12,175,371	15,649,726	(12,854,216)	17,793,515	16,140,521	18,006,553	(5,366,447)	14,424,489	6,877,607	(647,230)
Health care premiums	655,953	2,473,472	2,415,723	4,203,731	4,101,755	4,006,980	4,062,903	3,885,594	2,918,533	2,397,253
Retiree Drug Subsidy	268,948	1,111	433,632	3,687,575	1,742,357	1,665,632	1,808,082	1,418,110	1,082,402	1,140,016
Prescription Drug Rebates	136,083	494,477	1,200,110	2,128,443	1,578,830	1,318,027	1,352,977	719,538	351,087	428,517
Total additions	13,236,355	18,618,786	(\$4,914,751)	\$27,813,264	\$23,563,463	\$24,997,192	\$6,480,716	\$25,087,908	\$15,740,756	\$7,387,443
Deductions										
Health care expenses	8,358,839	10,462,275	9,900,250	16,181,131	15,725,987	15,609,344	15,762,478	15,456,987	14,594,984	13,759,103
Administrative expenses	208,926	256,274	177,934	126,296	200,961	229,044	203,812	204,143	193,401	157,150
Total deductions	\$8,567,765	\$10,718,549	\$10,078,183	\$16,307,427	\$15,926,948	\$15,838,388	\$15,966,290	\$15,661,130	\$14,788,385	\$13,916,253
Change in OPEB net position	\$4,668,590	\$7,900,237	(\$14,992,935)	\$11,505,837	\$7,636,515	\$9,158,804	(\$9,485,574)	\$9,426,778	\$952,371	(\$6,528,810)

Benefit Deductions from Net Position by Type - Pension

Years Ended December 31

Type of Benefit*	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Age & Service	\$71,847,098	\$70,039,941	\$71,169,040	\$72,802,319	\$65,795,145	\$61,332,945	\$59,778,507	\$63,909,049	\$55,912,247	\$54,637,611
Reduced	1,953,321	2,053,518	2,032,710	2,018,154	2,314,430	2,006,286	1,998,325	1,987,800	2,180,522	2,192,201
Disability	6,182,340	6,133,962	5,663,550	5,478,399	5,344,149	5,144,803	4,824,425	4,710,650	4,496,025	4,381,011
Survivor	6,407,805	6,048,354	5,826,048	5,405,565	5,024,678	4,920,414	4,870,163	4,688,402	4,765,650	4,307,551
Death Benefits	165,000	140,000	170,000	180,000	115,000	80,000	110,000	100,000	85,000	110,000
Total Pension Benefits	\$86,555,564	\$84,415,775	\$84,861,348	\$85,884,437	\$78,593,402	\$73,484,448	\$71,581,420	\$75,395,901	\$67,439,444	\$65,628,374

*Previous versions of this schedule included an "Early" category, which has now been combined with "Age & Service", since the criterion for eligibility is the same.

Benefit Deductions from Net Position by Type - OPEB

Years Ended December 31

Type of Benefit	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Medical	(\$36,575)	\$5,384,462	\$5,602,223	\$6,785,358	\$7,094,642	\$7,906,107	\$8,153,320	\$8,091,247	\$7,331,598	\$7,087,732
Wellness	31,538	76,512	38,007	57,214	20,549	42,447	27,951	53,566	31,455	68,263
Prescription drugs	529	2,118,493	1,530,598	8,451,258	7,782,415	6,789,285	6,718,222	6,488,074	6,115,493	5,245,815
Medicare-B reimbursement	-	-	-	-	-	-	-	-	311,820	601,860
Dental	749,873	713,888	715,924	714,782	656,141	713,553	690,084	642,998	621,659	593,016
Vision	266,081	272,755	211,255	172,519	172,240	157,952	172,901	181,102	182,959	162,417
Medicare HRA	2,461,197	1,821,202	1,801,686	-	-	-	-	-	-	-
Pre-Medicare HRA	4,852,004	-	-	-	-	-	-	-	-	-
HRA Admin Expenses	34,192	71,899	-	-	-	-	-	-	-	-
Medicare CatRx	-	3,064	557	-	-	-	-	-	-	-
Total	\$8,358,839	\$10,462,275	\$9,900,250	\$16,181,131	\$15,725,987	\$15,609,344	\$15,762,478	\$15,456,987	\$14,594,984	\$13,759,103
Member premiums/adjustments	(1,060,984)	(2,969,060)	(7,939,465)	(10,019,749)	(7,422,942)	(6,990,639)	(7,223,961)	(6,023,241)	(4,352,023)	(3,965,786)
Net paid by HPRS	\$7,297,855	\$7,493,215	\$1,960,785	\$6,161,382	\$8,303,045	\$8,618,705	\$8,538,517	\$9,433,746	\$10,242,961	\$9,793,317

Principal Participating Employer

2015-2024

Year	Participating Government*	Covered Employees	Year	Participating Government*	Covered Employees
2024	Ohio State Highway Patrol	1,436	2019	Ohio State Highway Patrol	1,614
2023	Ohio State Highway Patrol	1,399	2018	Ohio State Highway Patrol	1,668
2022	Ohio State Highway Patrol	1,380	2017	Ohio State Highway Patrol	1,650
2021	Ohio State Highway Patrol	1,454	2016	Ohio State Highway Patrol	1,670
2020	Ohio State Highway Patrol	1,542	2015	Ohio State Highway Patrol	1,621

*HPRS is a single-employer pension system; 100% of members are employed by the Ohio State Highway Patrol.

Benefit Recipients by Type of Benefit

December 31, 2024

Monthly Benefit	Number of Benefit Recipients	Type of Benefit					Unmodified	Retirement Option						
		1	2	3	4	5		1	2	3	4	5	6	7
Deferred	32	-	-	-	-	-	-	-	-	-	-	-	-	-
\$1 - 250	18	-	-	-	17	1	18	-	-	-	-	-	-	-
251-500	6	-	-	-	1	5	6	-	-	-	-	-	-	-
501 - 750	11	-	-	-	-	11	11	-	-	-	-	-	-	-
751 - 1000	22	-	-	-	10	12	22	-	-	-	-	-	-	-
1001 – 1250	48	-	3	1	30	14	48	-	-	-	-	-	-	-
1251 – 1500	55	-	1	1	41	12	55	-	-	-	-	-	-	-
1501 – 1750	88	3	7	1	67	10	88	-	-	-	-	-	-	-
1751 – 2000	88	7	8	3	62	8	86	-	2	-	-	-	-	-
2001 – 2250	77	16	13	7	40	1	75	1	1	-	-	-	-	-
2251 – 2500	58	16	10	10	19	3	54	1	-	3	-	-	-	-
2501 – 2750	59	21	7	19	11	1	54	-	1	4	-	-	-	-
2751 – 3000	77	39	14	14	10	-	70	1	1	5	-	-	-	-
3001 - 3250	168	125	2	37	4	-	144	-	14	10	-	-	-	-
3251 – 3500	200	177	-	23	-	-	169	1	15	15	-	-	-	-
Over 3,500	1,178	1,125	4	45	4	-	971	11	70	125	-	-	-	1
Total	2,185	1,529	69	161	316	78	1,871	15	104	162	-	-	-	1

Type of Benefit Recipient (Includes current members in DROP)*

- 1 – Age & Service
- 2 – Reduced
- 3 – Disability
- 4 – Survivor
- 5 – Alternate Payee (Division of Property Order)

* Previous versions of this schedule included an “Early” category, which has now been combined with “Age & Service”, since the criterion for eligibility is the same.

Retirement Option

Under the unmodified plan, a surviving spouse receives a 50% continuance (minimum, \$900 monthly)

Under the following options, a surviving spouse qualifies for the above-noted 50% continuance; however, the member’s lifetime benefit is reduced:

Option 1 – Beneficiary receives 0 to <25% of member’s reduced monthly benefit

Option 2 – Beneficiary receives 25 to <50% of member’s reduced monthly benefit

Option 3 – Beneficiary receives 50% or more of member’s reduced monthly benefit

Option 4 – Beneficiary receives 100% of member’s remaining reduced monthly benefit for 5 years after benefit begins

Option 5 – Beneficiary receives 100% of member’s remaining reduced monthly benefit for >5 to 10 years after benefit begins

Option 6 – Beneficiary receives 100% of member’s remaining reduced monthly benefit for >10 to 15 years after benefit begins

Option 7 – Beneficiary receives 100% of member’s remaining reduced monthly benefit for >15 years after benefit begins

Average Benefit Payments 2015-2024					
Retirement During		Years of Credited Service			Overall
		20 to <25	25 to <30	30+	
2024	Average Monthly Benefit	3,469	4,128	4,850	4,026
	Average Final Average Salary	6,844	7,070	6,908	7,096
	Number of Retirees	17	28	7	52
2023	Average Monthly Benefit	3,073	4,065	3,933	3,807
	Average Final Average Salary	5,315	6,815	7,417	6,750
	Number of Retirees	14	36	8	58
2022	Average Monthly Benefit	\$3,328	\$4,024	\$4,243	\$3,931
	Average Final Average Salary	\$6,069	\$6,768	\$6,630	\$6,584
	Number of Retirees	16	40	19	75
2021	Average Monthly Benefit	\$3,194	\$3,983	\$4,507	\$3,930
	Average Final Average Salary	\$5,962	\$6,548	\$6,950	\$6,511
	Number of Retirees	18	43	19	80
2020	Average Monthly Benefit	\$3,083	\$3,959	\$3,993	\$3,772
	Average Final Average Salary	\$5,586	\$6,438	\$5,931	\$6,220
	Number of Retirees	13	43	4	60
2019	Average Monthly Benefit	\$2,841	\$3,711	\$4,369	\$3,694
	Average Final Average Salary	\$5,085	\$6,010	\$5,959	\$5,959
	Number of Retirees	7	32	8	47
2018	Average Monthly Benefit	\$2,761	\$3,731	\$3,831	\$3,517
	Average Final Average Salary	\$5,186	\$6,064	\$5,697	\$5,807
	Number of Retirees	12	32	7	51
2017	Average Monthly Benefit	\$3,115	\$3,640	\$4,219	\$3,584
	Average Final Average Salary	\$5,611	\$5,795	\$5,986	\$5,775
	Number of Retirees	13	53	5	71
2016	Average Monthly Benefit	\$2,511	\$3,846	\$4,013	\$3,505
	Average Final Average Salary	\$5,020	\$6,091	\$5,678	\$5,796
	Number of Retirees	13	35	2	50
2015	Average Monthly Benefit	\$2,882	\$3,648	\$3,980	\$3,478
	Average Final Average Salary	\$5,287	\$5,828	\$5,821	\$5,684
	Number of Retirees	13	31	5	49

The table above does not include active DROP participants.

The average monthly benefit is based on the benefit paid at termination from employment, not entry into DROP.

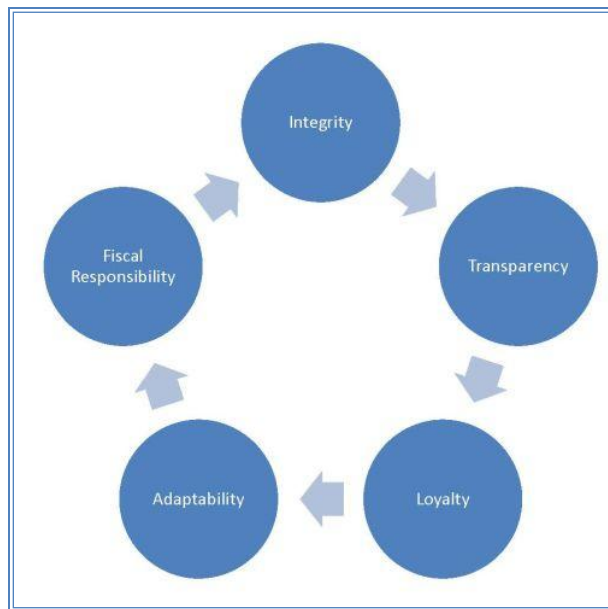
HPRS Mission Statement

Provide stable pension services that are fiscally responsible, prudently administered, and delivered with understanding and responsiveness to all members and beneficiaries.

HPRS Vision Statement

Maintain a financially sound pension system that is a leader in the oversight of our investments and liabilities, providing for the long-term financial wellbeing of our retirement system.

HPRS Values



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OHIO AUDITOR OF STATE KEITH FABER



OHIO STATE HIGHWAY PATROL RETIREMENT SYSTEM

DELAWARE COUNTY

AUDITOR OF STATE OF OHIO CERTIFICATION

This is a true and correct copy of the report, which is required to be filed pursuant to Section 117.26, Revised Code, and which is filed in the Office of the Ohio Auditor of State in Columbus, Ohio.



Certified for Release 7/29/2025

65 East State Street, Columbus, Ohio 43215
Phone: 614-466-4514 or 800-282-0370

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