PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEVADA

A COMPONENT UNIT of the STATE of NEVADA

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2023

Tina Leiss Executive Officer

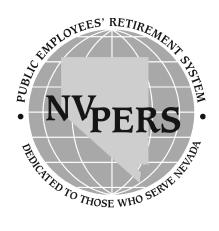
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MISSION STATEMENT

It is the mission of the Public Employees' Retirement System to:

- Provide public workers and their dependents with a retirement program that provides a reasonable base income for retirement or for periods where a disability has removed a worker's earning capacity.
- Encourage those workers to enter into and remain in government service for such periods of time to give public employers and the people of the State of Nevada the full benefit of their training and experience.
- Provide an orderly method of promoting and maintaining a high level of service to the public through an equitable separation procedure available to employees at retirement or upon becoming disabled.

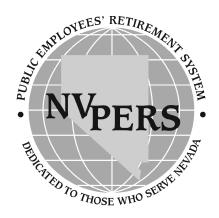
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INTRODUCTORY SECTION

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December 5, 2023

Dear Chair and Members of the Board:

It is a pleasure to present the Annual Comprehensive Financial Report (ACFR) of the Public Employees' Retirement System of Nevada (System or PERS), a component unit of the State of Nevada, for the fiscal year ended June 30, 2023.

The financial statements included in this report are the responsibility of the System's management and have been prepared in accordance with generally accepted accounting principles (GAAP) as promulgated or adopted by the Governmental Accounting Standards Board (GASB). In management's opinion, the financial statements present fairly the fiduciary net position of the System at June 30, 2023, and changes in fiduciary net position for the year then ended.

The System was established by the Nevada Legislature in 1947. By July 1, 1949, the System had approximately 3,000 members and 64 retirees. At the end of fiscal year 2023, the System had 227 participating employers, 112,019 active members, and 81,861 benefit recipients. The System is comprised of two sub-funds, Regular, consisting of members who are not police or fire employees, and Police and Firefighters (Police/Fire). The Regular sub-fund was established to provide retirement, disability, and survivor benefits for public employees with the exception of those who are police officers or firefighters. The Police/Fire sub-fund was established to segregate accounting for retirement and survivor benefits related to members who are police officers or firefighters. All services provided by staff are performed in order to meet those objectives. For more specific information on plan provisions, please refer to the Plan Summary, beginning on page 135.

Included in the Financial Section of this ACFR, beginning on page 22, is the Management's Discussion and Analysis (MD&A). Users of the financial statements are encouraged to review the MD&A, which contains a statement overview, highlights for the year, and a short analysis of the financial statements comparing the current and previous year.

We hope that you and the members of the System will find this ACFR helpful in understanding your public employees' retirement system.

Major Initiatives

Legislation

The Nevada Legislature convenes on a biennial basis in odd-numbered years. During the interim between legislative sessions, PERS worked with legislative staff on pension-related issues. Following the 2023 legislative session, the Public Employees' Retirement Board (Retirement Board or Board) continues to review the System's Official Policies and make necessary modifications to ensure compliance with applicable law. Assembly Bill 140 of the 2023 legislative session created the legal holiday of Juneteeth Day. With the passage of Assembly Bill 461, the position of Chief Administrative Analyst was created in the executive staff. Senate Bill 14 created a reemployment exemption for gaming commissioners. Senate Bill 434 created a new retirement option for beneficiary coverage and removed the exclusion from membership for substitute teachers.

System Governance

The System's existing governance principles, policies, and charters define the role of the Retirement Board and executive management, guide the conduct and decision-making of the Retirement Board, and document and preserve the System's policies.

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Managing the funding issue internally to PERS is paramount to the overall success of the System. Contribution rate stability and responsible funding are key goals of the System. The System continually reviews trends in actuarial liabilities and maintains a realistic recognition of plan costs in order to govern the plan in a fiscally sound manner. Staff will work to manage the expectations of stakeholders and other interested parties on funding issues and contribution rates through continued public relations outreach and education regarding the financing and management of the System.

A positive, open working relationship promotes sound fiduciary administration of the trust. All parties work together for the exclusive benefit of the members and beneficiaries of the System and Board governance practices promote this directive. Adhering to the responsibilities of the charters for the Board, Board Chair, and Executive Officer lay the framework for success, defining the objectives of each. Executive staff keeps Board members abreast of issues affecting the System both in the State and on a national level. Communication is designed to be helpful, organized, and not overwhelming to assist the Board in the discharge of fiduciary duties by ensuring pertinent information is delivered in a timely and coherent fashion.

The System shall maintain effective internal controls over financial reporting and observe the highest standards in financial reporting. Staff will continue to diligently monitor and update internal controls as necessary as well as continue to evaluate enterprise-wide risk through an assessment process. The System will continue to maintain the standards necessary to receive the Public Pension Coordinating Council award in recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards, the Government Finance Officers Association (GFOA) Award for Excellence in Financial Reporting for the Annual Comprehensive Financial Report, and the Government Finance Officers Association (GFOA) Award for Excellence in Financial Reporting for the Popular Annual Financial Report.

Information Technology

The IT department is dedicated to maintaining an efficient pension management system that can provide for all operational needs. Technology efforts are driven by business goals as well as statutory and pension fund industry mandates. During the last fiscal year, the System worked with a project manager and data conditioning vendor to assist with the initiation of a new Pension Administration System. The System completed the vendor selection and contract process in fiscal year 2021 allowing for the formal initiation of the new Pension Administration System project in early fiscal year 2022. Employer Advisory Group meetings continued this past year to communicate upcoming changes in preparation of the new Pension Administration System.

Strategic Planning

Annually, PERS' executive staff reviews the System's strategic plan for updates, including both additions and deletions. The Strategic Plan covers a five-year period and is updated annually by the Executive Officer in consultation with the Board. Strategic Plan revisions are prepared in conjunction with the Operational Yearly Plan and management plans for the individual departments. The Operational Yearly Plan supports the Strategic Plan by setting forth the business plan for the System for the vear.

Summary of Financial Information

The System's management is responsible for maintaining internal controls designed to provide reasonable assurance that transactions are executed according to management's authorization, recorded to maintain accountability for assets, and to allow the preparation of financial statements in accordance with generally accepted accounting principles. The internal controls include written policies and procedures and are reviewed periodically by the System's internal audit staff and independent auditors.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Because the cost of the 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. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. We believe our internal control structure considers these risks and that we maintain a system of internal controls designed to provide reasonable assurance that assets are properly safeguarded, transactions are properly executed, and financial statements are reliable. The valuation of costs and benefits requires estimates and judgments by management.

The Retirement Act requires a biennial financial audit of the System by a certified public accountant. The Board chooses to conduct such audits on an annual basis, rather than biennially, to ensure the System's financial statements are fairly presented, in all material respects, in accordance with generally accepted accounting principles. The System is also required by statute to submit a biennial budget proposal to the Budget Division of the State of Nevada, which must be incorporated with the State Executive Budget and approved by the Nevada Legislature.

Funding

The System's basic funding policy provides for periodic contributions at a level pattern of cost as a percentage of salary throughout an employee's working lifetime in order to accumulate sufficient assets to pay benefits when due. Although the System receives an annual actuarial valuation indicating the contribution rates required to fund the System on an actuarial reserve basis, contributions actually made are in accordance with the rates derived from the actuarial rates and then rounded according to statute.

The actuarial funding method used is the Entry Age Normal Cost Method. This method is used to calculate liabilities using a year-by-year closed amortization period where each amortization period is set at 20 years, in addition to using other significant actuarial assumptions detailed beginning on page 85. Plan rates in effect for the year ended June 30, 2023, are presented on page 33 in the Financial Section of this report. In addition, Required Supplementary Information on pages 44 - 46 show changes in employers' net pension liability, related ratios, and ten-year schedules of employer contributions and the moneyweighted rate of return on investments. The ten-year schedules of funding progress are on page 103 of the Actuarial Section. The actuarial funded ratio for all members is 75.4% in 2023, an increase from 74.7% in fiscal year 2022.

Investments

Investment performance plays an important role in the System's ability to provide retirement benefits to its members. The Board's investment philosophy centers on time tested investment principles and efficient, cost-effective portfolio management.

The investment portfolio is designed to meet the funding objectives of the System while taking the least possible risk. Investment of the System's assets is governed by the prudent person standard. This standard states that the Board may invest the System's funds in every type of investment which persons of prudence, discretion, and intelligence acquire or retain for their own account.

The System's investment portfolio is well diversified by asset class, investment structure, and individual security. In fact, the System's portfolio currently holds over 1,500 individual securities from 23 different countries. The Board uses these portfolio components to maintain strict control of the fund's risk/return profile.

Asset allocation is the most significant factor influencing the risk and return of the investment program. Since inception, more than 90% of the System's investment performance is explained by asset allocation. Determination of the fund's long-term asset allocation involves estimating the expected return and risk of major types of investments and blending them into a portfolio which meets the System's risk/return objectives.

The fair value of the System's investment assets at the end of fiscal year 2023 was \$58.1 billion. The portfolio return objective includes a premium over the Consumer Price Index (CPI). The System's investment return objective over calculated CPI in fiscal year 2023 was 7.7%. The System's total return (gross of fees) on investments for that same time period was 9.3%, which includes both realized and unrealized gains. Fiscal year 2023 investment performance was primarily driven by strong returns from U.S. Stocks and International Stocks.

The fund's annualized rate of return (gross of fees) is 9.4% since inception (39 years) exceeding the long-term actuarial funding objective. The fund is competitive on a risk-adjusted basis, ranking in the top 10% of large public funds for that same time frame. The investment section, beginning on page 64, addresses specific activity and results in the portfolio.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its annual comprehensive financial report for the fiscal year ended June 30, 2022 (see page 15). This was the 34th consecutive year the System achieved this prestigious award.

In order to be awarded a Certificate of Achievement, a government unit 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 our current report continues to meet the Certificate of Achievement Program requirements and are submitting it to the GFOA for consideration again this year.

PPCC Award

The Public Pension Coordinating Council awarded the Public Pension Standards Award to the System for the fiscal year ended June 30, 2023 (see page 16). The award is designed to commend public employee retirement systems for implementing and maintaining high professional standards. PERS has received the award every year it has been offered.

Professional Services

Professional consultants are hired to perform services essential to the efficient operation of the System. The Independent Auditor's Report, Consultant's Report of Investment Activity, and the actuary's certifications are included in this report. The System's consultants are listed on pages 13 and 64.

Acknowledgements

This report reflects the combined effort of the System's administrative staff. It is intended to provide both complete and reliable information as a basis for making management decisions, determining compliance with legal provisions, and determining the responsible stewardship of assets contributed by the members and their employers.

I would like to express my appreciation to the staff, consultants, Board, and other associates whose efforts ensured the successful operation of the System in 2023.

Respectfully submitted,

Tina Leiss Executive Officer

ADMINISTRATIVE PERSONNEL As of June 30, 2023

PUBLIC EMPLOYEES' RETIREMENT BOARD

| Mark Stevens | Chair | 2027 |
|-------------------|------------|------|
| Brian A. Wallace | Vice Chair | 2025 |
| Jessica Colvin | Member | 2025 |
| Dawn E. Huckaby | Member | 2026 |
| Todd H. Ingalsbee | Member | 2027 |
| Norma Santoyo | Member | 2025 |
| Cameron Wagner | Member | 2026 |

Terms expire on June 30 of year noted

RETIREMENT STAFF

Tina Leiss **Executive Officer** Steve Edmundson Chief Investment Officer Lauren Larson Deputy Investment Officer Kabrina Feser Operations Officer John Van Horn Chief Financial Officer Ian Carr General Counsel Teresa Chalmers Administrative Analyst

DIVISION SUPERVISORS

Ramon Chavez Accounting

Charyl Lacombe Employer, Production & Pension Services

Charlie Park Information Technology

Julie Spaletta* Internal Audit

Felicia King Member & Retiree Services

Walter Zeron Support Services

MEDICAL ADVISORS

G. Bruce Nickles, M.D., Carson City, Nevada Terry Long, RN, Carson City, Nevada

POLICE AND FIREFIGHTERS' RETIREMENT FUND ADVISORY COMMITTEE

| Scott Vivier | Chair | 2027 |
|----------------|------------|------|
| Scott Nicholas | Vice Chair | 2024 |
| Jennifer Wyatt | Member | 2023 |
| Troyce Krumme | Member | 2026 |
| Bill Gardner | Member | 2024 |
| Vacant | Member | |

Terms expire on June 30 of year noted

THE SYSTEM'S ADVISORS

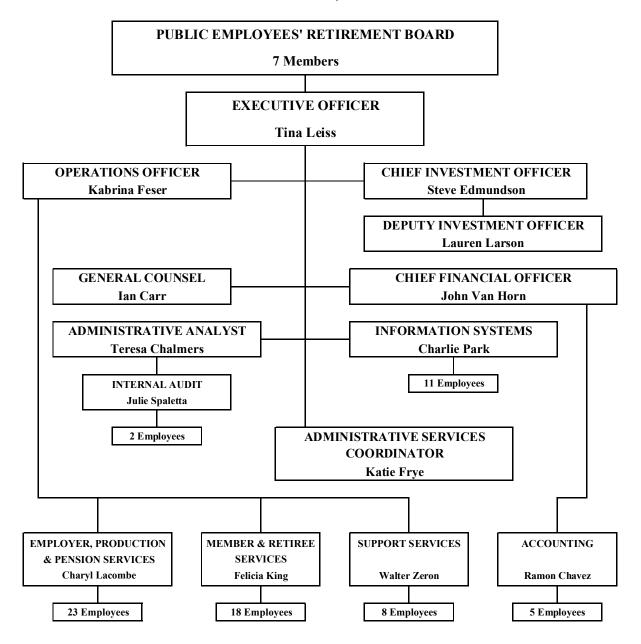
Consulting Actuary - Segal, San Francisco, California Independent Auditors - Plante & Moran PLLC, Cleveland, Ohio Investment Consultants - Callan Associates, San Francisco, California Jobs Peak Advisors, Minden, Nevada

Note: A list of investment professionals who provide services to PERS can be found on page 64. A schedule of fees and commissions paid to investment professionals can be found on pages 77-78.

^{*} This position has since terminated their employment/contract with PERS.

ORGANIZATIONAL CHART

As of June 30, 2023





Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Public Employees' Retirement System of Nevada

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2022

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2023

Presented to

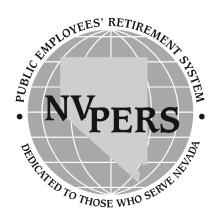
Public Employees' Retirement System of Nevada

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

Presented by the Public Pension Coordinating Council, a confederation of

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

> Alan H. Winkle Program Administrator



FINANCIAL SECTION

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Plante & Moran, PLLC

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Independent Auditor's Report

To the Public Employees' Retirement Board of the State of Nevada Public Employees' Retirement System of Nevada

Opinion

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

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2023 and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

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



To the Public Employees' Retirement Board of the State of Nevada Public Employees' Retirement System of Nevada

In performing an audit in accordance with GAAS, we:

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

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

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other required supplementary information, as identified 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, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The other supplementary information, as identified in the table of contents, is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements 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 auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is 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 Comprehensive Financial Report. The other information comprises the introductory, investment, actuarial, statistical, and plan summary 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.

To the Public Employees' Retirement Board of the State of Nevada Public Employees' Retirement System of Nevada

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 whether the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Report on Summarized Comparitive Information

We have previously audited the System's June 30, 2022 financial statements, and we expressed an unmodified opinion on those audited financial statements in our report dated December 1, 2022. In our opinion, the summarized comparitive information presented herein as of and for the year ended June 30, 2022 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Plante & Moran, PLLC

December 5, 2023

This Management's Discussion and Analysis (MD&A) of the financial performance of the Public Employees' Retirement System of Nevada (System or PERS) provides an overview of the System's financial activities for the year ended June 30, 2023. The MD&A is designed to focus on comparative analysis of the last resulting changes and currently known facts. Readers are encouraged to consider the information presented in conjunction with the financial statements as a whole, which follow the MD&A.

The System is responsible for administering retirement, disability, and survivor benefits for Regular members (consisting of employees within the State of Nevada and local governments which include schools, counties, cities, special districts, etc.) as well as Police/Fire members throughout the state.

Overview of the Financial Statements

The basic financial statements consist of: (1) the Statement of Fiduciary Net Position, (2) the Statement of Changes in Fiduciary Net Position, and (3) the Notes to the Financial Statements. Required Supplementary Information and Other Supplementary Information are also presented.

The Statement of Fiduciary Net Position includes all of the System's pension trust fund assets, liabilities, and the fiduciary net position at the end of the fiscal year.

The Statement of Changes in Fiduciary Net Position reports additions to and deductions from the pension trust fund during the fiscal year presented. Over time the increase or decrease in the fiduciary net position serves as a useful indicator of the health of the System's financial position.

The Notes to the Financial Statements provide additional information that is required by generally accepted accounting principles.

The Required Supplementary Information following the Notes to the Financial Statements consists of schedules and related notes pertaining to changes in employers' net pension liability, employers' contributions, investment returns, and actuarial assumptions. These schedules are intended to provide additional information useful in evaluating the condition of the defined benefit pension plan.

Other Supplementary Information details administrative expenses, investment expenses, consultant and professional service expenses, in addition to Schedules of Fiduciary Net Position and Changes in Fiduciary Net Position broken down between Regular and Police/Fire members.

Financial Highlights

As of and for the Years Ended June 30 (in millions)

| | 2023 | 2022 |
|-------------------------------------|-------------|-------------|
| Investments, at fair value | \$ 57,187.5 | \$ 53,701.2 |
| | | |
| Contributions | 2,390.6 | 2,290.4 |
| Net investment income (loss) | 4,951.3 | (2,944.1) |
| Net securities lending income | 2.1 | 6.2 |
| | | |
| Benefit payments | 3,477.8 | 3,231.9 |
| Refunds of contributions | 51.1 | 53.5 |
| Transfers of contributions to JRS* | 1.4 | 1.7 |
| Administrative expenses | 14.1 | 13.5 |
| | | |
| Plan fiduciary net position | \$ 58,315.1 | \$ 54,514.0 |
| Plan fiduciary net position as % of | | |
| total pension liability | 76.2 % | 75.1 % |

Total pension liability as of June 30, 2023, was \$76,568,012,068.

Financial Analysis

The fair value of investments for fiscal year 2023 increased by 6.5% to \$57,187.5 million from \$53,701.2 million in 2022. The total net investment income for 2023 was \$4,953.4 million. The PERS investment program returned 9.3% (time-weighted, gross of fees) in fiscal year 2023. The 9.4% annualized time-weighted (gross of fees) return since inception (39 years) exceeds the actuarial objective.

^{*} Judicial Retirement System

The following are summary comparative statements of the System.

CONDENSED STATEMENT OF FIDUCIARY NET POSITION

| | As of June 30, 2023 | As of June 30, 2022 | Increase/ (Decrease) from 2022 to 2023 | Percentage Increase/ (Decrease) from 2022 to 2023 |
|---|------------------------|-----------------------------------|---|---|
| Cash and cash equivalents | \$ 761,924,20 | 1 \$ 510,980,898 | \$ 250,943,303 | 49.1 % |
| Contributions receivable | 208,013,71 | 1 213,753,422 | (5,739,711) | (2.7) |
| Accrued investment income | 223,716,47 | 1 171,044,397 | 52,672,074 | 30.8 |
| Pending trades receivable | 68,032,70 | 1 45,076,880 | 22,955,821 | 50.9 |
| Investments, at fair value | 57,187,487,74 | 4 53,701,215,314 | 3,486,272,430 | 6.5 |
| Collateral on loaned securities, at fair value | - | 248,941,553 | (248,941,553) | (100.0) |
| Property and equipment, net | 12,956,87 | | 4,875,181 | 60.3 |
| Other assets | 3,962,81 | 5,107,408 | (1,144,594) | (22.4) |
| Total plan assets | 58,466,094,52 | 0 54,904,201,569 | 3,561,892,951 | 6.5 |
| Accounts payable and accrued expenses | 10,033,52 | 2 33,742,762 | (23,709,240) | (70.3) |
| Pending trades payable | 140,954,22 | 1 107,505,246 | 33,448,975 | 31.1 |
| Obligations under securities lending activities | | 248,941,553 | (248,941,553) | (100.0) |
| Total plan liabilities | 150,987,74 | 3 390,189,561 | (239,201,818) | (61.3) |
| Net position restricted for pension benefits | \$ 58,315,106,77 | <u>7</u> <u>\$ 54,514,012,008</u> | \$ 3,801,094,769 | 7.0 % |

Cash and cash equivalents increased by 49.1%, accrued investment income increased by 30.8%, and pending trades receivable and payable increased 50.9% and 31.1%, respectively, between 2022 and 2023. These categories fluctuate from year to year and are unpredictable.

Investments at fair value increased \$3.5 billion from 2022 to 2023 primarily due to the 9.3% (time-weighted, gross of fees) total return generated by the System's investments in 2023. The investment performance was primarily driven by strong returns from both U.S. and international stocks.

Collateral on loaned securities, at fair value, and obligations under securities lending activities both decreased 100% due to the termination of the securities lending program in May 2023.

Property and equipment, net, increased by \$4.9 million from 2022 to 2023 primarily due to costs incurred and capitalized for the new pension administrative system, PERIS.

Accounts payable and accrued expenses decreased by \$23.7 million between 2022 and 2023 primarily due to a reclassification of the contribution overpayments to contributions.

CONDENSED STATEMENT OF CHANGES IN FIDUCIARY NET POSITION For the Years Ended June 30,

| | 2023 | 2022 | Increase/ (Decrease) from 2022 to 2023 | Percentage Increase/ (Decrease) from 2022 to 2023 |
|-----------------------------------|-------------------|----------------------|---|---|
| Contributions | \$ 2,390,600,366 | \$ 2,290,391,496 \$ | 100,208,870 | 4.4 % |
| Net investment income (loss) | 4,951,276,088 | (2,944,139,128) | 7,895,415,216 | (268.2) |
| Net securities lending income | 2,122,178 | 6,193,380 | (4,071,202) | (65.7) |
| Other income | 1,470,742 | 3,703,489 | (2,232,747) | (60.3) |
| Total additions | 7,345,469,374 | (643,850,763) | 7,989,320,137 | (1,240.9) |
| Benefit payments | 3,477,751,067 | 3,231,941,306 | 245,809,761 | 7.6 |
| Refunds of contributions | 51,102,915 | 53,537,925 | (2,435,010) | (4.5) |
| Transfers of contributions to JRS | 1,407,857 | 1,689,041 | (281,184) | (16.6) |
| Administrative expenses | 14,093,101 | 13,453,262 | 639,839 | 4.8 |
| Other expenses | 19,665 | 50 | 19,615 | 39,230.0 |
| Total deductions | 3,544,374,605 | 3,300,621,584 | 243,753,021 | 7.4 |
| Change in net position | 3,801,094,769 | (3,944,472,347) | 7,745,567,116 | (196.4) |
| Net position, beginning of year | 54,514,012,008 | 58,458,484,355 | (3,944,472,347) | (6.7) |
| Net position, end of year | \$ 58,315,106,777 | \$ 54,514,012,008 \$ | 3,801,094,769 | 7.0 % |

Net investment income increased \$7.9 billion from 2022 to 2023 because the time-weighted investment return (gross of fees) of 9.3% in 2023 was greater than the negative 5.1% in 2022.

Net security lending income decreased \$4.1 million from 2022 to 2023. The security lending program was terminated this fiscal year.

Other income decreased 60.3% from 2022 to 2023 primarily due to employer penalties written off in fiscal year 2023.

Benefit payments increased 7.6% in 2023 primarily due to the number of beneficiaries increasing from 79,049 in 2022 to 81,861 in 2023 and the average monthly benefit increasing from \$3,499 in 2022 to \$3,630 in 2023.

Transfers of contributions to JRS decreased \$0.3 million in 2023. These amounts are unpredictable each year and depend on individual elections made by active and inactive members.

Contacting the System's Financial Management

This financial report is designed to provide plan participants, employers, citizens, taxpayers, and others with a general overview of the System's finances and to demonstrate the Board's oversight of the System. If you have questions about this report or need additional financial information, please contact PERS at 775-687-4200.

STATEMENT OF FIDUCIARY NET POSITION

June 30, 2023

| | 2023 |
|--|---------------------------------|
| ASSETS | |
| Cash and cash equivalents | \$ 761,924,201 |
| Receivables: | 200 012 711 |
| Contributions receivable Accrued investment income | 208,013,711 223,716,471 |
| Pending trades receivable | 68,032,701 |
| Total receivables | 499,762,883 |
| Investments, at fair value: | |
| U.S. bonds | 14,142,712,734 |
| U.S. stocks | 24,187,950,208 |
| International stocks Real estate | 10,999,045,099 3,058,559,255 |
| Private equity | 4,799,220,448 |
| Total investments | 57,187,487,744 |
| | |
| Property and equipment | 57,334,667 |
| Accumulated depreciation | (44,377,789) |
| Net property and equipment | 12,956,878 |
| Other assets | 3,962,814 |
| Total plan assets | 58,466,094,520 |
| LIABILITIES | |
| Accounts payable and accrued expenses | 10,033,522 |
| Pending trades payable | 140,954,221 |
| Total plan liabilities | 150,987,743 |
| NET POSITION Not registion required for pension benefits | ¢ 59 215 104 777 |
| Net position restricted for pension benefits | \$ 58,315,106,777 |

The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the Year Ended June 30, 2023 (With Comparative Totals For the Year Ended June 30, 2022)

| | 2023 | 2022 |
|---|---|---|
| ADDITIONS | | |
| Contributions: Employer Plan members Repayment and purchase of service | \$ 1,163,873,854 1,163,873,854 62,852,658 | \$ 1,103,990,008 1,103,990,008 82,411,480 |
| Total contributions | 2,390,600,366 | 2,290,391,496 |
| Investment income (loss): Net appreciation (depreciation) in fair value of investments Interest Dividends Other investment income | 3,755,039,509 359,546,118 738,117,020 174,299,111 5,027,001,758 | (3,896,322,690) 161,256,553 713,766,500 147,800,484 (2,873,499,153) |
| Less investment fees and other expense | (75,725,670) | (2,875,477,133) $(70,639,975)$ |
| Net investment income (loss) | 4,951,276,088 | (2,944,139,128) |
| Securities lending income Less securities lending expense Net securities lending income | 7,182,836 (5,060,658) 2,122,178 | 7,772,857 (1,579,477) 6,193,380 |
| Total net investment income (loss) | 4,953,398,266 | (2,937,945,748) |
| Other income | 1,470,742 | 3,703,489 |
| Total additions | 7,345,469,374 | (643,850,763) |
| DEDUCTIONS | | |
| Benefit payments: Retirement and survivor benefits Disability | 3,346,154,182 131,596,885 | 3,107,324,168 124,617,138 |
| Total benefit payments Refunds of contributions Transfers of contributions to JRS Administrative expenses Other expenses Total deductions | 3,477,751,067 51,102,915 1,407,857 14,093,101 19,665 | 3,231,941,306 53,537,925 1,689,041 13,453,262 50 |
| Total deductions | 3,544,374,605 | 3,300,621,584 |
| Change in net position | 3,801,094,769 | (3,944,472,347) |
| Net position restricted for pension benefits: Beginning of year End of year | 54,514,012,008 \$ 58,315,106,777 | 58,458,484,355 \$ 54,514,012,008 |

The accompanying notes are an integral part of these financial statements.

NOTE 1 - Summary of Significant Accounting Policies

Financial Reporting Entity

The Public Employees' Retirement Board (Retirement Board or Board) is the governing body of the Public Employees' Retirement System of Nevada (System or PERS) with responsibility for administration and management. This autonomous, seven-member Retirement Board is appointed by the Governor of the State of Nevada.

The System has no relationship with another entity that meets the criteria for inclusion as a component unit and has not included any other entity as a component unit of its financial reporting entity.

The System is classified as a component unit of the State of Nevada for financial reporting purposes in accordance with the provisions of the Governmental Accounting Standards Board (GASB) because the Governor appoints the Retirement Board and the State Legislature retains certain significant governing powers over the System.

Basis of Accounting

The accompanying financial statements of the System have been prepared in conformity with generally accepted accounting principles (GAAP) in the United States of America.

The System uses the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded in the accounting period in which they are earned and become measurable. Per statute, employee and employer contributions are recognized in the reporting period for which they are due. Expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is legally made. Benefits and refunds are recognized when currently due and payable in accordance with the terms of the plan.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements and the reported amounts of additions and deductions during the reported period. Actual results could differ from those estimates.

Organization

The System is comprised of two sub-funds.

Regular sub-fund – Established to provide retirement, disability, and survivor benefits for public employees with the exception of those who are police officers or firefighters.

Police/Fire sub-fund - Established to segregate accounting for benefits related to members who are police officers or firefighters.

Assets of the System can legally be used to pay both Regular and Police/Fire beneficiaries.

Cash and Cash Equivalents

Cash and cash equivalents include both operating cash on deposit with the System's commercial bank and cash on deposit with the custodial bank. Cash on deposit at the System's custodial bank includes investments in Invesco Treasury Portfolio Short-Term Investments Trust, Goldman Sachs Financial Square Treasury Obligations Fund, Dreyfus Treasury Obligations Cash Management - Institutional Shares, and State Street Institutional Treasury Plus Money Market Fund - Investment Class. These funds invest in short-term, high credit quality money market instruments. These instruments are direct obligations of the U.S. Treasury and repurchase agreements backed by Treasury obligations. The Boards of Invesco, Dreyfus, and State Street, may impose liquidity fees of up to 2% of the value of shares redeemed and/or suspended redemptions. Goldman Sachs government money market funds are exempt from liquidity fees.

Contributions Receivable

No allowance for doubtful accounts has been established since the System anticipates no material collection loss with respect to contributions receivables.

NOTE 1 - Summary of Significant Accounting Policies (continued)

Benefit Payments

Benefits are paid during the month they are due; therefore, no benefit payable is recorded each month or at year-end.

Federal Income Tax

The System is a qualified pension plan under Section 401(a) of the Internal Revenue Code (IRC) and, as such, is required to withhold federal income tax from member and benefit recipient payments in accordance with the IRC. As a public entity, the System is not required to file a federal income tax return with the Internal Revenue Service.

Investments

The Regular sub-fund and the Police/Fire sub-fund are accounted for separately, based upon actual funds contributed and an allocation of the combined investment earnings. Individual investments are not specifically identified as belonging to either the Regular sub-fund or the Police/Fire sub-fund.

Plan investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is assumed that both buyer and seller are rational and have a reasonable knowledge of relevant facts.

Securities traded on national or international exchanges are valued at the last reported sales price at current exchange rates. U.S. treasuries are valued based on observable market data. For private equity partnership investments, estimated fair value is determined in good faith and provided by the general partner of the respective investment partnership, based on the most recent financial information available for the underlying companies at the measurement date. In addition, each partnership undergoes an independent audit on an annual basis.

Investment purchases and sales are recorded as of the trade date. Dividend income is recognized on the ex-dividend date. Investment income is recognized as earned. Net change in the fair value of investments is determined by calculating the change in fair value of investments between the beginning of the fiscal year and the end of the fiscal year, less purchases of investments at cost, plus sales of investments at fair value.

There are certain market risks, credit risks, foreign exchange currency risks, or event risks which may subject the System to economic changes occurring in certain industries, sectors, or geographies.

Property and Equipment

Property and equipment consist of furniture, equipment, computer hardware, and software at cost net of accumulated depreciation. Assets are capitalized when the expected life is greater than one year and the initial cost is \$5,000 or more per unit. Intangible assets are capitalized for the development stage only (design, configuration, installation, and testing). Depreciation is calculated using the straight-line depreciation method over five years. The term "depreciation" includes amortization of intangible assets.

Administrative Expenses

The funds for administering the System are provided by the assessment of an administrative fee for each member and benefit recipient. Monthly fees at June 30, 2023, were \$6.11 for each Regular member and benefit recipient and \$6.33 for each Police/Fire member and benefit recipient. PERS is required by statute to submit a biennial budget proposal to the Budget Division of the State of Nevada, which must be incorporated with the State Executive Budget and approved by the Nevada Legislature.

Comparative Totals

The Statement of Changes in Fiduciary Net Position includes a partial presentation of prior year comparative financial statements but not at the level of detail required for a presentation in conformity with the accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements as of and for the year ended June 30, 2022, from which the partial information was derived.

NOTE 2 - Plan Description

History and Purpose

PERS administers a cost-sharing, multiple-employer, defined benefit public employees' retirement system which includes both Regular and Police/Fire members. The System was established by the Nevada Legislature in 1947, effective July 1, 1948. The System is administered to provide a reasonable base income to qualified employees who have been employed by a public employer and whose earning capacities have been removed or substantially impaired by age or disability.

Membership

At June 30, 2023, the number of participating public employers and active members was:

| Entity Type | Number of Employers | Number of Members |
|---|------------------------|----------------------|
| | | |
| State of Nevada and Related Agencies | 25 | 18,282 |
| Nevada System of Higher Education | 1 | 3,841 |
| Schools | 74 | 51,982 |
| Counties | 16 | 12,838 |
| Cities | 19 | 10,088 |
| Hospitals | 8 | 4,510 |
| Utility, Irrigation, and Sanitation Districts | 17 | 894 |
| Special Districts and Agencies | 67 | 9,584 |
| | 227 | 112,019 |

A complete list of participating employers can be found in the Statistical Section.

NOTE 2 - Plan Description (continued)

Membership (continued)

Any public employer in the State of Nevada may have its Regular or Police/Fire employees covered by the System. Retired, active, and inactive membership at June 30 was as follows:

| _ | 2023 |
|--|---------|
| Regular retired members: | _ |
| Service retirees | 63,399 |
| Beneficiaries and survivors | 7,557 |
| | 70,956 |
| Police/Fire retired members: | |
| Service retirees | 9,479 |
| Beneficiaries and survivors | 1,426 |
| | 10,905 |
| Total benefit recipients | 81,861 |
| Inactive members entitled to but not yet receiving benefits: | |
| Regular | 19,041 |
| Police/Fire | 1,049 |
| Total inactive members | 20,090 |
| Active members: | |
| Regular | 99,132 |
| Police/Fire | 12,887 |
| Total active members | 112,019 |
| Total retired, active, and inactive membership | 213,970 |

Benefits

Benefits, as required by the Nevada Revised Statutes (NRS or statute), are determined by the number of years of accredited service at time of retirement and the member's highest average compensation in any 36 consecutive months with special provisions for plan members entering the System on or after January 1, 2010, and July 1, 2015. Benefit payments to which participants or their beneficiaries may be entitled under the plan include pension benefits, disability benefits, and survivor benefits.

Monthly benefit allowances for members are computed at 2.5% of average compensation for each accredited year of service prior to July 1, 2001. For service earned on and after July 1, 2001, this service time factor is 2.67% of average compensation. For plan members entering the System on or after January 1, 2010, there is a 2.5% service time factor for all years of service. Regular plan members entering the System on or after July 1, 2015, have a 2.25% service time factor. The System offers several alternatives to the unmodified service retirement allowance which, in general, allow the retired employee to accept a reduced service retirement allowance payable monthly during his or her lifetime and various optional monthly payments to a named beneficiary after his or her death.

Post-retirement increases are provided by authority of NRS 286.575-.579. See Plan Summary for details.

NOTE 2 - Plan Description (continued)

Vesting

Regular members entering the system prior to January 1, 2010, are eligible for retirement at age 65 with five years of service, at age 60 with 10 years of service, or at any age with 30 years of service. Regular members entering the System on or after January 1, 2010, are eligible for retirement at age 65 with five years of service, or at age 62 with 10 years of service, or at any age with 30 years of service. Regular members entering the System on or after July 1, 2015, are eligible for retirement at age 65 with five years of service, at age 62 with 10 years of service, at age 55 with 30 years of service, and at any age with 33 1/3 years of service.

Police/Fire members entering the system prior to January 1, 2010, are eligible for retirement at age 65 with five years of service, at age 55 with 10 years of service, at age 50 with 20 years of service, or at any age with 25 years of service. Police/Fire members entering the System on or after January 1, 2010, are eligible for retirement at age 65 with five years of service, or at age 60 with 10 years of service, or at age 50 with 20 years of service. Only service performed in a position as a police officer or firefighter may be counted towards eligibility for retirement as Police/Fire accredited service.

The normal ceiling limitation on monthly benefit allowances is 75% of average compensation. However, a member who has an effective date of membership before July 1, 1985, is entitled to a benefit of up to 90% of average compensation. Both Regular and Police/Fire members become fully vested as to benefits upon completion of five years of service.

Plan Member Contributions

The authority for establishing and amending the obligation to make contributions, and member contribution rates, is set by statute. New hires, in agencies which did not elect the Employer-Pay Contribution (EPC) plan prior to July 1, 1983, have the option of selecting one of two contribution plans. One plan provides for matching employee and employer contributions, while the other plan provides for employer-pay contributions only.

Termination

Under the matching Employee/Employer Contribution plan a member may, upon termination of service for which contribution is required, withdraw employee contributions which have been credited to their account. All membership rights and active service credit in the System are canceled upon withdrawal of contributions from the member's account. If EPC was elected, the member cannot convert to the Employee/Employer Contribution plan and cannot withdraw these contributions.

NOTE 3 - Contributions Required and Contributions Made

The System's basic funding policy provides for periodic contributions at a level pattern of cost as a percentage of salary throughout an employee's working lifetime in order to accumulate sufficient assets to pay benefits when due.

The System receives an actuarial valuation on an annual basis indicating the contribution rates required to fund the System on an actuarial reserve basis. Contributions actually made are in accordance with the required rates established by the Nevada Legislature. These statutory rates are increased/decreased pursuant to NRS 286.421 and 286.450 based on the most recent actuarial valuation.

The Public Employees' Retirement Act requires an adjustment in the statutory contribution rates on July 1 of each oddnumbered year, based on the actuarially determined rates indicated in the actuarial valuation report ending June 30 in the preceding even year. Rates are only adjusted upward if the new rates are more than 0.50% higher than the existing rate for Employer-Pay and more than 0.25% higher for Employee/Employer. Rates are only adjusted downward if the new rates are more than 2.00% lower than the existing rate for Employer-Pay (and adjusted only by the amount in excess of 2.00%) and more than 1.00% lower than the existing rate for Employee/Employer (and adjusted only by the amount in excess of 1.00%). Rates are rounded to the nearest 0.25% of payroll.

NOTE 3 - Contributions Required and Contributions Made (continued)

Rates in effect for the year ended June 30, 2023, were as follows:

| Regular Employees | Actuarially Determined Contribution Rate* | Statutory Rate |
|--|---|------------------|
| Employer-pay plan Employee/employer plan (matching rate) | 33.61 % 17.51 | 29.75 % 15.50 |
| Police/Fire Employees | | |
| Employer-pay plan Employee/employer plan (matching rate) | 49.95 % 25.69 | 44.00 % 22.75 |

^{*}From June 30, 2022, Actuarial Valuation and Review

Under the Employer-Pay provisions, the contributions made by employers on behalf of employees are not credited to the plan member's account and are not refunded upon termination; however, they are reported as plan member contributions. For employees covered by the Employer-Pay provisions, average compensation is increased by half the total contributions made by the public employer and may not be less than it would have been if contributions had been made by the plan member and the employer separately.

The Judicial Retirement System (JRS) was established in 2001 to provide benefits for the retirement, disability, or death of all justices of the Supreme Court and district judges. In fiscal year 2006 justices of the peace and municipal court judges began participating in JRS on a voluntary, employer-by-employer basis. Each participating individual who has service credit in PERS may transfer, subject to statutory time frames and requirements, to JRS. At the time of transfer all of the individual's contributions and the related liability to the System for that individual are moved from PERS to JRS. PERS transferred contributions of \$1,407,857 to JRS in the year ended June 30, 2023. JRS is reported and audited separately from PERS.

NOTE 4 - Retirement Fund Contributions of PERS' Employees

Administrative employees of PERS (as a participating employer) are plan members of the System. All participating public employers make contributions to the System at the same percentage of salary rate for Regular members as required by statute. Actuarially determined contribution requirements for administrative employees of the System are the same as all other employers within the System. Employer contributions for administrative employees were \$769,895 for the year ended June 30, 2023, and were paid for by the PERS Administrative Fund.

NOTE 5 - Deposit and Investment Disclosures

The investments of the System are governed primarily by the "prudent person" standard. The prudent person standard, as set forth in NRS 286.682, authorizes the Board to invest the System's funds in "every kind of investment which persons of prudence, discretion and intelligence acquire or retain for their own account."

NOTE 5 - Deposit and Investment Disclosures (continued)

Investment Policy

The System's policies* which determine the investment portfolio target asset allocation are established by the Board. The asset allocation is reviewed annually and is designed to meet the future risk and return needs of the System. The following was the Board adopted policy target asset allocation as of June 30, 2023:

| Asset Class | Target Allocation |
|----------------------|-------------------|
| | |
| U.S. stocks | 42 % |
| International stocks | 18 |
| U.S. bonds | 28 |
| Private markets** | 12 |
| Total | 100 % |

^{*}The System's current Investment Objectives and Policies may be found on the PERS website www.nvpers.org.

Rate of Return

For the year ended June 30, 2023, the annual money-weighted return on pension plan investments was 9.20%. The moneyweighted rate of return expresses investment performance net of pension plan investment expense, adjusted for changing amounts actually invested.

The majority of the System's investments are held by the Depository Trust Company (DTC) in DTC's nominee name, and trading is conducted through DTC's book-entry system. The holder of record for the System is The Bank of New York Mellon.

Custodial Credit Risk – Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of its depository financial institution, the System will not be able to recover its deposits.

At June 30, 2023, the carrying amount of the System's commercial cash deposits was \$17,563,508 and the commercial bank balance was \$24,366,190. Of the bank balance, \$250,000 was insured by the Federal Deposit Insurance Corporation (FDIC). The remaining commercial bank balance is, per a depository pledge agreement between the System and the System's commercial bank, collateralized at 102% of the collected funds on deposit (increased by the amount of accrued but uncredited interest, reduced by deposits covered by FDIC). These collateral securities are held by the System's agent in the System's name.

The custodial cash balance at June 30, 2023, was \$76,251,212. Custodial cash is swept nightly from the custodial bank to an overnight short-term investment fund held outside the bank. Funds arriving at the bank after the overnight sweep deadline are part of the custodial bank cash reserve and are covered up to the FDIC limit, any amount in the cash reserve in excess of this limit is subject to custodial credit risk. The custodial bank carries insurance covering destruction of cash or securities on or off premises with a limit of \$875,000,000 per occurrence.

^{**}As of June 30, 2023, the Private markets allocation includes 6% Private real estate and 6% Private equity.

NOTE 5 - Deposit and Investment Disclosures (continued)

Credit Risk – Investments

Credit risk for investments is the risk that an issuer or other counterparty will not fulfill its obligations to the System and custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the System will not be able to recover the value of investment or collateral securities that are in the possession of an outside party.

System policies provide protection from undue investment credit risk by requiring the following:

- Investments in direct obligations of the U.S. Treasury including bills, notes, bonds, and repurchase agreements secured by those obligations.
- U.S. Treasury money market mutual funds must be SEC registered 2(a)-7 and AAA rated by at least two of Moody's, Standard & Poor's, or Fitch and whose investment guidelines are substantially equivalent to and consistent with the System's overall short-term investment criteria.
- Short selling and the use of leverage is not permitted.

There is no credit risk assigned to U.S. Treasury securities as these are explicitly guaranteed by the U.S. Government. It is important to note, however, that the value of U.S. Treasury obligations fluctuate based on non-credit-related factors, such as interest-rate movements, which could cause future price declines despite government backing.

Cash equivalents include \$668.1 million (amortized cost) investment in Invesco Treasury Portfolio Short-Term Investments Trust, Goldman Sachs Financial Square Treasury Obligations Fund, Dreyfus Treasury Obligations Cash Management -Institutional Shares, and State Street Institutional Treasury Plus Money Market Fund - Investment Class, of which only Dreyfus Treasury Obligations Cash Management - Institutional Shares is rated. The System additionally holds \$14,142.7 million in U.S. Treasury securities which are explicitly guaranteed by the U.S. Government.

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of an investment in a single issuer. As of June 30, 2023, the PERS portfolio has no single issuer exposure that comprises 5% or more of the overall portfolio, excluding investments issued or explicitly guaranteed by the U.S. Government. Also, the System does not have an investment in any single issuer that represents 5% or more of the fiduciary net position. Therefore, the System believes there is no concentration of credit risk.

Equity portfolios shall be suitably diversified to the extent that an adversity affecting a particular sector or issuer will not impact a disproportionate share of the investment manager portfolio.

In addition, the investment policy requires that no more than 10% of the System's publicly traded assets shall be managed on a permanent basis by a single investment firm in active strategies. A single firm may manage up to 30% of the System's assets on a permanent basis in index strategies. No asset manager may oversee more than 30% of the System's assets. The System's assets shall not permanently constitute more than 20% of any firm's assets within the asset class (equity, bonds, real estate, or private equity) managed for the System. Staff shall provide an annual report to the Board of assets under management consistent with this policy.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The System mitigates interest rate risk through portfolio diversification as discussed previously. The System's investment policy, and the investment portfolio counsel mandates, permit investment only in bonds within the Bloomberg U.S. Treasury Index.

NOTE 5 - Deposit and Investment Disclosures (continued)

<u>Credit Risk – Investments (continued)</u>

The segmented time distribution method is used to determine investment maturity time horizons. The following table shows the fair value of fixed income and short-term securities and the applicable investment maturities as of June 30, 2023.

INVESTMENT MATURITIES

(in years)

| Investment Type | | Less | | More | | | | | | |
|-------------------|----|-------|---------------|------|---------|----|---------|-------|----------|--|
| (in millions) | t | han 1 | 1 to 5 | | 6 to 10 | | than 10 | Total | | |
| Cash equivalents* | \$ | 668.1 | \$ - | \$ | - | \$ | - | \$ | 668.1 | |
| U.S. treasuries | | - | 8,711.4 | | 2,552.0 | | 2,879.3 | | 14,142.7 | |
| Total | \$ | 668.1 | \$ 8,711.4 | \$ | 2,552.0 | \$ | 2,879.3 | \$ | 14,810.8 | |

*Cash equivalents consist of investments in Invesco Treasury Portfolio Short-Term Investments Trust, Goldman Sachs Financial Square Treasury Obligations Fund, Dreyfus Treasury Obligations Cash Management - Institutional Shares, and State Street Institutional Treasury Plus Money Market Fund - Investment Class.

The above table does not include commercial cash of \$17.6 million or cash in custodial bank of \$76.2 million.

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The System mitigates foreign currency risk through portfolio diversification as discussed previously, along with asset allocation policy limits on international assets. The System's investment policy maintains a target allocation to international stocks of 18%. All international stock holdings are constituents of the MSCI World ex USA Index.

The System's exposure to foreign currency risk in U.S. dollars as of June 30, 2023, is summarized in the following table.

CURRENCY BY INVESTMENT AND FAIR VALUE

(in millions)

| | | | Private | | Pending | | | | | | |
|------------------------|---------------|----------|---------------|-------|---------|---------------------|----|------|----|----------|--|
| Currency Type | Equity | | Equity | | T | Transactions | | Cash | | Total | |
| Australian Dollar | \$ | 665.1 | \$ | - | \$ | (0.5) | \$ | 1.1 | \$ | 665.7 | |
| British Pound Sterling | | 1,347.2 | | 61.0 | | (1.3) | | 4.6 | | 1,411.5 | |
| Canadian Dollar | | 1,065.7 | | - | | - | | 1.8 | | 1,067.5 | |
| Danish Krone | | 277.0 | | - | | - | | 0.1 | | 277.1 | |
| Euro | | 3,051.0 | | 441.8 | | (1.3) | | 2.6 | | 3,494.1 | |
| Hong Kong Dollar | | 218.2 | | - | | (0.3) | | 1.6 | | 219.5 | |
| Israeli Shekel | | 36.8 | | - | | (0.2) | | 0.2 | | 36.8 | |
| Japanese Yen | | 2,037.5 | | - | | (4.2) | | 9.2 | | 2,042.5 | |
| New Zealand Dollar | | 18.9 | | - | | - | | - | | 18.9 | |
| Norwegian Krone | | 57.3 | | - | | (0.1) | | 0.4 | | 57.6 | |
| Singapore Dollar | | 111.1 | | - | | - | | 0.2 | | 111.3 | |
| Swedish Krona | | 295.9 | | - | | (0.7) | | 2.1 | | 297.3 | |
| Swiss Franc | | 912.5 | | - | | (0.1) | | 0.2 | | 912.6 | |
| Total | \$ | 10,094.2 | \$ | 502.8 | \$ | (8.7) | \$ | 24.1 | \$ | 10,612.4 | |

NOTE 5 - Deposit and Investment Disclosures (continued)

Credit Risk – Investments (continued)

Derivative Instruments

The System held no derivatives in the portfolio as of June 30, 2023, and had no derivative transactions during the current fiscal year.

Securities Lending

At the April 2023 Retirement Board meeting, the Retirement Board voted to terminate the securities lending program, which phased out in May 2023. For fiscal year 2023, the net income from securities lending was \$2,122,178.

NOTE 6 - Fair Value

The System holds investments that are measured at fair value on a recurring basis. The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. Investments measured and reported at fair value using Level inputs are classified and disclosed in one of the following categories:

Level 1 – Quoted prices are available in active markets for identical investments as of the reporting date. The types of investments included in Level 1 include U.S. Treasuries and listed stocks.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable.

Level 3 – Valuations derived from valuation techniques in which significant inputs or significant value drivers are unobservable.

The following table presents fair value measurements as of June 30, 2023:

FAIR VALUE LEVELS

(in millions)

| | Level 1 | | Level 2 | | Level 3 | | _ | Total |
|---|---------|----------|---------|----------|---------|---|----|----------|
| U.S. treasuries | \$ | 14,142.7 | \$ | | \$ | _ | \$ | 14,142.7 |
| Stocks | | | | | | | | |
| Common stock | | 35,140.0 | | - | | - | | 35,140.0 |
| Preferred stock | | 47.0 | | | | _ | _ | 47.0 |
| Total stocks | | 35,187.0 | _ | | | | | 35,187.0 |
| Total investments by fair value level | \$ | 49,329.7 | \$ | <u>-</u> | \$ | | \$ | 49,329.7 |
| Investments measured at the net asset value (NAV) | | | | | | | | |
| Real estate | | 3,058.6 | | | | | | |
| Private equity | | 4,799.2 | | | | | | |
| Total investments measured at the NAV | | 7,857.8 | | | | | | |
| Total investments | \$ | 57,187.5 | | | | | | |

Stocks and bonds securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

NOTE 6 - Fair Value (continued)

The following table presents investments measured at the NAV as of June 30, 2023: (in millions)

| | Fair | Unfunded | | Redemption | Redemption |
|--------------------------------|---------------|----------|---------|------------|---------------|
| | Value | Comm | itments | Frequency | Notice Period |
| Real estate separate accounts* | \$ 3,058.6 | \$ | - | N/A | N/A |
| Private equity** | 4,799.2 | | 1,653.3 | N/A | N/A |
| Total investments measured | | | | | |
| at the NAV | \$ 7,857.8 | \$ | 1,653.3 | N/A | N/A |

^{*}Real estate separate accounts. This type includes two core real estate separate accounts that invest in U.S. industrial, multifamily, office, and retail properties. The fair values of the investments in this type have been determined based on third-party appraisals net of outstanding debt. The property values are managed by the Altus Group which values the real estate assets on a quarterly basis and oversees the engagement of and management of third-party appraisers who value the properties annually. The System owns each property through 501(c)(25) holding corporations or limited liability companies with the System as sole shareholder. The properties can be put up for sale at any time.

For private equity investment partnerships, fair value considers, among other factors, the reported net asset value (NAV) of the investment as determined in good faith by the general partner of the respective investment partnership. Because of the inherent uncertainty in valuing investments in investment partnerships for which no active, public market exists, or where the net realizable value may be significantly affected by a lack of liquidity or other market conditions, the fair value reported is an estimate and could significantly differ from the value that could be realized in a secondary market transaction and/or from the amounts ultimately realized.

The general partners of the investment partnerships generally report NAV based on the fair value of the underlying portfolio companies, as well as the other assets and liabilities held by the investment partnership. Investments that have a negative fair value have losses allocated to the portfolio that exceed the amounts invested. Owing to the general partners' expertise and proprietary knowledge of the portfolio company investments, the System generally utilizes the NAV as the basis for the reported investment values. The System may, in good faith, apply an appropriate adjustment to the NAV reported by the general partner of the respective investment partnership, if deemed necessary.

NOTE 7 - Net Pension Liability and Actuarial Assumptions

Net Pension Liability

The components of the net pension liability at June 30, 2023, were as follows:

| Total pension liability | \$ 76,568,012,068 |
|--|----------------------|
| Plan fiduciary net position | 58,315,106,777 |
| Net pension liability | \$ 18,252,905,291 |
| | |
| Plan fiduciary net position as a percentage of the total | |
| pension liability | 76.2 % |

^{**}Private equity. This type includes a single portfolio investing in and acquiring private equity investment partnerships located in the United States and Europe. The System does not have the ability to withdraw its investments from these investment partnerships. Interest in an investment partnership can be transferred or sold only upon the approval of the general partner of the respective investment partnership.

NOTE 7 - Net Pension Liability and Actuarial Assumptions (continued)

Actuarial Assumptions

The total pension liability was determined as part of the GASB Statement No. 67 actuarial valuation as of June 30, 2023. It is important to note that the GASB rules only define pension liability for financial reporting purposes. The System continues to develop and adopt funding policies under current practices. The actuarial assumptions were based on the results of an experience study for the period from July 1, 2016, through June 30, 2020.

The entry age actuarial cost method is used for actuarial valuations. The following assumptions were applied to all periods included in the measurement:

Inflation Salary Increases

Investment Rate of Return

Post-Retirement Mortality Rates

Healthy:

2.50%

4.20% to 9.10% for Regular members and 4.60% to 14.50% for Police/Fire members, vary by service, inflation, and productivity increases

7.25%, net of pension plan investment expense, including inflation

Regular Members:

Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 15% for females, projected generationally with the twodimensional monthly improvement scale MP-2020.

The above listed mortality tables only provide rates for ages 50 and older. To develop mortality rates for ages 40 through 50, we have smoothed the difference between the rates at age 40 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 50 from the Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 40, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Police/Fire Members:

Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

NOTE 7 - Net Pension Liability and Actuarial Assumptions (continued)

The above listed mortality tables only provide rates for ages 45 and older. To develop mortality rates for ages 35 through 45, we have smoothed the difference between the rates at age 35 from the Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 45 from the Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 35, we have used the Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Regular Members:

Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 20% for males and 15% for females, projected generationally with the two-dimensional mortality improvement scale MP- 2020.

Police/Fire Members:

Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 30% for males and 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

Regular and Police/Fire Current Beneficiaries in Pay Status:

Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 15% for males and 30% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

Disabled:

Beneficiaries:

NOTE 7 - Net Pension Liability and Actuarial Assumptions (continued)

The above listed mortality table only provides rates for ages 45 and older. To develop mortality rates for ages 35 through 45, we have smoothed the difference between the rates at age 35 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 45 from the Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 35, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Regular and Police/Fire Contingent Beneficiaries:

Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 15% for females, projected generationally with the twodimensional mortality improvement scale MP-2020.

The above listed mortality tables only provide rates for ages 50 and older. To develop mortality rates for ages 40 through 50, we have smoothed the difference between the rates at age 40 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 50 from the Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 40, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages. For the mortality table applicable to contingent beneficiaries, "Approach 1" from the Society of Actuaries "Pub-2010 Public Retirement Plans Mortality Tables Report" was utilized. In particular, the mortality basis for contingent beneficiaries has been assumed to be the same mortality basis as the Healthy Regular retiree table listed above (except using rates applicable to the beneficiary's gender) for both when the primary retiree is alive and is no longer alive.

NOTE 7 - Net Pension Liability and Actuarial Assumptions (continued)

The Pub-2010 Amount-Weighted Mortality Tables (with loading factors as described above) reasonably reflect the projected mortality experience of the Plan as of the measurement date. The generational projection is a provision made for future mortality improvement

Pre-Retirement Mortality Rates:

Regular Members:

Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

Police/Fire Members:

Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females). Projected generationally with the two-dimensional mortality improvement scale MP-2020.

Police/Fire

The Pub-2010 Amount-Weighted Mortality Tables reasonably reflect the projected mortality experience of the plan as of the measurement date. The generational projection is a provision made for future mortality improvement.

Regular

Pre-Retirement Mortality Rates (%)

| Age | Male | Female | Male | Female |
|-----|------|--------|------|--------|
| 20 | 0.04 | 0.01 | 0.04 | 0.02 |
| 25 | 0.02 | 0.01 | 0.03 | 0.02 |
| 30 | 0.03 | 0.01 | 0.04 | 0.02 |
| 35 | 0.04 | 0.02 | 0.04 | 0.03 |
| 40 | 0.06 | 0.03 | 0.05 | 0.04 |
| 45 | 0.09 | 0.05 | 0.07 | 0.06 |
| 50 | 0.13 | 0.08 | 0.10 | 0.08 |
| 55 | 0.19 | 0.11 | 0.15 | 0.11 |
| 60 | 0.28 | 0.17 | 0.23 | 0.15 |
| 65 | 0.41 | 0.27 | 0.35 | 0.20 |
| 70 | 0.61 | 0.45 | 0.66 | 0.39 |

Note that generational projections beyond the base year (2010) are not reflected in the above mortality rates. Deaths that occur during the first two years of employment are assumed to be non-duty related.

The long-term expected real rates of return are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The total portfolio compound return is greater than the weighted sum of the asset class compound returns due to diversification.

| | Long-Term Geometric |
|----------------------|------------------------------|
| Asset Class | Expected Real Rate of Return |
| U.S. stocks | 5.50 % |
| International stocks | 5.50 % |
| U.S. bonds | 0.75 % |
| Private markets | 6.65 % |

NOTE 7 - Net Pension Liability and Actuarial Assumptions (continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.25% as of June 30, 2023. The projection of cash flows used to determine the discount rate assumed plan contributions will be made in amounts consistent with statutory provisions and recognizing the plan's current funding policy and cost-sharing mechanism between employers and members. For this purpose, all contributions that are intended to fund benefits for all plan members and their beneficiaries are included, except that projected contributions that are intended to fund the service costs for future plan members and their beneficiaries are not included.

Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments for 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 as of June 30, 2023.

Future Payroll Growth

For the purpose of calculating the actuarial determined contribution rate, the total payroll growth assumption for future years is 3.50% per year for both Regular and Police/Fire.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability using the discount rate of 7.25%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower at 6.25% and 1-percentage-point higher at 8.25% than the current rate:

| 1% Decrease | C | urrent Discount | 1% Increase | | | | |
|----------------------|----|-----------------|-------------|---------------|--|--|--|
| 6.25% | | Rate 7.25% | | 8.25% | | | |
| \$ 28.404.200.588 | \$ | 18.252.905.291 | \$ | 9.875.106.252 | | | |

NOTE 8 - Risk Management

The System is exposed to various risks of loss related to theft of, damage to, and destruction of assets; injuries to employees and others; and court challenges to fiduciary decisions. To cover these risks, the System maintains commercial building and contents insurance, vehicle liability and collision/comprehensive insurance, general liability insurance, worker's compensation insurance, and employee fidelity bonds. For coverage included within the State of Nevada's policies, the System pays its premium directly to the State. The System's building/contents insurance is placed with a private insurance company. There have never been any insurance settlements which exceeded insurance coverage.

NOTE 9 - Litigation

The System is involved in litigation relating to various matters. In the opinion of the management, after consulting with legal counsel, the outcome of these matters is not expected to have a material effect on the financial statements for fiscal year 2023.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS June 30,

(in millions)

| | 2023 | 2022 |
|--|------------------------------|------------------------|
| TOTAL PENSION LIABILITY | | |
| Service cost | 1,514.1 | 1,470.1 |
| Interest | 5,243.1 | 4,886.8 |
| Change of benefit terms | · - | - |
| Differences between expected and actual experience | 772.2 | 1,921.3 |
| Change of assumptions | - | - |
| Benefit payments, including refunds | (3,528.9) | (3,285.5) |
| Other changes | (1.4) | (1.6) |
| Net change in total pension liability | 3,999.1 | 4,991.1 |
| Total pension liability - beginning | 72,568.9 | 67,577.8 |
| Total pension liability - ending (a) | \$ 76,568.0 \$ | 72,568.9 |
| NI AN EVEN CLADY NEET BENGLON | | |
| PLAN FIDUCIARY NET PENSION | 1.162.0 | 1 104 0 |
| Contributions - employer | 1,163.9 | 1,104.0 |
| Contributions - plan member Net investment income | 1,203.1 4,953.4 | 1,156.0 |
| Benefit payments, including refunds | (3,528.8) | (2,937.9) (3,285.5) |
| Administrative expense | (3,328.8) (14.1) | (3,283.5) (13.5) |
| Purchase of service | 23.6 | 30.4 |
| Other | - | 2.0 |
| Net change in plan fiduciary net position | 3,801.1 | (3,944.5) |
| Plan fiduciary net position - beginning | 54,514.0 | 58,458.5 |
| Plan fiduciary net position - ending (b) | 58,315.1 | 54,514.0 |
| Net pension liability - ending (a) - (b) | <u>\$ 18,252.9</u> <u>\$</u> | 18,054.9 |
| Plan fiduciary net position as a percentage of total pension liability | 76.16 % | 75.12 % |
| Covered payroll | 7,648.8 | 7,127.0 |
| Net pension liability as a percentage of covered payroll | 238.6 % | 253.3 % |

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS June 30,

(in millions)

| _ | 2021 | | 2020 | _ | 2019 | | 2018 | _ | 2017 | _ | 2016 | _ | 2015 | _ | 2014 |
|-----------|---|-----------|--|-----------|--|----|--|-----------|--|----|--------------------------------------|-----------|--|-----------|--|
| | 1,249.3 4,529.3 | | 1,207.3 4,328.2 | | 1,169.7 4,119.1 | | 1,134.0 3,892.0 | | 1,107.0 3,873.0 | | 1,086.0 3,687.0 | | 1,063.0 3,525.0 | | 1,058.0 3,369.0 10.0 |
| | 834.0 3,345.0 (3,038.8) (4.4) | | 42.2 - (2,834.5) | | 198.0 - (2,635.8) (0.2) | | 509.0 - (2,451.0) | | (211.0) 1,046.0 (2,288.0) | _ | (245.0) - (2,138.0) | | (529.0) - (1,983.0) (2.0) | | (585.0) - (1,839.0) (1.0) |
| \$ | 6,914.4 60,663.4 67,577.8 | \$ | 2,743.2 57,920.2 60,663.4 | \$ | 2,850.8 55,069.4 57,920.2 | \$ | 3,084.0 51,986.0 55,070.0 | \$ | 3,527.0 48,459.0 51,986.0 | \$ | 2,390.0 46,070.0 48,460.0 | \$ | 2,074.0 43,997.0 46,071.0 | \$ | 2,012.0 41,984.0 43,996.0 |
| | 1,051.9 1,097.0 12,602.1 (3,038.8) | | 1,045.1 1,094.2 3,137.5 (2,834.5) | | 965.5 1,039.9 3,468.1 (2,635.8) | | 930.0 987.0 3,273.0 (2,451.0) | | 901.0 952.0 4,110.0 (2,288.0) | | 849.0 850.0 778.0 (2,138.0) | | 1,436.0 114.0 1,395.0 (1,983.0) | | 1,405.0 109.0 5,031.0 (1,839.0) |
| | (12.5) 24.9 (1.2) 11,723.4 | | (12.4) 17.9 3.1 2,450.9 | | (11.8) 24.0 2.6 2,852.5 | | (12.0) 16.0 1.0 2,744.0 | _ | (9.0) 16.0 1.0 3,683.0 | _ | (10.0) 61.0 - 390.0 | _ | (9.0) 80.0 2.0 1,035.0 | | (9.0) 41.0 1.0 4,739.0 |
| _ | 46,735.1 58,458.5 | _ | 44,284.2 46,735.1 | | 41,431.7 44,284.2 | _ | 38,686.0 41,430.0 | _ | 35,002.0 38,685.0 | _ | 34,610.0 35,000.0 | _ | 33,575.0 34,610.0 | _ | 28,834.0 33,573.0 |
| <u>\$</u> | 9,119.3 | <u>\$</u> | 13,928.3 77.04 % | <u>\$</u> | 76.46 % | \$ | 75.23 % | <u>\$</u> | 74.41 % | \$ | 72.22 % | <u>\$</u> | 75.12 % | <u>\$</u> | 76.31 % |
| | 6,874.8 132.6 % | | 7,059.5 197.3 % | | 6,786.9 200.9 % | | 6,508.9 209.6 % | | 6,237.2 213.3 % | | 6,081.1 221.3 % | | 5,921.6 193.5 % | | 5,753.1 181.2 % |

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS

2014 to 2023 (in millions)

Contributions in Relation to the Contribution Year Actuarially Actuarially Contributions as a Ended Determined Determined Deficiency Percentage of Contributions Contributions* Covered Payroll June 30 (Excess) Covered Payroll** 2014 1,508.8 \$ 1,405.0 \$ 103.8 \$ 5,715.3 24.6 % 2015 1,499.8 63.1 5,753.1 25.0 1,436.7 2016 38.8 5,921.6 888.6 849.8 14.4 901.7 10.9 2017 912.6 6,081.1 14.8 939.7 9.4 2018 930.3 6,237.2 14.9 2019 981.8 965.5 16.3 6,508.9 14.8 2020 1,078.2 1,045.1 33.1 6,786.9 15.4 2021 1,121.3 1,051.9 69.4 7,059.5 14.9 2022 1,115.9 1,104.0 11.9 6,874.8 16.1

(9.8)

7,127.0

16.3

1,163.9

2023

Notes: Beginning with the year-ended 2016, all contributions shown reflect employer-paid contributions only, and employer-paid member contributions are excluded. Actuarially Determined Contributions above are based on actuarially determined contribution rates (employer portion only) from most recent rate-setting year prior to year shown, applied to covered payroll for year shown.

Information provided by Segal, the System's actuary.

1,154.1

SCHEDULE OF INVESTMENT RETURNS

2014 to 2023

| For Year | Annual Money-Weighted Rate of Return, |
|---------------|---------------------------------------|
| Ended June 30 | Net of Investment Expenses |
| 2014 | 17.6 % |
| 2015 | 4.2 |
| 2016 | 2.3 |
| 2017 | 11.8 |
| 2018 | 8.5 |
| 2019 | 8.5 |
| 2020 | 7.2 |
| 2021 | 27.3 |
| 2022 | (5.1) |
| 2023 | 9.2 |
| | |

^{*}Includes employer contributions towards administrative expenses. Also, these contributions are made based on the statutory rates pursuant to NRS 286.421 and 286.450.

^{**}Measurement as of beginning of year.

Methods and Assumptions Used in Calculations of Actuarially Determined Contributions

The actuarially determined contribution rates in the schedule of contributions are calculated as of June 30. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule.

Valuation date: Actuarially determined contribution rates are calculated in annual

actuarial valuations as of June 30

Entry Age Normal Actuarial Cost Method. Entry Age is the age at Actuarial Cost Method:

the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of salary, with Normal Cost determined based on the plan provisions and benefit

accrual rate applicable to that individual.

Amortization Policy: Effective June 30, 2022, the outstanding balance of all Regular amortization bases, except for the initial base dated June 30, 2004,

were combined and re-amortized over a closed 20-year period, and the outstanding balance of all Police/Fire amortization bases, including the initial base dated June 30, 2004, were combined and

re-amortized over a closed 20-year period.

Any new UAAL as a result of actuarial gains or losses or a change in actuarial assumptions or methods will be amortized over 20 years.

Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:

- a. with the exception noted in b., below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;
- b. the increase in UAAL that would result from a temporary retirement incentive will be pre-funded by the participating employer(s).

UAAL layers shall be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.

UAAL layers shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.

If an overfunding exists (i.e., the total of all UAAL becomes negative so that there is a surplus), the UAAL contribution rate will be the greater of:

- a. the rate resulting from a 30-year amortization of the surplus, and
- b. the previous year's rate, reduced by 25% of the difference between the previous rate and the rate resulting from a 30-year amortization of the surplus.

These amortization policy components will apply separately to each of the Regular and Police/Fire UAAL cost groups.

Asset Valuation Method:

Fair value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value and is recognized over a five-year period. The actuarial value of assets is further limited to not less than 70% or greater than 130% of the fair value of assets.

Actuarial Assumptions:

Assumed Inflation Rate:

FY14-FY16: 3.50% per annum FY17-FY20: 2.75% per annum FY21-FY23 2.50% per annum

Projected Salary Increases:

FY14-FY16:

Inflation: 3.50% Plus 0.75% Plus Productivity pay increases:

Promotional and merit salary increases:

| Regular | Police/Fire |
|---------|--|
| 5.50 % | 10.25 % |
| 4.25 | 6.55 |
| 3.50 | 5.15 |
| 3.25 | 4.55 |
| 3.00 | 4.25 |
| 2.75 | 4.05 |
| 2.40 | 3.75 |
| 2.25 | 3.25 |
| 1.85 | 2.75 |
| 1.75 | 2.25 |
| 1.50 | 1.75 |
| 1.00 | 1.50 |
| 0.80 | 1.25 |
| 0.35 | 1.00 |
| | 5.50 % 4.25 3.50 3.25 3.00 2.75 2.40 2.25 1.85 1.75 1.50 1.00 0.80 |

FY17-FY20:

2.75% Plus Inflation:

0.50% Plus Productivity pay increases:

Promotional and merit salary increases:

| Years of Service | Regular | Police/Fire |
|------------------|---------|-------------|
| Less than 1 | 5.90 % | 10.65 % |
| 1 | 4.80 | 7.15 |
| 2 | 4.00 | 5.20 |
| 3 | 3.60 | 4.60 |
| 4 | 3.30 | 4.30 |
| 5 | 3.00 | 4.15 |
| 6 | 2.80 | 3.90 |
| 7 | 2.70 | 3.50 |
| 8 | 2.50 | 3.15 |
| 9 | 2.35 | 2.90 |
| 10 | 2.15 | 2.50 |
| 11 | 1.75 | 1.90 |
| 12 | 1.50 | 1.50 |
| 13 | 1.25 | 1.30 |
| 14 | 1.10 | 1.30 |
| 15 or more | 1.00 | 1.30 |

FY21-FY23:

Inflation: 2.50% Plus Productivity pay increases: 0.50% Plus

Merit salary increases:

| Years of Service | Regular | Police/Fire |
|------------------|---------|-------------|
| 0-1 | 6.10 % | 11.50 % |
| 1-2 | 5.00 | 8.20 |
| 2-3 | 4.40 | 5.80 |
| 3-4 | 4.00 | 5.20 |
| 4-5 | 3.70 | 4.90 |
| 5-6 | 3.40 | 4.70 |
| 6-7 | 3.30 | 4.40 |
| 7-8 | 3.20 | 4.20 |
| 8-9 | 3.00 | 4.00 |
| 9-10 | 2.80 | 3.90 |
| 10-11 | 2.60 | 3.50 |
| 11-12 | 2.30 | 2.80 |
| 12-13 | 2.10 | 2.20 |
| 13-14 | 1.90 | 2.00 |
| 14-15 | 1.80 | 1.90 |
| 15-16 | 1.70 | 1.70 |
| 16-17 | 1.60 | 1.70 |
| 17-18 | 1.50 | 1.70 |
| 18-19 | 1.40 | 1.70 |
| 19-20 | 1.30 | 1.70 |
| 20 & Over | 1.20 | 1.60 |

Future Salary Increases are assumed to occur at the beginning of the year.

Investment Rate of Return:

FY14-FY16: 8.00% FY17-FY20: 7.50% FY21-FY23: 7.25%

Varies based on years of service Retirement Age:

Mortality Rates:

FY14-FY16:

Healthy: For non-disabled male regular members it is the RP-2000 Combined

> Healthy Mortality Table projected to 2013 with Scale AA. For nondisabled female regular members it is the RP-2000 Combined Healthy Mortality Table, projected to 2013 with Scale AA, set back one year. For all non-disabled police/fire members it is the RP-2000 Combined Healthy Mortality Table projected to 2013 with Scale AA,

set forward one year.

Disabled: The mortality table used in the actuarial valuation to project

> mortality rates for all disabled regular members and all disabled police/fire members is the RP-2000 Disabled Retiree Mortality Table

projected to 2013 with Scale AA, set forward three years.

FY17-FY20:

Headcount-Weighted RP-2014 Healthy Annuitant Table projected to Healthy:

2020 with Scale MP-2016, set forward one year for spouses and

beneficiaries.

For ages less than 50*, mortality rates are based on the Headcount-Weighted RP-2014 Employee Mortality Tables. Those mortality rates are adjusted by the ratio of the mortality rate for members at age 50 to the mortality rate at age 50 from the Employee mortality tables listed above. The mortality rates are then projected to 2020

with Scale MP-2016.

Headcount-Weighted RP-2014 Disabled Retiree Table, set forward Disabled:

four years.

Headcount-Weighted RP-2014 Employee Table, projected to 2020 Pre-Retirement:

with Scale MP- 2016.

The RP-2014 Headcount-Weighted Mortality Tables, set forward one year for spouses and beneficiaries, reasonably reflect the projected mortality experience of the Plan as of the measurement date. The additional projection of 6 years is a provision made for future mortality improvement.

^{*} The RP-2014 Healthy Annuitant Mortality Tables have rates only for ages 50 and later.

FY21 - FY23: Post-Retirement Mortality Rates: Healthy:

Regular Members:

Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 15% for females, projected generationally with the two-dimensional monthly improvement scale MP-2020.

The above listed mortality tables only provide rates for ages 50 and older. To develop mortality rates for ages 40 through 50, we have smoothed the difference between the rates at age 40 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 50 from the Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 40, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Police/Fire Members:

Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

The above listed mortality tables only provide rates for ages 45 and older. To develop mortality rates for ages 35 through 45, we have smoothed the difference between the rates at age 35 from the Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 45 from the Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 35, we have used the Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Disabled:

Regular Members:

Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 20% for males and 15% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

Police/Fire Members:

Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 30% for males and 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

Regular and Police/Fire Current Beneficiaries in Pay Status:

Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 15% for males and 30% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

The above listed mortality table only provides rates for ages 45 and older. To develop mortality rates for ages 35 through 45, we have smoothed the difference between the rates at age 35 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 45 from the Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 35, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Regular and Police/Fire Contingent Beneficiaries:

Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 15% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

Beneficiaries:

The above listed mortality tables only provide rates for ages 50 and older. To develop mortality rates for ages 40 through 50, we have smoothed the difference between the rates at age 40 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 50 from the Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 40, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to the System, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

For the mortality table applicable to contingent beneficiaries, "Approach 1" from the Society of Actuaries "Pub-2010 Public Retirement Plans Mortality Tables Report" was utilized. In particular, the mortality basis for contingent beneficiaries has been assumed to be the same mortality basis as the Healthy Regular retiree table listed above (except using rates applicable to the beneficiary's gender) for both when the primary retiree is alive and is no longer alive.

The Pub-2010 Amount-Weighted Mortality Tables (with loading factors as described above) reasonably reflect the projected mortality experience of the Plan as of the measurement date. The generational projection is a provision made for future mortality improvement.

FY21- FY23: Pre-Retirement Mortality Rates:

Regular Members:

Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

Police/Fire Members:

Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

0.06

0.08

0.11

Police/Fire

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION FOR THE YEAR ENDED JUNE 30, 2023

The Pub-2010 Amount-Weighted Mortality Tables reasonably reflect the projected mortality experience of the plan as of the measurement date. The generational projection is a provision made for future mortality improvement.

Pre-Retirement Mortality Rates (%)

Age Male **Female** Male **Female** 20 0.04 0.01 0.04 0.02 25 0.02 0.01 0.03 0.02 30 0.03 0.01 0.04 0.02 35 0.04 0.02 0.04 0.03 40 0.06 0.04 0.03 0.05

0.05

0.08

0.11

Regular

0.09

0.13

0.19

during the first two years of employment are assumed to be non-duty related.

60 0.28 0.23 0.17 0.15 65 0.41 0.27 0.35 0.20 70 0.61 0.45 0.66 0.39 Note that generational projections beyond the base year (2010) are not reflected in the above mortality rates. Deaths that occur

Changes in Actuarial Assumptions and Methods:

Amortization Policy:

45

50

55

Based on the June 30, 2022, Actuarial Valuation, the following method was changed. Previously, this method was as follows:

0.07

0.10

0.15

For funding purposes,

the UAAL (i.e., the difference between the Actuarial Accrued Liability and the Valuation Value of Assets) as of June 30, 2011 shall continue to be amortized over separate 30-year period amortization layers based on the valuations during which each separate layer was previously established.

Any new UAAL as a result of actuarial gains or losses identified in the annual valuation as of June 30 was amortized over a period equal to the truncated average remaining amortization period of all prior UAAL layers. This occurred until the average remaining amortization period was less than 20 years. At that point, amortization periods of 20 years are used for actuarial gains and losses.

Any new UAAL as a result of change in actuarial assumptions or methods was amortized over a period equal to the truncated average remaining amortization period of all prior UAAL layers. This occurred until the average remaining amortization period was less than 20 years. At that point, amortization periods of 20 years are used for assumption or method changes.

Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:

- with the exception noted in b., below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;
- b. the increase in UAAL that would result from a temporary retirement incentive will be prefunded by the participating employer(s).

UAAL layers shall be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.

UAAL layers shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.

If an overfunding exists (i.e., the total of all UAAL becomes negative so that there is a surplus), such surplus and any subsequent surpluses will be amortized over an "open" amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL will be amortized over 20 years as the first of a new series of amortization layers.

These amortization policy components will apply separately to each of the Regular and Police/Fire UAAL cost groups.

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the Year Ended June 30, 2023

| Personnel services: Staff payroll and benefits Board fees | \$ 7,352,050 11,120 | |
|---|------------------------|---------------|
| Total personnel services | | \$ 7,363,170 |
| Out-of-state travel: | | |
| Staff | 28,500 | |
| Board | 12,628 | |
| Total out-of-state travel | | 41,128 |
| In-state travel: | | |
| Staff | 32,818 | |
| Board | 9,662 | |
| Police/Fire committee | 604 | |
| Total in-state travel | | 43,084 |
| Operating: | | |
| Office supplies | 27,349 | |
| Postage and freight | 443,267 | |
| Communications | 37,255 | |
| Printing | 247,604 | |
| Publications and periodicals | 772 | |
| Bonds and insurance premiums | 41,637 | |
| Contract services | 1,087,960 | |
| Vehicle expense | 485 | |
| Equipment rental and repair | 13,656 | |
| Building rental | 598,199 | |
| License and fees | 3,185 | |
| Client communication | 33,057 | |
| Dues and registration | 42,833 | |
| Medical expenses | 55,215 | |
| Host expense | 692 | |
| Litigation expense | 18,089 | |
| Furniture and Equipment | 2,290 | |
| Staff Search | 12,688 | |
| Total operating | | 2,666,233 |
| | | |
| Equipment and office furniture, net | | 3,510 |
| Information technology, net | | 3,835,195 |
| Training | | 106,586 |
| State cost allocation | | 8,652 |
| Attorney general cost allocation | | 25,543 |
| Total administrative expenses | | \$ 14,093,101 |

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF INVESTMENT EXPENSES

For the Year Ended June 30, 2023

| Investment management fees | \$ 73,487,814 |
|--|------------------|
| Investment consulting fees | 861,781 |
| Subtotal investment management and consulting fees | 74,349,595 |
| | |
| Administrative investment expenses | 1,376,075 |
| Total investment expenses | \$ 75,725,670 |

SCHEDULE OF PAYMENTS TO CONSULTANTS

For the Year Ended June 30, 2023

| Actuary | |
|---|---------------------|
| Segal | \$ 491,921 |
| Independent Auditor Plante & Moran, PLLC | 197,937 |
| Administrative Legal Counsel Groom Law Group | 85,105 |
| Medical Consultants Olympus Medical Consulting, LLC Terry R. Long | 54,000 1,215 |
| Total payments to consultants | \$ 830,178 |

Notes: Information on payments made to investment professionals can be found in the Investment Section.

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OTHER SUPPLEMENTARY INFORMATION

COMBINING SCHEDULE OF FIDUCIARY NET POSITION

June 30, 2023

| | Regular Fund | Police/Fire Fund | Eliminations | Total Pension Trust Fund 2023 |
|---|--|-------------------------------|--------------------------|--|
| ASSETS | | | | |
| Cash and cash equivalents Contributions receivable Accrued investment income Pending trades receivable Investments, at fair value | \$ 761,924,201 208,013,711 223,716,471 68,032,701 57,187,487,744 | \$ - - - - - - | \$ - - - - - | \$ 761,924,201 208,013,711 223,716,471 68,032,701 57,187,487,744 |
| Property and equipment Accumulated depreciation Net property and equipment | 57,334,667 (44,377,789) 12,956,878 | - - - | - <u>-</u> - | 57,334,667 (44,377,789) 12,956,878 |
| Other assets Due from other funds - equity in investments | 3,962,814 | 13,490,488,343 | (13,490,488,343) | 3,962,814 |
| Total plan assets | 58,466,094,520 | 13,490,488,343 | (13,490,488,343) | 58,466,094,520 |
| LIABILITIES | | | | |
| Accounts payable and accrued expenses Pending trades payable Due to other funds | 10,033,522 140,954,221 13,490,488,343 | - - - | - (13,490,488,343) | 10,033,522 140,954,221 |
| Total plan liabilities | 13,641,476,086 | - | (13,490,488,343) | 150,987,743 |
| Net position restricted for pension benefits | \$ 44,824,618,434 | \$ 13,490,488,343 | \$ - | \$ 58,315,106,777 |

OTHER SUPPLEMENTARY INFORMATION

COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

For the Year Ended June 30, 2023

(With Comparative Totals for the Year Ended June 30, 2022)

| | Regular Fund | Police/Fire Fund | Total Pension Trust Fund 2023 | Total Pension Trust Fund 2022 |
|---|--|--|---|---|
| ADDITIONS | | | | |
| Contributions: Employer Plan members Repayment and purchase of service | \$ 904,779,436 904,779,436 49,303,003 | \$ 259,094,418 259,094,418 13,549,655 | \$ 1,163,873,854 1,163,873,854 62,852,658 | \$ 1,103,990,008 1,103,990,008 82,411,480 |
| Total contributions | 1,858,861,875 | 531,738,491 | 2,390,600,366 | 2,290,391,496 |
| Investment income (loss): Net appreciation (depreciation) in fair value of investments Interest Dividends Other investment income | 3,755,039,509 359,546,118 738,117,020 174,299,111 | - - - - | 3,755,039,509 359,546,118 738,117,020 174,299,111 | (3,896,322,690) 161,256,553 713,766,500 147,800,484 |
| Less investment fees and other expense | 5,027,001,758 (75,725,670) | - ! | 5,027,001,758 (75,725,670) | (2,873,499,153) (70,639,975) |
| Net investment income (loss) | 4,951,276,088 | | 4,951,276,088 | (2,944,139,128) |
| Securities lending income Less securities lending expense Net securities lending income | 7,182,836 (5,060,658) 2,122,178 | - - - | 7,182,836 (5,060,658) 2,122,178 | 7,772,857 (1,579,477) 6,193,380 |
| Total net investment income (loss) Other income: | 4,953,398,266 807,972 | 662,770 | 4,953,398,266 1,470,742 | (2,937,945,748) 3,703,489 |
| Total additions | 6,813,068,113 | 532,401,261 | 7,345,469,374 | (643,850,763) |
| DEDUCTIONS | | | | |
| Benefit payments: | | | | |
| Retirement and survivor benefits Disability Refunds of contributions Transfers of contributions to JRS Administrative expenses Other expenses | 2,632,056,992 96,763,587 41,532,063 1,407,857 14,093,101 19,665 | 714,097,190 34,833,298 9,570,852 - - | 3,346,154,182 131,596,885 51,102,915 1,407,857 14,093,101 19,665 | 3,107,324,168 124,617,138 53,537,925 1,689,041 13,453,262 50 |
| Total deductions | 2,785,873,265 | 758,501,340 | 3,544,374,605 | 3,300,621,584 |
| Increase (decrease) in net position | 4,027,194,848 | (226,100,079) | 3,801,094,769 | (3,944,472,347) |
| Interfund transfers Transfers of annual investment income Transfers of administrative fees | (2,661,718) (1,144,235,001) 2,211,968 | | - - - | - - - |
| Total transfers | (1,144,684,751) | 1,144,684,751 | | |
| Net position restricted for pension benefits: Beginning of year End of year | 41,942,108,337 <u>\$44,824,618,434</u> | 12,571,903,671 \$13,490,488,343 | 54,514,012,008 \$58,315,106,777 | 58,458,484,355 \$54,514,012,008 |

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INVESTMENT SECTION

CURRENT INVESTMENT ADVISORS

INVESTMENT CONSULTANTS

Callan Associates, Inc. Jobs Peak Advisors

INVESTMENT COUNSEL

U.S. Stocks: AllianceBernstein BlackRock

International Stocks: Mellon Capital State Street Global Advisors

U.S. Bonds: Payden & Rygel State Street Global Advisors

Private Equity: Pathway Capital Management

> Private Real Estate: AEW Invesco Real Estate



October 16, 2023

The Public Employees' Retirement System of Nevada (PERS) investment portfolio finished the fiscal year on June 30, 2023, with an annual return of 9.3% (net)*.

As the Federal Reserve continued to tighten interest rates in FY 2023 through 6 additional hikes, the yield curve continued to invert with 2-year Treasury yields at 5.5% and the 10-year Treasury yield at 3.8% by December 2022. As the market absorbed forecasts that inflation was cooling and future rate hikes would pause, the S&P 500 Index shifted into growth mode and bond yields continued to rise.

FY 2023 delivered a strong rebound in global equity markets. The U.S. stock market, as represented by the S&P 500 Index of large capitalization stocks, earned a stunning 19.6%. U.S. Treasuries continued to reprice with the Bloomberg US Treasury Index earning a return of -2.1%. Developed country, Non-U.S. stocks represented by the MSCI World ex USA Index returned 18.8%, contributing strongly to the fund's positive performance as well. The private market investments were a drag on total portfolio return as PERS private equity portfolio returned -3.1% (net) as valuations reflected marks-to-market from FY 2022's negative public equity performance. The Private Real Estate portfolio performed negatively as well, earning -7.5% (net). Private Real Estate continues to reflect weakness as assets absorb rising interest rates. PERS ended FY 2023 with \$58.1 billion in assets.

Fiscal year 2023 was a period of extraordinary growth in global equity markets but extreme volatility in the bond markets as continued uncertainty with inflation and interest rates put stress on bond portfolio returns and private market assets. Inversion in the yield curve, short rates higher than long rates, typically forecasts an economic recession. Statistical data, however, did not reflect this economic behavior and the potential of the Federal Reserve pausing or lowering the Fed Funds rate fueled a stock market rally. Inflation continued to moderate, also bolstering stocks. The reality, however, reflects that much of the growth is still being generated by large capitalization technology stocks and lower capitalization stocks are struggling to keep pace. Bonds perform negatively when yields rise, and FY 2023 continued to reverse the almost 40-year period of declining interest rates. PERS simple approach to investing has continued to deliver strong risk-adjusted performance by being well diversified.

The total return for the portfolio for FY 2023 was 9.3% (net.) The fund delivered returns in excess of the 7.25% expected return over 5 years (8.9% (net)) and 10 years 8.9% (net)), ranking PERS at the 10th and 11th percentiles of the universe of large public defined benefit plans, respectively. Since inception, over the past 39 years, the Nevada PERS portfolio has earned 9.2% (net), ranking the plan higher than 75% of large public plans.*

The Target Asset Allocation for Nevada PERS as of fiscal year-end 2023 was 42.0 % in U.S. stocks, 18.0% in international stocks, 28.0% in U.S. bonds, 6.0% in Private Real Estate, 6.0% in Private

1 | P a g e



Equity. The PERS total fund portfolio is specifically designed to meet its investment objectives over a long-term investment horizon of 30+ years. This design relies on time-tested principles of investing that are focused on asset allocation, disciplined rebalancing and a low-cost implementation. This simple, less complex portfolio structure has delivered strong returns since inception and will perform even more efficiently now that bond yields are normalizing.

Julia Bonafede, CFA President

gunkon_

^{*}The basis of presentation used in the Investment Section follows common investment industry practices that reflect the way the portfolio is managed. Calculations are prepared using time-weighted rate of return, gross of fees methodology. This methodology provides timely information that is easily compared to benchmarks and other pension funds' performance.

^{**}Peer group rankings are presented gross of asset management fees for comparison purposes.

INVESTMENT REVIEW

Introduction

The investment program is designed to generate a long-term return that meets the System's objective while minimizing risk. The structure and administration of the portfolio is defined by the prudent person standard. The standard states that the Board may invest the System's funds in every type of investment which persons of prudence, discretion, and intelligence acquire or retain for their own account under similar circumstances. The Board's investment philosophy centers on time tested investment principles such as maintaining consistent exposure to the capital markets, buying assets at lower prices and selling them at higher prices through disciplined rebalancing, and keeping costs low by utilizing index management.

Developing a sound long-term investment strategy and faithfully adhering to that strategy in both strong and weak market environments has been a key element in the fund's success.

The System's investment assets reported in the Investment Section are presented on the same basis of accounting as described in Note 1 of the Notes to Financial Statements, fair value.

The System's Investment Objectives and Policies detail the fund's long-term investment goals, management responsibilities, return/risk expectations, and monitoring requirements. These policies are subject to change at any time by the Board and are reviewed thoroughly at least annually to ensure that they continue to reflect the System's expectations.

Objective

The investment objective of the System is to:

- Generate a 7.25% long-term investment return which exceeds the rate of inflation (CPI) by 4.75% by capturing market returns within each asset class.
- Invest so that the short-term volatility of returns will not cause the System to alter its long-term strategy.
- Structure an investment program which is sufficiently uncomplicated to control the ability to consistently meet return and risk objectives.

Chart 1, on page 70, demonstrates that the investment portfolio over the last ten years has captured the real return (inflation) objective in seven of those years. The inflation objective was CPI +3.0% until September 30, 2000; CPI +3.5% from October 1, 2000, through September 30, 2002; CPI +3.75% from October 1, 2002, through September 30, 2003; CPI +4.5% from October 1, 2003, through November 30, 2017; and CPI +4.75% thereafter. Chart 2, on page 70, details annualized returns for long-term periods ended June 30, 2023. The System's 9.3% return for fiscal year 2023 was driven primarily by strong returns from U.S. Stocks and International Stocks.

Note: Inception on Chart 2 refers to July 1, 1984, the date the System began calculating total return versus annual yield. For all other charts, inception refers to the point at which the System began including that particular investment vehicle in the portfolio.

Asset Allocation

Asset allocation is the most significant factor influencing the risk and return of the investment program. Since inception, more than 90% of the System's investment performance is explained by asset allocation. Determination of the fund's long-term asset allocation involves estimating the expected return and risk of major types of investments and blending them into a portfolio which meets the System's risk/return objectives.

To establish an appropriate long-term asset allocation strategy, the Board evaluates expected return and risk for each of the major asset types (stocks, bonds, private markets). These asset classes are then combined in the most efficient manner possible to construct a portfolio that matches the risk and return needs of the fund. By diversifying the System's investments in multiple asset classes, the Board is able to reduce the volatility of annual investment earnings. In addition, the Board employs a disciplined rebalancing policy to manage market volatility and to ensure the portfolio's exposures are consistent with the System's long-term asset targets.

The target allocation for the fund was adopted by the Retirement Board in June 2018 and implemented at the beginning of the 2019 fiscal year. As of June 30, 2023, the target allocation was 28% U.S. Bonds, 42% U.S. Stocks, 18% International Stocks, and 12% Private Markets. The June 30, 2023, asset class allocation by Manager Directive is shown in Chart 3, page 71.

INVESTMENT SECTION

Diversification

After the asset allocation strategy is established, the Board implements a portfolio management structure that is designed to capture the market objective in each asset class. The most efficient and cost-effective way to capture market returns is by gaining market exposures through fully replicated index funds. As a result, the System employs a 100% index structure in all public market asset classes. The U.S. Stock allocation is indexed to the S&P 500 Index, which represents roughly 80% of the total U.S. stock market capitalization. Similarly, the International Stock allocation is 100% indexed to the MSCI World ex USA Index which represents 85% of the market capitalization within the 22 developed market countries included in the index. Combined, the System's total stock exposure represents more than 80% of the global public equity market.

The System's fixed income allocation has historically emphasized index management, and in fiscal year 2015, the Board elected to move to a 100% U.S. Treasury Index structure. The transition to a 100% Treasury Index structure removed credit risk from the fixed income allocation and increased total fund diversification. The System's overall portfolio is well diversified by asset class, investment structure, and individual security. The System's portfolio currently holds over 1,500 individual securities from 23 different countries.

Chart 4, on page 72, shows the fair value of the assets under management by investment type, category, and manager. A list of the ten largest stock and bond holdings based on fair value at June 30, 2023, is included in Chart 5 on page 73. A complete list of security holdings is available upon request.

Investment Class Objectives

In order to achieve the total fund objectives, each asset type is assigned return objectives (listed below). Progress toward those benchmarks is closely monitored.

| U.S. Stocks | _ | Produce a total return that captures the Standard & Poor's 500 Common Stock Index with commensurate volatility. |
|----------------------|---|---|
| International Stocks | - | Produce a total return that captures the unhedged Morgan Stanley Capital International World ex USA Index with commensurate volatility. |
| U.S. Bonds | _ | Produce a total return that captures the Bloomberg Barclays U.S. Treasury Index with |

Produce a total return that captures the Bloomberg Barclays U.S. Treasury Index with commensurate volatility.

Produce a total return that captures the blended return (based on PERS' actual allocation) **Private Markets** of: the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index

-0.75%, and S&P 500 Index +3% over rolling 10-year periods with commensurate volatility.

Each of the System's investment managers agrees to a performance benchmark which, when all the benchmarks in an investment class are combined, is expected to produce the class objective.

Investment Performance

The System's custody bank calculates performance for the total fund, each asset class, and individual investment management firms employed by the Board. Performance calculations are prepared using time-weighted rate of return based on fair values. Returns in this report are gross of fees.

Chart 6, shown on page 74, shows a year-by-year comparison of how the total fund and each investment class compared with its corresponding objective.

Charts 7-9, on pages 75 - 76, compare 1, 3, 5, 10-year, and since-inception returns for each asset class to the corresponding objective for periods ended June 30, 2023.

Chart 10, on page 76, shows Private Markets returns for the fiscal year ended June 30, 2023, compared to since-inception returns using a blended objective.

Driven by strong returns from publicly traded stocks, PERS' portfolio generated a 9.3% return in fiscal year 2023. Through the 2023 fiscal year, PERS' 3-year, 5-year, 10-year, and since-inception returns (39 years) remain above the System's long-term 7.25% objective.

U.S. Stocks finished the year ended June 30, 2023, with a 19.5% return. While U.S. Stocks have produced an 11.4% annualized return since inception (39 years), volatility over short time periods continues to be expected. The System employs a 100% indexed structure in the asset class which keeps costs low and minimizes the variability of returns that is traditionally associated with active management.

International stocks produced a negative 17.7% return and underperformed U.S. Stocks for the sixth consecutive fiscal year. Country exposure in the international equity allocation is entirely in developed markets, and like the U.S. Equity portfolio, the allocation employs a 100% indexed structure. In the 2019 fiscal year, the System transitioned the international stock benchmark index from the MSCI EAFE Index to the MSCI World ex USA Index, adding Canadian stocks to the allocation.

The U.S. Bond allocation is 100% invested in U.S. Treasury securities. Limiting the fixed income allocation to U.S. Treasuries removes credit risk from the allocation which increases diversification at the total fund level. The asset class produced a negative 2.3% return during the 2023 fiscal year as interest rates continued to rise. While the rapid rise of interest rates over the past two fiscal years have been negative for bond returns, the higher interest rate environment has also improved potential prospective long-term returns for the asset class.

The Private Markets portfolio, which is comprised of private real estate and private equity, has 1934 years of performance history as an asset class. PERS' allocation to Private Markets produced a negative 4.8% return for the 2023 fiscal year, as private market asset valuations repriced lower from the previous fiscal year's gains. While the Private Markets portfolio has produced strong, absolute returns and has outperformed its objective since inception, we anticipate the higher interest rate environment will continue to produce near term headwinds for private market assets.

This report has been prepared in conjunction with the System's investment consultants, Jobs Peak Advisors and Callan Associates.

Basis of Presentation

Investment information is presented differently in the Investment and the Financial Sections of the ACFR. The methodology used in the Investment Section, as well as in online investment materials and board meeting investment presentations, follows common investment industry practices that reflect the way the portfolio is managed. This methodology provides timely information that is easily compared to benchmarks and other pension funds' performance.

In the Financial Section, the investment information is reported in conformity with generally accepted accounting principles in the United States. The main difference from the Investment Section is that transactions are reported on an accrual basis, rather than when the transactions actually occurred. In the basic financial statements, the System accounts for securities using the "country of issue" methodology. Under this methodology, regardless of the manager's directive, if a manager invests funds and the underlying country of issue for the security is not the United States, then the securities are classified as international. In the Investment Section, however, the same securities are classified by investment manager's directive, not taking into consideration the country the security was issued in. (See Charts 6 and 11).

In the Financial Section, in regard to real estate investments, the value is based on third-party appraisals net of outstanding debt. Also, in regard to private equity, up until the 2023 fiscal year, private equity investments had historically been reported at the net asset value (NAV) from the prior quarter and adjusted for cash flows in the last quarter of the fiscal year. For the 2023 fiscal year-end reporting, the quarter lagged pricing methodology described above has been eliminated in favor of using updated June 30th valuations.

Finally, in the Management's Discussion and Analysis portion of the Financial Section, the System includes the time-weighted, gross of fees returns to explain the change in the investment fair value and change in the investment income during the current year. The Financial Section also includes the money-weighted return, net of fees, in Note 5 on page 34.

INVESTMENT PERFORMANCE VS. OBJECTIVE

CHART 1

Individual Fiscal Year Return vs. Inflation Objective Periods Ended June 30

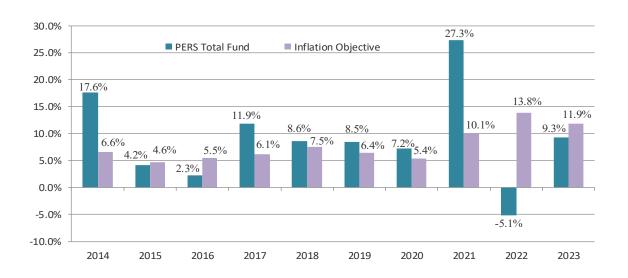
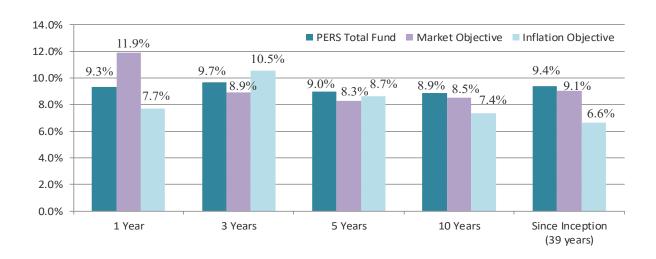


CHART 2

Annualized Total Returns vs. Market Objective and Inflation Objective As of June 30, 2023

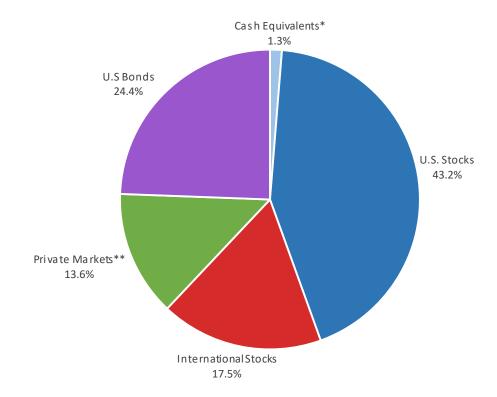


Performance calculations are prepared using time-weighted rate of return (gross of fees) based on fair values.

CHART 3

ASSET MIX

June 30, 2023



^{*}Includes cash held by investment managers.

^{**}Includes 8.3% Private Equity and 5.3% Private Real Estate.

CHART 4

Fair Value of Assets by Investment Manager Directive June 30, 2023

| | Fair value | | Percent of Total Fair Value |
|--|--|-------------------|-----------------------------------|
| STOCKS | | | |
| U.S. Stock Index Managers AB - S&P BlackRock - S&P 500 Subtotal | \$12,506,562,362 12,527,524,185 25,034,086,547 | | 43.2 % |
| International Stock Index Managers Mellon Capital State Street Global Advisors Subtotal | 5,071,089,229 5,081,819,530 10,152,908,759 | | 17.5 |
| Private Equity Pathway Capital Management Subtotal | 4,799,220,448 4,799,220,448 | | 8.3 |
| Total Equities | | \$ 39,986,215,754 | 69.0 |
| BONDS | | | |
| U.S. Bond Index Managers Payden & Rygel - US Bond Index State Street Global Advisors Total Bonds | 7,109,589,473 7,033,123,261 | 14,142,712,734 | 24.4 |
| PRIVATE REAL ESTATE AEW Realty Invesco Realty Advisors Invesco Realty Advisors Takeover | 1,527,884,694 1,527,743,480 2,931,081 | | |
| Total Private Real Estate | | 3,058,559,255 | 5.3 |
| SHORT-TERM INVESTMENTS Cash Equivalents | 744,360,494 | | |
| Total Short-Term Investments | | 744,360,494 | 1.3 |
| TOTAL PORTFOLIO | | \$ 57,931,848,237 | 100.0 % |

Total portfolio does not include pending trades receivable of \$68,032,701, accrued investment income of \$223,716,471, and pending trades payable of \$140,954,221.

The Statement of Fiduciary Net Position contains \$17,563,707 in administrative cash, which does not appear on this schedule.

In the basic financial statements the System accounts for securities using the "country of issue" methodology. Under this methodology, regardless of the manager's directive, if a manager invests funds and the underlying country of issue for the security is not the United States, then the securities are classified as international. In this chart, however, the securities are classified by investment manager's directive and may not tie directly to the basic financial statements.

CHART 5

LIST OF LARGEST ASSETS HELD

Largest Stock Holdings June 30, 2023

| Ranking | Name | Fair Value |
|---------|------------------------|------------------|
| 1 | APPLE INC | \$ 1,925,206,950 |
| 2 | MICROSOFT CORP | 1,699,807,794 |
| 3 | AMAZON.COM INC | 781,174,609 |
| 4 | NVIDIA CORP | 702,311,764 |
| 5 | ALPHABET INC-CL A | 477,337,625 |
| 6 | TESLA INC | 473,426,228 |
| 7 | META PLATFORMS INC | 426,176,205 |
| 8 | ALPHABET INC-CL C | 415,004,763 |
| 9 | BERKSHIRE HATHAWAY INC | 408,224,058 |
| 10 | UNITEDHEALTH GROUP INC | 300,404,806 |

Largest Bond Holdings June 30, 2023

| Ranking | Name | Coupon Rate | Maturity Date | Fair Value |
|---------|-------------------|-------------|---------------|-------------------|
| 1 | U S TREASURY NOTE | 0.500 % | 5/31/2027 | \$ 726,304,768 |
| 2 | U S TREASURY NOTE | 2.750 | 5/31/2029 | 513,858,244 |
| 3 | U S TREASURY NOTE | 0.375 | 7/31/2027 | 494,919,469 |
| 4 | U S TREASURY NOTE | 3.875 | 11/30/2029 | 451,204,563 |
| 5 | U S TREASURY NOTE | 4.500 | 11/15/2025 | 450,032,730 |
| 6 | U S TREASURY BOND | 3.250 | 5/15/2042 | 437,539,342 |
| 7 | U S TREASURY BOND | 2.875 | 5/15/2052 | 395,678,812 |
| 8 | U S TREASURY NOTE | 0.375 | 8/15/2024 | 388,844,531 |
| 9 | U S TREASURY NOTE | 2.625 | 5/31/2027 | 348,067,020 |
| 10 | U S TREASURY NOTE | 1.000 | 12/15/2024 | 319,985,155 |

Note: A complete list of the portfolio's holdings can be obtained upon request.

CHART 6 SUMMARY OF ACTUAL PERFORMANCE VS. OBJECTIVES (% Returns)

| | U.S. | INT'L | U.S. | PRIVATE | TOTAL |
|---|----------------|----------------|--------------|-------------|--------------|
| | STOCKS | STOCKS | BONDS | MARKETS | FUND |
| Fiscal Year 2014 Total Return Objective | 24.8 | 23.5 | 4.6 | 14.2 | 17.6 |
| | 24.6 | 23.9 | 4.4 | 17.9 | 17.6 |
| Fiscal Year 2015 Total Return Objective | 7.4 | -3.9 | 2.0 | 13.9 | 4.2 |
| | 7.4 | -4.2 | 2.0 | 11.8 | 4.1 |
| Fiscal Year 2016 Total Return Objective | 4.0 | -9.8 | 6.3 | 8.6 | 2.3 |
| | 4.0 | -10.2 | 6.2 | 9.3 | 2.8 |
| Fiscal Year 2017 Total Return Objective | 17.8 | 20.5 | -2.4 | 13.3 | 11.9 |
| | 17.9 | 20.3 | -2.3 | 13.5 | 11.5 |
| Fiscal Year 2018 Total Return Objective | 14.3 | 7.2 | -0.7 | 13.4 | 8.6 |
| | 14.4 | 6.8 | -0.7 | 12.3 | 8.2 |
| Fiscal Year 2019 Total Return Objective | 10.4 | 1.8 | 7.3 | 13.4 | 8.5 |
| | 10.4 | 1.8 | 7.2 | 10.2 | 8.3 |
| Fiscal Year 2020 Total Return Objective | 7.4 7.5 | -5.0 -5.4 | 10.2 10.2 | 4.7 7.4 | 7.2 6.4 |
| Fiscal Year 2021 Total Return Objective | 40.7 | 33.7 | 0.1 | 41.8 | 27.3 |
| | 40.8 | 33.6 | 0.1 | 27.2 | 25.6 |
| Fiscal Year 2022 Total Return Objective | -10.4 -10.6 | -16.2 -16.8 | -2.8 -3.5 | 22.0 2.9 | -5.1 -8.0 |
| Fiscal Year 2023 Total Return Objective | 19.5 | 17.7 | -2.3 | -4.8 | 9.3 |
| | 19.6 | 17.4 | -2.1 | 9.8 | 11.9 |

Current Objectives

U.S. Stocks - S&P 500

Int'l Stocks – MSCI World ex USA

U.S. Bonds – Bloomberg Barclays U.S. Treasury 1-3 Year Index

Private Markets - Portfolio weighted blend of NCREIF -0.75% and

S&P 500 +3%

Total Fund – Inflation Objectives

Performance calculations are prepared using time-weighted rate of return (gross of fees) based on fair values.

INVESTMENT PERFORMANCE VS. OBJECTIVE

CHART 7

U.S. Stocks vs. S&P 500 As of June 30, 2023

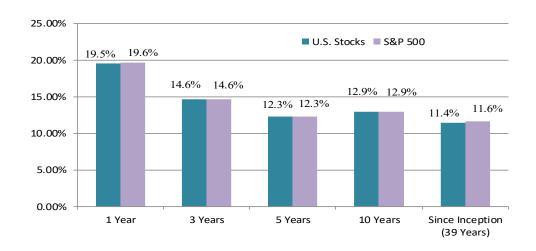
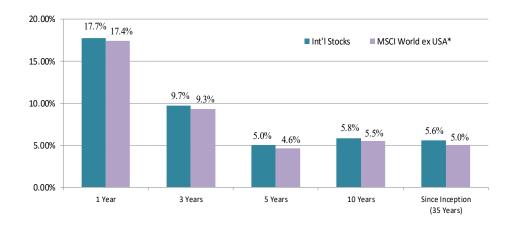


CHART 8 International Stocks vs. MSCI World ex USA As of June 30, 2023

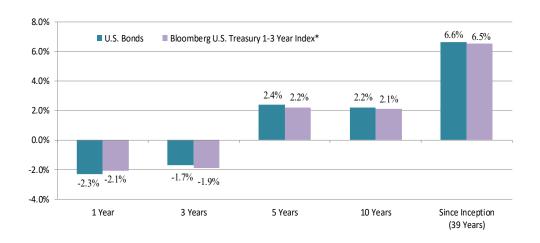


^{*}Int'l Stocks benchmark is the MSCI EAFE Index until 8/1/2018 and the MSCI World ex USA Index thereafter.

INVESTMENT PERFORMANCE VS. OBJECTIVE

CHART 9

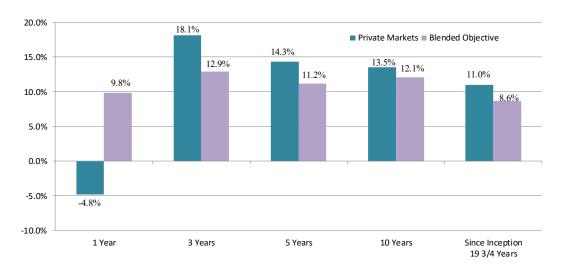
U.S. Bonds vs. Bloomberg Barclays U.S. Treasury 1-3 Year Index As of June 30, 2023



*U.S. Bonds benchmark is the Barclays U.S. Aggregate Index until 3/31/2015, the Bloomberg Barclays U.S. Treasury Index until 4/30/2020, the Bloomberg Barclays U.S. Treasury 1-3 Year Index until 6/30/2022, and the Bloomberg U.S. Treasury Index thereafter.

CHART 10

Private Markets vs. Blended Objective* As of June 30, 2023



*Blended Objective:

44.4% NCREIF -0.75%

55.6% S&P 500 + 3.0%

Target adjusted quarterly, based on beginning fair values.

CHART 11

SCHEDULE OF FEES AND COMMISSIONS For Year Ended June 30, 2023

(Page 1 of 2)

| Name/Firm | Investment Mandate | Amount Under Management at June 30, 2023 | Fees Incurred |
|--|--|---|---|
| Investment Management Fees | | | |
| U.S. and International Stock Managers | | | |
| AB S&P 500 BlackRock S&P 500 Mellon Capital State Street Global Advisors U.S. Bond Managers | U.S. Index U.S. Index Int'l Index Int'l Index | \$ 12,520,879,076 12,549,309,525 5,146,917,340 5,151,244,521 | \$ 667,719 673,666 725,203 725,685 |
| Payden & Rygel State Street Global Advisors Fixed Private Equity Manager | U.S. Index U.S. Index | 7,151,038,349 7,088,175,789 | 550,911 350,087 |
| Pathway Capital Management Private Equity General Partner Fees | | 4,850,594,825 | 7,513,191 47,101,618 |
| Private Real Estate Managers AEW Realty | | 1,526,057,906 | 7,740,838 |
| Invesco Realty Advisors Invesco Realty Advisors Takeover | | 1,525,981,778 2,927,792 | 7,425,481 13,415 |
| Subtotal investment management fees | | | 73,487,814 |
| Investment Consulting Fees | | | |
| Investment Consultants | | | |
| Callan Associates Jobs Peak Advisors | | | 382,825 478,955 |
| Subtotal investment consulting fees | | | 861,780 |
| Total investment management and consulting fees | | | \$ 74,349,594 |

Other investment expenses of \$1,376,076 are not included in the fees listed above.

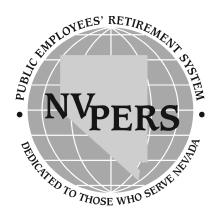
CHART 11

SCHEDULE OF FEES AND COMMISSIONS For Year Ended June 30, 2023

(Page 2 of 2)

| | Number of | Commissions | Commission Per Share |
|----------------------------|----------------------|---------------|-------------------------|
| Brokerage Firm | Shares Traded | Paid | (rounded) |
| ABN AMRO | 504,938 | \$ 4,622 | 0.01 |
| Barclays | 7,658,840 | 27,391 | 0.00 * |
| BNP Paribas | 5,392,533 | 8,195 | 0.00 * |
| BMO Mellon | 82,941 | 703 | 0.01 |
| Cantor Fitzgerald | 54,277 | 434 | 0.01 |
| CastleOak Securities | 2,900 | 20 | 0.01 |
| CIBC | 121,010 | 1,015 | 0.01 |
| Citigroup | 2,177,403 | 9,852 | 0.00 * |
| CLSA | 455,675 | 1,371 | 0.00 * |
| Cowen | 27,681 | 206 | 0.01 |
| Credit Lyonnais | 713,521 | 2,360 | 0.00 * |
| Credit Suisse | 2,456,451 | 1,729 | 0.00 * |
| Daiwa | 122,500 | 504 | 0.00 * |
| Exane | 140,469 | 288 | 0.00 * |
| Goldman Sachs | 10,256,259 | 32,248 | 0.00 * |
| Goodbody | 334,507 | 371 | 0.00 * |
| HSBC | 532,355 | 4,875 | 0.01 |
| Instinet | 3,876,458 | 21,906 | 0.01 |
| ITG | 8,369,452 | 7,654 | 0.00 * |
| JP Morgan | 5,128,559 | 43,178 | 0.01 |
| Jefferies & Co | 530,399 | 2,014 | 0.00 * |
| Liquidnet | 40,143 | 12 | 0.00 * |
| Loop | 9,100 | 64 | 0.01 |
| Macquarie | 2,435,996 | 10,277 | 0.00 * |
| Merrill Lynch | 5,945,341 | 24,002 | 0.00 * |
| Morgan Stanley | 10,538,318 | 51,061 | 0.00 * |
| Optiver Vof | 672,591 | 3,992 | 0.01 |
| Parel | 7,488 | 42 | 0.01 |
| Pershing | 2,880,529 | 21,857 | 0.01 |
| Piper Jaffray | 4,500 | 17 | 0.00 * |
| RBC | 979,706 | 5,189 | 0.01 |
| Sanford C. Bernstein | 21,357 | 45 | 0.00 * |
| Scotia Capital Markets | 109,700 | 567 | 0.01 |
| SG | 4,343,412 | 17,977 | 0.00 * |
| Toronto Dominion | 103,300 | 532 | 0.01 |
| UBS | 5,755,279 | 19,709 | 0.00 * |
| Wells Fargo | 222,727 | 1,533 | 0.01 |
| Subtotal commissions | | 327,812 | |
| Total fees and commissions | | \$ 74,677,406 | |

^{*} Commission is less than one cent per share



ACTUARIAL SECTION

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180 Howard Street Suite 1100 San Francisco, CA 94105-6147 T 415.263.8200 segalco.com

November 21, 2023

Public Employees' Retirement Board State of Nevada 693 West Nye Lane Carson City, Nevada 89703

Re: Certification Letter for Actuarial Section of Financial Report for Fiscal Year Ended June 30, 2023

Dear Retirement Board Members:

This letter is to certify that Segal has prepared an actuarial valuation of the Public Employees' Retirement System of the State of Nevada as of June 30, 2023 and that such valuation is accurate and fairly presents the actuarial position of the Public Employees' Retirement System of Nevada.

The unfunded actuarial accrued liability is being amortized by level percentage-of-payroll payments over a year-by-year closed amortization period. Any new UAAL as a result of actuarial gains or losses or a change in actuarial assumptions or methods will be amortized over 20 years. As of June 30, 2023, the funded ratios are 75.5% for Regular employees and 75.2% for Police/Fire employees.

Actuarial valuations are prepared annually by the independent actuary for the Public Employees' Retirement Board. The basic purposes of annual actuarial valuations are to determine the Retirement System's actuarial liabilities and the level percentage-of-payroll contribution rates required to fund the Retirement System on an actuarial reserve basis.

For funding purposes, to amortize the unfunded portion of actuarial accrued liability under the level percentage-of-payroll amortization method, the dollar amounts of calculated amortization payments increase in direct proportion to the assumed payroll growth rates of 3.50% per year for both Regular and Police/Fire employees. These payroll growth rates are based on a 2.50% per year inflation assumption.

The most recent actuarial valuation prepared as of June 30, 2023 is based on the following major elements:

- Current benefit provisions (as specified in the Public Employees' Retirement Act).
- Membership data as of June 30, 2023 obtained from electronic files provided by the Retirement System. Membership data contained on the electronic files is examined and tested for reasonableness, but is not audited by the actuary.

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Public Employees' Retirement Board November 21, 2023 Page 2

- Assets as of June 30, 2023 obtained from the System's unaudited financial statements.
- Actuarial assumptions and methods adopted by the Public Employees' Retirement Board.
- The funding policy adopted by the Retirement Board.

A complete copy of the June 30, 2023 actuarial valuation is available from the System. The actuarial valuation report contains a description of the plan provisions. The Public Employees' Retirement System of the State of Nevada is a cost-sharing multiple employer plan.

Each annual actuarial valuation involves a projection of the benefits expected to be paid in the future to all members of the Retirement System. The projection of expected future benefit payments is based on the benefit provisions in effect on the actuarial valuation date. (See the Plan Summary section of this Annual Financial Report for a summary of current benefit and contribution provisions.)

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

List of supporting schedules

The following schedules and summaries prepared by Segal are included within this Actuarial Section:

- Summary of Actuarial Assumptions and Methods
- · Schedules of Funding Progress
- Schedule 1 Retirement System Membership
- Schedule 2 Active Member Valuation Data
- Schedule 3 Pay Status Participants Added to and Removed from the Rolls
- Schedule 4 Schedule of Funded Liabilities by Type
- · Schedule 5 Analysis of Actuarial Experience
- Schedule 6 Schedule of Employer Contributions
- Schedule 7 Schedule of Participating Employers

We have also included the following two items:

- Distribution of Retired Members and Beneficiaries by Type as of June 30, 2023
- Retired Members as of June 30, 2023



Public Employees' Retirement Board November 21, 2023 Page 3

The Public Employees' Retirement Act requires an adjustment in the statutory contribution rates on July 1 of each odd-numbered year based on the actuarially determined rates indicated in the actuarial valuation report for the immediately preceding even-numbered year. In other words, contribution rate adjustments are driven by valuation results as of July 1 of even-numbered years. Rates are only adjusted upward if the new rates are more than 0.50% higher than the existing rate for Employer-Pay members and if the new rates (for each the employee and the employer) are more than 0.25% higher for Employee/Employer members. Rates are only adjusted downward if the new rates are more than 2.00% lower than the existing rate for Employer-Pay members (and adjusted only by the amount in excess of 2.00%) and if the new rates (for each the employee and the employer) are more than 1.00% lower than the existing rate for Employee/Employer Members (and adjusted only by the amount in excess of 1.00%). Rates for each the employee and the employer are rounded to the nearest 0.25% of payroll.

For the valuations as of June 30, 2021, 2022, and 2023, the actuarially determined contribution rates used in this determination were lowered by the four-year phase-in of the cost impact of the 2021 assumption changes.

Because this valuation calculates the actuarially determined contribution rates for a Plan year beginning July 1 of an odd-numbered year, no adjustment in the statutory contribution rate is required as a result of this valuation.

| Employer-Pay | Regular <u>Employees</u> | Police/Fire <u>Employees</u> |
|--|-----------------------------|---------------------------------|
| Statutory Rate for Fiscal Years July 1, 2023 through June 30, 2025 | 33.50% | 50.00% |
| Actuarially Determined Contribution Rate per June 30, 2023 Actuarial Valuation* | 35.18% | 54.18% |
| | | |
| Employee/Employer-Pay | Regular <u>Employees</u> | Police/Fire Employees |
| Employee/Employer-Pay Statutory Rate for Fiscal Years July 1, 2023 through June 30, 2025 | • | |

The actuarial calculations prepared for funding purposes were made in accordance with generally accepted actuarial principles and practices. The information supplied in this letter is based on the current provisions of the Public Employees' Retirement Act and on the actuarial assumptions and methods adopted by the Public Employees' Retirement Board. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of

The actuarially determined contribution rates without any adjustment for the phase-in would be 37.16% for Regular Employer-Pay, 38.82% for Regular Employee/Employer-Pay, 57.95% for Police/Fire Employer-Pay, and 59.46% for Police/Fire Employee/Employer-Pay.



On October 21, 2021, the Board adopted a four-year phase-in of the cost impact of the assumption changes being made pursuant to the Experience Study dated September 10, 2021. One fourth of the cost impact attributable to the assumption changes, measured as of June 30, 2021 separately for each cost group, will be recognized in each of the valuations as of June 30, 2021, 2022, 2023, and 2024.

ACTUARIAL SECTION

Public Employees' Retirement Board November 21, 2023 Page 4

and the expectations for the plan, and the assumptions and methods used for funding purposes meet the parameters set by the applicable Actuarial Standards of Practice. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Sincerely,

Segal

Brad Ramirez, FSA, MAAA, EA Vice President & Consulting Actuary

Mark Hamwee, FSA, MAAA, EA Vice President & Actuary

Todd Tauzer, FSA, MAAA, FCA, CERA Senior Vice President & Actuary

MAM/jl Enclosures



Summary of Actuarial Assumptions and Methods

The actuarial assumptions and methods used in the June 30, 2023 actuarial valuation were adopted by the Public Employees' Retirement Board and were based on the results of the experience review issued September 10, 2021.

The assumptions have been set in accordance with Actuarial Standard of Practice (ASOP) No. 35, "Selection of Demographic and Other Non-economic Assumptions for Measuring Pension Obligations" and ASOP No. 27 "Selection of Economic Assumptions for Measuring Pension Obligations." These Standards of Practice put forth guidelines for the selection of the various actuarial assumptions utilized in a pension plan actuarial valuation.

Economic assumptions

Investment Return: 7.25% per year*

Consumer Price Index: Increase of 2.50% per year

Administrative Expenses: 0.20% of payroll added to Normal Cost



^{*} Includes inflation at 2.50% per year.

Salary Increases:

Inflation: 2.50% plus Productivity pay increases: 0.50% plus

Merit and promotion salary increases:

| = | Rate (%) | | | | |
|------------------|----------|-------------|--|--|--|
| Years of Service | Regular | Police/Fire | | | |
| 0 – 1 | 6.10 | 11.50 | | | |
| 1 – 2 | 5.00 | 8.20 | | | |
| 2 – 3 | 4.40 | 5.80 | | | |
| 3 – 4 | 4.00 | 5.20 | | | |
| 4 – 5 | 3.70 | 4.90 | | | |
| 5 – 6 | 3.40 | 4.70 | | | |
| 6 – 7 | 3.30 | 4.40 | | | |
| 7 – 8 | 3.20 | 4.20 | | | |
| 8 – 9 | 3.00 | 4.00 | | | |
| 9 – 10 | 2.80 | 3.90 | | | |
| 10 – 11 | 2.60 | 3.50 | | | |
| 11 – 12 | 2.30 | 2.80 | | | |
| 12 – 13 | 2.10 | 2.20 | | | |
| 13 – 14 | 1.90 | 2.00 | | | |
| 14 – 15 | 1.80 | 1.90 | | | |
| 15 – 16 | 1.70 | 1.70 | | | |
| 16 – 17 | 1.60 | 1.70 | | | |
| 17 – 18 | 1.50 | 1.70 | | | |
| 18 – 19 | 1.40 | 1.70 | | | |
| 19 – 20 | 1.30 | 1.70 | | | |
| 20 & Over | 1.20 | 1.60 | | | |

Future salary increases are assumed to occur at the beginning of the year.

Total Payroll Growth:

Assumed payroll growth rates are used to compute the unfunded actuarial accrued liability amortization payments as a level percentage of projected payroll. For this valuation, the payroll for the coming year is based on actual annualized payroll for the actives as of the valuation date and projected by the salary scale. However, for members with less than one year of service as of the valuation date, no salary increase assumption is applied to their annualized compensation. For the purpose of calculating the actuarially determined contribution rate, the total payroll growth assumption for future years is 3.50% per year for both Regular and Police/Fire.



Post-Retirement Benefit Increases: For current retirees and beneficiaries, future Post-Retirement Benefit Increases reflect actual changes in historical CPI and are assumed to follow the formulas described below. For future retirees, those hired prior to January 1, 2010 are assumed to reach the cap after 14 years of retirement. Those hired between January 1, 2010 and July 1, 2015 are also assumed to reach the cap after 14 years of retirement. Those hired after July 1, 2015 are assumed to never receive an annual increase that exceeds 2.50%. Underlying all of these assumptions is that CPI will grow over time at a rate of 2.50% per year.

> For members with an effective date of membership before January 1, 2010:

The lesser of:

- a. 2% per year following the third anniversary of the commencement of benefits, 3% per year following the sixth anniversary, 3 1/2% per year following the ninth anniversary, 4% per year following the twelfth anniversary and 5% per year following the fourteenth anniversary, or
- b. The annual benefit increase is equal to the average percentage increase in the Consumer Price Index (or other Board approved index) for the three preceding years.

In any event, a member's benefit must be increased by the percentages in paragraph (a) if the benefit of a member has not been increased at a rate greater than or egual to the average of the Consumer Price Index (All Items) (or other Board approved index) for the period between retirement and the date of increase.

For members with an effective date of membership on or after January 1, 2010 and before July 1, 2015:

Same as above, except the increases do not exceed 4% per year.

For members with an effective date of membership on or after July 1, 2015:

2% per year following the third anniversary of the commencement of benefits, 2 1/2% per year following the sixth anniversary, the lesser of 3% or the CPI for the preceding calendar year following the ninth anniversary.



Non-economic assumptions

Retirement Rates:

The assumed retirement rates, which project the percentage of eligible employees who will retire, are shown below:

Regular members with an effective date of membership before January 1, 2010:

| | Retirement Rates (%) | | | | | | |
|-----------|----------------------|---------|----------|-----------|---------|-----------|--|
| | | | Years of | f Service | | | |
| Age | 5 – 9 | 10 – 19 | 20 – 24 | 25 – 27 | 28 – 29 | 30 & Over | |
| 45 | 0.00 | 0.10 | 0.10 | 0.50 | 20.00 | 20.00 | |
| 46 | 0.00 | 0.20 | 0.20 | 1.00 | 20.00 | 20.00 | |
| 47 | 0.00 | 0.30 | 0.30 | 1.50 | 20.00 | 20.00 | |
| 48 | 0.00 | 0.40 | 0.40 | 2.00 | 20.00 | 20.00 | |
| 49 | 0.00 | 0.50 | 0.50 | 2.00 | 20.00 | 20.00 | |
| 50 | 0.20 | 0.60 | 0.70 | 2.00 | 20.00 | 20.00 | |
| 51 | 0.30 | 0.70 | 1.00 | 2.00 | 20.00 | 20.00 | |
| 52 | 0.40 | 0.80 | 1.20 | 3.00 | 20.00 | 20.00 | |
| 53 | 0.50 | 1.00 | 1.50 | 3.00 | 20.00 | 20.00 | |
| 54 | 0.60 | 1.20 | 2.00 | 3.00 | 20.00 | 20.00 | |
| 55 | 0.80 | 1.50 | 3.00 | 3.00 | 20.00 | 20.00 | |
| 56 | 1.00 | 2.00 | 3.50 | 4.00 | 20.00 | 20.00 | |
| 57 | 1.50 | 2.50 | 4.00 | 7.00 | 20.00 | 20.00 | |
| 58 | 2.00 | 3.00 | 5.00 | 7.00 | 20.00 | 20.00 | |
| 59 | 2.50 | 4.00 | 7.00 | 11.00 | 20.00 | 20.00 | |
| 60 | 5.00 | 11.00 | 18.00 | 25.00 | 21.00 | 21.00 | |
| 61 | 6.00 | 10.00 | 15.00 | 20.00 | 21.00 | 21.00 | |
| 62 | 7.00 | 11.00 | 16.00 | 20.00 | 20.00 | 20.00 | |
| 63 | 8.00 | 11.00 | 16.00 | 20.00 | 20.00 | 20.00 | |
| 64 | 9.00 | 11.00 | 16.00 | 20.00 | 20.00 | 20.00 | |
| 65 | 18.00 | 19.00 | 22.00 | 22.00 | 25.00 | 25.00 | |
| 66 | 18.00 | 19.00 | 22.00 | 22.00 | 25.00 | 25.00 | |
| 67 | 18.00 | 19.00 | 22.00 | 22.00 | 25.00 | 25.00 | |
| 68 | 18.00 | 19.00 | 22.00 | 22.00 | 25.00 | 25.00 | |
| 69 | 18.00 | 19.00 | 22.00 | 22.00 | 25.00 | 25.00 | |
| 70 | 20.00 | 20.00 | 25.00 | 30.00 | 30.00 | 30.00 | |
| 71 | 20.00 | 20.00 | 25.00 | 30.00 | 30.00 | 30.00 | |
| 72 | 20.00 | 20.00 | 25.00 | 30.00 | 30.00 | 30.00 | |
| 73 | 20.00 | 20.00 | 25.00 | 30.00 | 30.00 | 30.00 | |
| 74 | 20.00 | 20.00 | 25.00 | 30.00 | 30.00 | 30.00 | |
| 75 & Over | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | |
| | | | | | | | |



Regular members with an effective date of membership on or after January 1, 2010 and before July 1, 2015:

| Retirement Rates (%) |
|----------------------|
|----------------------|

| | Years of Service | | | | | |
|-----------|------------------|---------|---------|---------|---------|-----------|
| Age | 5 – 9 | 10 – 19 | 20 – 24 | 25 – 27 | 28 – 29 | 30 & Over |
| 45 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 20.00 |
| 46 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 20.00 |
| 47 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 20.00 |
| 48 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 20.00 |
| 49 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 20.00 |
| 50 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 20.00 |
| 51 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 20.00 |
| 52 | 0.00 | 0.40 | 0.70 | 1.70 | 20.00 | 20.00 |
| 53 | 0.00 | 0.60 | 0.90 | 1.80 | 20.00 | 20.00 |
| 54 | 0.00 | 0.80 | 1.30 | 1.90 | 20.00 | 20.00 |
| 55 | 0.20 | 1.00 | 2.00 | 2.00 | 20.00 | 20.00 |
| 56 | 0.40 | 1.40 | 2.50 | 2.90 | 20.00 | 20.00 |
| 57 | 0.60 | 1.90 | 3.00 | 5.20 | 20.00 | 20.00 |
| 58 | 0.80 | 2.30 | 3.90 | 5.40 | 20.00 | 20.00 |
| 59 | 1.00 | 3.20 | 5.60 | 8.80 | 20.00 | 20.00 |
| 60 | 2.00 | 4.00 | 6.00 | 10.00 | 21.00 | 21.00 |
| 61 | 3.50 | 6.00 | 10.00 | 15.00 | 21.00 | 21.00 |
| 62 | 4.00 | 10.30 | 15.00 | 18.70 | 20.00 | 20.00 |
| 63 | 5.00 | 10.30 | 15.00 | 18.70 | 20.00 | 20.00 |
| 64 | 7.00 | 10.30 | 15.00 | 18.70 | 20.00 | 20.00 |
| 65 | 17.00 | 17.80 | 20.60 | 20.60 | 25.00 | 25.00 |
| 66 | 17.00 | 17.80 | 20.60 | 20.60 | 25.00 | 25.00 |
| 67 | 17.00 | 17.80 | 20.60 | 20.60 | 25.00 | 25.00 |
| 68 | 17.00 | 17.80 | 20.60 | 20.60 | 25.00 | 25.00 |
| 69 | 17.00 | 17.80 | 20.60 | 20.60 | 25.00 | 25.00 |
| 70 | 19.00 | 18.70 | 23.40 | 28.10 | 30.00 | 30.00 |
| 71 | 19.00 | 18.70 | 23.40 | 28.10 | 30.00 | 30.00 |
| 72 | 19.00 | 18.70 | 23.40 | 28.10 | 30.00 | 30.00 |
| 73 | 19.00 | 18.70 | 23.40 | 28.10 | 30.00 | 30.00 |
| 74 | 19.00 | 18.70 | 23.40 | 28.10 | 30.00 | 30.00 |
| 75 & Over | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |



Regular members with an effective date of membership on or after July 1, 2015:

Retirement Rates (%)

| | Years of Service | | | | | |
|-----------|------------------|---------|---------|---------|-----------|-------------|
| Age | 5 – 9 | 10 – 19 | 20 – 24 | 25 – 29 | 30 - 33.3 | 33.3 & Over |
| 45 | 0.00 | 0.00 | 0.00 | 0.00 | 7.20 | 20.00 |
| 46 | 0.00 | 0.00 | 0.00 | 0.00 | 8.30 | 20.00 |
| 47 | 0.00 | 0.00 | 0.00 | 0.00 | 9.40 | 20.00 |
| 48 | 0.00 | 0.00 | 0.00 | 0.00 | 10.40 | 20.00 |
| 49 | 0.00 | 0.00 | 0.00 | 0.00 | 11.50 | 20.00 |
| 50 | 0.00 | 0.00 | 0.00 | 0.00 | 12.60 | 20.00 |
| 51 | 0.00 | 0.00 | 0.00 | 0.00 | 13.70 | 20.00 |
| 52 | 0.00 | 0.40 | 0.60 | 1.50 | 14.80 | 20.00 |
| 53 | 0.00 | 0.50 | 0.80 | 1.60 | 15.80 | 20.00 |
| 54 | 0.00 | 0.70 | 1.20 | 1.70 | 16.90 | 20.00 |
| 55 | 0.20 | 0.90 | 1.80 | 1.80 | 18.00 | 20.00 |
| 56 | 0.40 | 1.30 | 2.30 | 2.60 | 18.00 | 20.00 |
| 57 | 0.50 | 1.70 | 2.70 | 4.70 | 18.00 | 20.00 |
| 58 | 0.70 | 2.10 | 3.50 | 4.90 | 18.00 | 20.00 |
| 59 | 0.90 | 2.90 | 5.00 | 7.90 | 18.00 | 20.00 |
| 60 | 1.80 | 3.60 | 5.40 | 9.00 | 18.90 | 21.00 |
| 61 | 3.20 | 5.40 | 9.00 | 13.50 | 18.90 | 21.00 |
| 62 | 3.60 | 9.30 | 13.50 | 16.80 | 18.00 | 20.00 |
| 63 | 4.50 | 9.30 | 13.50 | 16.80 | 18.00 | 20.00 |
| 64 | 6.30 | 9.30 | 13.50 | 16.80 | 18.00 | 20.00 |
| 65 | 15.30 | 16.00 | 18.50 | 18.50 | 22.50 | 25.00 |
| 66 | 15.30 | 16.00 | 18.50 | 18.50 | 22.50 | 25.00 |
| 67 | 15.30 | 16.00 | 18.50 | 18.50 | 22.50 | 25.00 |
| 68 | 15.30 | 16.00 | 18.50 | 18.50 | 22.50 | 25.00 |
| 69 | 15.30 | 16.00 | 18.50 | 18.50 | 22.50 | 25.00 |
| 70 | 17.10 | 16.80 | 21.10 | 25.30 | 27.00 | 30.00 |
| 71 | 17.10 | 16.80 | 21.10 | 25.30 | 27.00 | 30.00 |
| 72 | 17.10 | 16.80 | 21.10 | 25.30 | 27.00 | 30.00 |
| 73 | 17.10 | 16.80 | 21.10 | 25.30 | 27.00 | 30.00 |
| 74 | 17.10 | 16.80 | 21.10 | 25.30 | 27.00 | 30.00 |
| 75 & Over | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |



Police/Fire members with an effective date of membership before January 1, 2010:

| | | | | (,,, | | |
|-----------|------------------|---------|---------|---------|---------|-----------|
| | Years of Service | | | | | |
| Age | 5 – 9 | 10 – 19 | 20 – 22 | 23 – 24 | 25 – 29 | 30 & Over |
| 40 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 41 | 0.00 | 0.20 | 0.00 | 20.00 | 20.00 | 0.00 |
| 42 | 0.00 | 0.30 | 1.00 | 20.00 | 20.00 | 0.00 |
| 43 | 0.00 | 0.40 | 2.00 | 20.00 | 20.00 | 0.00 |
| 44 | 0.00 | 0.50 | 3.00 | 20.00 | 20.00 | 0.00 |
| 45 | 0.00 | 0.70 | 3.50 | 20.00 | 20.00 | 20.00 |
| 46 | 0.00 | 0.90 | 4.00 | 20.00 | 20.00 | 20.00 |
| 47 | 0.00 | 1.10 | 4.50 | 20.00 | 20.00 | 20.00 |
| 48 | 0.00 | 1.30 | 5.00 | 20.00 | 20.00 | 20.00 |
| 49 | 0.00 | 1.50 | 6.50 | 20.00 | 20.00 | 20.00 |
| 50 | 1.50 | 4.50 | 16.00 | 23.00 | 23.00 | 23.00 |
| 51 | 1.50 | 4.50 | 13.00 | 23.00 | 23.00 | 23.00 |
| 52 | 1.50 | 5.00 | 13.00 | 23.00 | 23.00 | 23.00 |
| 53 | 1.50 | 6.00 | 13.00 | 23.00 | 23.00 | 23.00 |
| 54 | 1.50 | 7.00 | 13.00 | 23.00 | 23.00 | 23.00 |
| 55 | 4.50 | 11.00 | 18.00 | 25.00 | 25.00 | 25.00 |
| 56 | 4.50 | 11.00 | 18.00 | 25.00 | 25.00 | 25.00 |
| 57 | 4.50 | 11.00 | 18.00 | 25.00 | 25.00 | 25.00 |
| 58 | 4.50 | 11.00 | 18.00 | 25.00 | 25.00 | 25.00 |
| 59 | 4.50 | 11.00 | 18.00 | 25.00 | 25.00 | 25.00 |
| 60 | 5.00 | 18.00 | 26.00 | 35.00 | 35.00 | 35.00 |
| 61 | 6.00 | 18.00 | 26.00 | 35.00 | 35.00 | 35.00 |
| 62 | 7.00 | 18.00 | 26.00 | 35.00 | 35.00 | 35.00 |
| 63 | 8.00 | 18.00 | 26.00 | 35.00 | 35.00 | 35.00 |
| 64 | 9.00 | 18.00 | 26.00 | 35.00 | 35.00 | 35.00 |
| 65 | 20.00 | 25.00 | 40.00 | 50.00 | 50.00 | 50.00 |
| 66 | 20.00 | 25.00 | 40.00 | 50.00 | 50.00 | 50.00 |
| 67 | 20.00 | 25.00 | 40.00 | 50.00 | 50.00 | 50.00 |
| 68 | 20.00 | 25.00 | 40.00 | 50.00 | 50.00 | 50.00 |
| 69 | 20.00 | 25.00 | 40.00 | 50.00 | 50.00 | 50.00 |
| 70 & Over | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |



Police/Fire members with an effective date of membership on or after January 1, 2010 and before July 1, 2015:

| | | | Years of | f Service | | |
|-----------|--------|---------|----------|-----------|---------|-----------|
| Age | 5 – 9 | 10 – 19 | 20 – 24 | 25 – 27 | 28 – 29 | 30 & Over |
| 40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 42 | 0.00 | 0.00 | 0.70 | 0.00 | 0.00 | 0.00 |
| 43 | 0.00 | 0.00 | 1.50 | 10.90 | 20.00 | 0.00 |
| 44 | 0.00 | 0.00 | 2.40 | 12.00 | 20.00 | 0.00 |
| 45 | 0.00 | 0.00 | 2.90 | 13.10 | 20.00 | 20.00 |
| 46 | 0.00 | 0.00 | 3.40 | 14.20 | 20.00 | 20.00 |
| 47 | 0.00 | 0.00 | 3.90 | 15.40 | 20.00 | 20.00 |
| 48 | 0.00 | 0.00 | 4.50 | 16.50 | 20.00 | 20.00 |
| 49 | 0.00 | 0.00 | 6.00 | 17.60 | 20.00 | 20.00 |
| 50 | 0.00 | 2.10 | 15.00 | 21.50 | 23.00 | 23.00 |
| 51 | 0.00 | 2.30 | 12.20 | 21.50 | 23.00 | 23.00 |
| 52 | 0.00 | 2.80 | 12.20 | 21.50 | 23.00 | 23.00 |
| 53 | 0.00 | 3.50 | 12.20 | 21.50 | 23.00 | 23.00 |
| 54 | 0.00 | 4.40 | 12.20 | 21.50 | 23.00 | 23.00 |
| 55 | 2.80 | 7.20 | 16.90 | 23.40 | 25.00 | 25.00 |
| 56 | 3.00 | 7.80 | 16.90 | 23.40 | 25.00 | 25.00 |
| 57 | 3.20 | 8.40 | 16.90 | 23.40 | 25.00 | 25.00 |
| 58 | 3.40 | 9.10 | 16.90 | 23.40 | 25.00 | 25.00 |
| 59 | 3.50 | 9.70 | 16.90 | 23.40 | 25.00 | 25.00 |
| 60 | 4.10 | 16.90 | 24.30 | 32.80 | 35.00 | 35.00 |
| 61 | 5.10 | 16.90 | 24.30 | 32.80 | 35.00 | 35.00 |
| 62 | 6.10 | 16.90 | 24.30 | 32.80 | 35.00 | 35.00 |
| 63 | 7.20 | 16.90 | 24.30 | 32.80 | 35.00 | 35.00 |
| 64 | 8.30 | 16.90 | 24.30 | 32.80 | 35.00 | 35.00 |
| 65 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 | 50.00 |
| 66 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 | 50.00 |
| 67 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 | 50.00 |
| 68 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 | 50.00 |
| 69 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 | 50.00 |
| 70 & Over | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |



Police/Fire members with an effective date of membership on or after July 1, 2015:

| | | • | Years of Service | e | |
|-----------|--------|---------|------------------|---------|-----------|
| Age | 5 – 9 | 10 – 19 | 20 – 24 | 25 – 29 | 30 & Over |
| 40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 42 | 0.00 | 0.00 | 0.70 | 0.00 | 0.00 |
| 43 | 0.00 | 0.00 | 1.50 | 10.90 | 0.00 |
| 44 | 0.00 | 0.00 | 2.40 | 12.00 | 0.00 |
| 45 | 0.00 | 0.00 | 2.90 | 13.10 | 20.00 |
| 46 | 0.00 | 0.00 | 3.40 | 14.20 | 20.00 |
| 47 | 0.00 | 0.00 | 3.90 | 15.40 | 20.00 |
| 48 | 0.00 | 0.00 | 4.50 | 16.50 | 20.00 |
| 49 | 0.00 | 0.00 | 6.00 | 17.60 | 20.00 |
| 50 | 0.00 | 2.10 | 15.00 | 21.50 | 23.00 |
| 51 | 0.00 | 2.30 | 12.20 | 21.50 | 23.00 |
| 52 | 0.00 | 2.80 | 12.20 | 21.50 | 23.00 |
| 53 | 0.00 | 3.50 | 12.20 | 21.50 | 23.00 |
| 54 | 0.00 | 4.40 | 12.20 | 21.50 | 23.00 |
| 55 | 2.80 | 7.20 | 16.90 | 23.40 | 25.00 |
| 56 | 3.00 | 7.80 | 16.90 | 23.40 | 25.00 |
| 57 | 3.20 | 8.40 | 16.90 | 23.40 | 25.00 |
| 58 | 3.40 | 9.10 | 16.90 | 23.40 | 25.00 |
| 59 | 3.50 | 9.70 | 16.90 | 23.40 | 25.00 |
| 60 | 4.10 | 16.90 | 24.30 | 32.80 | 35.00 |
| 61 | 5.10 | 16.90 | 24.30 | 32.80 | 35.00 |
| 62 | 6.10 | 16.90 | 24.30 | 32.80 | 35.00 |
| 63 | 7.20 | 16.90 | 24.30 | 32.80 | 35.00 |
| 64 | 8.30 | 16.90 | 24.30 | 32.80 | 35.00 |
| 65 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 |
| 66 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 |
| 67 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 |
| 68 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 |
| 69 | 18.70 | 23.40 | 37.50 | 46.80 | 50.00 |
| 70 & Over | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |



The following categories of active members are assumed to receive an unreduced benefit when they retire:

| Group (Active Members) | Years of Service |
|--|--------------------------|
| Regular members with an effective date of membership before January 1, 2010 | 28 – 29 years of service |
| Regular members with an effective date of membership on or after January 1, 2010 and before July 1, 2015 | 28 – 29 years of service |
| Police/Fire members with an effective date of membership before January 1, 2010 | 23 – 24 years of service |
| Police/Fire members with an effective date of membership on or after January 1, 2010 and before July 1, 2015 | 28 – 29 years of service |

Retirement Age for Inactive Vested Members:

Inactive vested members are generally assumed to retire at the earliest unreduced retirement

The following categories of inactive vested members are assumed to retire immediately with an unreduced benefit:

| Group (Inactive Vested Members) | Years of Service |
|--|--------------------------|
| Regular members with an effective date of membership before January 1, 2010 | 28 – 29 years of service |
| Regular members with an effective date of membership on or after January 1, 2010 and before July 1, 2015 | 28 – 29 years of service |
| Police/Fire members with an effective date of membership before January 1, 2010 | 23 – 24 years of service |
| Police/Fire members with an effective date of membership on or after January 1, 2010 and before July 1, 2015 | 28 – 29 years of service |



Termination Rates:

The assumed termination rates are shown below.

Termination Rates (%)

| Years of Service | Regular | Police/Fire |
|------------------|---------|-------------|
| 0 – 1 | 15.75 | 14.50 |
| 1 – 2 | 12.75 | 8.25 |
| 2 – 3 | 10.25 | 6.50 |
| 3 – 4 | 8.25 | 5.50 |
| 4 – 5 | 7.50 | 4.50 |
| 5 – 6 | 6.50 | 4.25 |
| 6 – 7 | 5.75 | 3.25 |
| 7 – 8 | 5.25 | 2.50 |
| 8 – 9 | 4.75 | 2.50 |
| 9 – 10 | 4.50 | 1.90 |
| 10 – 11 | 4.25 | 1.40 |
| 11 – 12 | 3.25 | 1.25 |
| 12 – 13 | 3.00 | 1.00 |
| 13 – 14 | 2.75 | 0.90 |
| 14 – 15 | 2.25 | 0.80 |
| 15 – 16 | 2.25 | 0.70 |
| 16 – 17 | 2.25 | 0.60 |
| 17 – 18 | 2.00 | 0.50 |
| 18 – 19 | 1.75 | 0.40 |
| 19 – 20 | 1.75 | 0.30 |
| 20 – 21 | 1.75 | 0.30 |
| 21 – 22 | 1.75 | 0.30 |
| 22 – 23 | 1.75 | 0.30 |
| 23 – 24 | 1.75 | 0.30 |
| 24 – 25 | 1.50 | 0.30 |
| 25 & Over | 1.50 | 0.30 |
| | | |

No termination is assumed after a member reaches earliest unreduced retirement age.

The termination liability is based on the greater actuarial value of a refund of member contributions and a deferred vested retirement benefit.



Disability Rates:

The assumed disability rates are shown below for selected ages:

| _ | Disability Rates (%) | | | | |
|-----------|----------------------|-------------|--|--|--|
| Age | Regular | Police/Fire | | | |
| 22 | 0.01 | 0.00 | | | |
| 27 | 0.03 | 0.06 | | | |
| 32 | 0.04 | 0.16 | | | |
| 37 | 0.10 | 0.32 | | | |
| 42 | 0.20 | 0.50 | | | |
| 47 | 0.30 | 0.80 | | | |
| 52 | 0.55 | 0.70 | | | |
| 57 | 0.70 | 0.50 | | | |
| 62 | 0.30 | 0.30 | | | |
| 65 & Over | 0.00 | 0.00 | | | |

Disability rates are applied only for members with more than 5 years of service and less than 30 years of service for Regular members with an effective date of membership before July 1, 2015, less than 33 1/3 years of service for Regular members with an effective date of membership on or after July 1, 2015, less than 25 years of service for Police/Fire members with an effective date of membership before January 1, 2010, or less than 30 years of service for Police/Fire members with an effective date of membership on or after January 1, 2010.



Mortality Tables:

Pre-Retirement: Regular Members: Pub-2010 General Employee Amount-Weighted

Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality

improvement scale MP-2020.

Police/Fire Members: Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and

females), projected generationally with the two-dimensional mortality

improvement scale MP-2020.

Healthy: Regular Members: Pub-2010 General Healthy Retiree Amount-

Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 15% for females, projected generationally with the two-dimensional mortality

improvement scale MP-2020.

The above listed mortality tables only provide rates for ages 50 and older. To develop mortality rates for ages 40 through 50, we have smoothed the difference between the rates at age 40 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 50 from the Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 40, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue

Code Section 430. While Section 430 is not applicable to NVPERS, we believe this is a reasonable method for developing annuitant

mortality rates at earlier ages.



Mortality Tables (continued):

Healthy (continued): Police/Fire Members: Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

> The above listed mortality tables only provide rates for ages 45 and older. To develop mortality rates for ages 35 through 45, we have smoothed the difference between the rates at age 35 from the Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 45 from the Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 35, we have used the Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for singleemployer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to NVPERS, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Disabled:

Regular Members: Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 20% for males and 15% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

Police/Fire Members: Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 30% for males and 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.



Mortality Tables (continued):

Beneficiaries:

Regular and Police/Fire Current Beneficiaries in Pay Status:

Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 15% for males and 30% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

The above listed mortality table only provides rates for ages 45 and older. To develop mortality rates for ages 35 through 45, we have smoothed the difference between the rates at age 35 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 45 from the Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 35, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to NVPERS, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Regular and Police/Fire Contingent Beneficiaries: Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 30% for males and 15% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

The above listed mortality tables only provide rates for ages 50 and older. To develop mortality rates for ages 40 through 50, we have smoothed the difference between the rates at age 40 from the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 50 from the Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 40, we have used the Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables rates. This methodology for developing an extended annuitant mortality table is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue Code Section 430. While Section 430 is not applicable to NVPERS, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.



Mortality Tables (continued):

For the mortality table applicable to contingent beneficiaries, "Approach 1" from the Society of Actuaries "Pub-2010 Public Retirement Plans Mortality Tables Report" (as noted on page 61 of that report) was utilized. In particular, the mortality basis for contingent beneficiaries has been assumed to be the same mortality basis as the Healthy Regular retiree table listed above (except using rates applicable to the beneficiary's gender) for both when the primary retiree is alive and is no longer alive.

The tables below show the assumed healthy retiree mortality rates¹ and projected life expectancies² for selected ages:

Regular Members

| Age | Mortality Rates for Males | Mortality Rates for Females | Expected Years of Life Remaining for Males | Expected Years of Life Remaining for Females |
|-----|------------------------------|-----------------------------|---|---|
| 40 | 0.07% | 0.04% | 43.4 | 47.1 |
| 50 | 0.35% | 0.24% | 33.2 | 36.7 |
| 60 | 0.72% | 0.43% | 23.7 | 26.9 |
| 70 | 1.80% | 1.19% | 15.2 | 17.8 |
| 80 | 5.71% | 3.75% | 8.1 | 10.0 |

Police/Fire Members

| Age | Mortality Rates for Males | Mortality Rates for Females | Expected Years of Life Remaining for Males | Expected Years of Life Remaining for Females |
|-----|------------------------------|--------------------------------|---|---|
| 40 | 0.07% | 0.05% | 44.2 | 47.3 |
| 50 | 0.21% | 0.15% | 33.9 | 36.9 |
| 60 | 0.57% | 0.44% | 24.0 | 26.9 |
| 70 | 1.76% | 1.31% | 15.3 | 17.9 |
| 80 | 5.65% | 3.92% | 8.2 | 10.2 |

The Pub-2010 Amount-Weighted Mortality Tables and adjustments as shown above reasonably reflect the mortality experience of the Plan as of the measurement date. These mortality tables were adjusted to future years using a generational projection to reflect future mortality improvement between the measurement date and those years.

² Expected years of life remaining are based on age as of calendar year 2021. In practice, assumed life expectancies will increase as a result of the mortality improvement scale.



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¹ Generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Future Benefit Accruals:

1.0 year of service per year.

Presence and Age of Beneficiary:

It is assumed for purposes of the actuarial valuation that beneficiaries of female members are two years older than the female member. Beneficiaries of male members are assumed to be two years younger than the male member. Spouses are assumed to be of the opposite sex of the member.

Since pre-retirement death benefits are payable to a surviving beneficiary of an unmarried member, all members are assumed to have a beneficiary upon pre-retirement death.

The unmodified option is a straight life annuity except for "employer-pay" Police/Fire retirees, for whom it is a 50% joint and survivor annuity. Existing "employer-pay" Police/Fire retirees with an unmodified option who retired after June 30, 1981 and before July 1, 2011 have been valued assuming no surviving spouse, pending the results of an analysis and verification of spousal information.

75% of "employer-pay" Police/Fire male members and 65% of "employer-pay" Police/Fire female members are assumed to be married at retirement.

Dependent Children:

The assumption for dependent children in the actuarial valuation is one dependent child who is 28 years younger than the employee.

Unknown Data for Members:

Same as those exhibited by members with similar known characteristics. If not specified, Regular members are assumed to be female, and Police/Fire members are assumed to be male.

Form of Payment:

All active and inactive members are assumed to elect the unmodified option at retirement (Option 1).

Actuarial Value of Assets:

Fair value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual return on the fair value of assets and the expected return on the actuarial value of assets, and is recognized over a five-year period. The actuarial value of assets is further limited to not less than 70% or greater than 130% of the fair value of assets.

Actuarial Cost Method:

Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of salary, with Normal



Cost determined based on the plan provisions and benefit accrual rate applicable to that individual.

Amortization Policy:

Effective June 30, 2022 the outstanding balance of all Regular amortization bases, except for the initial base dated June 30, 2004, were combined and re-amortized over a closed 20-year period, and the outstanding balance of all Police/Fire amortization bases, including the initial base dated June 30, 2004, were combined and re-amortized over a closed 20-year period.

Any new UAAL as a result of actuarial gains or losses or a change in actuarial assumptions or methods will be amortized over 20 years.

Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:

- with the exception noted below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;
- the increase in UAAL that would result from a temporary retirement incentive will be prefunded by the participating employer(s).

UAAL layers shall be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.

UAAL layers shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.

If an overfunding exists (i.e., the total of all UAAL becomes negative so that there is a surplus), the contribution rate will be the greater of:

- the rate resulting from a 30-year amortization of the surplus, and
- the previous year's rate, reduced by 25% of the difference between the previous rate and the rate resulting from a 30-year amortization of the surplus.

These amortization policy components will apply separately to each of the Regular and Police/Fire UAAL cost groups.

Phase-In:

On October 21, 2021, the Board adopted a four-year phase-in of the cost impact of the assumption changes being made pursuant to the Experience Study dated September 10, 2021. One fourth of the cost impact attributable to the assumption changes, measured as of June 30, 2021 separately for each cost group, will be recognized in each of the valuations as of June 30, 2021, 2022, 2023, and 2024.

Changes in Actuarial Assumptions and Methods Since the Previous Year:

There were no changes in actuarial assumptions since the preceding valuation.



Required Supplementary Information Schedules of Funding Progress 2014 to 2023 (dollars in millions)

| Actuarial Valuation Date June 30 | Actuarial Value of Assets (AVA) | Accrued Liability (AAL) | Unfunded Actuarial Accrued Liability (UAAL) | Ratio of AVA to AAL | Annual Covered Payroll | UAAL as a % of Annual Covered Payroll |
|---|--|-------------------------------|---|---------------------------|------------------------------|---|
| 2014 | \$31,465.6 | \$43,997.1 | \$12,531.5 | 71.5% | \$5,113.5 | 245.1% |
| 2015 | 33,717.9 | 46,070.1 | 12,352.2 | 73.2 | 5,227.2 | 236.3 |
| 2016 | 35,896.2 | 48,459.2 | 12,562.9 | 74.1 | 5,346.3 | 235.0 |
| 2017 | 38,719.3 | 51,986.1 | 13,266.8 | 74.5 | 5,542.2 | 239.4 |
| 2018 | 41,342.4 | 55,069.4 | 13,727.1 | 75.1 | 5,830.4 | 235.4 |
| 2019 | 43,609.0 | 57,920.2 | 14,311.2 | 75.3 | 6,038.6 | 237.0 |
| 2020 | 46,171.7 | 60,663.5 | 14,491.8 | 76.1 | 6,276.8 | 230.9 |
| 2021 | 50,942.5 | 67,577.8 | 16,635.3 | 75.4 | 6,186.4 | 268.9 |
| 2022 | 54,242.1 | 72,568.9 | 18,326.8 | 74.7 | 6,340.2 | 289.1 |
| 2023 | 57,769.0 | 76,568.0 | 18,799.0 | 75.4 | 6,785.7 | 277.0 |

| Actuarial Valuation Date June 30 | Regular UAAL | Police/Fire UAAL | Regular UAAL as a % of Payroll | Police/Fire UAAL as a % of Payroll | Regular AVA as a % of AAL | Police/Fire AVA as a % of AAL |
|---|-----------------|---------------------|--------------------------------------|--|---------------------------------|-------------------------------------|
| 2014 | \$10,160.0 | \$2,371.5 | 238.3% | 278.9% | 70.8% | 74.3% |
| 2015 | 10,041.1 | 2,311.1 | 230.3 | 266.3 | 72.4 | 76.3 |
| 2016 | 10,197.9 | 2,365.0 | 228.7 | 266.3 | 73.2 | 77.1 |
| 2017 | 10,590.9 | 2,675.9 | 229.4 | 289.3 | 73.9 | 76.4 |
| 2018 | 10,876.0 | 2,851.0 | 224.5 | 288.9 | 74.7 | 76.5 |
| 2019 | 11,275.0 | 3,036.2 | 225.7 | 291.3 | 74.9 | 76.5 |
| 2020 | 11,429.8 | 3,061.9 | 219.5 | 286.3 | 75.7 | 77.5 |
| 2021 | 12,861.5 | 3,773.9 | 251.3 | 353.4 | 75.3 | 75.6 |
| 2022 | 14,071.1 | 4,255.7 | 267.1 | 396.7 | 74.8 | 74.6 |
| 2023 | 14,395.0 | 4,404.0 | 254.3 | 391.7 | 75.5 | 75.2 |
| | | | | | | |



Schedule 1 Retirement System Membership 2014 to 2023

| June 30 | Active Members | Inactive Members | Retired and Disabled Members | Beneficiaries and Survivors | Total Membership |
|---------|-------------------|---------------------|------------------------------------|-----------------------------|---------------------|
| 2014 | 100,522 | 14,633 | 49,170 | 6,038 | 170,363 |
| 2015 | 103,108 | 15,032 | 51,853 | 6,306 | 176,299 |
| 2016 | 105,167 | 15,639 | 54,615 | 6,565 | 181,986 |
| 2017 | 105,801 | 16,668 | 57,199 | 6,931 | 186,599 |
| 2018 | 107,506 | 16,607 | 59,819 | 7,289 | 191,221 |
| 2019 | 109,167 | 17,341 | 62,466 | 7,590 | 196,564 |
| 2020 | 111,815 | 17,398 | 64,867 | 7,874 | 201,954 |
| 2021 | 106,930 | 18,871 | 67,755 | 8,200 | 201,756 |
| 2022 | 108,635 | 19,511 | 70,410 | 8,639 | 207,195 |
| 2023 | 112,019 | 20,090 | 72,878 | 8,983 | 213,970 |

Schedule 2 Active Member Valuation Data 2014 to 2023

| June 30 | Number of Active Regular Members | Number of Active Police/Fire Members | Regular Annual Salary (Millions) | Police/Fire Annual Salary (Millions) | Regular Annual Average Salary | Police/Fire Annual Average Salary | Percent Increase in Regular Average Salary | Percent Increase in Police/Fire Average Salary |
|---------|---|---|---|---|--|--|--|--|
| 2014 | 88,709 | 11,813 | \$4,263.1 | \$850.4 | \$48,057 | \$71,990 | (1.2)% | (0.9)% |
| 2015 | 91,124 | 11,984 | 4,359.4 | 867.8 | 47,840 | 72,417 | (0.5) | 0.6 |
| 2016 | 93,030 | 12,137 | 4,458.2 | 888.2 | 47,922 | 73,179 | 0.2 | 1.1 |
| 2017 | 93,276 | 12,525 | 4,617.4 | 924.9 | 49,502 | 73,841 | 3.3 | 0.9 |
| 2018 | 94,615 | 12,891 | 4,843.6 | 986.8 | 51,193 | 76,549 | 3.4 | 3.7 |
| 2019 | 96,072 | 13,095 | 4,996.4 | 1,042.2 | 52,007 | 79,586 | 1.6 | 4.0 |
| 2020 | 98,228 | 13,587 | 5,207.3 | 1,069.5 | 53,013 | 78,712 | 1.9 | (1.1) |
| 2021 | 93,796 | 13,134 | 5,118.6 | 1,067.8 | 54,572 | 81,303 | 2.9 | 3.3 |
| 2022 | 95,785 | 12,850 | 5,267.3 | 1,072.8 | 54,991 | 83,489 | 0.8 | 2.7 |
| 2023 | 99,132 | 12,887 | 5,661.2 | 1,124.5 | 57,108 | 87,255 | 3.8 | 4.5 |



Schedule 3 Pay Status Participants Added to and Removed from the Rolls 2014 to 2023

Retirees and Beneficiaries

| June 30 | Beginning Balance | Number Added to Rolls | Annual Allowances Added to Rolls | Number Removed from Rolls | Annual Allowances Removed from Rolls | Number at End of Year | Annual Allowances at End of Year | % Increase in Annual Allowances | Average Annual Allowances | % Increase in Average Allowances |
|---------|----------------------|-----------------------------|---|---------------------------------|---|-----------------------------|--|---------------------------------------|---------------------------------|----------------------------------|
| 2014 | 47,351 | 3,732 | \$119,871,171 | (1,142) | \$(34,060,824 | 49,941 | \$1,757,076,98 | 7.6% | \$35,183 | 2.1% |
| 2015 | 49,941 | 4,110 | 143,218,449 | (1,250) | (37,461,678) | 52,801 | 1,901,374,760 | 8.2 | 36,010 | 2.4 |
| 2016 | 52,801 | 4,454 | 158,933,124 | (1,328) | (41,066,707) | 55,927 | 2,050,852,866 | 7.9 | 36,670 | 1.8 |
| 2017 | 55,927 | 4,431 | 162,467,577 | (1,530) | (47,186,158) | 58,828 | 2,196,500,865 | 7.1 | 37,338 | 1.8 |
| 2018 | 58,828 | 4,444 | 167,984,313 | (1,574) | (50,855,765) | 61,698 | 2,354,772,962 | 7.2 | 38,166 | 2.2 |
| 2019 | 61,698 | 4,569 | 180,857,725 | (1,624) | (53,717,527) | 64,643 | 2,537,563,136 | 7.8 | 39,255 | 2.9 |
| 2020 | 64,643 | 4,488 | 191,510,349 | (1,861) | (62,734,737) | 67,270 | 2,723,693,217 | 7.3 | 40,489 | 3.1 |
| 2021 | 67,270 | 5,147 | 224,664,317 | (2,002) | (66,723,754) | 70,415 | 2,934,272,120 | 7.7 | 41,671 | 2.9 |
| 2022 | 70,415 | 5,081 | 210,019,285 | (2,074) | (69,956,422) | 73,422 | 3,167,481,647 | 7.9 | 43,141 | 3.5 |
| 2023 | 73,422 | 4,756 | 203,231,507 | (2,050) | (72,534,128) | 76,128 | 3,404,843,342 | 7.5 | 44,725 | 3.7 |

Disability Recipients

| June 30 | Beginning Balance | Number Added to Rolls | Annual Allowances Added to Rolls | Number Removed from Rolls | Annual Allowances Removed from Rolls | Number at End of Year | Annual Allowances at End of Year | % Increase in Annual Allowances | Average Annual Allowances | % Increase in Average Allowances |
|---------|----------------------|-----------------------------|---|---------------------------------|---|-----------------------------|--|---------------------------------------|---------------------------------|--|
| 2014 | 3,031 | 286 | \$8,346,444 | (133) | \$(3,001,371) | 3,184 | \$81,828,716 | 9.3% | \$25,700 | 4.0% |
| 2015 | 3,184 | 279 | 7,843,123 | (238) | (6,031,122) | 3,225 | 85,166,914 | 4.1 | 26,408 | 2.8 |
| 2016 | 3,225 | 224 | 6,630,290 | (375) | (9,669,332) | 3,074 | 83,459,531 | (2.0) | 27,150 | 2.8 |
| 2017 | 3,074 | 238 | 7,401,370 | (242) | (6,949,748) | 3,070 | 85,154,508 | 2.0 | 27,738 | 2.2 |
| 2018 | 3,070 | 196 | 6,637,162 | (167) | (4,986,863) | 3,099 | 88,402,398 | 3.8 | 28,526 | 2.8 |
| 2019 | 3,099 | 208 | 6,969,925 | (257) | (7,072,644) | 3,050 | 90,215,475 | 2.1 | 29,579 | 3.7 |
| 2020 | 3,050 | 152 | 5,924,594 | (137) | (4,030,829) | 3,065 | 93,959,228 | 4.1 | 30,656 | 3.6 |
| 2021 | 3,065 | 133 | 5,391,986 | (156) | (4,686,758) | 3,042 | 96,409,377 | 2.6 | 31,693 | 3.4 |
| 2022 | 3,042 | 153 | 6,852,216 | (158) | (4,710,875) | 3,037 | 101,458,312 | 5.2 | 33,407 | 5.4 |
| 2023 | 3,037 | 194 | 8,112,268 | (158) | (5,271,619) | 3,073 | 107,391,984 | 5.8 | 34,947 | 4.6 |

Survivor Annuitants

| June 30 | Beginning Balance | Number Added to Rolls | Annual Allowances Added to Rolls | Number Removed from Rolls | Annual Allowances Removed from Rolls | Number at End of Year | Annual Allowances at End of Year | % Increase in Annual Allowances | Average Annual Allowances | % Increase in Average Allowances |
|---------|----------------------|-----------------------------|---|---------------------------------|---|-----------------------------|--|---------------------------------------|---------------------------------|--|
| 2014 | 2,048 | 139 | \$1,699,773 | (104) | \$(935,578) | 2,083 | \$32,868,928 | 4.8% | \$15,780 | 3.1% |
| 2015 | 2,083 | 144 | 2,339,825 | (94) | (1,085,422) | 2,133 | 34,817,928 | 5.9 | 16,323 | 3.4 |
| 2016 | 2,133 | 161 | 2,474,940 | (115) | (1,338,740) | 2,179 | 36,659,755 | 5.3 | 16,824 | 3.1 |
| 2017 | 2,179 | 138 | 2,365,400 | (85) | (961,809) | 2,232 | 38,583,162 | 5.2 | 17,286 | 2.7 |
| 2018 | 2,232 | 160 | 2,733,806 | (81) | (1,057,591) | 2,311 | 40,927,907 | 6.1 | 17,710 | 2.5 |
| 2019 | 2,311 | 154 | 2,125,227 | (102) | (1,240,847) | 2,363 | 42,750,703 | 4.5 | 18,092 | 2.2 |
| 2020 | 2,363 | 125 | 2,281,249 | (82) | (945,472) | 2,406 | 45,002,512 | 5.3 | 18,704 | 3.4 |
| 2021 | 2,406 | 199 | 3,246,840 | (107) | (1,514,608) | 2,498 | 47,599,020 | 5.8 | 19,055 | 1.9 |
| 2022 | 2,498 | 206 | 3,261,896 | (114) | (1,583,404) | 2,590 | 50,829,340 | 6.8 | 19,625 | 3.0 |
| 2023 | 2,590 | 149 | 2,055,402 | (79) | (1,139,393) | 2,660 | 53,509,988 | 5.3 | 20,117 | 2.5 |



 $\begin{array}{c} \text{Schedule 4} \\ \text{Schedule of Funded Liabilities by Type (in millions)} \\ 2014 \text{ to } 2023 \end{array}$

| June 30 | Actuarial Accrued Liability: Active Member Contributions (1) | Actuarial Accrued Liability: Inactive and Pay Status Members* (2) | Actuarial Accrued Liability: Active Members Employer Financed Portion (3) | Actuarial Value of Assets | Portion of (1) Covered by Assets | Portion of (2) Covered by Assets | Portion of (3) Covered by Assets |
|---------|--|---|---|---------------------------------|---|---|---|
| 2014 | \$775.4 | \$24,781.5 | \$18,440.1 | \$31,465.6 | 100% | 100% | 32.0% |
| 2015 | 822.7 | 26,302.7 | 18,944.8 | 33,717.9 | 100 | 100 | 34.8 |
| 2016 | 872.8 | 28,068.7 | 19,517.7 | 35,896.2 | 100 | 100 | 35.6 |
| 2017 | 920.8 | 30,492.8 | 20,572.5 | 38,719.3 | 100 | 100 | 35.5 |
| 2018 | 996.5 | 32,736.8 | 21,336.1 | 41,342.4 | 100 | 100 | 35.7 |
| 2019 | 1,065.0 | 35,033.2 | 21,822.0 | 43,609.0 | 100 | 100 | 34.4 |
| 2020 | 1,152.8 | 37,004.7 | 22,506.0 | 46,171.7 | 100 | 100 | 35.6 |
| 2021 | 1,216.8 | 41,535.2 | 24,825.8 | 50,942.5 | 100 | 100 | 33.0 |
| 2022 | 1,257.8 | 45,732.0 | 25,579.2 | 54,242.1 | 100 | 100 | 28.4 |
| 2023 | 1,322.1 | 48,474.0 | 26,771.9 | 57,769.0 | 100 | 100 | 29.8 |



^{*} Includes liability for post-retirement benefit increases.

Schedule 5

Analysis of Actuarial Experience

Gains and Losses in Unfunded Actuarial Accrued Liabilities (UAAL) During Year Ended June 30, 2023 Resulting from Unfunded Differences Between Assumed Experience and Actual Experience (dollar amounts in millions)

| Type of Activity | Regular Amount | Regular % of AAL | Police/Fire Amount | Police/Fire % of AAL |
|--|-------------------|---------------------|-----------------------|----------------------|
| Age and Service Retirements. If members retire at older ages or with lower final average pay than assumed, there is a gain. If retirements occur at younger ages with higher average pay, there is a loss. | \$(147.2) | (0.25%) | \$(26.3) | (0.15%) |
| Disability Retirements. If disability claims are less than assumed, there is a gain. If there are more claims, there is a loss. | (9.9) | (0.02%) | (6.4) | (0.04%) |
| Pre- and Post-Retirement Mortality. If retirees live longer than assumed, there is a loss. If retirees live shorter than assumed, there is a gain. | 16.9 | 0.03% | (4.1) | (0.02%) |
| Post-Retirement Benefit Increases. If increases are more than assumed, there is a loss. If increases are less than assumed, there is a gain. | (67.9) | (0.12%) | (19.3) | (0.11%) |
| Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If less liabilities are released, there is a loss. | 35.3 | 0.06% | (5.0) | (0.03%) |
| Individual Pay and Service Increases. If there are smaller pay and service increases than assumed, there is a gain. If there are greater increases, there is a loss. | (302.4) | (0.51%) | (101.6) | (0.57%) |
| Active New Entrants. Cost due to new hires. | (21.7) | (0.04%) | 14.1 | 0.08% |
| Active Rehires. Some new active members have past service credits reinstated, thereby increasing costs due to the unanticipated liabilities. | (69.4) | (0.12%) | (8.2) | (0.05%) |
| Inactive and Retiree Showups. Persons in inactive or pay status who are added to the valuation data during the year. | (30.4) | (0.05%) | (5.8) | (0.03%) |
| Other. Miscellaneous gains and losses result from data changes and adjustments, and other miscellaneous impacts on the valuation results.* | 37.6 | 0.06% | 14.7 | 0.08% |
| Total Liability Experience Gain/(Loss) During Year: | \$(559.2) | (0.95%) | \$(147.9) | (0.83%) |
| Investment Income. If there is a greater investment income than assumed, there is a gain. If there is less income, there is a loss. | 610.3 | 1.04% | 179.6 | 1.01% |
| Contributions. If contributions are greater than assumed, there is a gain. If contributions are lower, there is a loss. | (542.7) | (0.92%) | (185.1) | (1.04%) |
| Administrative Expenses. If administrative expenses are lower than assumed, there is a gain. If administrative expenses are higher, there is a loss. | 0.4 | 0.00% | 0.2 | 0.00% |
| Total Experience Gain/(Loss) During the Year: | \$(491.1) | (0.84%) | \$(153.2) | (0.86%) |

Note: The total gain/(loss) dollar amounts and percentages may not exactly match the sum of the components due to rounding.

The actual contributions toward purchase of service (\$49.3 million for Regular and \$13.5 million for Police/Fire) offset the Gain/(Loss) for Age and Service Retirements for new retirees and Individual Pay and Service Increases for continuing actives. The contributions toward purchase of service for other members are allocated to Other.



Schedule 6

Schedule of Employer Contributions 2014 to 2023

| Fiscal Year Ended June 30 | Regular Annual Required Contribution* | Regular Percentage Contributed | Police/Fire Annual Required Contribution [*] | Police/Fire Percentage Contributed | Total Annual Required Contribution* | Total Percentage Contributed |
|---------------------------------|--|--------------------------------------|--|--|---|------------------------------------|
| 2014 | \$1,223,519,948 | 87% | \$354,604,416 | 96% | \$1,578,124,364 | 89% |
| 2015 | 1,243,009,888 | 87 | 357,365,587 | 98 | 1,600,375,475 | 90 |
| 2016 | 1,235,466,166 | 98 | 360,063,071 | 100 | 1,595,529,237 | 98 |
| 2017 | 684,350,580 | 103 | 194,707,470 | 102 | 879,058,050 | 103 |
| 2018 | 698,761,837 | 103 | 206,915,231 | 101 | 905,677,068 | 103 |
| 2019 | 714,413,481 | 105 | 217,139,466 | 100 | 931,552,947 | 104 |
| 2020 | 727,154,285 | 111 | 223,353,811 | 106 | 950,508,096 | 110 |
| 2021 | 693,499,344 | 117 | 219,128,782 | 110 | 912,628,125 | 115 |
| 2022 | 967,083,740 | 88 | 283,541,251 | 89 | 1,250,624,991 | 88 |
| 2023 | 1,112,641,357 | 81 | 308,833,590 | 84 | 1,421,474,947 | 82 |

Starting in the year ended June 30, 2017, pursuant to GASB Statement No. 82, the financial statements and annual required contributions recognize half of the employer contributions made on behalf of Employer-Pay members as member contributions.



Reflects employer contributions only. For years prior to June 30, 2022, determined using 5% assumed payroll growth and 30-year frozen period for amortizing unfunded actuarial accrued liability. Beginning June 30, 2022, determined using assumptions from the preceding year's actuarial valuation.

Schedule 7 Schedule of Participating Employers 2014 to 2023

| Fiscal Year Ended June 30 | Number of Participating Employers* |
|------------------------------|--|
| 2014 | 189 |
| 2015 | 195 |
| 2016 | 202 |
| 2017 | 204 |
| 2018 | 210 |
| 2019 | 212 |
| 2020 | 215 |
| 2021 | 214 |
| 2022 | 221 |
| 2023 | 227 |

Starting in the entry for 2020, the number of participating employers shown in this Schedule was provided by the System for the purpose of this Schedule. This count may differ slightly from the count in the GASB Statement No. 68 report, which is limited to employers that contributed during the fiscal year.



Before 2020, the number of participating employers is the number of employers that made contributions during each fiscal year, as listed in Appendix A of each year's GASB Statement No. 68 report, based on information provided by the System. The counts in this Schedule also include PERS, which is not considered to be a participating employer for purposes of GASB Statement No. 68, starting with the June 30, 2015 report.

Distribution of Retired Members and Beneficiaries By Type as of June 30, 2023

Regular

| Monthly Benefit | Total | Service | Disability | Beneficiary | Survivor |
|-----------------|--------|---------|------------|-------------|----------|
| Under \$1,000 | 12,936 | 9,863 | 413 | 1,324 | 1,336 |
| 1,000 - 1,999 | 14,118 | 11,752 | 616 | 1,395 | 355 |
| 2,000 - 2,999 | 11,196 | 9,452 | 521 | 963 | 260 |
| 3,000 - 3,999 | 8,807 | 7,700 | 375 | 563 | 169 |
| 4,000 - 4,999 | 7,283 | 6,504 | 269 | 381 | 129 |
| 5,000 - 5,999 | 7,009 | 6,541 | 118 | 287 | 63 |
| 6,000 - 6,999 | 4,333 | 4,129 | 46 | 126 | 32 |
| 7,000 – 7,999 | 2,282 | 2,171 | 26 | 78 | 7 |
| 8,000 - 8,999 | 1,307 | 1,255 | 13 | 35 | 4 |
| 9,000 - 9,999 | 739 | 712 | 7 | 20 | 0 |
| 10,000 & over | 946 | 915 | 1 | 27 | 3 |
| Total | 70,956 | 60,994 | 2,405 | 5,199 | 2,358 |

Police/Fire

| Monthly Benefit | Total | Service | Disability | Beneficiary | Survivor |
|------------------------|--------|---------|------------|-------------|----------|
| Under \$1,500 | 980 | 499 | 61 | 240 | 180 |
| 1,500 - 2,999 | 1,449 | 873 | 160 | 389 | 27 |
| 3,000 - 4,499 | 1,689 | 1,198 | 187 | 266 | 38 |
| 4,500 - 5,999 | 1,794 | 1,474 | 166 | 120 | 34 |
| 6,000 - 7,499 | 1,734 | 1,596 | 66 | 60 | 12 |
| 7,500 - 8,999 | 1,374 | 1,324 | 19 | 22 | 9 |
| 9,000 - 10,499 | 847 | 820 | 6 | 20 | 1 |
| 10,500 - 11,999 | 472 | 467 | 1 | 4 | 0 |
| 12,000 - 13,499 | 279 | 274 | 1 | 3 | 1 |
| 13,500 - 14,999 | 150 | 149 | 1 | 0 | 0 |
| 15,000 & over | 137 | 137 | 0 | 0 | 0 |
| Total | 10,905 | 8,811 | 668 | 1,124 | 302 |



Retired Members as of June 30, 2023

Regular

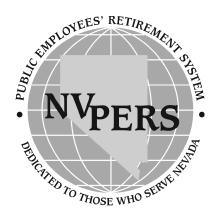
| Years of Credited Service | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ |
|---------------------------|----------|----------|----------|----------|----------|----------|----------|
| Average monthly benefit | \$447 | \$815 | \$1,686 | \$2,703 | \$3,779 | \$5,169 | \$6,404 |
| Average annual salary | \$38,876 | \$47,745 | \$55,565 | \$64,013 | \$69,492 | \$75,412 | \$75,249 |
| Number of retirees | 564 | 9,313 | 12,814 | 10,686 | 9,601 | 7,371 | 13,050 |

Police/Fire

| Years of Credited Service | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ |
|---------------------------|-----|----------|----------|----------|----------|-----------|-----------|
| Average monthly benefit | N/A | \$1,040 | \$2,107 | \$3,827 | \$5,808 | \$8,314 | \$10,400 |
| Average annual salary | N/A | \$54,431 | \$67,824 | \$88,527 | \$99,852 | \$117,729 | \$112,173 |
| Number of retirees | 0 | 296 | 1,038 | 1,139 | 2,752 | 3,281 | 973 |



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STATISTICAL SECTION

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OVERVIEW

This section of the Public Employees' Retirement System of Nevada's Annual Comprehensive Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the System's overall financial health.

FINANCIAL TRENDS

These schedules contain trend information to help the reader understand how the System's financial performance has changed over time.

- Schedule 1 Changes in Net Position – Last Ten Years
- Schedule 2 Benefit and Refund Deductions from Net Position – Last Ten Years

REVENUES

This schedule contains information to help the reader understand the System's funding over the last ten years.

Schedule 3 Contribution Rates – Last Ten Years

OPERATIONS

These schedules contain information about the System's operations.

| • | Schedule 4 | Retired Members by Type of Benefit |
|---|-------------|--|
| • | Schedule 5 | New Retired Members Average Benefit Payments |
| • | Schedule 6 | Average Age at Retirement – Last Ten Years |
| • | Schedule 7 | Number of Active Members per Retiree – Last Ten Years |
| • | Schedule 8 | Schedules of Funding Progress – Last Ten Years |
| • | Schedule 9 | Participating Employers |
| • | Schedule 10 | Principal Participating Employers - Current Year and Ten Years Ago |
| • | Schedule 11 | Average Age and Service Statistics for Members – Last Ten Years |
| | | |

Schedule 12 Average Salaries for Members – Last Ten Years

STATISTICAL SECTION

FINANCIAL TRENDS

SCHEDULE 1

CHANGES IN NET POSITION - LAST TEN FISCAL YEARS*

(in millions)

| | 2014 | 2015 | 2016 | 2017 |
|---|---------------|---------------|-------------|---------------|
| ADDITIONS | | | | |
| Employer contributions | \$ 757.4 | \$ 775.5 | \$ 849.7 | \$ 901.8 |
| Plan members contributions | 757.3 | 775.4 | 849.8 | 901.7 |
| Repayment and purchase of service | 42.8 | 82.5 | 61.7 | 67.2 |
| Total net investment income (loss) | 5,031.4 | 1,395.3 | 778.7 | 4,110.3 |
| Other income | 1.9 | 2.8 | 2.0 | 2.1 |
| Total additions to plan net position | 6,590.8 | 3,031.5 | 2,541.9 | 5,983.1 |
| DEDUCTIONS | | | | |
| Benefit payments | 1,816.7 | 1,958.3 | 2,111.9 | 2,258.2 |
| Refunds of contributions | 23.1 | 25.6 | 26.8 | 30.4 |
| Transfers of contributions to JRS | 1.0 | 2.4 | - | 0.4 |
| Administrative expenses | 9.6 | 9.6 | 11.9 | 9.9 |
| Total deductions from plan net position | 1,850.4 | 1,995.9 | 2,150.6 | 2,298.9 |
| Change in net position | \$ 4,740.4 | \$ 1,035.6 | \$ 391.3 | \$ 3,684.2 |

^{*}Information is from internal System records.

Both the employer and plan members contributions have been restated in this schedule for fiscal years 2014 through 2016 as a result of implementing GASB 82 (see below).

Statement No. 82, an amendment of GASB Statements No. 67, No. 68, and No. 73, this statement addresses classification of employer-paid contributions. This statement requires certain contribution payments made by the employer to be classified as plan member contributions.

FINANCIAL TRENDS

| 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|--|--|---|--|--|
| \$ 930.2 930.2 73.6 3,273.9 2.3 | \$ 965.5 965.5 98.4 3,468.1 2.8 | \$ 1,045.1 1,045.1 67.0 3,137.5 3.1 | \$ 1,051.9 1,051.9 70.0 12,602.1 3.3 | \$ 1,104.0 1,104.0 82.4 (2,938.0) 3.7 | \$ 1,163.9 1,163.9 62.9 4,953.4 1.4 |
| 5,210.2 | 5,500.3 | 5,297.8 | 14,779.2 | (643.9) | 7,345.5 |
| 2,420.0 31.4 0.5 12.9 | 2,601.7 34.0 0.2 11.8 | 2,805.0 29.5 - 12.4 | 3,008.6 30.3 4.4 12.5 | 3,231.9 53.5 1.7 13.5 | 3,477.8 51.1 1.4 14.1 |
| 2,464.8 | 2,647.7 | 2,846.9 | 3,055.8 | 3,300.6 | 3,544.4 |
| \$ 2,745.4 | \$ 2,852.6 | \$ 2,450.9 | \$ 11,723.4 | \$ (3,944.5) | \$ 3,801.1 |

STATISTICAL SECTION

FINANCIAL TRENDS

SCHEDULE 2

BENEFIT AND REFUND DEDUCTIONS FROM NET POSITION*

(in millions)

| | 2014 | 2015 | 2016 | 2017 |
|---|-----------------------|------------------------|------------------------|------------------------|
| REGULAR MEMBERS: | | | | |
| Benefits | | | | |
| Retirement and survivor Disability | \$ 1,385.3 75.5 | \$ 1,491.2 81.3 | \$ 1,609.6 81.7 | \$ 1,720.0 81.5 |
| Total benefits | \$ 1,460.8 | \$ 1,572.5 | \$ 1,691.3 | \$ 1,801.5 |
| Total refunds | \$ 17.5 | \$ 19.0 | \$ 22.0 | \$ 24.5 |
| POLICE/FIRE MEMBERS: | | | | |
| Benefits | | | | |
| Retirement and survivor Disability | \$ 336.4 19.5 | \$ 364.2 21.6 | \$ 398.1 22.5 | \$ 432.9 23.8 |
| Total benefits | \$ 355.9 | \$ 385.8 | \$ 420.6 | \$ 456.7 |
| Refunds | | | | |
| Refunds due to separation Refunds due to death Mandatory employer distributions | \$ 5.5 0.1 | \$ 6.6 | \$ 4.8 - - | \$ 5.7 0.2 |
| Total refunds | \$ 5.6 | \$ 6.6 | \$ 4.8 | \$ 5.9 |
| TOTAL MEMBERS: | | | | |
| Benefits | | | | |
| Retirement and survivor Disability | \$ 1,721.7 95.0 | \$ 1,855.4 102.9 | \$ 2,007.7 104.2 | \$ 2,152.9 105.3 |
| Total benefits | \$ 1,816.7 | \$ 1,958.3 | \$ 2,111.9 | \$ 2,258.2 |
| Refunds | | | | |
| Refunds due to separation | \$ 22.5 | \$ 24.7 | \$ 25.2 | \$ 27.6 |
| Refunds due to death | 0.5 | 0.8 | 1.3 | 1.9 |
| Mandatory employer distributions | 0.1 | 0.1 | 0.3 | 0.9 |
| Total refunds | \$ 23.1 | \$ 25.6 | \$ 26.8 | \$ 30.4 |

Notes: Police/Fire received post-retirement increases each year. Amounts are immaterial for purposes of this schedule.

^{*}Information is from internal System records.

FINANCIAL TRENDS

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | 2023 |
|----|-----------------|----|-----------------|----------|-----------------|----|-----------------|----|-----------------|----|-----------------|
| | | | | | | | | | | | |
| \$ | 1,843.3 82.9 | \$ | 1,981.0 86.3 | \$ | 2,137.2 88.2 | \$ | 2,287.6 89.5 | \$ | 2,449.3 92.3 | \$ | 2,632.0 96.8 |
| \$ | 1,926.2 | \$ | 2,067.3 | \$ | 2,225.4 | \$ | 2,377.1 | \$ | 2,541.6 | \$ | 2,728.8 |
| \$ | 24.4 | \$ | 27.0 | \$ | 23.5 | \$ | 23.4 | \$ | 42.7 | \$ | 41.5 |
| | | | | | | | | | | | |
| \$ | 469.0 24.8 | \$ | 508.5 25.9 | \$ | 551.9 27.7 | \$ | 601.7 29.8 | \$ | 658.0 32.3 | \$ | 714.1 34.8 |
| \$ | 493.8 | \$ | 534.4 | \$ | 579.6 | \$ | 631.5 | \$ | 690.3 | \$ | 748.9 |
| Ψ | 773.8 | Ψ | 334.4 | <u> </u> | 377.0 | Ψ | 031.3 | Ψ | 070.3 | Ψ | 770.7 |
| \$ | 6.6 0.4 | \$ | 6.6 0.4 | \$ | 5.7 0.3 | \$ | 6.8 | \$ | 10.6 0.2 | \$ | 8.6 |
| | | | - | | - | | 0.1 | | | | 0.6 0.4 |
| \$ | 7.0 | \$ | 7.0 | \$ | 6.0 | \$ | 6.9 | \$ | 10.8 | \$ | 9.6 |
| | | | | | | | | | | | |
| \$ | 2,312.3 | \$ | 2,489.5 | \$ | 2,689.1 | \$ | 2,889.3 | \$ | 3,107.3 | \$ | 3,346.1 |
| _ | 107.7 | | 112.2 | | 115.9 | | 119.3 | | 124.6 | | 131.6 |
| \$ | 2,420.0 | \$ | 2,601.7 | \$ | 2,805.0 | \$ | 3,008.6 | \$ | 3,231.9 | \$ | 3,477.7 |
| \$ | 28.9 | \$ | 31.6 | \$ | 26.9 | \$ | 26.4 | \$ | 50.4 | \$ | 46.5 |
| | 1.5 1.0 | | 1.6 0.8 | | 1.9 0.7 | | 2.2 1.7 | | 1.9 1.2 | | 2.8 1.8 |
| \$ | 31.4 | \$ | 34.0 | \$ | 29.5 | \$ | 30.3 | \$ | 53.5 | \$ | 51.1 |

REVENUES

SCHEDULE 3

CONTRIBUTION RATES

Regular Employees

Police/Fire Employees

| _ | Employer-Pay Plan | Plan Member/ Employer Plan (matching rate) | Employer-Pay Plan | Plan Member/ Employer Plan (matching rate) |
|----------------------------|----------------------|---|----------------------|---|
| Fiscal year ended June 30, | | | | |
| 2014 | 25.75 % | 13.25 % | 40.50 % | 20.75 % |
| 2015 | 25.75 | 13.25 | 40.50 | 20.75 |
| 2016 | 28.00 | 14.50 | 40.50 | 20.75 |
| 2017 | 28.00 | 14.50 | 40.50 | 20.75 |
| 2018 | 28.00 | 14.50 | 40.50 | 20.75 |
| 2019 | 28.00 | 14.50 | 40.50 | 20.75 |
| 2020 | 29.25 | 15.25 | 42.50 | 22.00 |
| 2021 | 29.25 | 15.25 | 42.50 | 22.00 |
| 2022 | 29.75 | 15.50 | 44.00 | 22.75 |
| 2023 | 29.75 | 15.50 | 44.00 | 22.75 |

SCHEDULE 4

RETIRED MEMBERS BY TYPE OF BENEFIT*

As of June 30, 2023 (Page 1 of 2)

Regular Retired Members

Type of Retirement Number of Retired Amount of **Monthly Benefit** Members Service **Disability** Beneficiary Survivor Under \$1,000 12,936 9,863 413 1,324 1,336 \$1,000 - \$1,999 1,395 14,118 11,752 616 355 \$2,000 - \$2,999 11,196 9,452 521 963 260 \$3,000 - \$3,999 8,807 7,700 375 563 169 \$4,000 - \$4,999 269 381 129 7,283 6,504 6,541 \$5,000 - \$5,999 7,009 118 287 63 \$6,000 - \$6,999 32 4,333 4,129 46 126 \$7,000 - \$7,999 2,282 2,171 26 78 7 \$8,000 - \$8,999 1,307 1,255 35 4 13 \$9,000 - \$9,999 712 7 20 739 \$10,000 & Over 946 915 27 3 1 Total 70,956 60,994 2,405 5,199 2,358

^{*}Information provided by Segal, the System's actuary

SCHEDULE 4

RETIRED MEMBERS BY TYPE OF BENEFIT*

As of June 30, 2023 (Page 2 of 2)

Police/Fire Retired Members

Type of Retirement Number of Retired Amount of **Monthly Benefit** Members Service **Disability** Beneficiary Survivor Under \$1,500 980 499 240 180 61 \$1,500 - \$2,999 1,449 873 160 389 27 \$3,000 - \$4,499 1,689 1,198 187 266 38 \$4,500 - \$5,999 1,794 1,474 166 120 34 \$6,000 - \$7,499 1,734 1,596 66 60 12 1,374 \$7,500 - \$8,999 1,324 19 22 9 1 \$9,000 - \$10,499 847 820 20 6 \$10,500 - \$11,999 472 467 1 4 \$12,000 - \$13,499 279 274 3 1 1 \$13,500 - \$14,999 150 149 1 \$15,000 & Over 137 137 10,905 8,811 668 1,124 302 Total

The values in these tables represent the number of individuals receiving benefit payments.

Individuals receiving service retirement are members of the System that received a benefit payment during fiscal year 2023 which was not a disability retirement.

Members with five or more years of service who become totally unable to perform their job or any comparable job because of injury or mental or physical illness are eligible to apply for disability retirement. Once approved by the Board, members receive a monthly disability retirement payment.

When a member retires there are seven retirement options. Option 1 pays the full monthly benefit but provides no income protection for a beneficiary after death for Regular members. Beneficiary retirements are paid to beneficiaries of retired members who have passed away with a retirement of Option 1 (Police/Fire members only) and Options 2 through 7 for all members.

Survivor retirements are paid when a member dies prior to retirement.

For more information regarding the various retirement types, refer to the Plan Summary starting on page 137.

^{*}Information provided by Segal, the System's actuary.

SCHEDULE 5

RETIRED MEMBERS AVERAGE BENEFIT PAYMENTS*

(Page 1 of 2)

Regular

Year of Credited Service

| FY 2014 | |
|---|------|
| | |
| Average monthly benefit \$ 391 \$ 689 \$ 1,359 \$ 2,135 \$ 2,974 \$ 4,165 \$ 5, | 262 |
| Average annual salary N/A N/A N/A N/A N/A N/A | N/A |
| | 966 |
| FY 2015 | |
| | 394 |
| Average annual salary N/A N/A N/A N/A N/A N/A N/A | N/A |
| | 287 |
| FY 2016 | |
| | 482 |
| Average annual salary N/A N/A N/A N/A N/A N/A N/A | N/A |
| ε | 658 |
| FY 2017 | 020 |
| | 557 |
| Average annual salary N/A N/A N/A N/A N/A N/A N/A | N/A |
| | 997 |
| FY 2018 | ,,, |
| | 654 |
| Average annual salary N/A N/A N/A N/A N/A N/A | N/A |
| | 499 |
| FY 2019 | .,, |
| | 777 |
| Average annual salary N/A N/A N/A N/A N/A N/A N/A | N/A |
| | 977 |
| FY 2020 | |
| | 909 |
| Average annual salary N/A N/A N/A N/A N/A N/A N/A | N/A |
| ε | 545 |
| FY 2021 | |
| | 009 |
| | 1445 |
| 6 | 070 |
| FY 2022 | |
| | 196 |
| | 673 |
| | 567 |
| FY 2023 | |
| | 404 |
| | 249 |
| | 050 |

^{*}Information provided by Segal, the System's actuary

SCHEDULE 5

RETIRED MEMBERS AVERAGE BENEFIT PAYMENTS*

(Page 2 of 2)

Police/Fire

Year of Credited Service

| | | 0-4 | | 5-9 | | 10-14 | | 15-19 | | 20-24 | | 25-29 | | 30+ |
|---|----|-----------|----|--------------|----|----------------|----|----------------|----|-----------------|----|-----------------|----|-----------------|
| FY 2014 | | | | | | | | | | | | | | |
| Average monthly benefit | \$ | - | \$ | 856 | \$ | 1,595 | \$ | 2,888 | \$ | 4,336 | \$ | 6,480 | \$ | 8,238 |
| Average annual salary | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A |
| Retirees | | - | | 242 | | 843 | | 745 | | 1,626 | | 1,765 | | 813 |
| FY 2015 | | | | | | | | | | | | | | |
| Average monthly benefit | \$ | - | \$ | 888 | \$ | 1,637 | \$ | 2,977 | \$ | 4,487 | \$ | 6,674 | \$ | 8,468 |
| Average annual salary | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A |
| Retirees | | - | | 245 | | 858 | | 779 | | 1,721 | | 1,897 | | 845 |
| FY 2016 | | | | | | | | | | | | | | |
| Average monthly benefit | \$ | - | \$ | 892 | \$ | 1,677 | \$ | 3,062 | \$ | 4,615 | \$ | 6,829 | \$ | 8,602 |
| Average annual salary | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A |
| Retirees | | - | | 254 | | 890 | | 815 | | 1,811 | | 2,071 | | 875 |
| FY 2017 | | | | | | | | | | | | | | |
| Average monthly benefit | \$ | - | \$ | 917 | \$ | 1,722 | \$ | 3,160 | \$ | 4,723 | \$ | 6,980 | \$ | 8,822 |
| Average annual salary | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A |
| Retirees | | - | | 267 | | 923 | | 860 | | 1,908 | | 2,244 | | 906 |
| FY 2018 | | | | | | | | | | | | | | |
| Average monthly benefit | \$ | | \$ | 926 | \$ | 1,765 | \$ | 3,256 | \$ | 4,867 | \$ | 7,172 | \$ | 8,991 |
| Average annual salary | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A |
| Retirees | | - | | 275 | | 953 | | 902 | | 2,015 | | 2,382 | | 915 |
| FY 2019 | | | | | | | | | | | | | | |
| Average monthly benefit | \$ | - | \$ | 946 | \$ | 1,815 | \$ | 3,353 | \$ | 5,013 | \$ | 7,393 | \$ | 9,225 |
| Average annual salary | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A |
| Retirees | | - | | 279 | | 978 | | 929 | | 2,108 | | 2,566 | | 928 |
| FY 2020 | Φ. | | Φ. | 0.46 | ф | 1 001 | ф | 2.460 | Ф | 5 101 | ф | 5 602 | Ф | 0.420 |
| Average monthly benefit | \$ | - 31/4 | \$ | 946 | \$ | 1,881 | \$ | 3,460 | \$ | 5,191 | \$ | 7,603 | \$ | 9,438 |
| Average annual salary | | N/A | | N/A 279 | | N/A 994 | | N/A 969 | | N/A | | N/A | | N/A 941 |
| Retirees | | - | | 219 | | 994 | | 909 | | 2,222 | | 2,729 | | 941 |
| FY 2021 | ø | | ø | 050 | ф | 1.024 | Φ | 2.564 | Φ | 5 266 | d. | 7 702 | Φ | 0.625 |
| Average monthly benefit Average annual salary | \$ | - 0 | \$ | 959 56814 | \$ | 1,934 71806 | \$ | 3,564 90732 | \$ | 5,366 105102 | \$ | 7,792 122558 | \$ | 9,635 122182 |
| Retirees | | U | | 284 | | 1,008 | | 1,024 | | 2,438 | | 2,963 | | 969 |
| FY 2022 | | _ | | 207 | | 1,000 | | 1,024 | | 2,730 | | 2,903 | | 909 |
| Average monthly benefit | \$ | _ | \$ | 1,004 | \$ | 2,010 | \$ | 3,695 | \$ | 5,585 | \$ | 8,048 | \$ | 9,995 |
| Average annual salary | Ф | - | Φ | 57,935 | Ф | 73,276 | Φ | 92,716 | Ф | 107,718 | Ф | 124,334 | Φ | 123,016 |
| Retirees | | _ | | 287 | | 1,034 | | 1,088 | | 2,617 | | 3,145 | | 971 |
| FY 2023 | | | | 207 | | 1,054 | | 1,000 | | 2,017 | | 3,143 | | 7/1 |
| Average monthly benefit | | _ | \$ | 1,040 | \$ | 2,107 | \$ | 3,827 | \$ | 5,808 | \$ | 8,314 | \$ | 10,400 |
| Average annual salary | | _ | \$ | 54,431 | \$ | 67,824 | \$ | 88,527 | \$ | 99,852 | \$ | 117,729 | \$ | 112,173 |
| Retirees | | _ | Ψ | 296 | Ψ | 1,038 | Ψ | 1,139 | Ψ | 2,752 | Ψ | 3,281 | Ψ | 973 |
| 1111100 | | | | 270 | | 1,050 | | 1,100 | | 2,732 | | 2,201 | | 715 |

^{*}Information provided by Segal, the System's actuary

SCHEDULE 6 AVERAGE AGE AT RETIREMENT*

| June 30 | Regular | Police/Fire |
|---------|---------|-------------|
| 2014 | 66 | 59 |
| 2015 | 66 | 60 |
| 2016 | 67 | 60 |
| 2017 | 67 | 60 |
| 2018 | 67 | 60 |
| 2019 | 68 | 61 |
| 2020 | 68 | 61 |
| 2021 | 69 | 61 |
| 2022 | 69 | 61 |
| 2023 | 70 | 62 |

^{*}Information is from internal System records.

SCHEDULE 7 NUMBER OF ACTIVE MEMBERS PER RETIREE*

| | Numb Active M | | Number Number Retired Me | | Active Members per Retiree | | |
|---------|------------------|---------|--------------------------|---------|----------------------------|---------|--|
| | | Police/ | | Police/ | | Police/ | |
| June 30 | Regular | Fire | Regular | Fire | Regular | Fire | |
| 2014 | 88,709 | 11,813 | 43,136 | 6,034 | 2.1 | 2.0 | |
| 2015 | 91,124 | 11,984 | 45,508 | 6,345 | 2.0 | 1.9 | |
| 2016 | 93,030 | 12,137 | 47,899 | 6,716 | 1.9 | 1.8 | |
| 2017 | 93,276 | 12,525 | 50,091 | 7,108 | 1.9 | 1.8 | |
| 2018 | 94,615 | 12,891 | 52,377 | 7,442 | 1.8 | 1.7 | |
| 2019 | 96,072 | 13,095 | 54,678 | 7,788 | 1.8 | 1.7 | |
| 2020 | 98,228 | 13,587 | 56,733 | 8,134 | 1.7 | 1.7 | |
| 2021 | 93,796 | 13,134 | 59,069 | 8,686 | 1.6 | 1.5 | |
| 2022 | 95,785 | 12,850 | 61,268 | 9,142 | 1.6 | 1.4 | |
| 2023 | 99,132 | 12,887 | 63,399 | 9,479 | 1.6 | 1.4 | |

^{*}Information provided by Segal, the System's actuary.

^{**}Excludes survivors and beneficiaries

SCHEDULE 8

SCHEDULES OF FUNDING PROGRESS*

2014 to 2023

(in millions)

| Actuarial Valuation Date June 30 | Actuarial Value of Assets (AVA) | Actuarial Accrued Liability (AAL) | Unfunded Actuarial Accrued Liability (UAAL) | Ratio of AVA to AAL | Annual Covered Payroll | UAAL as a % of Annual Covered Payroll |
|----------------------------------|--|--|---|---------------------------|------------------------------|---|
| 2014 | \$ 31,465.6 | \$ 43,997.1 | \$ 12,531.5 | 71.5 % | \$ 5,113.5 | 245.1 % |
| 2015 | 33,717.9 | 46,070.2 | 12,352.2 | 73.2 | 5,227.2 | 236.3 |
| 2016 | 35,896.2 | 48,459.2 | 12,562.9 | 74.1 | 5,346.3 | 235.0 |
| 2017 | 38,719.3 | 51,986.1 | 13,266.8 | 74.5 | 5,542.2 | 239.4 |
| 2018 | 41,342.4 | 55,069.4 | 13,727.1 | 75.1 | 5,830.4 | 235.4 |
| 2019 | 43,609.0 | 57,920.2 | 14,311.2 | 75.3 | 6,038.6 | 237.0 |
| 2020 | 46,171.7 | 60,663.5 | 14,491.8 | 76.1 | 6,276.8 | 230.9 |
| 2021 | 50,942.5 | 67,577.8 | 16,635.3 | 75.4 | 6,186.4 | 268.9 |
| 2022 | 54,242.1 | 72,568.9 | 18,326.8 | 74.7 | 6,340.2 | 289.1 |
| 2023 | 57,769.0 | 76,568.0 | 18,799.0 | 75.4 | 6,785.7 | 277.0 |

| | | | Actuarial Value of |
|-----------|-------------------------|----------------------|--------------------|
| | Unfunded | Unfunded Actuarial | Assets as % of |
| | Actuarial Accrued | Accrued Liability as | Total Actuarial |
| | Liability (in millions) | % of Payroll | Accrued Liability |
| Actuarial | | | |

| Actuarial | | | | | | | | | | |
|----------------|----------------|---------------|---|---------|---|---------|---|---------|----|--------|
| Valuation Date | | Police/ | | |] | Police/ | | | Po | olice/ |
| June 30 | Regular | Fire |] | Regular | | Fire | R | legular |] | Fire |
| 2014 | \$ 10,160.0 | \$ 2,371.5 | | 238.3 % | | 278.9 % | | 70.8 % | | 74.3 % |
| 2015 | 10,041.1 | 2,311.1 | | 230.3 | | 266.3 | | 72.4 | | 76.3 |
| 2016 | 10,197.9 | 2,365.0 | | 228.7 | | 266.3 | | 73.2 | | 77.1 |
| 2017 | 10,590.9 | 2,675.9 | | 229.4 | | 289.3 | | 73.9 | | 76.4 |
| 2018 | 10,876.0 | 2,851.0 | | 224.5 | | 288.9 | | 74.7 | | 76.5 |
| 2019 | 11,275.0 | 3,036.2 | | 225.7 | | 291.3 | | 74.9 | | 76.5 |
| 2020 | 11,429.8 | 3,061.9 | | 219.5 | | 286.3 | | 75.7 | | 77.5 |
| 2021 | 12,861.5 | 3,773.9 | | 251.3 | | 353.4 | | 75.3 | | 75.6 |
| 2022 | 14,071.1 | 4,255.7 | | 267.1 | | 396.7 | | 74.8 | | 74.6 |
| 2023 | 14,395.0 | 4,404.0 | | 254.3 | | 267.1 | | 75.5 | | 74.8 |

^{*}Information provided by Segal, the System's actuary.

SCHEDULE 9

PARTICIPATING EMPLOYERS

(Page 1 of 3)

State of Nevada and Related Agencies

Board of Examiners for Alcohol & Drug Abuse Counselors

Eighth Judicial District Court Legislative Counsel Bureau Liquefied Petroleum Gas Board Nevada Rural Housing Authority Private Investigators Licensing Board Public Employees' Retirement System

State Board of Accountancy State Board of Architecture

State Board of Chiropractic Examiners

State Board of Cosmetology State Board of Dental Examiners State Board of Dispensing Opticians

State Board of Examiners for Marriage & Family Therapists and Clinical Professional Counselors State Board of Examiners for Social Workers

State Board of Massage Therapy State Board of Medical Examiners

State Board of Nursing State Board of Optometry

State Board of Osteopathic Medicine

State Board of Pharmacy

State Board of Physical Therapy Examiners State Board of Psychological Examiners State Board of Veterinary Medical Examiners

State Personnel

Nevada System of Higher Education

Schools

100 Academy of Excellence Academy for Career Education Alpine Academy Charter School

American Preparatory Academy of Nevada

Bailey Charter Elementary School

Battle Born Academy Beacon Academy of Nevada

Cactus Park Elementary Public Charter School

Carson City School District Carson Montessori School Churchill County School District

CIVICA Academy

Clark County School District CLV Strong Start Academy Coral Academy Las Vegas Coral Academy of Science

Democracy Prep at the Agassi Campus

Discovery Charter School

Doral Academy of Nevada

Doral Academy of Northern Nevada Douglas County School District Elko County School District

Elko Institute for Academic Achievement

En Compass Academy Equipo Academy

Esmeralda County School District Eureka County School District Explore Academy Las Vegas Explore Knowledge Charter School Founders Academy of Las Vegas Freedom Classical Academy

Futuro Academy Inc

Girls Athletic Leadership School High Desert Montessori Charter School

Honors Academy of Literature Humboldt County School District Imagine School at Mountain View Innovations Charter School Lander County School District Leadership Academy of Nevada Learning Bridge Charter School Legacy Traditional Schools - Nevada Lincoln County School District

Mariposa Academy of Language and Learning

Mater Academy of Nevada

Lyon County School District

Mater Academy of Northern Nevada Mineral County School District Nevada Connections Academy Nevada Preparatory Charter Nevada Rise Academy Nevada State High School

Nevada State High School at Meadowwood

Nevada Virtual Academy Nye County School District

Oasis Academy

Odyssey Charter School

Pershing County School District Pinecrest Academy of Nevada

Pinecrest Academy of Northern Nevada

Quest Academy

Rainbow Dreams Academy Sage Collegiate Charter

Sierra Nevada Academy Charter School

Signature Preparatory Academy

Silver Sands Montessori Charter School

SLAM Academy of Nevada

SCHEDULE 9

PARTICIPATING EMPLOYERS

(Page 2 of 3)

Schools (continued)

Somerset Academy of Las Vegas Storey County School District

TEACH Las Vegas The Delta Academy

Washoe County School District White Pine County School District

Young Women's Leadership Academy of Las Vegas

Counties

Churchill County

Clark County

Douglas County

Elko County

Esmeralda County

Eureka County

Humboldt County

Lander County

Lincoln County

Lyon County

Mineral County

Nye County

Pershing County

Storey County

Washoe County

White Pine County

Cities

City of Boulder

City of Caliente

City of Carlin

City of Carson

City of Elko

City of Ely

City of Fallon

City of Fernley

City of Henderson

City of Las Vegas

City of Lovelock

City of Mesquite

City of North Las Vegas

City of Reno

City of Sparks

City of Wells

City of West Wendover

City of Winnemucca

City of Yerington

Hospitals

Battle Mountain General Hospital Grover C. Dils Medical Center

Humboldt General Hospital

Mount Grant General Hospital

Pershing General Hospital

Silver Springs Stagecoach Hospital District

University Medical Center of Southern Nevada

William Bee Ririe Hospital

Utility, Irrigation, and Sanitation Districts

Alamo Sewer & Water General Improvement District

Beatty Water and Sanitation District

CC Communications

Clark County Water Reclamation District

Douglas County Sewer and Water District

Lincoln County Power District

Lovelock Meadows Water District

McGill-Ruth Consolidated Sewer and Water District

Minden-Gardnerville Sanitation District

Moapa Valley Water District

Overton Power District

Pershing County Water Conservation District

Truckee Meadows Water Authority

Truckee-Carson Irrigation District

Virgin Valley Water District

Walker River Irrigation District

Washoe County Water District

Special Districts and Agencies

Austin Volunteer Fire Department

Battle Mountain Volunteer Fire Department

Canyon General Improvement District

Carson City Airport Authority

Central Dispatch Administrative Authority*

Central Lyon County Fire Protection District

Churchill County Volunteer Fire Department

Churchill Mosquito Abatement District

City of Wells Volunteer Fire Department

Douglas County Mosquito District

East Fork Fire Protection District

East Fork Swimming Pool District

Elko Convention and Visitors Authority

Elko County Agricultural Association

Elko County Fire Protection District

Elko Volunteer Fire Department**

Fernley Swimming Pool District

SCHEDULE 9

PARTICIPATING EMPLOYERS

(Page 3 of 3)

Special Districts and Agencies (continued)

Gardnerville Ranchos General Improvement District

Gerlach General Improvement District

Grass Valley Volunteer Fire Department

Henderson District Public Libraries

Incline Village Visitor's and Convention Bureau

Indian Hills General Improvement District

Kingsbury General Improvement District

Lander County Convention and Tourism

Las Vegas Convention and Visitors Authority

Las Vegas-Clark County Library District

Las Vegas Metropolitan Police Department

Lovelock Volunteer Fire Department

Lyon Health Center**

Mason Valley Fire District

Mineral County Housing Authority

Moapa Valley Fire Department

Mt. Charleston Fire Protection District

Nevada Association of Counties

Nevada Tahoe Conservation District

Nevadaworks

North Lake Tahoe Fire Protection District

North Lyon County Fire District

Palomino Valley General Improvement District

Pershing County Volunteer Fire Department

Regional Transportation Commission

Regional Transportation Commission of Southern Nevada

Reno Housing Authority

Reno-Sparks Convention and Visitors Authority

Reno-Tahoe Airport Authority

Round Hill General Improvement District

Rye Patch Volunteer Fire Department

Southern Nevada Health District

Southern Nevada Housing Authority

Stagecoach General Improvement District

Storey County Fire Protection District

Sun Valley General Improvement District

Tahoe-Douglas District

Tahoe-Douglas Fire Protection District

Tahoe-Reno General Improvement District

Topaz Ranch Estates General Improvement District

Town of Kingston

Town of Kingston Fire Company

Truckee Meadows Fire Protection District

Truckee Meadows Regional Planning Agency

Western Nevada Regional Youth Center

White Pine County 474 Fire Protection District**

White Pine County Tourism and Recreation Board

Winnemucca Rural Volunteer Fire

Winnemucca Volunteer Fire Department

Workforce Connections

^{*} Contributions received in current fiscal year, no longer active

^{**} No contributions received in current fiscal year, still active

SCHEDULE 10

PRINCIPAL PARTICIPATING EMPLOYERS

| | | 2014 | |
|--|-----------|------|------------------------|
| D. C. C. A. C. | Covered | D 1 | Percentage of Total |
| Participating Agencies | Employees | Rank | System |
| Clark County School District | 30,839 | 1 | 30.7 % |
| State of Nevada | 17,350 | 2 | 17.3 |
| Washoe County School District | 7,363 | 3 | 7.3 |
| Clark County | 6,940 | 4 | 6.9 |
| Las Vegas Metropolitan Police Department | 4,739 | 5 | 4.7 |
| University Medical Center of Southern Nevada | 3,368 | 6 | 3.4 |
| City of Las Vegas | 2,483 | 7 | 2.5 |
| Washoe County | 2,363 | 8 | 2.4 |
| City of Henderson | 2,074 | 9 | 2.1 |
| University of Nevada, Reno | 1,826 | 10 | 1.8 |
| Subtotal | 79,345 | | 79.1 |
| All other | 21,177 | | 20.9 |
| Total 2014 (190 Agencies) | 100,522 | | 100.0 % |
| | | 2023 | |
| | | | Percentage |
| D. C. C. A. C. | Covered | D 1 | of Total |
| Participating Agencies | Employees | Rank | System |
| Clark County School District | 33,319 | 1 | 29.7 % |
| State of Nevada | 17,106 | 2 | 15.3 |
| Clark County | 7,042 | 3 | 6.3 |
| Washoe County School District | 6,957 | 4 | 6.2 |
| Las Vegas Metropolitan Police Department | 5,852 | 5 | 5.2 |
| Nevada System of Higher Education (NSHE) | 3,841 | 6 | 3.4 |
| University Medical Center of Southern Nevada | 3,611 | 7 | 3.2 |
| Washoe County | 2.756 | Q | 2.5 |

Washoe County 2,756 2.5 City of Las Vegas City of Henderson 2,704 2.4 2,432 10 2.2 Subtotal 85,620 76.4 All other* 26,399 23.6 Total 2023 (227 Agencies) 112,019 100.0 %

| | Number of | Covered |
|---|-----------|-----------|
| Agency Type | Agencies | Employees |
| State of Nevada and Related Agencies | 24 | 1,176 |
| Schools | 72 | 11,706 |
| Counties | 14 | 3,040 |
| Cities | 17 | 4,952 |
| Hospitals | 7 | 899 |
| Utility, Irrigation, and Sanitation Districts | 17 | 894 |
| Special Districts and Agencies | 66 | 3,732 |
| Subtotal | 217 | 26,399 |
| Largest Ten Participating Employers | 10 | 85,620 |
| Total | 227 | 112,019 |

SCHEDULE 11 AVERAGE AGE AND SERVICE STATISTICS FOR MEMBERS*

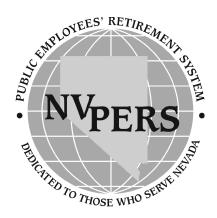
| | Regu | ular | Polic | e/Fire |
|---------------|-------------|---------------|-------------|---------------|
| | | Average Years | | Average Years |
| As of June 30 | Average Age | of Service | Average Age | of Service |
| 2014 | 46.4 | 10.1 | 40.8 | 11.5 |
| 2015 | 46.2 | 10.0 | 40.8 | 11.6 |
| 2016 | 46.0 | 9.9 | 40.7 | 11.5 |
| 2017 | 45.9 | 9.8 | 40.2 | 11.2 |
| 2018 | 45.8 | 9.9 | 39.9 | 11.1 |
| 2019 | 45.7 | 9.7 | 39.8 | 11.0 |
| 2020 | 45.7 | 9.7 | 39.5 | 10.8 |
| 2021 | 45.8 | 10.0 | 39.3 | 10.8 |
| 2022 | 45.7 | 9.8 | 39.3 | 10.8 |
| 2023 | 45.5 | 9.6 | 39.2 | 10.8 |

SCHEDULE 12 AVERAGE SALARIES FOR MEMBERS*

| | | Increase | | Increase |
|-------------------------|-----------|------------|-------------|------------|
| As of June 30 | Regular | (Decrease) | Police/Fire | (Decrease) |
| 2014 | \$ 48,057 | | \$ 71,990 | |
| 2015 | 47,840 | (0.5)% | 72,417 | 0.6 % |
| 2016 | 47,922 | 0.2 | 73,179 | 1.1 |
| 2017 | 49,502 | 3.3 | 73,841 | 0.9 |
| 2018 | 51,193 | 3.4 | 76,549 | 3.7 |
| 2019 | 52,007 | 1.6 | 79,586 | 4.0 |
| 2020 | 53,013 | 1.9 | 78,712 | (1.1) |
| 2021 | 54,572 | 2.9 | 81,303 | 3.3 |
| 2022 | 54,991 | 0.8 | 83,489 | 2.7 |
| 2023 | 57,108 | 3.8 | 87,255 | 4.5 |
| Average annual increase | | | | |
| 2014 - 2023 | | 1.9 % | | 2.2 % |

^{*}Information provided by Segal, the System's actuary.

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PLAN SUMMARY

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Administration

PERS provides retirement, disability, and survivor benefits to long-term public employees. The System includes the employees of Nevada counties, cities, schools, state government, and other local public employers.

The governing authority of the System is a 7-member board appointed by the Governor. Day-to-day operations are managed by the Executive Officer. Operating funds are provided by transfer of an administrative fee assigned to each member and benefit recipient. Monthly fees at June 30, 2023, were \$3.37 for each Regular member and benefit recipient and \$3.48 for each Police/Fire member and benefit recipient.

Membership

Membership is required of any person employed in a qualifying position commencing on the employee's first day of work. A qualifying position is normally considered to be half-time or more according to the full-time work schedule established by the public employer. Persons employed in an approved police or fire position are covered under the Police/Fire sub-fund. Persons who are not police or fire employees are covered under the Regular sub-fund. Membership is canceled upon refund, retirement, or death. Membership is not canceled automatically upon termination of employment. A member must apply for a refund, distribution, or retirement to cancel membership.

Types of Contribution Plans

All pay that meets the definition of compensation as defined in NRS 286.025(2) is subject to retirement contribution. New hires (in agencies which did not elect the Employer-Pay Contribution Plan (EPC) prior to July 1, 1983) have the option of selecting EPC or the Employee/Employer Contribution Plan. Each plan is described below.

Employer-Pay Contribution Plan (EPC)

Under EPC, contributions are paid on the employee's behalf by their public employer. However, the employee shares equally in the cost of the contribution rate either through salary reduction or in lieu of a promised pay increase. EPC contributions are not deposited to the individual member's account and are not available for refund upon termination of employment. Effective July 1, 2021, the EPC contribution rates are 29.75% for Regular members and 44.00% for Police/Fire members.

Employee/Employer Contribution Plan

Effective July 1, 2021, under this plan, the Regular member and the employer each contribute 15.50% of compensation to the System. Police/Fire members and their employers each contributed 22.75% of compensation. Employee contributions made under this plan are refundable upon termination of employment. Employer contributions are not refundable.

Service

Public employees, other than specific school employees, earn service credit for years, months, and days in a paid status. School employees, who are not regular 12-month employees, receive service credit on the basis of a full year if they work full-time for the entire school year. For these same school employees, service for a part of the school year is credited on a ratio of one and one-third days for each day worked.

Purchase of Service

Members with five years of creditable service may purchase up to five years of service credit. The member must pay the full actuarial cost associated with age and average compensation at the time of purchase. Members entering the System on or after July 1, 2015, may purchase service; however, the service will not count towards retirement eligibility unless the member has a family medical emergency.

Refund of Contributions

Members who have contributed under the Employee/Employer Contribution plan may withdraw employee contributions if terminating all employment for which contribution is required or if employed in a position ineligible for membership for at least 90 days. A refund cancels all rights of membership.

Repayment of Refunded Contributions

Members who receive a refund of employee contributions and later return to work and re-establish active membership for a period of at least six months may repay the refunded contributions and restore service credit. Repayment, including interest at the actuarially determined rate, may be in the form of a lump-sum payment or by monthly installments. Service will not be restored until repayment is complete.

PLAN SUMMARY

Benefits

The 2009 Legislature passed Senate Bill 427 which provided for various changes to the System and members newly hired into the System on or after January 1, 2010. The 2015 Legislature passed Senate Bill 406 which applies to members newly hired on or after July 1, 2015. Such changes are noted within each subject area below.

Service Retirement Vesting

Contributing members of the System earn the right to receive a retirement benefit after five years of service.

Service Retirement

Requirements for Regular members to retire with an unreduced benefit – age 65 with five years of service, **or** age 60 with ten years of service, **or** any age with thirty years of service.

For Regular members who enter the System on or after January 1, 2010, to retire with an unreduced benefit – age 65 with five years of service, **or** age 62 with ten years of service, **or** any age with thirty years of service.

For Regular members who enter the System on or after July 1, 2015, to retire with an unreduced benefit – age 65 with five years of service, **or** age 62 with ten years of service, **or** age 55 with 30 years of service, **or** at any age with 33 1/3 years of service.

Requirements for Police/Fire members to retire with an unreduced benefit – age 65 with five years of service, **or** age 55 with ten years of Police/Fire service, **or** age 50 with twenty years of Police/Fire service, **or** at any age with twenty-five years of Police/Fire service.

For Police/Fire members who enter the System on or after January 1, 2010, to retire with an unreduced benefit – age 65 with five years of service, **or** age 60 with ten years of Police/Fire service, **or** age 50 with twenty years of Police/Fire service, **or** any age with thirty years of total service.

For Police/Fire members who enter the System on or after July 1, 2015, to retire with an unreduced benefit – age 65 with five years of service, **or** at age 60 with ten years of Police/Fire service, **or** age 50 with twenty years of Police/Fire service **or** age 55 with thirty years of total service.

Only service performed in a position as a police officer or firefighter may be counted towards eligibility for retirement as Police/Fire accredited service.

Early Retirement Penalty

Members with the years of service necessary to receive a retirement benefit but who have not reached the age for an unreduced benefit may retire at any age with the benefit reduced by 4% for each full year they are under the required age.

Members entering the System on or after January 1, 2010, with the years of service necessary to receive a retirement benefit but who have not reached the age for an unreduced benefit may retire at any age with the benefit reduced by 6% for each full year they are under the required age.

Important Factors for Determining Retirement Benefits

Benefit amounts are based on three factors:

- Average compensation defined as the average of 36 highest consecutive months of compensation and, for members entering the system on or after January 1, 2010, the average of 36 highest consecutive months of compensation with a provision that each 12-month period of salary may not increase greater than 10% of the prior 12 months of salary reported. Salary increases due to promotion and assignment-related compensation are excluded from the salary cap calculation.
- 2. Service credit years, months, and days worked.
- 3. Selection of retirement plan prospective retirees may elect one of seven retirement options.

Option 1 – (the unmodified plan) for Regular members – Pays the full monthly benefit earned but provides no income protection for beneficiary after death.

Option 1 – (the unmodified plan) for Police/Fire members – Pays the full monthly benefit earned for the retiree's lifetime. A person who was the spouse or registered domestic partner at time of retirement shall be entitled, at the time of the retired employee's death or upon the attainment of age 50, whichever is later, to a benefit of 50% of the deceased retired employee's benefit earned at the time of his/her death in an eligible police/fire position. This benefit is available only if you are contributing

under the Employer Pay contribution plan (EPC) at the time of retirement. Otherwise, no beneficiary allowance is available under this option.

Option 2 – Provides an actuarially reduced lifetime benefit. Upon the death of the retiree, the same benefit continues for the lifetime of the beneficiary.

Option 3 – Provides an actuarially reduced lifetime benefit. Upon the death of the retiree, 50% of the benefit continues for the lifetime of the beneficiary.

Option 4 – Provides an actuarially reduced lifetime benefit. Upon the death of the retiree and upon the beneficiary reaching age 60, the same benefit continues for the lifetime of the beneficiary.

Option 5 - Provides an actuarially reduced lifetime benefit to retiree. Upon the death of the retiree and upon beneficiary reaching age 60, 50% of the benefit continues for the lifetime of the beneficiary.

Option 6 – Provides an actuarially reduced lifetime benefit to retiree. Upon death of the retiree, this option provides to the beneficiary a specific sum per month, which cannot exceed the monthly benefit paid to retiree.

Option 7 – Provides an actuarially reduced lifetime benefit to retiree. Upon the death of the retiree this option provides that upon the beneficiary reaching age 60, a specific sum per month, which cannot exceed the monthly benefit paid to retiree.

Post-Retirement Benefit Increases

Retirees are eligible for annual benefit increases starting the fourth year of initially receiving benefits. Benefits are increased annually on the first day of the month following the anniversary of the commencement of benefits. The increases begin at 2% in years four, five, and six; increase to 3% in years seven, eight, and nine; 3.5% in years ten, eleven, and twelve; 4% for years thirteen and fourteen; and 5% in year fifteen and each year thereafter. If the benefit outpaces inflation in the period since retirement, the increase may be capped by a rolling three-year average of the Consumer Price Index (all items).

Retirees who enter the System on or after January 1, 2010, are eligible for annual benefit increases starting the fourth year of initially receiving benefits. Benefits are increased annually on the first day of the month following the anniversary of the commencement of benefits. The increases begin at 2% in years four, five, and six; increase to 3% in years seven, eight, and nine; 3.5% in years ten, eleven, and twelve; and 4% in year thirteen and each year thereafter. If the benefit outpaces inflation in the period since retirement, the increase may be capped by a rolling three-year average of the Consumer Price Index (all items).

Retirees who enter the System on or after July 1, 2015, are eligible for annual benefit increases starting the fourth year of initially receiving benefits. Benefits are increased annually on the first day of the month following the anniversary of the commencement of benefits. The increases begin at 2% in years four, five, and six; increase to 2.5% in years seven, eight, and nine; then adjust to the lesser of 3% or the increase, if any, in the Consumer Price Index (all items) for the preceding calendar year following the tenth year and every year thereafter.

Benefit Formula

The formula used for calculating retirement benefits is as follows:

- Total Service Credit Earned (or purchased) before July 1, 2001 X 2.5% = Service Time Factor
- Total Service Credit Earned (or purchased) on and after July 1, 2001 X 2.67% = Service Time Factor
- Total Service Time Factors X Average Monthly Compensation (36 Highest Consecutive Months of Salary) = Unmodified benefit (Option 1).

For members entering the System on or after January 1, 2010, the formula for calculating retirement benefits is as follows:

- Total Service Credit Earned (or purchased) X 2.5% = Service Time Factor
- Total Service Time Factor X Average Monthly Compensation (36 Highest Consecutive Months of Salary with applicable limits*) = Unmodified benefit (Option 1).

For Regular members entering the System on or after July 1, 2015, the formula for calculating retirement benefits is as follows:

- Total Service Credit Earned X 2.25% = Service Time Factor
- Total Service Time Factor X Average Monthly Compensation (36 Highest Consecutive Months of Salary with applicable limits*) = Unmodified benefit (Option 1).

PLAN SUMMARY

*Each 12-month period of salary may not increase greater than 10% unless promotion or assignment related.

Maximum benefits are 90% of average compensation for individuals who became members before July 1, 1985, and 75% of average compensation for individuals who became members after June 30, 1985.

Actuarial reductions are based on the member's age and the beneficiary's age at the time of retirement, determined from tables supplied by the System's actuary.

Disability Retirement

Members with five or more years of service who become totally unable to perform their current or any comparable job because of an injury or mental or physical illness of a permanent nature are eligible to apply for disability retirement. The application must be filed with the System prior to termination of employment. Disability retirement benefits are calculated in the same manner as service retirement without reduction for age.

Survivor Benefits

Eligibility

Eligible survivors of a member who dies prior to retirement are entitled to a benefit if:

- 1. The member had two years of service in the two and one-half years immediately preceding death, or
- 2. The member had more than ten years of accredited service, or
- 3. The member's death was caused by an occupational disease or an accident arising out of or in the course of employment, regardless of service credit.

An additional benefit is available for a surviving spouse/registered domestic partner of an active member killed in the line of duty or in the course of employment regardless of service credit. See SB 406 below.

Eligible survivors:

- Spouse or registered domestic partner
- 2. Each unmarried dependent child under age 18, or up to age 23 if a full-time student.
- 3. Dependent parents, provided there are no other eligible survivors at the time of member's death.
- 4. If the member is unmarried at the time of death, one designated survivor beneficiary. Additional payees may also be designated to receive direct payment of a portion of the survivor beneficiary benefit.

Amount of Survivor Benefits

Generally, if a member dies with less than ten years of service, the spouse, registered domestic partner, or survivor beneficiary would receive \$450 per month and each dependent child would receive \$400 per month. The spouse, registered domestic partner, or survivor beneficiary would receive survivor benefits for his or her lifetime. Each unmarried dependent child would receive monthly benefits until age 18, or age 23 if he or she is a full-time student.

If a member dies with more than ten years of service credit, the spouse, registered domestic partner, or survivor beneficiary is entitled to a lifetime benefit. The amount of the benefit is based on the member's age, years of service, and average compensation at the time of death. A dependent child would receive the same benefits as previously described.

A member is able to designate one survivor beneficiary to receive benefits (as described above) to be paid if the member is unmarried at the time of death. A member may also designate additional payees to receive direct payment of a portion of the survivor beneficiary benefit.

SB 406

If a member is killed in the line of duty or the course of employment, the spouse of the member has additional benefit options pursuant to Senate Bill 406 of the 2015 Legislative session. The new benefit entitles the spouse to receive 50% of the salary of the member on the date of death, 100% of the retirement allowance that the member was eligible to receive based on the member's years of service obtained prior to death, or benefits in place prior to July 1, 2015, at the election of the spouse. This benefit is effective for benefits paid on or after July 1, 2015, on account of members killed in the line of duty or course of employment on or after July 1, 2013.