

**COMPREHENSIVE ANNUAL FINANCIAL REPORT  
of the  
PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
of NEVADA**

**A COMPONENT UNIT of  
the STATE of NEVADA**



**For the Fiscal Year Ended  
June 30, 2016**

**COMPREHENSIVE ANNUAL FINANCIAL REPORT  
of the  
PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
of NEVADA**

**A COMPONENT UNIT of  
the STATE of NEVADA**

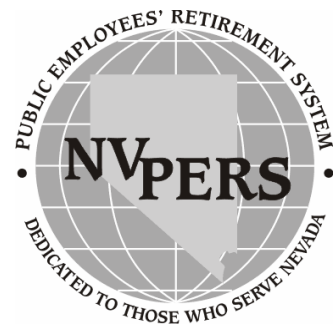
**For the Fiscal Year Ended  
June 30, 2016**

**Tina M. Leiss  
Executive Officer**

693 West Nye Lane  
Carson City, Nevada 89703  
(775) 687-4200

5820 South Eastern Avenue, Suite 220  
Las Vegas, Nevada 89119  
(702) 486-3900

[www.nvpers.org](http://www.nvpers.org)



**Prepared by PERS Staff**

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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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**Retirement Board**

**Executive Staff**

Mark R. Vincent  
Chair  
Katherine Ong  
Vice Chair  
  
Vikki Courtney  
Scott M. Gorgon  
Audrey Noriega  
Timothy M. Ross  
Kay Scherer



Tina M. Leiss  
Executive Officer  
  
Cheryl Price  
Operations Officer  
  
Steve Edmundson  
Investment Officer

December 7, 2016

Dear Chairman and Members of the Board:

It is a pleasure to present the Comprehensive Annual Financial Report (CAFR) 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, 2016.

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 as promulgated or adopted by the Governmental Accounting Standards Board (GASB). In management's opinion, the financial statements present fairly the financial position of the System at June 30, 2016, 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 2016, the System had 202 participating employers, 105,167 active members, and 61,180 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 125.

Included in the Financial Section of this CAFR, beginning on page 24, is 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 statements comparing the current and previous year.

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

---

693 W. Nye Lane  
Carson City, NV 89703  
(775) 687-4200  
Fax: (775) 687-5131

Toll Free: 1-866-473-7768  
Website: [www.nvpers.org](http://www.nvpers.org)

5820 S. Eastern Avenue, Suite 220  
Las Vegas, NV 89119  
(702) 486-3900  
Fax: (702) 678-6934

## **INTRODUCTORY SECTION**

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### **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 2015 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.

There were several bills that passed in the 2015 Legislative session that affected PERS and the benefits we provide. Senate Bill 406 passed and was implemented for members enrolled on or after July 1, 2015. This bill affected PERS and the Legislators' and Judicial Retirement Systems.

The Assistant Investment Officer job title was changed to the Chief Financial Officer through Senate Bill 12 and the System hired a General Counsel through Senate Bill 420. Senate Bill 69 as passed provided changes to provisions on senior judges. Assembly Bill 180 revised the provisions governing biennial audit requirements for PERS.

#### **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.

Managing the funding issue internally to PERS is paramount to 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 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.

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 Award (GFOA) for excellence in financial reporting for the Comprehensive Annual Financial Report, and the Government Finance Officers Award (GFOA) for excellence in financial reporting for the Popular Annual Financial Report.

#### **Information Technology**

The System is dedicated to maintaining an efficient pension management system that is capable of providing for all operational needs. Technology efforts are driven by business goals as well as statutory and pension fund industry mandates. Highlights in the area of information technology this year include disaster recovery site testing including business processing and functionality testing. Ongoing computer and network security measures are a part of daily processes. This year also included hardware and software upgrades and server virtualization testing. The Information Technology department has continued to streamline and strengthen policies and procedures for completion of work orders and change management.

**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 year.

**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 independent auditors and the System's internal audit staff.

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 concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived. 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 proper financial controls are in place. 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.

## **INTRODUCTORY SECTION**

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The following schedule is a summary of the pension trust funds' additions and deductions for the years ended June 30:

	2016	2015
Additions	\$ 2,541,875,457	\$ 3,031,519,210
Deductions	2,150,566,735	1,995,880,183
Change in net position	\$ <u>391,308,722</u>	\$ <u>1,035,639,027</u>

Additions decreased approximately \$489.6 million from fiscal year 2015, due primarily to a decrease in net investment income. Deductions increased by \$154.7 million between 2015 and 2016 due to increases in benefit payouts and refunds.

### **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 the truncated average remaining period of all prior amortization layers until the average remaining amortization period is less than 20 years (at that point, amortization periods of 20 years will be used), in addition to other significant actuarial assumptions detailed beginning on page 81. Plan rates in effect for fiscal year ended June 30, 2016, are presented on page 36 in the Financial Section of this report. In addition, Required Supplementary Information on page 48 shows changes in employers' net pension liability, related ratios, and ten-year schedules of employer contributions and the money-weighted rate of return on investments. The ten-year schedules of funding progress are on page 90 of the Actuarial Section. The actuarial funded ratio for all members is 74.1% in 2016, an increase from 73.2% in fiscal year 2015.

### **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 1,900 individual securities from 22 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, 98% 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 2016 was \$34.9 billion. The portfolio return objective includes a premium over the Consumer Price Index (CPI). This premium ranged from 3.0% to 4.5% over time. On that basis the total fiscal year 2016 inflation return objective was 5.5%. The System's total return (gross of fees) on investments for that same time period was 2.3%, which includes both realized and unrealized gains. Fiscal year 2016 returns were primarily driven by positive returns from U.S. stocks and bonds which were tempered by negative returns from international stocks.

The fund's annualized rate of return (gross of fees) is 9.4% since inception (32 years) versus the long-term actuarial funding objective of 8%. The fund is competitive on a risk-adjusted basis, ranking in the top 10% of public funds for that same time frame. The investment section, beginning on page 60, 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 comprehensive annual financial report for the fiscal year ended June 30, 2015 (see page 17). This was the 26th 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 comprehensive annual 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, 2016 (see page 18). 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 Report of Independent Auditors, Consultant's Report of Investment Activity, and the actuary's certifications are included in this report. The System's consultants are listed on pages 15 and 60.

## INTRODUCTORY SECTION

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### 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 2016.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Tina M. Leiss". The signature is written in a cursive, flowing style.

Tina M. Leiss  
Executive Officer

**ADMINISTRATIVE PERSONNEL**

**Current**

**PUBLIC EMPLOYEES' RETIREMENT BOARD**

Mark R. Vincent	Chairman	2018
Katherine Ong	Vice Chairman	2019
Vikki Courtney	Member	2017
Scott M. Gorgon	Member	2019
Audrey Noriega	Member	2017
Timothy Ross	Member	2018
Kay Scherer	Member	2017

Terms expire on June 30 of year noted.

**RETIREMENT STAFF**

Tina M. Leiss	Executive Officer
Steve Edmundson	Investment Officer
Cheryl Price	Operations Officer
Lauren Larson	Chief Financial Officer
Christopher Nielsen	General Counsel
Kabrina Feser	Administrative Analyst

Division Supervisors:

Jean Barnett	Accounting
Sonya Hellwinkel	Employer, Production & Pension Services
Charlie Park	Information Technology
Carrie Harrison	Internal Audit
Walter Zeron	Member & Retiree Services
Kristina Kibbe	Support Services

**MEDICAL ADVISORS**

B Bottenberg, D.O., Carson City, Nevada  
Kathy Stoner, RN, CCM, Minden, Nevada

**POLICE AND FIREFIGHTERS' RETIREMENT FUND ADVISORY COMMITTEE**

Richard Tiran	Chairman	2018
Brian Wolfgram	Vice Chairman	2020
Bill Ames	Member	2020
Brett Fields	Member	2019
Robert Schreihans	Member	2019

Terms expire on June 30 of year noted.

**THE SYSTEM'S ADVISORS**

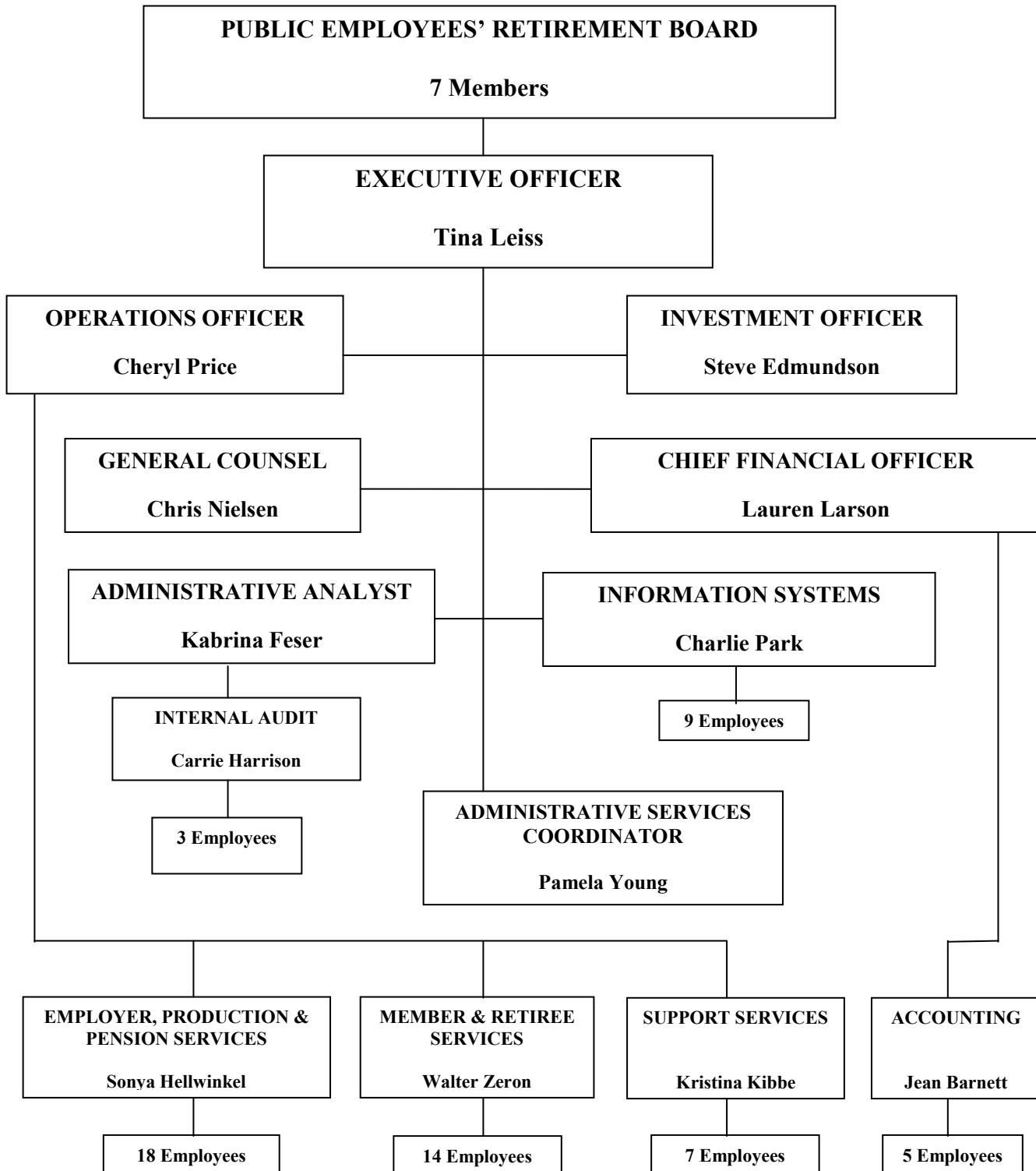
Consulting Actuary – Segal Consulting, San Francisco, California  
Independent Auditors – CliftonLarsonAllen LLP, Baltimore, Maryland  
Investment Consultants – Callan Associates, Atlanta, Georgia  
Peavine Capital, Reno, Nevada

Note: A list of investment professionals who provide services to PERS can be found on page 60. A schedule of fees and commissions paid to investment professionals can be found beginning on page 73.



# ORGANIZATIONAL CHART

## Current





Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**Public Employees' Retirement System  
of Nevada**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2015**

A handwritten signature in black ink, reading "Jeffrey R. Emer".

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2016***

Presented to

***Public Employees' Retirement System of Nevada***

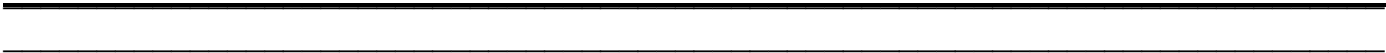
In recognition of meeting professional standards for  
plan funding and administration as  
set forth in the Public Pension Standards.

*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)

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is fluid and cursive.

Alan H. Winkle  
Program Administrator



## **FINANCIAL SECTION**

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CliftonLarsonAllen LLP  
 CLAconnect.com

## INDEPENDENT AUDITORS' REPORT

Public Employees' Retirement Board  
 Of the State of Nevada  
 Carson City, Nevada

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Public Employees' Retirement System of Nevada (the System) a component unit of the State of Nevada, which comprise the statement of fiduciary net position as of June 30, 2016, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, as listed in the table of contents.

### ***Management's Responsibility for the Financial Statements***

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

### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2016, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matter***

As discussed in Note 1, the financials statements of the System are intended to present the fiduciary net position and changes in fiduciary net position of only that portion of the State of Nevada which are attributable to the transactions of the System. They do not purport to, and do not present fairly the financial position of the State of Nevada as of June 30, 2016, and the changes in its financial position, for the year then ended in accordance with accounting principles general accepted in the United States of America. Our opinion is not modified with respect to this matter.

## FINANCIAL SECTION

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Public Employees' Retirement Board  
Of the State of Nevada

### **Other Matters**

#### *Prior-Year Comparative Information*

We have previously audited the System's 2015 financial statements, and we expressed an unmodified opinion on the statement of fiduciary net position as of June 30, 2015, and the related statement of changes in fiduciary net position for the year then ended in our report dated December 4, 2015. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2015, is consistent, in all material respects, with the audited financial statements from which it has been derived.

The financial statements include partial prior-year comparative information. Such information does not include all of the information required to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2015, from which such partial information was derived.

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes in net pension liability and related ratios, employer contributions and investment returns and related notes, as listed on the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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 Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's financial statements. The schedule of administrative expenses – GAAP basis, schedule of administrative expenses – non-GAAP budgetary basis, reconciliation of GAAP basis administrative expenses to non-GAAP budgetary basis, schedule of investment expenses, schedule of payments to consultants and the combining schedules of fiduciary net position and changes in fiduciary net position, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the financial statements for the year ended June 30, 2016.

These schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the financial statements as a whole.



**CliftonLarsonAllen LLP**

Baltimore, Maryland  
December 7, 2016

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### MANAGEMENT'S DISCUSSION AND ANALYSIS

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 fiscal year ended June 30, 2016. The MD&A is designed to focus on the current year's activities, resulting changes, and currently known facts while also showing three-year trends. 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 Financial Statements**

The financial statements consist of: (1) the Statement of Fiduciary Net Position, (2) the Statement of Changes in Fiduciary Net Position, (3) the Notes to the Financial Statements, and (4) the Required Supplementary Information. Other supplementary information is also presented.

The **Statement of Fiduciary Net Position** includes all of the System's pension trust fund assets, liabilities, and the 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 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.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

**Financial Highlights**

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

	<b>2016</b>	<b>2015</b>	<b>2014</b>
Total investments	\$ 34,617.2	\$ 34,148.2	\$ 33,183.4
Net investment income	778.7	1,395.3	5,031.4
Contributions	1,761.2	1,633.4	1,557.4
Benefit payments	2,111.9	1,958.2	1,816.7
Refunds of contributions	26.8	25.6	23.0
Transfers of contributions	-	2.4	1.0
Administrative expenses	10.6	9.6	9.6
Plan fiduciary net position	\$ 35,002.0	\$ 34,610.7	\$ 33,575.1
Actuarial funded ratio	74.1%	73.2%	71.5%

Total pension liability as of June 30, 2016, was \$48,459,161,570.

Plan fiduciary net position as a percentage of total pension liability was 72.2%.

**Financial Analysis**

The fair value of investments for fiscal year 2016 increased by 1.4% from \$34,148.2 million in 2015 to \$34,617.2 million. Investment income for 2016 was \$778.7 million compared to \$1,395.3 million for 2015. The PERS investment program returned 2.3% in fiscal year 2016 below its long-term actuarial goal of 8%. The 9.4% annualized return since inception (32 years) exceeds the actuarial objective.

**FINANCIAL SECTION****MANAGEMENT'S DISCUSSION AND ANALYSIS**

The following are summary comparative statements of the System.

**CONDENSED STATEMENT OF FIDUCIARY NET POSITION**

	<u>As of</u> <u>June 30, 2016</u>	<u>As of</u> <u>June 30, 2015</u>	<u>As of</u> <u>June 30, 2014</u>	<b>Percentage Increase/ (Decrease) from 2015 to 2016</b>
Cash and cash equivalents	\$ 209,333,614	\$ 264,196,276	\$ 1,022,818,228	(20.8) %
Receivables	232,182,181	212,623,231	219,035,861	9.2
Pending trades receivable	120,155,081	129,448,044	136,040,433	(7.2)
Investments, at fair value	34,617,238,271	34,148,195,967	33,183,431,470	1.4
Collateral on loaned securities, at fair value	411,128,913	373,833,323	541,523,662	10.0
Property and equipment, net	3,872,142	3,950,191	3,891,904	(2.0)
Other assets	2,916,621	3,633,781	2,240,330	(19.7)
Total assets	<u>35,596,826,823</u>	<u>35,135,880,813</u>	<u>35,108,981,888</u>	1.3
Accounts payable and accrued expenses	11,279,040	10,447,899	12,822,827	8.0
Pending trades payable	172,389,964	140,879,407	979,554,242	22.4
Obligations under securities lending activities	411,128,913	373,833,323	541,523,662	10.0
Total liabilities	<u>594,797,917</u>	<u>525,160,629</u>	<u>1,533,900,731</u>	13.3
Net position restricted for pensions	<u>\$ 35,002,028,906</u>	<u>\$ 34,610,720,184</u>	<u>\$ 33,575,081,157</u>	1.1 %

Pending trades payable increased 22.4% between 2015 and 2016. Pending trades fluctuate from year to year and are unpredictable.

The net position increased between 2015 and 2016 by 1.1% and increased 3.1% between 2014 and 2015.

**MANAGEMENT'S DISCUSSION AND ANALYSIS**

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

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<b>Percentage Increase/ (Decrease) from 2015 to 2016</b>
Contributions	\$ 1,761,234,219	\$ 1,633,441,048	\$ 1,557,415,536	7.8 %
Net investment gain	778,696,864	1,395,292,096	5,031,434,843	(44.2)
Other income	1,944,374	2,786,066	1,941,816	(30.2)
Total additions	<u>2,541,875,457</u>	<u>3,031,519,210</u>	<u>6,590,792,195</u>	(16.2)
Benefit payments	2,111,858,380	1,958,237,104	1,816,733,645	7.8
Refunds of contributions	26,757,635	25,637,753	23,047,743	4.4
Transfer of contributions	-	2,356,700	990,121	(100.0)
Administrative expenses	10,573,149	9,648,626	9,591,311	9.6
Other expenses	1,377,571	-	1,259	100.0
Total deductions	<u>2,150,566,735</u>	<u>1,995,880,183</u>	<u>1,850,364,079</u>	7.8
Change in net position	391,308,722	1,035,639,027	4,740,428,116	(62.2)
Net position, beginning of year	<u>34,610,720,184</u>	<u>33,575,081,157</u>	<u>28,834,653,041</u>	3.1
Net position, end of year	<u>\$ 35,002,028,906</u>	<u>\$ 34,610,720,184</u>	<u>\$ 33,575,081,157</u>	1.1 %

Contributions increased between 2015 and 2016 by 7.8% as compared to 2014 and 2015, which increased 4.9%. Breaking this down into its components reveals that employer contributions increased by 9.3% between 2015 and 2016, employee contributions increased by 13.6%, and repayments and purchases of service decreased by 25.2% between 2015 and 2016.

Benefit payments rose 7.8% between 2015 and 2016 and 7.8% between 2015 and 2014. The increase in benefit payments can be attributed to cost of living increases and retirement inceptions. As of June 30, 2016, there were 54,615 retired members.

Refunds of contributions increased 4.4% between 2015 and 2016, compared to an 11.2% decrease in refunds between 2014 and 2015. Members no longer employed in a position eligible for membership in the System, who are eligible for a refund, may apply for a refund of contributions, making this number unpredictable from year to year.

Transfers of contributions consist of contributions associated with judges who choose to transfer from PERS to the Judicial Retirement System (JRS). There were no transfers between PERS and JRS in 2016. Similar to refund requests, the transfers of members and associated contributions from PERS to JRS are unpredictable from year to year.

The fiscal year 2016 net position restricted for pensions increased by 1.1% from 2015. This is the seventh year in a row the System has increased its net position.

**FINANCIAL SECTION****STATEMENT OF FIDUCIARY NET POSITION**

June 30, 2016

(With Comparative Totals for June 30, 2015)

<b>ASSETS</b>	<b>2016</b>	<b>2015</b>
Cash and cash equivalents	\$ 209,333,614	\$ 264,196,276
Receivables:		
Contributions receivable	134,973,348	121,288,992
Pending trades receivable	120,155,081	129,448,044
Accrued investment income	97,208,833	91,334,239
Total receivables	<u>352,337,262</u>	<u>342,071,275</u>
Investments, at fair value:		
Fixed income securities	9,815,487,784	9,449,725,984
Marketable equity securities	15,156,704,122	14,600,247,164
International securities	6,627,477,668	7,324,919,557
Real estate	1,584,377,325	1,454,303,113
Private equity	1,433,191,372	1,319,000,149
Total investments	<u>34,617,238,271</u>	<u>34,148,195,967</u>
Collateral on loaned securities, at fair value	411,128,913	373,833,323
Property and equipment	41,550,920	40,412,280
Accumulated depreciation	<u>(37,678,778)</u>	<u>(36,462,089)</u>
Net property and equipment	3,872,142	3,950,191
Other assets	<u>2,916,621</u>	<u>3,633,781</u>
Total plan assets	<u>35,596,826,823</u>	<u>35,135,880,813</u>
<b>LIABILITIES</b>		
Accounts payable and accrued expenses	11,279,040	10,447,899
Pending trades payable	<u>172,389,964</u>	<u>140,879,407</u>
	183,669,004	151,327,306
Obligations under securities lending activities	<u>411,128,913</u>	<u>373,833,323</u>
Total plan liabilities	<u>594,797,917</u>	<u>525,160,629</u>
<b>NET POSITION</b>		
Net position restricted for pensions	\$ <u><u>35,002,028,906</u></u>	\$ <u><u>34,610,720,184</u></u>

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

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**

For the Year Ended June 30, 2016

(With Comparative Totals For the Year Ended June 30, 2015)

	2016	2015
<b>ADDITIONS</b>		
Contributions:		
Employer	\$ 1,569,709,596	\$ 1,436,652,815
Plan members	129,788,195	114,302,545
Repayment and purchase of service	61,736,428	82,485,688
Total contributions	1,761,234,219	1,633,441,048
Investment income:		
Net appreciation (depreciation) in fair value of investments	(72,040,745)	520,754,925
Interest	191,695,946	261,392,850
Dividends	552,629,496	523,536,563
Other investment income	139,896,529	124,491,007
	812,181,226	1,430,175,345
Less investment fees and other expense:	(39,307,761)	(39,577,974)
Net investment income	772,873,465	1,390,597,371
Securities lending income	8,315,687	6,395,913
Less securities lending expense	(2,492,288)	(1,701,188)
Net securities lending income	5,823,399	4,694,725
Total net investment income	778,696,864	1,395,292,096
Other income	1,944,374	2,786,066
Total additions	2,541,875,457	3,031,519,210
<b>DEDUCTIONS</b>		
Benefit payments:		
Retirement and survivor benefits	2,007,720,431	1,855,326,226
Disability	104,125,858	102,897,584
Post-retirement increases	12,091	13,294
Refunds of contributions	26,757,635	25,637,753
Transfers of contributions	-	2,356,700
Administrative expenses	10,573,149	9,648,626
Other expenses	1,377,571	-
Total deductions	2,150,566,735	1,995,880,183
<b>Change in net position</b>	391,308,722	1,035,639,027
<b>Net position:</b>		
Beginning of year	34,610,720,184	33,575,081,157
End of year	\$ 35,002,028,906	\$ 34,610,720,184

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

**NOTES TO FINANCIAL STATEMENTS**

**NOTE 1 – Summary of Significant Accounting Policies and Plan Asset Matters**

Financial Reporting Entity

The 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 Board is appointed by the Governor of the State of Nevada.

The System has developed criteria in accordance with standards issued by GASB to determine whether other state agencies, boards, and commissions, which benefit the members of the System, should be included within its financial reporting entity as component units. A component unit is defined as a legally separate organization for which officials of the System are financially accountable. In addition, component units can be other organizations for which the nature and significance of their relationship with the System are such that exclusion would cause the System's financial statements to be misleading or incomplete.

In accordance with GASB, the following criteria are used when evaluating financial accountability: The ability of the System to appoint a voting majority of the organization's governing body and (1) the ability to impose its will on the other organization or (2) the potential for the organization to provide specific financial benefits to or impose specific financial burdens on the System. In addition, the System may be financially accountable if an organization is fiscally dependent on the System regardless of whether the organization has a separately elected governing board, a governing board appointed by a higher level of government, or a jointly appointed board.

The System has no relationship with another entity that meets the above criteria 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 GASB because 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 has adopted the pronouncements of GASB, which is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

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 made. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Unfunded portions of actuarially determined liabilities for retirement benefits are not recorded in the financial statements.

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**NOTES TO FINANCIAL STATEMENTS**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. This fund invests 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.

Contributions Receivable

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

Benefits Payable

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 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.



### NOTES TO FINANCIAL STATEMENTS

Plan investments are reported at fair value. Fair value is defined as the price at which an asset passes in a current transaction from a willing seller to a willing buyer, other than in a forced liquidation or sale. 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. In general, however, fixed income securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings. The fair value of real estate investments is established by an independent third party valuation firm in conjunction with Member Appraisal Institute (MAI) independent appraisals. 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 adjusted for subsequent cash flow activities through June 30, 2016. 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 consists of furniture, equipment, computer hardware, and software at cost with 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 assessment of an administrative fee for each member and benefit recipient. Monthly fees at June 30, 2016, were \$3.12 for each Regular member and benefit recipient and \$3.37 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.

#### Financial Statement Presentation

Comparative data shown for the prior year has been extracted from the June 30, 2015, financial statements. Fiscal year 2015 data has been presented to facilitate financial analysis but is not considered full disclosure of transactions for that year.

**NOTES TO 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 security is classified as international.

New Accounting Pronouncement

For the year ended June 30, 2016, the System adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*. This Statement requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques.

**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, 2016, the number of participating public employers and active members was:

<u>Entity Type</u>	<u>Number of Employers</u>	<u>Number of Members</u>
State of Nevada and Related Agencies	22	18,510
University of Nevada System	2	3,681
Schools	57	48,590
Counties	16	12,326
Cities	19	8,925
Hospitals	8	4,089
Utility, Irrigation, and Sanitation Districts	18	816
Special Districts and Agencies	60	8,230
	<u>202</u>	<u>105,167</u>

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

**NOTES TO FINANCIAL STATEMENTS**

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:

	<u>2016</u>	<u>2015</u>
Regular retired members:		
Service retirees	47,899	45,508
Beneficiaries and survivors	<u>5,585</u>	<u>5,369</u>
	<u>53,484</u>	<u>50,877</u>
Police/Fire retired members:		
Service retirees	6,716	6,345
Beneficiaries and survivors	<u>980</u>	<u>937</u>
	<u>7,696</u>	<u>7,282</u>
Total benefit recipients	<u>61,180</u>	<u>58,159</u>
Inactive members:		
Regular	14,795	14,206
Police/Fire	<u>844</u>	<u>826</u>
Total inactive members	<u>15,639</u>	<u>15,032</u>
Active members:		
Regular	93,030	91,124
Police/Fire	<u>12,137</u>	<u>11,984</u>
Total active members	<u>105,167</u>	<u>103,108</u>
Total retired, active, and inactive membership	<u>181,986</u>	<u>176,299</u>

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 members entering the System on or after January 1, 2010. 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 multiplier is 2.67% of average compensation. For members entering the System on or after January 1, 2010, there is a 2.5% multiplier for all years of service. Regular members entering the System on or after July 1, 2015, have a 2.25% multiplier. 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.

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**NOTES TO FINANCIAL STATEMENTS**

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

**Vesting**

Regular members are eligible for retirement at age 65 with five years of service, at age 60 with ten years of service, or at any age with thirty 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 age 62 with ten years of service, or any age with thirty 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 ten 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 are eligible for retirement at age 65 with five years of service, at age 55 with ten years of service, at age 50 with twenty years of service, or at any age with twenty-five 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 age 60 with ten years of service, or age 50 with twenty years of service, or at any age with thirty 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.

**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. 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.

**Termination**

Upon termination or partial termination of the System, all accrued benefits that are funded become 100% vested and non-forfeitable.

**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.

**NOTES TO FINANCIAL STATEMENTS**

Although 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.

**Rates in effect for fiscal year ended June 30, 2016, were as follows:**

<u>Regular Employees</u>	<u>Funding Basis*</u>	<u>Statutory Rate</u>
Employer-pay plan	27.80%	28.00%
Employee/employer plan (matching rate)	14.45	14.50
 <u>Police/Fire Employees</u>		
Employer-pay plan	39.50%	40.50%
Employee/employer plan (matching rate)	20.34	20.75

\* From June 30, 2015, actuarial valuation

For fiscal year 2016 contributions totaling \$1,761,234,219 (\$1,569,709,596 employer and \$191,524,623 employee) were made in accordance with statutory rates.

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 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.

Under the Employer-Pay provisions, the contributions made by employers on behalf of employees are not credited to the member's account and are not refunded upon termination. 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 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.

**NOTES TO FINANCIAL STATEMENTS**

**NOTE 4 – Retirement Fund Contributions of PERS’ Employees**

Administrative employees of PERS (as a participating employer) are 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 \$855,514 for the year ended June 30, 2016.

**NOTE 5 – Deposit and Investment Disclosures**

Investment Policy

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.” Additionally, the System has established limits on the concentration of investments in any single issuer or class of issuer or managed by a single investment firm.

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, 2016:

Asset Class	Target Allocation
Domestic equity	42%
International equity	18
Domestic fixed income	30
Private markets*	10
Total	100%

\*As of June 30, 2016, the Private Markets allocation includes 5% Private Real Estate and 5% Private Equity.

Rate of Return

For the year ended June 30, 2016, the annual money-weighted return on pension plan investments was 2.27%. The money-weighted rate of return expresses investment performance adjusted for cash flows.

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.

### NOTES TO FINANCIAL STATEMENTS

#### 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, 2016, the carrying amount of the System's commercial cash deposits was \$4,636,977 and the commercial bank balance was \$11,632,402. 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.

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 (including securities or others held in custody) with a limit of \$850,000,000.

#### 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 as follows:

- Direct obligations of the U.S. Treasury including bills, 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.

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.

Short selling and the use of leverage is not permitted.



## NOTES TO FINANCIAL STATEMENTS

The following table shows the credit rating of fixed income and short-term securities as of June 30, 2016.

## QUALITY RATING

Investment Type (in millions)	BBB	Not Rated	Total
Cash equivalents*	\$ -	\$ 171.6	\$ 171.6
Corporate bonds and other	<u>0.6</u>	<u>-</u>	<u>0.6</u>
Total	<u>\$ 0.6</u>	<u>\$ 171.6</u>	<u>\$ 172.2</u>

\*Cash equivalents consist of investments in Invesco Treasury Portfolio Short-Term Investments Trust.

Quality Ratings above have been provided by the System's custodial bank, The Bank of New York Mellon. The System additionally holds \$9,815.0 million in Treasury securities which are explicitly guaranteed by the U.S. Government.

The above table does not include commercial cash of \$4.6 million and cash in custodial bank of \$32.5 million.

*Concentration of credit risk* is the risk of loss attributed to the magnitude of the System's investment in a single issuer. The System mitigates concentration of credit risk as policy requires 100% of the fixed income portfolio be invested in U.S. Treasury securities. There is no credit risk assigned to U.S. Treasury securities as these are explicitly guaranteed by the U.S. Government.

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 counsel's portfolio. The System's investment policy requires no more than 10% of counsel's portfolio shall be invested in any one security.

In addition, investment policy requires that no more than 10% of the System's 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 PERS.

No individual asset exceeded 5% of the total portfolio during the fiscal year.

*Interest rate risk* is the risk that changes in interest rates will adversely affect the fair value of an investment or a deposit. The System mitigates interest rate risk through portfolio diversification as discussed previously. The System's investment policy and investment portfolio counsel mandates permit investment in all securities within the Barclays U.S. Treasury Index.



**NOTES TO FINANCIAL STATEMENTS**

The actual years to maturity 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, 2016.

**INVESTMENT MATURITIES**

(in years)

<b>Investment Type</b> (in millions)	<b>Less than 1</b>	<b>1 to 5</b>	<b>6 to 10</b>	<b>More than 10</b>	<b>Total</b>
Cash equivalents*	\$ 171.6	\$ -	\$ -	\$ -	\$ 171.6
Corporate bonds and other	-	-	0.6	-	0.6
Treasury securities	47.8	6,291.7	1,880.5	1,595.0	9,815.0
<b>Total</b>	<u>\$ 219.4</u>	<u>\$ 6,291.7</u>	<u>\$ 1,881.1</u>	<u>\$ 1,595.0</u>	<u>\$ 9,987.2</u>

\*Cash equivalents consist of investments in Invesco Treasury Portfolio Short-Term Investments Trust.

Investment maturities above have been provided by the System’s custodial bank, The Bank of New York Mellon.

The above table does not include commercial cash of \$4.6 million and cash in custodial bank of \$32.5 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 equities of 18% and allows investment in all securities within the MSCI EAFE Index.

## NOTES TO FINANCIAL STATEMENTS

The System's exposure to foreign currency risk in U.S. dollars as of June 30, 2016, is summarized in the following table.

## CURRENCY BY INVESTMENT AND FAIR VALUE

(in millions)

<b>Currency Type</b>	<b>Equity</b>	<b>Pending Transactions</b>	<b>Cash</b>	<b>Total</b>
Australian Dollar	\$ 429.1	(0.2)	\$ 0.4	\$ 429.3
British Pound Sterling	1,161.1	(0.4)	1.5	1,162.2
Danish Krone	117.2	-	-	117.2
Euro	1,763.1	(0.8)	(0.2)	1,762.1
Hong Kong Dollar	184.6	(0.1)	1.0	185.5
Israeli Shekel	35.3	-	0.2	35.5
Japanese Yen	1,379.9	(3.4)	4.3	1,380.8
New Zealand Dollar	11.2	-	0.1	11.3
Norwegian Krone	38.2	-	0.1	38.3
Singapore Dollar	79.5	(0.1)	0.6	80.0
Swedish Krona	164.2	-	0.1	164.3
Swiss Franc	548.8	-	-	548.8
Total	\$ <u>5,912.2</u>	\$ <u>(5.0)</u>	\$ <u>8.1</u>	\$ <u>5,915.3</u>

*Derivatives*

The System held no derivatives in the portfolio as of June 30, 2016.

**NOTES TO FINANCIAL STATEMENTS**

*Securities Lending*

The System maintains a securities lending program by authorization of NRS 286.682, the “prudent person” standard previously described. Securities loaned under this program consist of U.S. Treasury Obligations, corporate fixed income securities, international fixed income securities, equity securities, and international equity securities. Collateral received consists of cash and securities issued by the U.S. Government, its agencies, or instrumentalities. The System has no discretionary authority to sell or pledge collateral received.

At June 30, 2016, the weighted average maturities were 2 days for loans outstanding and 1 day for collateral/reinvestments. Collateral received for the lending of U.S. securities must equal at least 102% of fair value, plus accrued interest in the case of fixed income securities. Collateral received for the lending of international securities must equal at least 105% of fair value, plus accrued interest in the case of fixed income securities. In September 2013 the Board elected to allow only overnight repurchase agreements collateralized by U.S. government obligations issued or guaranteed by the U.S. Government, its agencies or instrumentalities within the reinvestment portfolio. This action effectively eliminated risk in the securities lending collateral reinvestment portfolio since securities issued or guaranteed by the United States government are considered to be free of credit risk. In addition, PERS’ securities lending agent provides full indemnification against losses incurred in the collateral reinvestment program.

The System has no credit risk exposure to borrowers because the associated value of the collateral held exceeds the value of the securities borrowed. At June 30, 2016, the System had collateral, on an operational basis, of 102%. Collateral consisted of cash and securities issued by the U.S. Government, its agencies, or instrumentalities. In addition, securities loaned may not exceed 33⅓% of the total portfolio. Loss indemnification due to borrower default is provided by PERS’ securities lending agent. There were no losses during the period resulting from borrower default.

The fair value of securities loaned at June 30, 2016, was \$3,954,057,876. Cash collateral received in securities lending arrangements is reported on the Statement of Fiduciary Net Position as an asset with a related liability.

The following table represents the collateral received for the outstanding securities lending transactions as of June 30, 2016.

	<b>Cash</b>	<b>Non-Cash</b>	<b>Total</b>
Collateral Received	\$ 411,128,913	\$ 3,635,396,664	\$ 4,046,525,577

For fiscal year 2016 the net income from security lending was \$5,823,399.

NOTES TO FINANCIAL STATEMENTS

**NOTE 6 – Fair Value**

The following table presents fair value measurements as of June 30, 2016:  
(millions)

	<u>6/30/2016</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
<b>Investments by fair value level</b>				
Fixed income	\$ 9,815.5	\$ 9,814.9	\$ 0.6	\$ -
Equities				
Common stock	21,754.0	21,754.0	-	-
Preferred securities	30.2	30.2	-	-
Total equity securities	<u>21,784.2</u>	<u>21,784.2</u>	<u>-</u>	<u>-</u>
Total investments by fair value level	\$ <u>31,599.7</u>	\$ <u>31,599.1</u>	\$ <u>0.6</u>	\$ <u>-</u>
<b>Investments measured at the net asset value (NAV)</b>				
Private Equity	1,433.2			
Real Estate	<u>1,584.4</u>			
Total investments measured at the NAV	3,017.6			
Total investments	\$ <u><u>34,617.3</u></u>			

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using market observable inputs.

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

The following table presents investments measured at the NAV as of June 30, 2016:  
(millions)

	<u>Fair Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency</u>	<u>Redemption Notice Period</u>
Private Equity*	\$ 1,433.2	\$ 1,130	-	-
Real estate separate accounts**	<u>1,584.4</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total investments measured at the NAV	\$ <u><u>3,017.6</u></u>	\$ <u><u>1,130</u></u>	<u>-</u>	<u>-</u>

\*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.

**NOTES TO FINANCIAL STATEMENTS**

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.

Due to the reporting time frame of private investment fund managers, which report performance on a one-quarter lag from the end of the performance quarter, estimated market values as of June 30, 2016, are based on actual March 31, 2016, market values, adjusted for cash flows and common stock that was distributed but not yet sold as of June 30, 2016.

\*\*Real estate separate accounts. This type includes two core real estate separate accounts that invest in U.S. industrial, multi-family, office, and retail properties. The fair values of the investments in this type have been determined using the NAV per share. 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 wholly owns the properties held in each separate account. The properties can be put up for sale at any time.

**NOTE 7 – Net Pension Liability**

The components of the net pension liability at June 30, 2016, were as follows:

Total pension liability	\$ 48,459,161,570
Plan fiduciary net position	<u>(35,002,028,906)</u>
Net pension liability	<u>\$ 13,457,132,664</u>

Plan fiduciary net position as a percentage of the total pension liability	72.2%
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**Actuarial Assumptions**

The total pension liability was determined as part of the GASB Statement No. 67 actuarial valuation as of June 30, 2016. It is important to note that the new GASB rules only redefine pension liability for financial reporting purposes. The System continues to develop and adopt funding policies under current practices.

**NOTES TO FINANCIAL STATEMENTS**

The actuarial assumptions were based on the results of an experience study for the period from July 1, 2006, through June 30, 2012.

The following assumptions were applied to all periods included in the measurement:

Inflation	3.50%
Salary increases	4.60% to 9.75% for Regular members and 5.25% to 14.50% for Police/Fire members, vary by service, including inflation
Investment rate of return	8.00%, including inflation

The Board evaluates and establishes expected real rates of return (expected returns, net of investment expenses and inflation) for each asset class. The Board reviews these capital market expectations annually. The System's current long-term geometric expected real rates of return for each asset class included in the fund's investment portfolio as of June 30, 2016, are included in the following table:

<u>Asset Class</u>	<u>Long-Term Geometric Expected Real Rate of Return*</u>
Domestic Equity	5.50%
International Equity	5.75%
Domestic Fixed Income	0.25%
Private Markets	6.80%

\*As of June 30, 2016, PERS' long-term inflation assumption was 3.5%.

Discount Rate

The discount rate used to measure the total pension liability was 8.00% as of June 30, 2016. 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, 2016.

Future Payroll Growth

In projecting plan contributions as described above, Fund experience was projected to be consistent with the valuation assumptions, except that payroll was projected to grow at 5% per year.

**NOTES TO FINANCIAL STATEMENTS**

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

The following presents the net pension liability using the discount rate of 8.00%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate:

<b>1% Decrease (7.00%)</b>	<b>Current Discount Rate (8.00%)</b>	<b>1% Increase (9.00%)</b>
<u>\$ 19,725,527,478</u>	<u>\$ 13,457,132,664</u>	<u>\$ 8,241,905,366</u>

**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.

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## REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY  
AND RELATED RATIOS2013 to 2016  
(in millions)

	<u>2016</u>
<b>Total pension liability</b>	
Service cost	\$ 1,086.5
Interest	3,687.0
Change of plan provisions	-
Difference between expected and actual experience	(245.8)
Change of assumptions	-
Benefit payments, including refunds	(2,138.6)
Other changes	-
Net change in total pension liability	<u>2,389.1</u>
<b>Total pension liability-beginning</b>	<u>46,070.1</u>
<b>Total pension liability-ending (a)</b>	<u>\$ 48,459.2</u>
<b>Plan fiduciary net position</b>	
Contributions-employer	\$ 1,569.7
Contributions-employee	130.3
Net investment income	778.7
Benefit payments, including refunds	(2,138.6)
Administration expenses	(10.6)
Purchase of Service	61.2
Other	0.6
Net change in plan fiduciary net position	<u>391.3</u>
<b>Plan fiduciary net position-beginning</b>	<u>34,610.7</u>
<b>Plan fiduciary net position-ending (b)</b>	<u>\$ 35,002.0</u>
<b>Net pension liability-ending (a) - (b)</b>	<u>\$ 13,457.2</u>
<b>Plan fiduciary net position as a percentage of total pension liability</b>	72.23%
<b>Covered employee payroll</b>	\$ 6,081.1
<b>Net pension liability as a percentage of covered employee payroll</b>	221.3%

Note: Complete data for this schedule is not available prior to 2013.

	<u>2015</u>	<u>2014</u>	<u>2013</u>
\$	1,063.5	\$ 1,058.8	\$ 1,038.7
	3,525.4	3,369.8	3,103.2
	-	10.0	-
	(529.6)	(585.2)	(514.3)
	-	-	1,459.8
	(1,983.9)	(1,839.8)	(1,707.8)
	<u>(2.4)</u>	<u>(1.0)</u>	<u>-</u>
	2,073.0	2,012.6	3,379.6
	<u>43,997.1</u>	<u>41,984.5</u>	<u>38,604.9</u>
\$	<u><u>46,070.1</u></u>	<u><u>43,997.1</u></u>	<u><u>41,984.5</u></u>
\$	1,436.6	\$ 1,405.0	\$ 1,310.1
	114.3	109.7	99.2
	1,395.3	5,031.4	3,193.9
	(1,983.9)	(1,839.8)	(1,706.9)
	(9.6)	(9.6)	(9.6)
	80.1	41.8	46.5
	2.8	1.9	1.7
	<u>1,035.6</u>	<u>4,740.4</u>	<u>2,934.9</u>
	<u>33,575.1</u>	<u>28,834.7</u>	<u>25,899.8</u>
\$	<u><u>34,610.7</u></u>	<u><u>33,575.1</u></u>	<u><u>28,834.7</u></u>
\$	<u><u>11,459.4</u></u>	<u><u>10,422.0</u></u>	<u><u>13,149.8</u></u>
	75.13%	76.31%	68.68%
\$	5,921.6	\$ 5,753.1	\$ 5,715.3
	193.5%	181.2%	230.1%

**FINANCIAL SECTION****REQUIRED SUPPLEMENTARY INFORMATION****SCHEDULE OF EMPLOYER CONTRIBUTIONS**

2007 to 2016

(in millions)

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions*	Contribution Deficiency (Excess)	Covered Employee Payroll**	Contributions as a Percentage of Covered Employee Payroll
2007	\$ 1,014.0	\$ 1,046.6	\$ (32.6)	\$ 5,005.6	20.9 %
2008	1,123.5	1,167.4	(43.9)	5,347.1	21.8
2009	1,202.1	1,213.1	(11.0)	5,724.8	21.2
2010	1,339.5	1,281.7	57.8	5,958.9	21.5
2011	1,326.8	1,264.8	62.0	5,911.9	21.4
2012	1,425.8	1,332.3	93.5	5,817.6	22.9
2013	1,370.0	1,310.1	59.9	5,574.6	23.5
2014	1,508.8	1,405.0	103.8	5,715.3	24.6
2015	1,499.8	1,436.7	63.1	5,753.1	25.0
2016	1,636.0	1,569.7	66.3	5,921.6	26.5

\*Includes employer contributions towards administrative expenses.

\*\* Measurement as of beginning of year.

Notes: All contributions shown reflect employer-paid contributions only. Employer-paid member contributions are excluded. Actuarially Determined Contributions above are based on actuarially determined contributions 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 Consulting, the System's actuary.

**SCHEDULE OF INVESTMENT RETURNS**

2007 to 2016

For Fiscal Year Ended June 30	Annual Money-Weighted Rate of Return, Net of Investment Expenses
2007	14.99%
2008	(3.26)
2009	(15.57)
2010	11.12
2011	21.08
2012	3.05
2013	12.39
2014	17.60
2015	4.18
2016	2.27

**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION  
FOR THE YEAR ENDED JUNE 30, 2016**

Legislation passed in the 2015 Legislative session made changes to a number of plan provisions. These changes were effective July 1, 2015, and apply only to members whose effective date of membership is on or after July 1, 2015. Changes to certain survivor benefit provisions were made effective for survivors of members killed in the line of duty or in the course of employment on or after July 1, 2013, for payments on or after July 1, 2015. The July 1, 2015, sunset on the critical labor shortage exception to the reemployment restrictions was repealed.

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, 2016. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule.

Actuarial Cost Method:	Entry age normal
Amortization Method:	Level percent of payroll
Remaining Amortization Period	The UAAL as of June 30, 2011, shall continue to be amortized over separate 30-year period amortization layers based on the valuations during which the 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 will be amortized over a period equal to the truncated average remaining amortization period of all prior UAAL layers. This will occur until the average remaining amortization period is less than 20 years. At that point, amortization periods of 20 years would be used for actuarial gains and losses. Any new UAAL as a result of a change in actuarial assumptions or methods or a change in plan provisions will be amortized over a period equal to the truncated average remaining amortization period of all prior UAAL layers. This would occur until the average remaining amortization period is less than 20 years. At that point, amortization periods of 20 years would be used for assumption or method changes.

**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION  
FOR THE YEAR ENDED JUNE 30, 2016**

Asset Valuation Method:	5-year smoothed market
Assumed Inflation Rate:	3.5%
Payroll Growth Assumption for Future Years:	6.5% per year for regular employees and 7.5% per year for police/fire employees
Investment Return:	8.0% (including 3.5% for inflation)
Mortality Rates:	
Healthy: <i>Regular</i>	RP-2000 Combined Healthy Mortality Table projected to 2013 with Scale AA, set back one year for females (no age setback for males).
<i>Police/Fire</i>	RP-2000 Combined Healthy Mortality Table projected to 2013 with Scale AA, set forward one year.
Disabled: <i>Regular and Police/Fire</i>	RP-2000 Disabled Retiree Mortality Table projected to 2013 with Scale AA, set forward three years.

**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION  
FOR THE YEAR ENDED JUNE 30, 2016**

Salary Increases:

Inflation: 3.50% Plus

Productivity pay increases: 0.75% Plus

Promotional and merit salary  
increases:

Years of Service	Regular	Police/Fire
Less than 1	5.50%	10.25%
1	4.25	6.55
2	3.50	5.15
3	3.25	4.55
4	3.00	4.25
5	2.75	4.05
6	2.40	3.75
7	2.25	3.25
8	1.85	2.75
9	1.75	2.25
10	1.50	1.75
11	1.00	1.50
12	0.80	1.25
13 or More	0.35	1.00

Changes of Assumptions

There have been no changes in actuarial assumptions or methods since the last valuation.

**OTHER SUPPLEMENTARY INFORMATION**

**SCHEDULE OF ADMINISTRATIVE EXPENSES**

**For the Year Ended June 30, 2016**

**(GAAP Basis)**

Personnel services:		
Staff payroll and benefits	\$ 5,252,326	
Board fees	12,720	
Total personnel services		\$ 5,265,046
Out-of-state travel:		
Staff	8,826	
Board	3,757	
Police/Fire committee	1,428	
Total out-of-state travel		14,011
In-state travel:		
Staff	37,737	
Board	18,027	
Police/Fire committee	2,792	
Total in-state travel		58,556
Operating:		
Office supplies	17,637	
Equipment less than \$1,000	3,649	
Postage and freight	376,170	
Communications	42,635	
Printing	219,607	
Publications and periodicals	3,227	
Bonds and insurance premiums	15,447	
Contract services	698,449	
Vehicle expense	504	
Equipment rental and repair	20,329	
Building rental	317,072	
License and fees	1,525	
Client communication	88,648	
Dues and registration	29,434	
Medical expenses	38,064	
Host expense	242	
Litigation expense	126,509	
Total operating		1,999,148
Equipment and office furniture, net		4,850
Information technology, net		2,947,422
Training		31,410
Attorney General Allocation		252,706
Total administrative expenses		<u>\$ 10,573,149</u>

**OTHER SUPPLEMENTARY INFORMATION**

**SCHEDULE OF ADMINISTRATIVE EXPENSES**

For the Year Ended June 30, 2016

(Non-GAAP Budgetary Basis)

Budget vs. Actual

	<b>Budget</b>	<b>Actual Expenditures</b>	<b>Variance Under (Over)</b>
Personnel services	\$ 5,515,534	\$ 5,243,830	\$ 271,704
Out-of-state travel	47,324	14,011	33,313
In-state travel	87,000	58,556	28,444
Operating	2,044,364	1,999,148	45,216
Information technology	2,879,822	2,874,223	5,599
Training	79,715	31,410	48,305
Attorney general allocation	446	252,706	(252,260)
Unallocated budgetary authority	200,000	-	200,000
 Total administrative expenses	 \$ 10,854,205	 \$ 10,473,884	 \$ 380,321

**Reconciliation of GAAP Basis Administrative Expenses to Non-GAAP Budgetary Basis**

For the Year Ended June 30, 2016

The budget and actual (non-GAAP budgetary basis) schedules present comparisons of the legally adopted budget with actual data on a budgetary basis. Since accounting principles applied for purposes of developing data on a budgetary basis sometimes differ significantly from those used to present financial statements in conformity with generally accepted accounting principles, a reconciliation of resulting differences is presented for the year ended June 30, 2016.

Administrative Expenses (Non-GAAP Budgetary Basis)	\$ 10,473,884
 Adjustments:	
Accrued payroll	21,216
Depreciation expense	1,216,689
Capitalization of system projects	(1,138,640)
 Administrative Expenses (GAAP Basis)	 \$ 10,573,149



**OTHER SUPPLEMENTARY INFORMATION**

**SCHEDULE OF INVESTMENT EXPENSES**

For the Year Ended June 30, 2016

Investment management fees	\$ 38,230,262
Investment consulting fees	<u>610,213</u>
Subtotal investment management and consulting fees	38,840,475
Investment monitoring expenses	4,173
Administrative investment expenses	<u>463,113</u>
Total investment expenses	<u>\$ 39,307,761</u>

**SCHEDULE OF PAYMENTS TO CONSULTANTS**

For the Year Ended June 30, 2016

Actuary	
Segal Consulting	\$ 603,314
Independent Auditors	
CliftonLarsonAllen LLP	207,250
Administrative Legal Counsel	
Groom Law Group	356
Woodburn and Wedge	117,310
State Attorney General	252,706
Medical Consultant	
B Bottenberg, D.O.	36,204
Kathleen Stoner, R.N.	<u>1,860</u>
Total payments to consultants	<u>\$ 1,219,000</u>

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

**OTHER SUPPLEMENTARY INFORMATION**

**COMBINING SCHEDULE OF FIDUCIARY NET POSITION**

June 30, 2016

(With Comparative Totals for June 30, 2015)

	Regular	Police/Fire	Eliminations	Total Pension Trust Fund 2016	Total Pension Trust Fund 2015
<b>ASSETS</b>					
Cash and cash equivalents	\$ 209,333,614	\$ -	\$ -	\$ 209,333,614	\$ 264,196,276
Contributions receivable	134,973,348	-	-	134,973,348	121,288,992
Pending trades receivable	120,155,081	-	-	120,155,081	129,448,044
Accrued investment income	97,208,833	-	-	97,208,833	91,334,239
Investments, at fair value	34,617,238,271	-	-	34,617,238,271	34,148,195,967
Collateral on loaned securities, at fair value	411,128,913	-	-	411,128,913	373,833,323
Property and equipment	41,550,920	-	-	41,550,920	40,412,280
Accumulated depreciation	(37,678,778)	-	-	(37,678,778)	(36,462,089)
Net property and equipment	3,872,142	-	-	3,872,142	3,950,191
Other assets	2,916,621	-	-	2,916,621	3,633,781
Due from other funds- equity in investments	-	7,777,949,267	(7,777,949,267)	-	-
Total plan assets	<u>35,596,826,823</u>	<u>7,777,949,267</u>	<u>(7,777,949,267)</u>	<u>35,596,826,823</u>	<u>35,135,880,813</u>
<b>LIABILITIES</b>					
Accounts payable and accrued expenses	11,279,040	-	-	11,279,040	10,447,899
Pending trades payable	172,389,964	-	-	172,389,964	140,879,407
Due to other funds - equity in investments	7,777,949,267	-	(7,777,949,267)	-	-
Obligations under securities lending activities	411,128,913	-	-	411,128,913	373,833,323
Total plan liabilities	<u>8,372,747,184</u>	<u>-</u>	<u>(7,777,949,267)</u>	<u>594,797,917</u>	<u>525,160,629</u>
Net assets held in trust for pension benefits	<u>\$ 27,224,079,639</u>	<u>\$ 7,777,949,267</u>	<u>\$ -</u>	<u>\$ 35,002,028,906</u>	<u>\$ 34,610,720,184</u>

# FINANCIAL SECTION

## OTHER SUPPLEMENTARY INFORMATION

### COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

For the Year Ended June 30, 2016

(With Comparative Totals for the Year Ended June 30, 2015)

	Regular	Police/Fire	Total Pension Trust Fund 2016	Total Pension Trust Fund 2015
<b>ADDITIONS</b>				
Contributions:				
Employer	\$ 1,209,652,176	\$ 360,057,420	\$ 1,569,709,596	\$ 1,436,652,815
Plan members	113,790,379	15,997,816	129,788,195	114,302,545
Repayment and purchase of service	39,881,167	21,855,261	61,736,428	82,485,688
Total contributions	<u>1,363,323,722</u>	<u>397,910,497</u>	<u>1,761,234,219</u>	<u>1,633,441,048</u>
Investment income:				
Net appreciation (depreciation) in fair value of investments	(72,040,745)	-	(72,040,745)	520,754,925
Interest	191,695,946	-	191,695,946	261,392,850
Dividends	552,629,496	-	552,629,496	523,536,563
Other investment income	139,896,529	-	139,896,529	124,491,007
	<u>812,181,226</u>	<u>-</u>	<u>812,181,226</u>	<u>1,430,175,345</u>
Less investment fees and other expense	<u>(39,307,761)</u>	<u>-</u>	<u>(39,307,761)</u>	<u>(39,577,974)</u>
Net investment income	<u>772,873,465</u>	<u>-</u>	<u>772,873,465</u>	<u>1,390,597,371</u>
Securities lending income	8,315,687	-	8,315,687	6,395,913
Change in fair value of securities lending	-	-	-	-
Less securities lending expense	<u>(2,492,288)</u>	<u>-</u>	<u>(2,492,288)</u>	<u>(1,701,188)</u>
Net securities lending income (loss)	<u>5,823,399</u>	<u>-</u>	<u>5,823,399</u>	<u>4,694,725</u>
Total net investment income (loss)	<u>778,696,864</u>	<u>-</u>	<u>778,696,864</u>	<u>1,395,292,096</u>
Other income	<u>1,627,067</u>	<u>317,307</u>	<u>1,944,374</u>	<u>2,786,066</u>
Total additions	<u>2,143,647,653</u>	<u>398,227,804</u>	<u>2,541,875,457</u>	<u>3,031,519,210</u>
<b>DEDUCTIONS</b>				
Benefit payments:				
Retirement and survivor benefits	1,609,650,785	398,069,646	2,007,720,431	1,855,326,226
Disability	81,626,240	22,499,618	104,125,858	102,897,584
Post-retirement increases	11,204	887	12,091	13,294
Refunds of contributions	22,005,015	4,752,620	26,757,635	25,637,753
Transfers of contributions	-	-	-	2,356,700
Administrative expenses	10,573,149	-	10,573,149	9,648,626
Other expenses	1,371,708	5,863	1,377,571	-
Total deductions	<u>1,725,238,101</u>	<u>425,328,634</u>	<u>2,150,566,735</u>	<u>1,995,880,183</u>
<b>Increase (decrease) in net assets</b>	<u>418,409,552</u>	<u>(27,100,830)</u>	<u>391,308,722</u>	<u>1,035,639,027</u>
<b>Transfers:</b>				
Interfund transfers	1,810,829	(1,810,829)	-	-
Transfer of annual investment income	(172,481,355)	172,481,355	-	-
Transfer of administrative fees	962,472	(962,472)	-	-
Total transfers	<u>(169,708,054)</u>	<u>169,708,054</u>	<u>-</u>	<u>-</u>
Net position - Beginning of year	<u>26,975,378,141</u>	<u>7,635,342,043</u>	<u>34,610,720,184</u>	<u>33,575,081,157</u>
Net position - End of year	<u>\$ 27,224,079,639</u>	<u>\$ 7,777,949,267</u>	<u>\$ 35,002,028,906</u>	<u>\$ 34,610,720,184</u>



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## INVESTMENT SECTION

**CURRENT INVESTMENT ADVISORS**

**INVESTMENT CONSULTANTS**

Callan Associates, Inc.  
Peavine Capital

**INVESTMENT COUNSEL**

Domestic Equities:

AB  
BlackRock

International Equities:

Mellon Capital  
State Street Global Advisors

Domestic Fixed Income:

Payden & Rygel  
UBS Global Asset Management

Private Equity:

Pathway Capital Management

Private Real Estate:

AEW  
Invesco Real Estate

Securities Lending:

The Bank of New York Mellon

# PEAVINE CAPITAL

October 18, 2016

We are pleased to report on the Public Employees' Retirement System of Nevada (PERS) investment portfolio for the fiscal year ended June 30, 2016.

Market volatility was historically high during the year. This volatility, combined with weak global economic growth and record low interest rates, created a challenging investment climate.

Nevada PERS finished fiscal year 2016 with \$34.9 billion in assets and a return of 2.3%. While this is below the 8% long term actuarial discount rate, it was exceptional given the market environment.

PERS' return ranks in the top 8% of large public pension funds for the fiscal year, 2.3% higher than the median plan. This translates to over \$700 million in additional profits earned over the median plan this fiscal year. PERS' superior relative results for the last 5 years equates to over \$2 billion in value added above the median fund.

PERS' 5-year annualized return was 7.8%, ranking in the top 8% of peer funds. Since inception (32 years), the portfolio has generated a return of 9.4%, capturing its actuarial objective and ranking in the top 35% of peers on a total return basis and in the top 6% on a risk-adjusted return basis.

PERS' investment strategy is unique. The fund's common sense, long term approach is grounded in patience and is focused on intelligently managing asset allocation throughout the market cycle. This strategy has generated a competitive track record with the simplest investment structure, lowest external management fees and smallest investment staff in the country.

PERS' current asset allocation policy includes: 42% U.S. Stocks, 18% International Stocks, 30% U.S. Treasury Bonds, and 10% Private Markets. PERS' stock and bond portfolios are invested entirely in index funds, enhancing diversification and reducing costs.



Ken Lambert, CFA, CAIA  
Chief Investment Officer

## **INVESTMENT SECTION**

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### **INVESTMENT REVIEW**

#### Introduction

The investment program is designed to generate an 8% long-term return 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 an 8% long-term investment return which exceeds the rate of inflation (CPI) by 4.5% 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 66, demonstrates that the investment portfolio, over the last ten years, has captured the blended real return (inflation) objective in five of those years. The 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; and CPI + 4.5% thereafter. Chart 2, on page 66, details annualized returns for long-term periods ended June 30, 2016. The System's 2.3% return for fiscal year 2016 was driven primarily by positive returns from U.S. stocks and bonds which were tempered by negative returns from 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 98% 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. The Board reviews capital market expectations and asset allocation annually. 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 long-term target allocation for the fund as of June 30, 2016, was 30% U.S. Fixed Income, 42% U.S. Equity, 18% International Equity, and 10% Private Markets. The June 30, 2016, asset class allocation by Manager Directive is shown in Chart 3, page 67.

### 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, historically the System has emphasized index management and in fiscal year 2014 the Board elected to move from 75% index management to 100% index management in U.S. and International Stocks. 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 EAFE Index which represents 85% of the market capitalization within the 21 developed market countries included in the index. Combined, the System's total stock exposure represents more than 80% of the global public equity market.

Similar to the U.S. and International stock allocations, the System's fixed income allocation has historically emphasized index management and in fiscal year 2015 the Board elected to move to a 100% Barclays 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 1,900 individual securities from 22 different countries.

Chart 4, on page 68, shows the fair value of the assets under management by investment type, category, and manager. A list of the ten largest Equity and Fixed Income holdings based on fair value at June 30, 2016, is included in Chart 5 on page 69. A complete list of security holdings is available upon request.



## INVESTMENT SECTION

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### 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. Equity - Produce a total return that captures the Standard & Poor's 500 Common Stock Index over rolling 10-year periods with commensurate volatility.
- International Equity - Produce a total return that captures the unhedged Morgan Stanley Capital International Europe, Australia, Far East (MSCI EAFE) Index over rolling 10-year periods with commensurate volatility.
- U.S. Fixed Income - Produce a total return that captures the Barclays U.S. Treasury Index over rolling 10-year periods with commensurate volatility.
- Private Markets - Produce a total return that captures the blended return (based on PERS actual allocation) of: the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index -0.75%, and S&P 500 Index + 4% 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 70, 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 71-72, compare 1, 3, 5, 10-year, and since-inception returns for each asset class to the corresponding objective for periods ended June 30, 2016.

Chart 10, on page 72, shows Private Markets returns for the fiscal year ended June 30, 2016, compared to since-inception returns using a blended objective.

The bull market in U.S. Equity extended through fiscal year 2016 with modest returns from the asset class. Due to the volatility and cost structure associated with active management, in fiscal year 2014 the Board elected to move to 100% index management in U.S. Equity. As a result, the 4.0% return in fiscal year 2016 matched the performance objective and going forward we expect the U.S. Equity allocation will continue to closely track the market objective.

In fiscal year 2014, for the same reasons as in the U.S. Equity portfolio, the Board moved to 100% index management in the International Equity portfolio. The decision reduced fees and risk versus the market objective on a going forward basis. While fiscal year 2016 produced negative absolute returns from the asset class, the International Equity allocation return met the market objective.

In fiscal year 2015 the Board elected to transition the fixed income allocation to a 100% Barclays U.S. Treasury Index structure. The decision removed credit risk from the fixed income allocation while increasing total fund diversification. Driven by declining interest rates, the 6.3% fixed income allocation return in 2016 met the market objective and because the allocation is fully indexed we expect it will track the market objective closely in future years.

The Private Markets portfolio, which is comprised of private real estate and private equity, has 12<sup>3</sup>/<sub>4</sub> years of performance history as an asset class. The allocation experienced positive absolute returns during fiscal year 2016. The private real estate allocation underperformed the objective for the fiscal year, bringing the 10-year performance modestly below the objective. The private equity portfolio outperformed the objective over the most recent 1-year period and continues to be above the market benchmark over longer time periods.

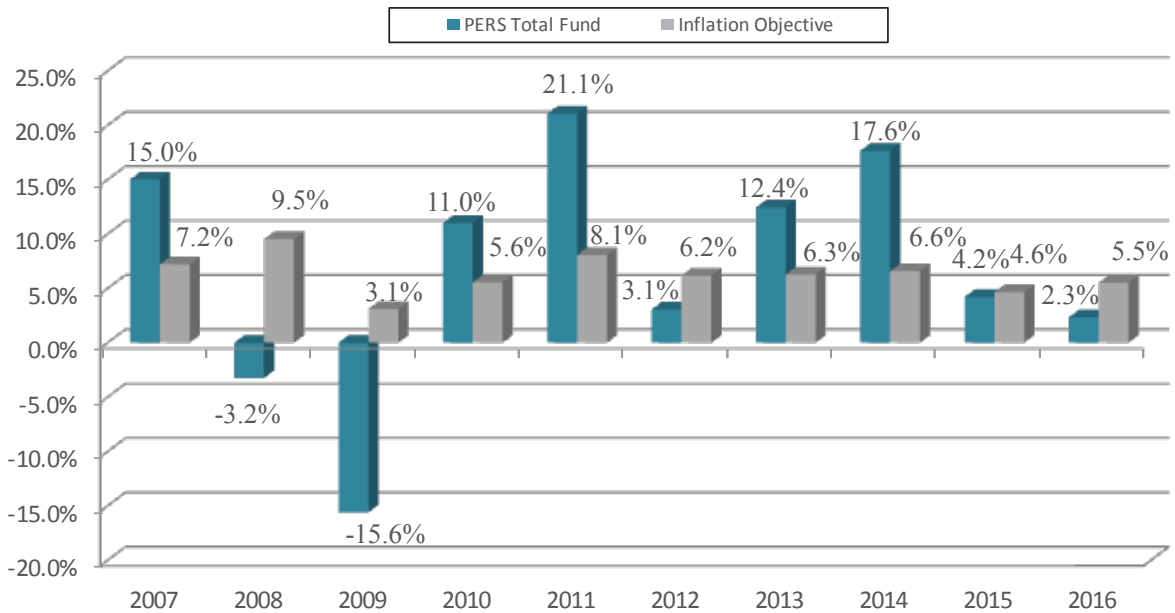
This report has been prepared in conjunction with the System's investment consultants, Peavine Capital and Callan Associates.

**INVESTMENT SECTION**

**INVESTMENT PERFORMANCE VS. OBJECTIVE**

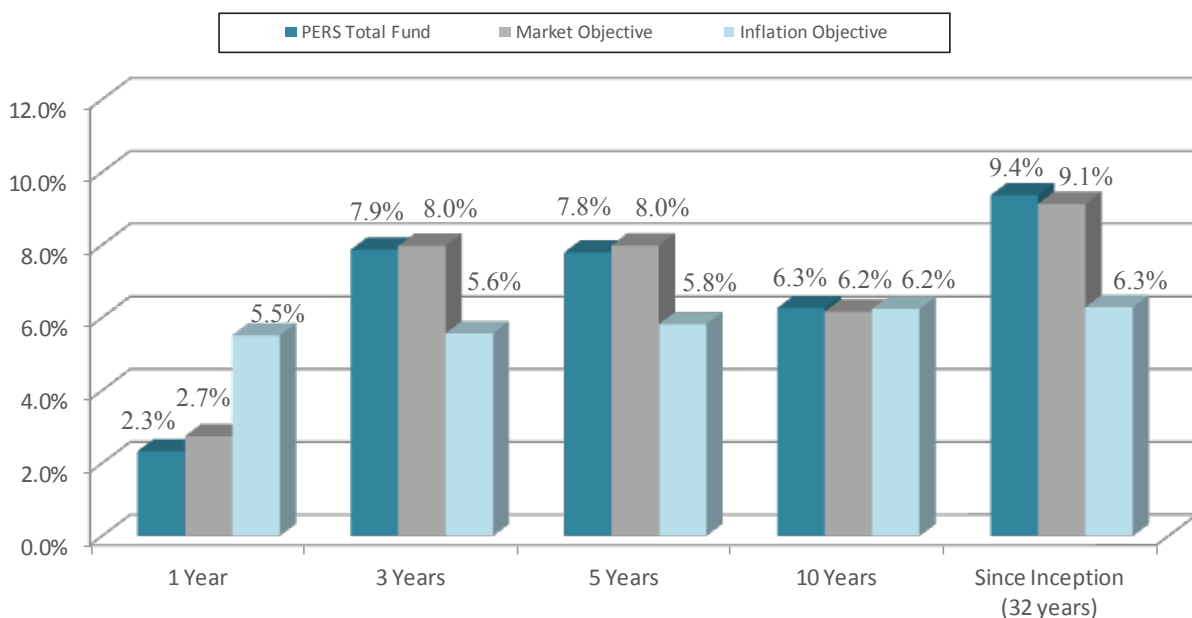
**CHART 1**

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



**CHART 2**

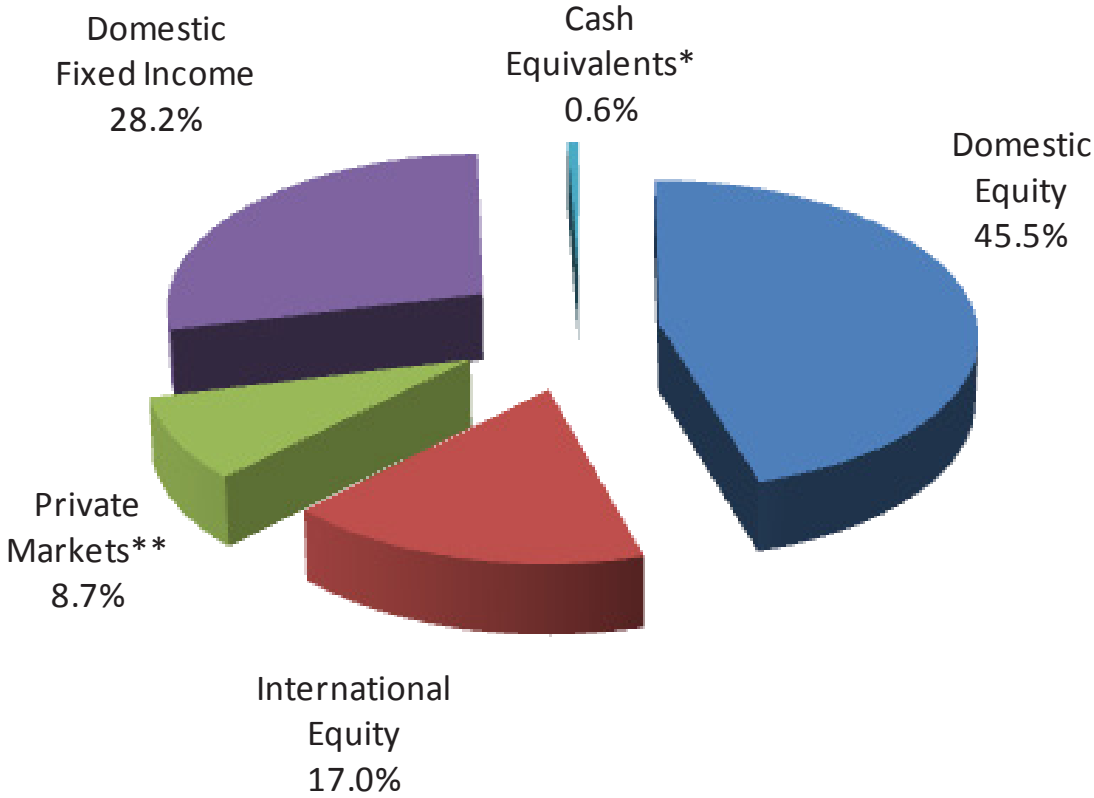
**Annualized Total Returns vs. Market Objective and Inflation Objectives \*  
As of June 30, 2016**



\*CPI + 3.0% until September 2000, CPI + 3.5% from October 1, 2000 through September 30, 2002, CPI + 3.75% from October 1, 2002 through September 30, 2003, and CPI + 4.5% thereafter.

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

CHART 3  
ASSET MIX  
JUNE 30, 2016



\*Includes cash held by investment managers.

\*\*Includes 4.1% Private Equity and 4.6% Private Real Estate.

**INVESTMENT SECTION****CHART 4****Fair Value of Assets by Investment Directive  
June 30, 2016**

	<u>Fair Value</u>	<u>Percent of Total Fair Value</u>
<b>EQUITIES</b>		
<u>Domestic Index Managers</u>		
AB - S&P 500	7,865,667,192	
BlackRock - S&P 500	7,990,493,110	
Subtotal	<u>15,856,160,302</u>	45.5
<u>International Index Managers</u>		
Mellon Capital	4,026,273,564	17.0
State Street Global Advisors	1,901,747,924	
Subtotal	<u>5,928,021,488</u>	
<u>Private Equity</u>		
Pathway Capital Management	<u>1,433,191,372</u>	4.1
Total Equities	<u>\$ 23,217,373,162</u>	<u>66.6</u>
<b>FIXED INCOME</b>		
<u>Domestic Index Managers</u>		
Payden & Rygel - US Bond Index	4,924,040,504	
UBS Global Asset Management - US Bond	4,891,447,280	
Subtotal	<u>9,815,487,784</u>	28.2
Total Fixed Income	<u>9,815,487,784</u>	<u>28.2</u>
<b>PRIVATE REAL ESTATE</b>		
AEW Realty	661,760,704	
Invesco Realty Advisors	920,195,748	
Invesco Realty Advisors Takeover	<u>2,420,873</u>	
Total Real Estate	<u>1,584,377,325</u>	<u>4.6</u>
<b>SHORT-TERM INVESTMENTS</b>		
Cash Equivalents	204,696,637	
Total Short-Term Investments	<u>204,696,637</u>	<u>0.6</u>
<b>TOTAL PORTFOLIO</b>	<b><u>\$ 34,821,934,908</u></b>	<b><u>100.0</u> %</b>

Total portfolio does not include pending trades receivable of \$120,155,081, accrued interest income of \$97,208,833, and pending trades payable of \$172,389,964.

The Statement of Fiduciary Net Position contains \$4,636,977 in administrative cash, which does not appear on this schedule.

## CHART 5

## LIST OF LARGEST ASSETS HELD

## Largest Equity Holdings

June 30, 2016

Ranking	Name	Fair Value
1	APPLE INC	\$ 456,785,978
2	ALPHABET INC	356,685,468
3	MICROSOFT CORP	349,814,546
4	EXXON MOBIL CORP	337,271,552
5	JOHNSON & JOHNSON	289,749,067
6	GENERAL ELECTRIC CO	252,817,769
7	AMAZON.COM INC	239,845,052
8	BERKSHIRE HATHAWAY INC	235,225,255
9	AT&T INC	230,546,091
10	FACEBOOK INC	228,237,159

## Largest Fixed Income Holdings

June 30, 2016

Ranking	Name	Fair Value
1	U S TREASURY NOTE 0.875% 08/15/2017	\$ 297,349,384
2	U S TREASURY NOTE 2.000% 08/15/2025	205,188,637
3	U S TREASURY NOTE 1.375% 05/31/2020	186,726,306
4	U S TREASURY NOTE 2.625% 11/15/2020	183,548,990
5	U S TREASURY NOTE 1.250% 11/30/2018	148,249,021
6	U S TREASURY NOTE 1.000% 09/15/2017	144,658,785
7	U S TREASURY NOTE 1.625% 12/31/2019	139,423,992
8	U S TREASURY NOTE 0.750% 02/28/2018	139,127,337
9	U S TREASURY NOTE 2.250% 11/15/2024	135,590,652
10	U S TREASURY NOTE 3.000% 11/15/2045	133,447,445

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

## INVESTMENT SECTION

### CHART 6

#### SUMMARY OF ACTUAL PERFORMANCE VS. OBJECTIVES (% Returns)

	<u>U.S. EQUITY</u>	<u>INT'L EQUITY</u>	<u>U.S. FIXED INC.</u>	<u>INT'L FIXED INC.</u>	<u>PRIVATE MARKETS</u>	<u>TOTAL FUND</u>
<u>Fiscal Year 2007</u>						
Total Return	20.2	27.0	6.1	1.5	16.3	15.0
Objective	20.6	27.0	6.1	2.2	16.2	15.2
<u>Fiscal Year 2008</u>						
Total Return	-11.7	-10.9	6.4	18.4	3.5	-3.2
Objective	-13.1	-10.6	7.1	18.7	-2.5	-4.0
<u>Fiscal Year 2009</u>						
Total Return	-25.4	-31.5	5.9	3.4	-27.6	-15.6
Objective	-26.2	-31.4	6.1	3.5	-23.8	-16.1
<u>Fiscal Year 2010</u>						
Total Return	13.8	6.1	10.6	1.5	6.2	11.0
Objective	14.4	5.9	9.5	1.5	7.8	10.7
<u>Fiscal Year 2011</u>						
Total Return	31.8	30.5	4.2	14.1	22.9	21.1
Objective	30.7	30.4	3.9	14.0	24.0	20.8
<u>Fiscal Year 2012</u>						
Total Return	4.7	-13.6	7.5	0.4	10.4	3.1
Objective	5.5	-13.8	7.5	0.4	12.3	3.6
<u>Fiscal Year 2013</u>						
Total Return	21.3	19.4	-0.3	-5.8	7.7	12.4
Objective	20.6	18.6	-0.7	-5.7	15.8	12.6
<u>Fiscal Year 2014</u>						
Total Return	24.8	23.5	4.6	N/A	14.2	17.6
Objective	24.6	23.9	4.4	N/A	17.9	17.6
<u>Fiscal Year 2015</u>						
Total Return	7.4	-3.9	2.0	N/A	13.9	4.2
Objective	7.4	-4.2	2.0	N/A	11.8	4.1
<u>Fiscal Year 2016</u>						
Total Return	4.0	-9.8	6.3	N/A	8.6	2.3
Objective	4.0	-10.2	6.2	N/A	9.3	2.8

#### Objectives

U.S. Equity – S&P 500

Int'l Equity – MSCI-EAFE

U.S. Fixed Income – Barclays U.S. Treasury Index

Private Markets – Portfolio weighted blend of NCREIF -0.75%  
and S&P 500 + 4%

Total Fund:

Until September 30, 2000 – CPI + 3%

October 1, 2000 – September 30, 2002 – CPI + 3.5%

October 1, 2002 – September 30, 2003 – CPI + 3.75%

October 1, 2003 thereafter – CPI + 4.5%

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

\* objective = -0.01

INVESTMENT PERFORMANCE VS. OBJECTIVE

CHART 7

U.S. Equity vs. S&P 500  
As of June 30, 2016

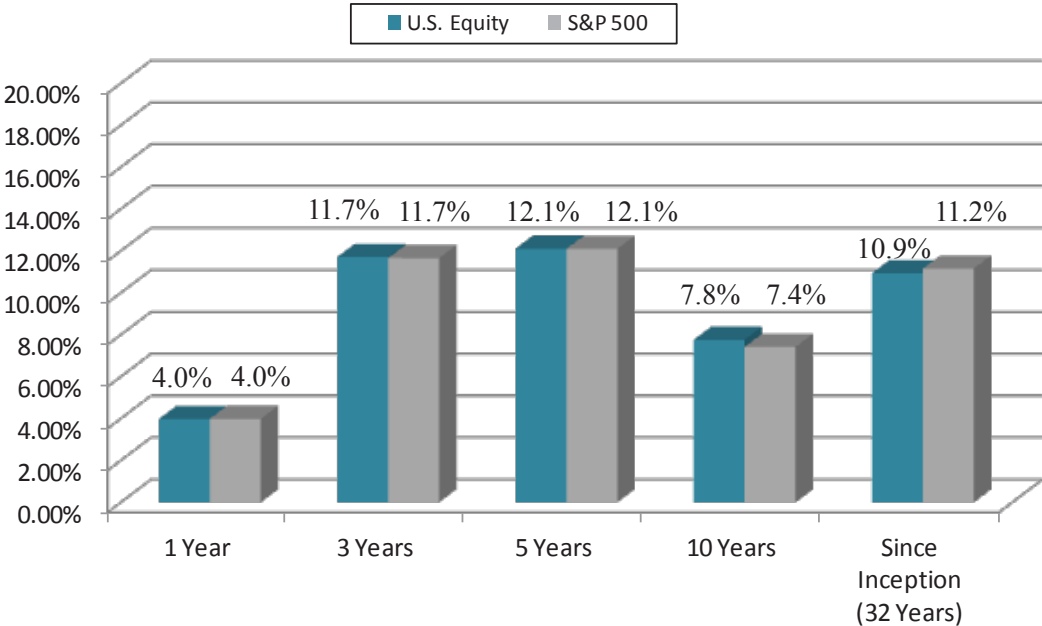
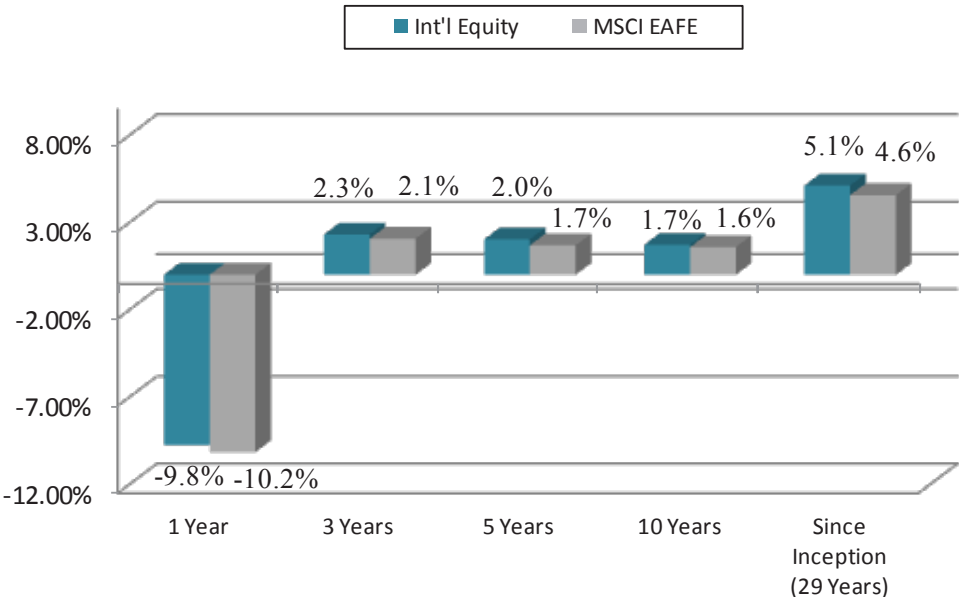


CHART 8

International Equity vs. MSCI EAFE  
As of June 30, 2016

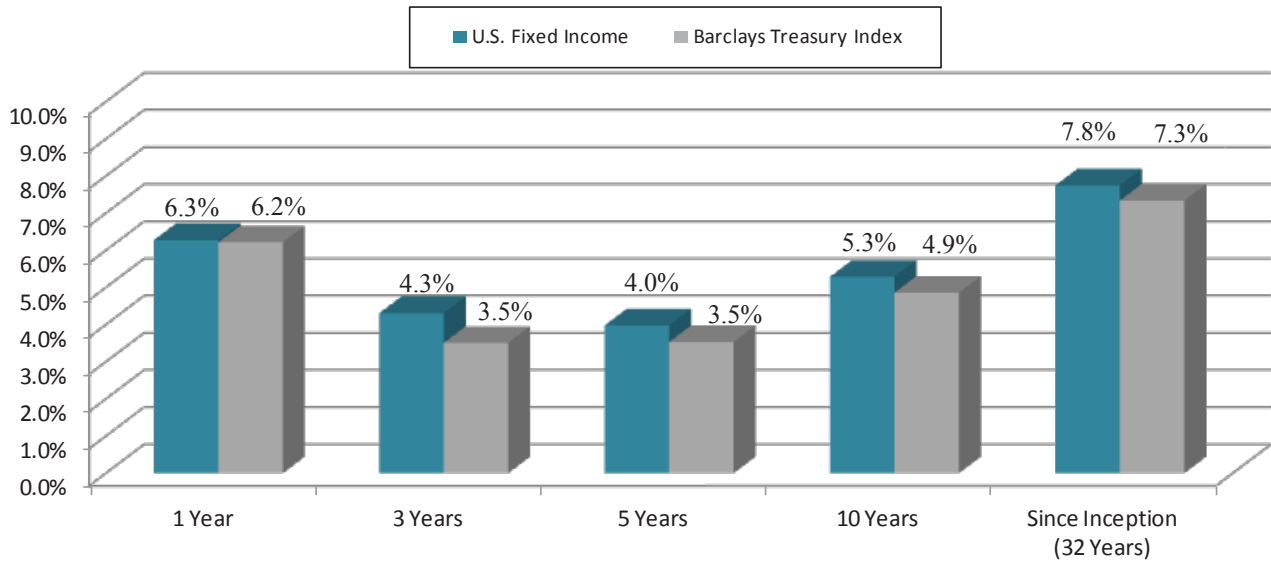




**INVESTMENT PERFORMANCE VS. OBJECTIVE**

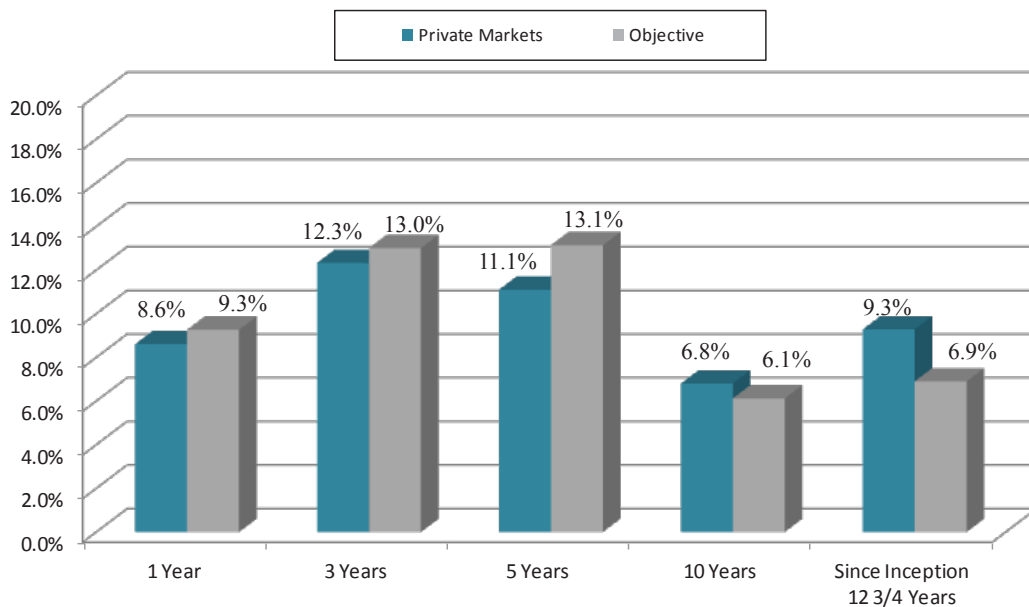
**CHART 9**

**U.S. Fixed Income vs. Barclays Treasury Index  
As of June 30, 2016**



**CHART 10**

**Private Markets vs. Blended Objective\*  
As of June 30, 2016**



\* Blended Objective:

52.1% NCREIF -0.75%  
47.9% S&P 500 + 4.0%

Target adjusted quarterly, based on beginning fair values.

## CHART 11

## SCHEDULE OF FEES AND COMMISSIONS

For Year Ended June 30, 2016

(Page 1 of 2)

Name/Firm	Investment Mandate	Amount Under Management at June 30, 2016	Fees Incurred
<b>Investment Management Fees</b>			
<u>Domestic and International Equity Managers</u>			
AB S&P 500	U.S. Index	\$ 7,905,325,890	\$ 492,137
BlackRock S&P 500	U.S. Index	8,004,264,153	497,789
Mellon Capital	Int'l Index	4,052,124,317	671,063
State Street Global Advisors	Int'l Index	1,913,755,284	446,103
<u>Domestic and International Fixed Income Managers</u>			
Payden & Rygel	U. S. Index	4,965,658,763	330,618
UBS Global Asset Management	U. S. Index	4,860,063,515	486,277
<u>Private Equity Manager</u>			
Pathway Capital Management		1,456,583,280	4,143,984
Private Equity General Partner Fees			24,754,730
<u>Private Real Estate Managers</u>			
AEW Realty		661,039,033	2,727,678
Invesco Realty Advisors		919,235,290	3,669,154
Invesco Realty Advisors Takeover		2,418,138	10,729
Subtotal investment management fees			<u>38,230,262</u>
<b>Investment Consulting Fees</b>			
<u>Investment Consultants</u>			
Callan Associates			305,760
Peavine Capital			<u>304,453</u>
Subtotal investment consulting fees			<u>610,213</u>
Total investment management and consulting fees			<u>\$ 38,840,475</u>

Other investment expenses of \$467,286 are not included in the fees listed above.

**INVESTMENT SECTION**

**CHART 11**

**SCHEDULE OF FEES AND COMMISSIONS**

For Year Ended June 30, 2016

(Page 2 of 2)

<b>Brokerage Firm</b>	<b>Number of Shares Traded</b>	<b>Commissions Paid</b>	<b>Commission Per Share (rounded)</b>
Banque Paribas	21,422	222	\$ 0.01
Barclays	4,317,131	12,105	0.00 *
Cantor Clearing Services	566,274	1,699	0.00 *
CIMB GK Securities	240,000	140	0.00 *
Citation Group	588,300	2,942	0.01
Citigroup	2,318,705	3,784	0.00 *
CLSA Singapore	1,016,156	5,644	0.01
Cowen and Company	75,456	384	0.01
Credit Lyonnais	300,300	2,663	0.01
Credit Suisse	4,633,063	10,528	0.00 *
Deutsche Bank	1,326,050	4,103	0.00 *
Exane	1,042,129	3,277	0.00 *
Fidelity	786,908	3,934	0.00 *
Goldman Sachs	6,624,155	24,548	0.00 *
Goodbody Stockbrokers	13,017	1,978	0.15
HSBC	566,618	1,313	0.00 *
Instinet	7,261,631	21,847	0.00 *
ITG	2,300,252	8,488	0.00 *
JP Morgan	8,655,880	24,359	0.00 *
Jeffries & Co.	23,613	83	0.00 *
Knight Clearing Services	1,136	17	0.01
MacQuarie Bank	2,563,579	6,413	0.00 *
Merrill Lynch	10,760,433	7,415	0.00 *
Morgan Stanley	10,560,194	2,845	0.00 *
Pershing	269,481	2,505	0.01
RBC Capital Markets	4,446	44	0.01
Sanford C Bernstein	239,027	953	0.00 *
SG Securities	20,310,869	10,435	0.00 *
SMBC Securities	815,666	4,829	0.01
UBS	3,184,763	13,403	0.00 *
Wells Fargo Securities	211	2	0.01
Subtotal commissions		<u>182,902</u>	
Total fees and commissions		<u>\$ 39,143,037</u>	

\* Commission is less than one cent per share



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## ACTUARIAL SECTION

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100 Montgomery Street Suite 500 San Francisco, CA 94104-4308  
T 415.263.8200 www.segalco.com

November 22, 2016

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, 2016**

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, 2016 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 where each amortization period will be set at the truncated average remaining period of all prior amortization layers until the average remaining amortization period is less than 20 years. At that point, amortization periods of 20 years will be used. As of June 30, 2016, the funded ratios are 73.2% for regular employees and 77.1% 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 6.5% per year for regular employees and 7.5% per year for police and firefighters. These payroll growth rates are based on a 3.5% per year inflation assumption.

The payroll growth assumptions are set by the Board and affect the timing of payments toward the unfunded liabilities. Considerations for setting these assumptions include future financial conditions that are difficult for Segal to evaluate. In recent years, payroll growth has been less than assumed. This has the effect of delaying contributions toward the unfunded liabilities and could result in increases to required contributions in future years. We recommend that the Board closely monitor actual payroll growth to verify that the assumptions remain valid.

## ACTUARIAL SECTION

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Public Employees' Retirement Board  
State of Nevada  
November 22, 2016  
Page 2

The most recent actuarial valuation prepared as of June 30, 2016 is based on the following major elements:

- Current benefit provisions (as specified in the Public Employees' Retirement Act).
- Membership data as of June 30, 2016 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.
- Assets as of June 30, 2016 obtained from the System's unaudited financial statements.
- Trend schedules for financial and actuarial sections of the Comprehensive Annual Financial Report (CAFR) as of June 30, 2016 (based upon data from the System, accepted without verification or audit, and upon results of the annual actuarial valuation).
- Actuarial assumptions and methods adopted by the Public Employees' Retirement Board.

A complete copy of the June 30, 2016 actuarial valuation is available from the System.

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.)

### 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 - Solvency Test
- Schedule 5 - Analysis of Actuarial Experience
- Schedule 6 – Schedule of Employer Contributions

Public Employees' Retirement Board  
 State of Nevada  
 November 22, 2016  
 Page 3

We have also included the following two items:

- Distribution of Retired Members and Beneficiaries by Type as of June 30, 2016
- New Retired Members for Year Ended June 30, 2016

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 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.

The actuarially determined rates from this valuation were within the ranges previously noted for Regular members and Police/Fire members. This valuation year is an even numbered year, but the statutory rates for Regular members and Police/Fire members remain unchanged.

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
<b>Employer-Pay</b>		
Statutory Rate for Fiscal Years July 1, 2015 through June 30, 2017	28.00%	40.50%
Actuarially Determined Contribution Rate per June 30, 2016 Actuarial Valuation	28.02%	39.88%
Statutory Rate for Fiscal Years July 1, 2017 through June 30, 2019	28.00%	40.50%
	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
<b>Employee/Employer</b>		
Statutory Rate for Fiscal Years July 1, 2015 through June 30, 2017	29.00%	41.50%
Actuarially Determined Contribution Rate per June 30, 2016 Actuarial Valuation	29.13%	41.07%
Statutory Rate for Fiscal Years July 1, 2017 through June 30, 2019	29.00%	41.50%



## ACTUARIAL SECTION

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Public Employees' Retirement Board  
State of Nevada  
November 22, 2016  
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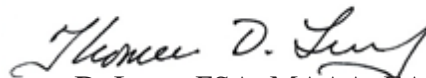
The actuarial calculations prepared for funding purposes were made in accordance with generally accepted actuarial principles and practices. The information supplied in this letter is based on the current provisions of the Public Employees' Retirement Act and on the actuarial assumptions and methods 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 and the expectations for the Plan.

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,



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



Thomas D. Levy, FSA, MAAA, EA  
Senior Vice President & Chief Actuary



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

MAM/jc  
Enclosures

**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS**

The actuarial assumptions and methods used in the June 30, 2016 actuarial valuation were adopted by the Public Employees' Retirement Board and were based on the results of the experience review completed in 2013.

**ECONOMIC ASSUMPTIONS**

The economic assumptions for the 2016 actuarial valuation.

Investment return\* - 8.00% per year.

Salary increases -

*Inflation:* 3.50% Plus

*Productivity pay increases:* 0.75% Plus

*Promotional and merit salary increases:*

Years of Service	Regular	Police/Fire
Less than 1	5.50%	10.25%
1	4.25	6.55
2	3.50	5.15
3	3.25	4.55
4	3.00	4.25
5	2.75	4.05
6	2.40	3.75
7	2.25	3.25
8	1.85	2.75
9	1.75	2.25
10	1.50	1.75
11	1.00	1.50
12	0.80	1.25
13 or More	0.35	1.00

Rate Payroll - 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.

Payroll growth\* (Funding) - 6.5% per year for regular employees and 7.5% per year for police/fire employees.

\* Includes inflation at 3.5% per year.

## ACTUARIAL SECTION

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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 2010 are assumed to reach the cap after 24 years of retirement. Those hired in 2010 or later are assumed to reach the cap after 39 years of retirement. Underlying all of these assumptions is that CPI will grow over time at a rate of 3.50% 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 ½% 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 equal 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:

- (a) 2% per year following the third anniversary of the commencement of benefits, 2.5% 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**

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

<b>Regular employees with a date of membership before July 1, 2015</b>						
<b>Years of Service</b>						
<b>Age</b>	<b>5 - 9</b>	<b>10 - 19</b>	<b>20 - 24</b>	<b>25 - 29</b>	<b>30 - 32</b>	<b>33 or More</b>
45 – 49	--	--	1%	7%	20%	20%
50 – 54	1%	2%	2%	10%	20%	20%
55 – 59	2%	4%	6%	13%	25%	25%
60 – 61	8%	12%	18%	25%	25%	25%
62 – 64	10%	14%	18%	25%	25%	25%
65 – 69	20%	20%	22%	25%	25%	25%
70 – 74	40%	40%	60%	60%	60%	60%
75 & older	100%	100%	100%	100%	100%	100%

<b>Regular employees with a date of membership on or after July 1, 2015</b>						
<b>Years of Service</b>						
<b>Age</b>	<b>5 - 9</b>	<b>10 - 19</b>	<b>20 - 24</b>	<b>25 - 29</b>	<b>30 - 32</b>	<b>33 or More</b>
45 – 49	--	--	1%	7%	7%	20%
50 – 54	1%	2%	2%	10%	10%	20%
55 – 59	2%	4%	6%	13%	25%	25%
60 – 61	8%	12%	18%	25%	25%	25%
62 – 64	10%	14%	18%	25%	25%	25%
65 – 69	20%	20%	22%	25%	25%	25%
70 – 74	40%	40%	60%	60%	60%	60%
75 & older	100%	100%	100%	100%	100%	100%

**ACTUARIAL SECTION**

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<b>Police/Fire Employees</b>					
<b>Years of Service</b>					
<b>Age</b>	<b>5 - 9</b>	<b>10 - 19</b>	<b>20 - 24</b>	<b>25 - 29</b>	<b>30 or more</b>
Less than 40	--	--	--	--	--
40 - 44	--	0.75%	3.00%	--	--
45 - 49	--	1.00%	5.00%	15.00%	15.00%
50 - 54	1.50%	5.00%	13.00%	18.00%	27.00%
55 - 59	3.50%	11.00%	20.00%	25.00%	35.00%
60 - 64	10.00%	18.00%	25.00%	32.00%	35.00%
65 - 69	60.00%	60.00%	65.00%	70.00%	70.00%
70 & older	100.00%	100.00%	100.00%	100.00%	100.0%

The retirement age for inactive vested members is equal to their earliest unreduced retirement age.

The assumed withdrawal rates are shown below:

<b>Regular Employees</b>	
<b>Years of Service</b>	<b>Rate</b>
0 – 1	16.50%
1 – 2	12.50%
2 – 3	9.70%
3 – 4	7.30%
4 – 5	6.60%
5 – 6	5.00%
6 – 7	4.00%
7 – 8	3.50%
8 – 9	3.25%
9 – 10	3.00%
10 – 11	2.75%
11 – 12	2.50%
12 – 13	2.25%
13 – 14	2.00%
14 – 15	1.75%
15 & over	1.50%

<b>Police/Fire Employees</b>	
<b>Years of Service</b>	<b>Rate</b>
0 – 1	14.00%
1 – 2	6.50%
2 – 3	5.75%
3 – 4	4.75%
4 – 5	4.25%
5 – 6	3.50%
6 – 7	3.00%
7 – 8	2.25%
8 – 9	1.90%
9 – 10	1.75%
10 – 11	1.50%
11 – 12	1.25%
12 – 13	1.00%
13 – 14	0.90%
14 – 15	0.80%
15 & over	0.50%

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

**ACTUARIAL SECTION**

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The assumed disability rates are shown below for selected ages:

<b>Age</b>	<b>Regular Employees</b>	<b>Police/Fire Employees</b>
22	0.01%	0.00%
27	0.02%	0.06%
32	0.06%	0.10%
37	0.09%	0.18%
42	0.21%	0.35%
47	0.35%	0.56%
52	0.57%	0.75%
57	0.75%	0.50%
62	0.40%	0.50%

No disability rates are assumed after age 65.

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 June 30, 2015, less than 33 1/3 years of service for Regular members with an effective date of membership on or after July 1, 2015, or 25 years for Police/Fire members.

Mortality Table – For non-disabled male regular members it is the RP-2000 Combined Healthy Mortality Table projected to 2013 with Scale AA. For non-disabled 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. The schedules below show the assumed mortality rates and projected life expectancies for selected ages:

<b>Regular Members</b>				
	<b>Mortality Rates</b>		<b>Expected Years of Life Remaining</b>	
<b>Age</b>	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
40	0.10%	0.05%	41.1	44.4
50	0.17%	0.12%	31.6	34.7
60	0.55%	0.42%	22.4	25.4
70	1.82%	1.39%	14.3	17.0
80	5.65%	3.79%	7.7	10.1

Police/Fire Members				
Age	Mortality Rates		Expected Years of Life Remaining	
	Males	Females	Males	Females
40	0.10%	0.06%	40.2	42.5
50	0.19%	0.15%	30.7	32.8
60	0.63%	0.54%	21.5	23.6
70	2.02%	1.72%	13.5	15.5
80	6.41%	4.63%	7.1	9.0

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.

**PRESENCE AND AGE OF BENEFICIARY**

It is assumed for purposes of the actuarial valuation that beneficiaries of female members are three years older than the female member. Beneficiaries of male members are assumed to be three 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 60% 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.

**ADMINISTRATIVE EXPENSES**

0.15% of payroll added to Normal Cost.

**ACTUARIAL VALUE OF ASSETS**

Market 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 SECTION

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actuarial value, and is recognized over a five-year period, further adjusted, if necessary, to be within 30% of the market value.

### 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

**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 will be amortized over a period equal to the truncated average remaining amortization period of all prior UAAL layers. This will occur until the average remaining amortization period is less than 20 years. At that point, amortization periods of 20 years will be used for actuarial gains and losses.

Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period equal to the truncated average remaining amortization period of all prior UAAL layers. This would occur until the average remaining amortization period is less than 20 years. At that point, amortization periods of 20 years would be 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:

- 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), 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.

**CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS SINCE THE PREVIOUS YEAR**

Retirement rates have been changed for Regular members with an effective date of membership on or after July 1, 2015, in conjunction with plan changes that modified retirement eligibilities for this group.

**REQUIRED SUPPLEMENTARY INFORMATION  
SCHEDULES OF FUNDING PROGRESS  
2007 to 2016  
(dollars in millions)**

<b>Actuarial Valuation Date June 30</b>	<b>Actuarial Value of Assets (AVA)</b>	<b>Accrued Liability (AAL)</b>	<b>Unfunded Actuarial Accrued Liability (UAAL)</b>	<b>Ratio of AVA to AAL</b>	<b>Annual Covered Payroll</b>	<b>UAAL as a % of Annual Covered Payroll</b>
2007	\$21,359.0	\$27,671.6	\$6,312.6	77.2%	\$4,769.6	132.4%
2008	23,237.7	30,495.9	7,258.2	76.2	5,194.4	139.7
2009	23,971.9	33,075.2	9,103.3	72.5	5,373.1	169.4
2010	24,725.5	35,077.7	10,352.3	70.5	5,365.5	192.9
2011	25,871.1	36,876.2	11,005.1	70.2	5,214.6	211.0
2012	27,399.0	38,604.9	11,205.9	71.0	5,087.8	220.3
2013	29,108.5	41,984.5	12,875.9	69.3	5,100.2	252.5
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

<b>Actuarial Valuation Date June 30</b>	<b>Unfunded Actuarial Accrued Liability (millions)</b>		<b>Unfunded Accrued Liability as % of Payroll</b>		<b>Actuarial Value of Assets as % of Total Actuarial Accrued Liability</b>	
	<b>Regular</b>	<b>Police/ Fire</b>	<b>Regular</b>	<b>Police/ Fire</b>	<b>Regular</b>	<b>Police/ Fire</b>
2007	\$4,615.8	\$1,696.8	116.0%	214.4%	78.8%	71.1%
2008	5,363.0	1,895.2	123.8	219.4	77.7	70.8
2009	6,929.3	2,173.9	155.1	240.1	73.4	68.9
2010	7,950.5	2,401.8	178.4	264.5	71.2	67.8
2011	8,514.1	2,491.0	196.5	282.4	70.6	68.4
2012	8,729.4	2,476.5	206.2	289.5	71.2	70.1
2013	10,331.9	2,544.0	243.7	295.7	68.9	71.1
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

**SCHEDULE 1  
RETIREMENT SYSTEM MEMBERSHIP  
2007 to 2016**

<b>June 30</b>	<b>Active Members</b>	<b>Inactive Members</b>	<b>Retired and Disabled Members</b>	<b>Beneficiaries &amp; Survivors</b>	<b>Total Membership</b>
2007	103,693	10,990	31,262	4,425	150,370
2008	106,123	11,593	33,479	4,651	155,846
2009	105,417	11,574	37,095	4,810	158,896
2010	102,594	11,807	38,841	5,078	158,320
2011	99,911	12,632	41,259	5,319	159,121
2012	98,512	12,962	44,012	5,534	161,020
2013	99,038	13,739	46,653	5,777	165,207
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

**SCHEDULE 2  
ACTIVE MEMBER VALUATION DATA  
2007 to 2016**

<b>June 30</b>	<b>Number of Active Members</b>		<b>Annual Salary (millions)</b>		<b>Annual Average Salary</b>		<b>Percent Increase Average Salary</b>	
	<b>Regular</b>	<b>Police/ Fire</b>	<b>Regular</b>	<b>Police/ Fire</b>	<b>Regular</b>	<b>Police/ Fire</b>	<b>Regular</b>	<b>Police/ Fire</b>
2007	91,757	11,936	\$3,978.1	\$791.6	\$43,355	\$66,316	3.4%	3.2%
2008	93,816	12,307	4,330.5	863.9	46,159	70,194	6.5	5.8
2009	92,784	12,633	4,467.7	905.4	48,151	71,669	4.3	2.1
2010	90,219	12,375	4,457.5	908.0	49,407	73,373	2.6	2.4
2011	87,975	11,936	4,332.6	882.0	49,248	73,895	(0.3)	0.7
2012	86,719	11,793	4,232.5	855.3	48,808	72,523	(0.9)	(1.9)
2013	87,193	11,845	4,239.8	860.4	48,626	72,637	(0.4)	0.2
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

SCHEDULE 3

PAY STATUS PARTICIPANTS ADDED TO AND REMOVED FROM THE ROLLS  
2007 to 2016

RETIREES AND BENEFICIARIES

June 30	Beginning Balance	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls at End of Year</u>		% Increase in Annual Allowances	Average Annual Allowances
		Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
2007	29,713	3,005	\$91,153,219	(795)	(\$17,445,492)	31,923	\$906,337,590	11.9%	\$28,391
2008	31,923	3,118	98,180,394	(875)	(18,596,824)	34,166	1,010,049,395	11.4	29,563
2009	34,166	4,395	153,318,503	(809)	(19,096,137)	37,752	1,172,786,193	16.1	31,066
2010	37,752	2,717	89,297,524	(915)	(22,834,942)	39,554	1,265,227,334	7.9	31,988
2011	39,554	3,443	114,677,405	(1,016)	(27,214,007)	41,981	1,379,326,118	9.0	32,856
2012	41,981	3,687	121,192,385	(932)	(24,956,200)	44,736	1,507,827,860	9.3	33,705
2013	44,736	3,665	115,060,841	(1,050)	(27,984,633)	47,351	1,632,417,296	8.3	34,475
2014	47,351	3,732	119,871,171	(1,142)	(34,060,824)	49,941	1,757,076,989	7.6	35,183
2015	49,941	4,110	143,218,449	(1,250)	(37,461,678)	52,801	1,901,374,760	8.2	36,010
2016	52,801	4,454	158,933,124	(1,328)	(41,066,707)	55,927	2,050,852,866	7.9	36,670

DISABILITY RECIPIENTS

June 30	Beginning Balance	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls at End of Year</u>		% Increase in Annual Allowances	Average Annual Allowances
		Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
2007	1,990	243	\$5,357,238	(90)	(\$1,905,849)	2,143	\$40,799,325	11.9%	\$19,038
2008	2,143	223	5,162,630	(121)	(2,175,505)	2,245	44,738,669	9.7	19,928
2009	2,245	267	6,957,349	(109)	(1,997,230)	2,403	50,775,027	13.5	21,130
2010	2,403	218	5,437,237	(106)	(2,128,188)	2,515	55,151,437	8.6	21,929
2011	2,515	266	7,149,107	(113)	(2,423,831)	2,668	61,000,876	10.6	22,864
2012	2,668	279	7,576,925	(122)	(2,462,375)	2,825	67,473,905	10.6	23,885
2013	2,825	323	8,863,323	(117)	(2,950,968)	3,031	74,890,587	11.0	24,708
2014	3,031	286	8,346,444	(133)	(3,001,371)	3,184	81,828,716	9.3	25,700
2015	3,184	279	7,843,123	(238)	(6,031,122)	3,225	85,166,914	4.1	26,408
2016	3,225	224	6,630,290	(375)	(9,669,332)	3,074	83,459,531	(2.0)	27,150

SURVIVOR ANNUITANTS

June 30	Beginning Balance	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls at End of Year</u>		% Increase in Annual Allowances	Average Annual Allowances
		Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
2007	1,559	148	\$1,896,176	(86)	(\$792,804)	1,621	\$20,944,150	8.5%	\$12,921
2008	1,621	161	1,905,857	(63)	(512,942)	1,719	22,920,123	9.4	13,333
2009	1,719	124	1,449,221	(93)	(751,205)	1,750	24,257,755	5.8	13,862
2010	1,750	174	1,977,291	(74)	(710,074)	1,850	26,115,812	7.7	14,117
2011	1,850	162	1,999,587	(83)	(825,074)	1,929	27,852,395	6.6	14,439
2012	1,929	140	1,764,977	(84)	(826,587)	1,985	29,436,963	5.7	14,830
2013	1,985	132	1,877,979	(69)	(706,398)	2,048	31,357,319	6.5	15,311
2014	2,048	139	1,699,773	(104)	(935,578)	2,083	32,868,928	4.8	15,780
2015	2,083	144	2,339,825	(94)	(1,085,422)	2,133	34,817,928	5.9	16,323
2016	2,133	161	2,474,940	(115)	(1,338,740)	2,179	36,659,755	5.3	16,824

**SCHEDULE 4**  
**SOLVENCY TEST**  
**(millions)**

**2007 to 2016**

**Actuarial Accrued Liabilities**

<b>June 30</b>	<b>Active Member Contributions</b> <b>(1)</b>	<b>Inactive and Pay-Status Members*</b> <b>(2)</b>	<b>Active Members</b>	<b>Actuarial Value of Assets</b>	<b>Portion of Actuarial Accrued Liabilities Covered by Assets</b>		
			<b>Employer Financed Portion</b> <b>(3)</b>		<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
2007	\$521.5	\$12,717.0	\$14,433.1	\$21,359.0	100%	100%	56.3%
2008	574.8	14,258.6	15,662.5	23,237.7	100	100	53.7
2009	606.0	16,367.0	16,102.2	23,971.9	100	100	43.5
2010	650.5	17,574.5	16,852.7	24,725.5	100	100	38.6
2011	679.9	19,206.9	16,989.4	25,871.1	100	100	35.2
2012	708.5	20,519.7	17,376.7	27,399.0	100	100	35.5
2013	743.2	23,132.1	18,109.2	29,108.5	100	100	28.9
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

\* Includes liability for post-retirement benefit increases.  
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SCHEDULE 5

ANALYSIS OF ACTUARIAL EXPERIENCE

Gains and Losses in Actuarial Accrued Liabilities (AAL) During Year Ended June 30, 2016  
 Resulting from Differences Between Assumed Experience and Actual Experience  
 (Dollar Amounts in Millions)

Type of Activity	Regular		Police/Fire	
	Amount	As Pct of AAL	Amount	As Pct of AAL
<b>Age and Service Retirements.</b> 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.	(\$185.9)	(0.49%)	(\$55.2)	(0.54%)
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If there are more claims, there is a loss.	(8.5)	(0.02%)	(5.5)	(0.05%)
<b>Pre- and Post-Retirement Mortality.</b> If retirees live longer than assumed, there is a loss. If retirees live shorter than assumed, there is a gain.	12.4	0.03%	(23.3)	(0.23%)
<b>Post-Retirement Benefit Increases.</b> If increases are more than assumed, there is a loss. If increases are less than assumed, there is a gain.	327.1	0.86%	77.5	0.75%
<b>Withdrawal From Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If less liabilities are released, there is a loss.	28.0	0.07%	(4.6)	(0.04)%
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If there are greater increases, there is a loss.	167.9	0.44%	50.4	0.49%
<b>Active New Entrants.</b> Cost due to new hires.	(55.8)	(0.15%)	(6.0)	(0.06%)
<b>Active Rehires.</b> Some new active members have past service credits reinstated, thereby increasing costs due to the unanticipated liabilities.	(28.3)	(0.07%)	(3.2)	(0.03%)
<b>Retirees Return to Actives.</b>	44.7	0.12%	1.6	0.02%
<b>Inactive and Retiree Showups.</b> Persons in inactive or pay status who are added to the valuation data during the year.	(69.6)	(0.18%)	(15.4)	(0.15%)
<b>Other.</b> Miscellaneous gains and losses result from data changes and adjustments, and other miscellaneous impacts on the valuation results. Includes actual purchase of service contributions.	38.4	0.10%	23.3	0.22%
<b>Total Liability Experience Gain (Loss) During Year.</b>	270.4	0.71%	39.6	0.38%
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If there is less income, there is a loss.	(89.4)	(0.23%)	(24.8)	(0.24%)
<b>Total Experience Gain (Loss) During the Year.</b>	181.0	0.48%	14.8	0.14%

SCHEDULE 6

SCHEDULE OF EMPLOYER CONTRIBUTIONS  
2007 to 2016

Fiscal Year Ended June 30	REGULAR		POLICE/FIRE		TOTAL	
	Annual Required Contribution*	Percentage Contributed	Annual Required Contribution*	Percentage Contributed	Annual Required Contribution*	Percentage Contributed
2007	\$861,341,800	97%	\$279,177,100	91%	\$1,140,518,900	96%
2008	924,842,900	96	333,828,000	85	1,258,670,900	93
2009	993,985,400	93	346,562,200	85	1,340,547,600	90
2010	1,030,796,200	93	358,761,400	91	1,389,557,600	92
2011	1,057,566,978	89	372,888,833	88	1,430,455,811	88
2012	1,028,518,922	96	356,627,690	96	1,385,146,612	96
2013	1,140,004,053	86	377,692,041	88	1,517,696,095	86
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

\* Reflects employer contributions only. Determined using 5% assumed payroll growth and 30-year frozen period for amortizing unfunded actuarial accrued liability.



**DISTRIBUTION OF RETIRED MEMBERS  
AND BENEFICIARIES BY TYPE AS OF  
JUNE 30, 2016**

**REGULAR**

	<u>Total</u>	<u>Service</u>	<u>Disability</u>	<u>Beneficiary</u>	<u>Survivor</u>
Under \$1,000	12,348	9,312	676	1,162	1,198
1,000 – 1,999	12,583	10,453	720	1,136	274
2,000 – 2,999	8,866	7,457	558	640	211
3,000 – 3,999	6,396	5,615	328	324	129
4,000 – 4,999	5,752	5,292	157	227	76
5,000 – 5,999	3,950	3,767	62	95	26
6,000 – 6,999	1,693	1,617	19	51	6
7,000 – 7,999	964	939	12	10	3
8,000 – 8,999	483	468	4	10	1
9,000 – 9,999	207	203	1	2	1
10,000 & over	<u>242</u>	<u>239</u>	<u>0</u>	<u>3</u>	<u>0</u>
Total	53,484	45,362	2,537	3,660	1,925

**POLICE/FIRE**

	<u>Total</u>	<u>Service</u>	<u>Disability</u>	<u>Beneficiary</u>	<u>Survivor</u>
Under \$1,000	608	284	39	138	147
1,000 – 1,999	973	601	123	216	33
2,000 – 2,999	922	617	118	172	15
3,000 – 3,999	987	770	99	93	25
4,000 – 4,999	955	792	92	54	17
5,000 – 5,999	866	783	46	27	10
6,000 – 6,999	781	752	14	10	5
7,000 – 7,999	573	562	2	7	2
8,000 – 8,999	375	371	2	2	0
9,000 – 9,999	243	241	0	2	0
10,000 & over	<u>413</u>	<u>406</u>	<u>2</u>	<u>5</u>	<u>0</u>
Total	7,696	6,179	537	726	254

NEW RETIRED MEMBERS FOR YEAR ENDED JUNE 30, 2016

**Regular**

	Years of Credited Service						
	0-4	5-9	10-14	15-19	20-24	25-29	30+
Average monthly benefit	\$363	\$745	\$1,412	\$2,412	\$3,332	\$4,412	\$5,357
Average salary	\$36,513	\$51,414	\$60,663	\$70,429	\$74,821	\$78,473	\$83,261
Number of new retirees	24	664	784	684	600	459	531

**Police/Fire**

	Years of Credited Service						
	0-4	5-9	10-14	15-19	20-24	25-29	30+
Average monthly benefit	N/A	\$797	\$1,864	\$3,414	\$5,230	\$7,117	\$8,275
Average salary	N/A	\$65,601	\$80,772	\$92,602	\$109,171	\$124,280	\$125,158
Number of new retirees	0	21	68	59	136	195	42

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100 Montgomery Street Suite 500 San Francisco, CA 94104-4308  
T 415.263.8200 www.segalco.com

November 22, 2016

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

Dear Retirement Board Members:

We are pleased to submit this Governmental Accounting Standards Board (GASB) Statement No. 67 Actuarial Valuation as of June 30, 2016. It contains various information that will need to be disclosed in order to comply with GASB Statement No. 67.

This report was prepared in accordance with applicable Actuarial Standards of Practice at the request of the Board to assist in administering the Plan. We are not accountants, but are familiar with the GASB requirements and believe that the calculations are consistent with those requirements. The census and financial information on which our calculations were based was prepared by the Retirement Office. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

The actuarial cost method used in the calculation of the Total Pension Liability (Entry Age Method) is the same cost method used for funding purposes. All actuarial assumptions for these calculations are the same as for funding purposes, with the exception of the payroll growth assumption, which is 5% per year for GASB 67 calculations.

The assumed rate of return on assets for funding purposes is 8% per year, net of investment fees, and this is also the assumed rate used to discount the Total Pension Liability.

The following supporting schedules were prepared by Segal:

- Schedule of Net Pension Liability
- Schedule of Sensitivity of the Net Pension Liability to Changes in the Discount Rate
- Schedule of Changes in Net Pension Liability
- Schedule of Contributions

The actuarial calculations were completed under the supervision of Mark Hamwee, FSA, MAAA, Enrolled Actuary. 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. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Plan.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

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

Thomas D. Levy, FSA, MAAA, EA  
Senior Vice President &  
Chief Actuary

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

MAM/jc  
Enclosures

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Benefits, Compensation and HR Consulting. Member of The Segal Group. Offices throughout the United States and Canada

## ACTUARIAL SECTION

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### Schedule of Net Pension Liability

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The components of the net pension liability are as follows:

	June 30, 2016	June 30, 2015
Total pension liability	\$48,459,161,570	\$46,070,157,029
Plan fiduciary net position	<u>35,002,028,906</u>	<u>34,610,720,184</u>
Net pension liability	\$13,457,132,664	\$11,459,436,845
Plan fiduciary net position as a percentage of the total pension liability	72.23%	75.13%

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The net pension liability was measured as of June 30, 2016 and 2015 and determined based upon the Plan fiduciary net position (plan assets) and total pension liability from actuarial valuations as of July 1, 2016 and 2015, respectively.

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### Schedule of Sensitivity of the Net Pension Liability to Changes in the Discount Rate.

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The following presents the net pension liability of the NVPERS as of June 30, 2016, calculated using the discount rate of 8.00%, as well as what the NVPERS net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (7.00%) or 1 percentage point higher (9.00%) than the current rate:

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Net pension liability as of June 30, 2016	\$19,725,527,478	\$13,457,132,664	\$8,241,905,366

**Schedule of Changes in Net Pension Liability – Last Two Fiscal Years**

	2016	2015
<b>Total pension liability</b>		
Service cost	\$1,086,454,356	\$1,063,483,261
Interest	3,686,984,270	3,525,394,213
Change of assumptions	0	0
Differences between expected and actual experience*	-245,818,070	-529,549,068
Change of plan provisions	0	0
Benefit payments, including refunds of member contributions	-2,138,616,015	-1,983,874,857
Other Changes	<u>0</u>	<u>-2,356,700</u>
<b>Net change in total pension liability</b>	<b>\$2,389,004,541</b>	<b>\$2,073,096,849</b>
<b>Total pension liability – beginning</b>	<u>46,070,157,029</u>	<u>43,997,060,180</u>
<b>Total pension liability – ending (a)</b>	<u><b>\$48,459,161,570</b></u>	<u><b>\$46,070,157,029</b></u>
<b>Plan fiduciary net position</b>		
Contributions – employer (including those for administrative expenses)	\$1,569,709,596	\$1,436,652,815
Contributions – employee (including purchase of service)	191,524,623	196,788,233
Net investment income	778,696,864	1,395,292,096
Benefit payments, including refunds of member contributions	-2,138,616,015	-1,983,874,857
Administrative expense	-10,573,149	-9,648,626
Other	<u>566,803</u>	<u>429,366</u>
<b>Net change in plan fiduciary net position</b>	<b>\$391,308,722</b>	<b>\$1,035,639,027</b>
<b>Plan fiduciary net position – beginning</b>	<u>34,610,720,184</u>	<u>33,575,081,157</u>
<b>Plan fiduciary net position – ending (b)</b>	<u>\$35,002,028,906</u>	<u>\$34,610,720,184</u>
<b>Net pension liability – ending (a) – (b)</b>	<u><b>\$13,457,132,662</b></u>	<u><b>\$11,459,436,845</b></u>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	72.23%	75.13%
<b>Covered employee payroll</b>	\$6,081,072,010	\$5,921,618,314
<b>Plan net pension liability as percentage of covered employee payroll</b>	221.3%	193.5%

\* Includes new liability resulting from purchase of service.

## ACTUARIAL SECTION

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### Schedule of Contributions – Last Ten Fiscal Years

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Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions*	Contribution Deficiency (Excess)	Covered-Employee Payroll**	Contributions as a Percentage of Covered Employee Payroll
2007	\$1,013,966,730	\$1,046,628,769	(\$32,662,039)	\$5,005,561,300	20.91%
2008	1,123,540,833	1,167,392,913	(43,852,080)	5,347,066,098	21.83%
2009	1,202,077,571	1,213,067,534	(10,989,963)	5,724,801,269	21.19%
2010	1,339,528,091	1,281,714,847	57,813,244	5,958,931,742	21.51%
2011	1,326,777,889	1,264,759,603	62,018,286	5,911,919,210	21.39%
2012	1,425,790,188	1,332,320,660	93,469,528	5,817,634,985	22.90%
2013	1,369,998,167	1,310,082,859	59,915,308	5,574,616,761	23.50%
2014	1,508,752,536	1,405,006,553	103,745,983	5,715,259,174	24.58%
2015	1,499,751,865	1,436,652,815	63,099,050	5,753,148,095	24.97%
2016	1,636,036,557	1,569,709,596	66,326,961	5,921,618,314	26.51%

\* Includes employer contributions towards administrative expenses.

\*\* Measurement as of beginning of year.

*Notes:*

All contributions shown reflect employer-paid contributions only. 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-employee payroll for year shown.



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## STATISTICAL SECTION



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**OVERVIEW**

This section of the Public Employees’ Retirement System of Nevada’s Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary 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 Fiduciary 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 Average Benefit Payments
- Schedule 5-A 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 Nine 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**

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**SCHEDULE 1****CHANGES IN NET POSITION - LAST TEN FISCAL YEARS**

(in millions)

	<u>2007</u>	<u>2008</u>	<u>2009</u>
<b>Additions</b>			
Employer contributions	\$ 1,046.6	\$ 1,167.4	\$ 1,213.1
Plan member contributions	83.2	88.0	93.6
Repayment and purchase of service	45.6	43.3	28.1
Investment income (net of expenses)	2,937.1	(743.1)	(3,543.4)
Other income	<u>3.3</u>	<u>2.4</u>	<u>2.4</u>
Total additions to plan net position	<u>4,115.8</u>	<u>558.0</u>	<u>(2,206.2)</u>
<b>Deductions</b>			
Benefit payments	929.4	1,033.3	1,189.6
Refunds	17.4	16.8	18.6
Administrative and other expenses	8.6	8.7	9.7
Transfers of contributions	<u>2.0</u>	<u>2.6</u>	<u>3.8</u>
Total deductions from plan net position	<u>957.4</u>	<u>1,061.4</u>	<u>1,221.7</u>
<b>Change in net position</b>	<u>\$ 3,158.4</u>	<u>\$ (503.4)</u>	<u>\$ (3,427.9)</u>

Notes: Information is from internal System records

<b>Fiscal Year</b>						
<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
\$ 1,281.7	\$ 1,264.8	\$ 1,332.3	\$ 1,310.1	\$ 1,405.0	\$ 1,436.6	\$ 1,569.7
99.7	97.0	98.2	99.2	109.7	114.3	129.8
26.9	31.5	38.0	46.5	42.8	82.5	61.7
2,059.4	4,402.4	766.1	3,193.9	5,031.4	1,395.3	778.7
1.9	2.2	2.1	2.5	1.9	2.8	2.0
3,469.6	5,797.9	2,236.7	4,652.2	6,590.8	3,031.5	2,541.9
1,301.6	1,412.1	1,552.7	1,680.8	1,816.7	1,958.3	2,111.9
20.3	24.8	27.8	26.1	23.1	25.6	26.8
11.1	10.6	10.0	9.6	9.6	9.6	10.6
0.5	1.5	1.7	0.9	1.0	2.4	1.3
1,333.5	1,449.0	1,592.2	1,717.4	1,850.4	1,995.9	2,150.6
\$ 2,136.1	\$ 4,348.9	\$ 644.5	\$ 2,934.8	\$ 4,740.4	\$ 1,035.6	\$ 391.3

**STATISTICAL SECTION**  
**FINANCIAL TRENDS**

**SCHEDULE 2**

**BENEFIT AND REFUND DEDUCTIONS FROM NET POSITION**

(in millions)

	<u>2007</u>	<u>2008</u>	<u>2009</u>
<b>Regular Members:</b>			
<b>Benefits</b>			
Retirement and survivor	\$ 716.9	\$ 797.7	\$ 924.7
Disability	39.8	44.0	48.8
Post-retirement increases	0.1	-	-
<b>Total benefits</b>	<u>\$ 756.8</u>	<u>\$ 841.7</u>	<u>\$ 973.5</u>
<b>Refunds</b>			
Refunds due to separation	\$ 13.7	\$ 12.3	\$ 14.0
Refunds due to death	-	-	-
Mandatory employer distributions	0.3	0.2	0.5
<b>Total refunds</b>	<u>\$ 14.0</u>	<u>\$ 12.5</u>	<u>\$ 14.5</u>
<b>Police/Fire Members:</b>			
<b>Benefits</b>			
Retirement and survivor	\$ 163.4	\$ 181.6	\$ 204.9
Disability	9.2	9.9	11.2
<b>Total benefits</b>	<u>\$ 172.6</u>	<u>\$ 191.5</u>	<u>\$ 216.1</u>
<b>Refunds</b>			
Refunds due to separation	\$ 3.4	\$ 4.3	\$ 4.1
Refunds due to death	-	-	-
<b>Total refunds</b>	<u>\$ 3.4</u>	<u>\$ 4.3</u>	<u>\$ 4.1</u>
<b>Total Members:</b>			
<b>Benefits</b>			
Retirement and survivor	\$ 880.3	\$ 979.3	\$ 1,129.6
Disability	49.0	53.9	60.0
Post-retirement increases	0.1	-	-
<b>Total benefits</b>	<u>\$ 929.4</u>	<u>\$ 1,033.2</u>	<u>\$ 1,189.6</u>
<b>Refunds</b>			
Refunds due to separation	\$ 17.1	\$ 16.6	\$ 18.1
Refunds due to death	-	-	-
Mandatory employer distributions	0.3	0.2	0.5
<b>Total refunds</b>	<u>\$ 17.4</u>	<u>\$ 16.8</u>	<u>\$ 18.6</u>

Notes: Police/Fire received post-retirement increases each year. Amounts are immaterial for purposes of this schedule. Information is from internal System records.

Fiscal Year

<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
\$ 1,008.3	\$ 1,085.8	\$ 1,187.8	\$ 1,283.6	\$ 1,385.3	\$ 1,491.2	\$ 1,609.6
52.9	58.3	63.6	69.4	75.5	81.3	81.7
-	-	-	-	-	-	-
<u>\$ 1,061.2</u>	<u>\$ 1,144.1</u>	<u>\$ 1,251.4</u>	<u>\$ 1,353.0</u>	<u>\$ 1,460.8</u>	<u>\$ 1,572.5</u>	<u>\$ 1,691.3</u>
\$ 14.6	\$ 18.4	\$ 19.1	\$ 18.2	\$ 17.0	\$ 18.1	\$ 20.4
-	-	-	0.5	0.4	0.8	1.3
0.5	0.2	0.3	0.3	0.1	0.1	0.3
<u>\$ 15.1</u>	<u>\$ 18.6</u>	<u>\$ 19.4</u>	<u>\$ 19.0</u>	<u>\$ 17.5</u>	<u>\$ 19.0</u>	<u>\$ 22.0</u>
\$ 227.9	\$ 254.4	\$ 286.1	\$ 310.5	\$ 336.4	\$ 364.2	\$ 398.1
12.5	13.6	15.2	17.3	19.5	21.6	22.5
<u>\$ 240.4</u>	<u>\$ 268.0</u>	<u>\$ 301.3</u>	<u>\$ 327.8</u>	<u>\$ 355.9</u>	<u>\$ 385.8</u>	<u>\$ 420.6</u>
\$ 5.2	\$ 6.2	\$ 8.4	\$ 7.0	\$ 5.5	\$ 6.6	\$ 4.8
-	-	-	0.1	0.1	-	-
<u>\$ 5.2</u>	<u>\$ 6.2</u>	<u>\$ 8.4</u>	<u>\$ 7.1</u>	<u>\$ 5.6</u>	<u>\$ 6.6</u>	<u>\$ 4.8</u>
\$ 1,236.2	\$ 1,340.2	\$ 1,473.9	\$ 1,594.1	\$ 1,721.7	\$ 1,855.4	\$ 2,007.7
65.4	71.9	78.8	86.7	95.0	102.9	104.2
-	-	-	-	-	-	-
<u>\$ 1,301.6</u>	<u>\$ 1,412.1</u>	<u>\$ 1,552.7</u>	<u>\$ 1,680.8</u>	<u>\$ 1,816.7</u>	<u>\$ 1,958.3</u>	<u>\$ 2,111.9</u>
\$ 19.8	\$ 24.6	\$ 27.5	\$ 25.3	\$ 22.5	\$ 24.7	\$ 25.2
-	-	-	-	0.5	0.8	1.3
0.5	0.2	0.3	0.3	0.1	0.1	0.3
<u>\$ 20.3</u>	<u>\$ 24.8</u>	<u>\$ 27.8</u>	<u>\$ 25.6</u>	<u>\$ 23.1</u>	<u>\$ 25.6</u>	<u>\$ 26.8</u>

**STATISTICAL SECTION**  
**REVENUES**

**SCHEDULE 3**  
**CONTRIBUTION RATES**

	Regular Employees		Police/Fire Employees	
	<u>Employer-Pay Plan</u>	<u>Employee/ Employer Plan (matching rate)</u>	<u>Employer-Pay Plan</u>	<u>Employee/ Employer Plan (matching rate)</u>
<b>Fiscal year ended June 30,</b>				
<b>2007</b>	19.75 %	10.50 %	32.00 %	16.50 %
<b>2008</b>	20.50	10.50	33.50	17.25
<b>2009</b>	20.50	10.50	33.50	17.25
<b>2010</b>	21.50	11.25	37.00	19.00
<b>2011</b>	21.50	11.25	37.00	19.00
<b>2012</b>	23.75	12.25	39.75	20.25
<b>2013</b>	23.75	12.25	39.75	20.25
<b>2014</b>	25.75	13.25	40.50	20.75
<b>2015</b>	25.75	13.25	40.50	20.75
<b>2016</b>	28.00	14.50	40.50	20.75

**SCHEDULE 4**

**RETIRED MEMBERS BY TYPE OF BENEFIT**

As of June 30, 2016

(Page 1 of 2)

**Regular Retired Members**

Amount of Monthly Benefit	Number of Retired Members	Type of Retirement			
		Service	Disability	Beneficiary	Survivor
Under \$1,000	12,348	9,312	676	1,162	1,198
\$1,000 - \$1,999	12,583	10,453	720	1,136	274
\$2,000 - \$2,999	8,866	7,457	558	640	211
\$3,000 - \$3,999	6,396	5,615	328	324	129
\$4,000 - \$4,999	5,752	5,292	157	227	76
\$5,000 - \$5,999	3,950	3,767	62	95	26
\$6,000 - \$6,999	1,693	1,617	19	51	6
\$7,000 - \$7,999	964	939	12	10	3
\$8,000 - \$8,999	483	468	4	10	1
\$9,000 - \$9,999	207	203	1	2	1
\$10,000 & Over	242	239	-	3	-
<b>Total</b>	<b>53,484</b>	<b>45,362</b>	<b>2,537</b>	<b>3,660</b>	<b>1,925</b>



**SCHEDULE 4**

**RETIRED MEMBERS BY TYPE OF BENEFIT**

**As of June 30, 2016**

**(Page 2 of 2)**

**Police/Fire Retired Members**

Amount of Monthly Benefit	Number of Retired Members	Type of Retirement			
		Service	Disability	Beneficiary	Survivor
Under \$1,000	608	284	39	138	147
\$1,000 - \$1,999	973	601	123	216	33
\$2,000 - \$2,999	922	617	118	172	15
\$3,000 - \$3,999	987	770	99	93	25
\$4,000 - \$4,999	955	792	92	54	17
\$5,000 - \$5,999	866	783	46	27	10
\$6,000 - \$6,999	781	752	14	10	5
\$7,000 - \$7,999	573	562	2	7	2
\$8,000 - \$8,999	375	371	2	2	-
\$9,000 - \$9,999	243	241	-	2	-
\$10,000 & Over	413	406	2	5	-
Total	<u>7,696</u>	<u>6,179</u>	<u>537</u>	<u>726</u>	<u>254</u>

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 2016 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 125.

Information provided by Segal Consulting, the System's actuary.

**SCHEDULE 5**

**AVERAGE BENEFIT PAYMENTS**

<u>June 30</u>		<u>Regular Members</u>	<u>Police/Fire Members</u>
2007	Average monthly benefit	\$2,216	\$3,549
	Average monthly compensation at retirement	\$4,800	\$7,421
	Number of new retirees	2,678	299
	Average years of service at retirement	18.93	22.55
2008	Average monthly benefit	\$2,306	\$3,740
	Average monthly compensation at retirement	\$5,054	\$7,458
	Number of new retirees	2,710	345
	Average years of service at retirement	19.04	22.30
2009	Average monthly benefit	\$2,428	\$3,926
	Average monthly compensation at retirement	\$5,139	\$7,710
	Number of new retirees	3,996	379
	Average years of service at retirement	19.80	22.21
2010	Average monthly benefit	\$2,486	\$4,141
	Average monthly compensation at retirement	\$5,309	\$8,250
	Number of new retirees	2,252	357
	Average years of service at retirement	18.15	23.01
2011	Average monthly benefit	\$2,539	\$4,348
	Average monthly compensation at retirement	\$4,890	\$7,343
	Number of new retirees	2,933	433
	Average years of service at retirement	19.38	22.53

Number of new retirees excludes survivors and beneficiaries.

The average monthly benefit and number of new retirees is from Segal Consulting, the System's actuarial firm. All other data is from internal System records.

Note: Average age at retirement is now shown on Schedule 6.

For GASB reporting purposes, beginning in 2012 Schedule 5-A is organized by years of credited service.

**STATISTICAL SECTION**  
**OPERATIONS**

**SCHEDULE 5-A**

**NEW RETIRED MEMBERS AVERAGE BENEFIT PAYMENTS**  
**(Page 1 of 2)**

**Regular**

	<b>Year of Credited Service</b>						
	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30+</b>
<b>FY2012</b>							
Average							
monthly benefit	\$ 316	\$ 708	\$ 1,492	\$ 2,253	\$ 3,133	\$ 4,207	\$ 5,334
Average salary	\$ 31,100	\$ 53,851	\$ 65,168	\$ 67,022	\$ 73,116	\$ 77,811	\$ 82,864
New retirees	67	638	686	546	540	283	466
<b>FY2013</b>							
Average							
monthly benefit	\$ 392	\$ 732	\$ 1,445	\$ 2,302	\$ 3,208	\$ 4,180	\$ 5,533
Average salary	\$ 40,715	\$ 55,919	\$ 62,673	\$ 67,832	\$ 73,088	\$ 76,158	\$ 84,003
New retirees	63	742	729	563	517	274	353
<b>FY2014</b>							
Average							
monthly benefit	\$ 307	\$ 698	\$ 1,433	\$ 2,351	\$ 3,227	\$ 4,266	\$ 5,361
Average salary	\$ 39,526	\$ 53,111	\$ 63,395	\$ 70,463	\$ 73,299	\$ 76,178	\$ 82,142
New retirees	57	698	673	583	510	331	402
<b>FY2015</b>							
Average							
monthly benefit	\$ 281	\$ 762	\$ 1,441	\$ 2,408	\$ 3,245	\$ 4,287	\$ 5,565
Average salary	\$ 13,318	\$ 52,524	\$ 63,031	\$ 70,500	\$ 73,071	\$ 77,750	\$ 87,364
New retirees	40	721	746	573	558	446	471
<b>FY2016</b>							
Average							
monthly benefit	\$ 363	\$ 745	\$ 1,412	\$ 2,412	\$ 3,332	\$ 4,412	\$ 5,357
Average salary	\$ 36,513	\$ 51,414	\$ 60,663	\$ 70,429	\$ 74,821	\$ 78,473	\$ 83,261
New retirees	24	664	784	684	600	459	531

**SCHEDULE 5-A**

**NEW RETIRED MEMBERS AVERAGE BENEFIT PAYMENTS**

(Page 2 of 2)

**Police/Fire**

**Year of Credited Service**

	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>
<b>FY2012</b>							
Average							
monthly benefit	N/A	\$ 894	\$ 1,776	\$ 3,357	\$ 4,783	\$ 6,809	\$ 8,451
Average salary	N/A	\$ 63,123	\$ 79,808	\$ 94,892	\$ 105,111	\$ 119,107	\$ 128,952
New retirees	0	27	67	61	128	122	35
<b>FY2013</b>							
Average							
monthly benefit	N/A	\$ 1,098	\$ 1,836	\$ 3,287	\$ 5,056	\$ 7,103	\$ 8,677
Average salary	N/A	\$ 67,352	\$ 85,941	\$ 92,347	\$ 105,667	\$ 124,569	\$ 123,411
New retirees	0	25	54	72	107	123	28
<b>FY2014</b>							
Average							
monthly benefit	N/A	\$ 791	\$ 1,807	\$ 3,379	\$ 5,012	\$ 6,710	\$ 8,741
Average salary	N/A	\$ 68,430	\$ 77,952	\$ 99,204	\$ 107,261	\$ 120,215	\$ 130,369
New retirees	0	14	48	55	94	113	36
<b>FY2015</b>							
Average							
monthly benefit	N/A	\$ 1,134	\$ 1,762	\$ 3,419	\$ 5,276	\$ 7,185	\$ 8,815
Average salary	N/A	\$ 68,715	\$ 78,453	\$ 93,265	\$ 112,151	\$ 125,093	\$ 128,100
New retirees	0	13	47	53	128	149	47
<b>FY2016</b>							
Average							
monthly benefit	N/A	\$ 797	\$ 1,864	\$ 3,414	\$ 5,230	\$ 7,117	\$ 8,275
Average salary	N/A	\$ 65,601	\$ 80,772	\$ 92,602	\$ 109,171	\$ 124,280	\$ 125,158
New retirees	0	21	68	59	136	195	42

Information provided by Segal Consulting, the System's actuary.

**STATISTICAL SECTION**  
**OPERATIONS**

**SCHEDULE 6**

**AVERAGE AGE AT RETIREMENT**

<u>June 30</u>	<u>Regular</u>	<u>Police/Fire</u>
2007	60	55
2008	60	55
2009	61	54
2010	61	55
2011	64	58
2012	64	59
2013	65	59
2014	66	59
2015	66	60
2016	67	60

Information is from internal System records.

**SCHEDULE 7**

**NUMBER OF ACTIVE MEMBERS PER RETIREE**

<u>June 30</u>	<u>Number of Active Members</u>		<u>Number of Retired Members*</u>		<u>Active Members per Retiree</u>	
	<u>Regular</u>	<u>Police/ Fire</u>	<u>Regular</u>	<u>Police/ Fire</u>	<u>Regular</u>	<u>Police/ Fire</u>
2007	91,757	11,936	27,313	3,949	3.4	3.0
2008	93,816	12,307	29,270	4,209	3.2	2.9
2009	92,784	12,633	32,578	4,517	2.8	2.8
2010	90,219	12,375	34,047	4,794	2.6	2.6
2011	87,975	11,936	36,123	5,136	2.4	2.3
2012	86,719	11,793	38,528	5,484	2.3	2.2
2013	87,193	11,845	40,854	5,799	2.1	2.0
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

\* Excluding survivors and beneficiaries

Information provided by Segal Consulting, the System's actuary.

**SCHEDULE 8**

**SCHEDULES OF FUNDING PROGRESS\*  
2007 to 2016  
(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
2007	\$21,359.0	\$27,671.6	\$6,312.6	77.2%	\$4,769.6	132.4%
2008	23,237.7	30,495.9	7,258.2	76.2	5,194.4	139.7
2009	23,971.9	33,075.2	9,103.3	72.5	5,373.1	169.4
2010	24,725.5	35,077.7	10,352.3	70.5	5,365.5	192.9
2011	25,871.1	36,876.2	11,005.1	70.2	5,214.6	211.0
2012	27,399.0	38,604.9	11,205.9	71.0	5,087.8	220.3
2013	29,108.5	41,984.5	12,875.9	69.3	5,100.2	252.5
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

Actuarial Valuation Date June 30	Unfunded Actuarial Accrued Liability (in millions)		Unfunded Actuarial Accrued Liability as % of Payroll		Actuarial Value of Assets as % of Total Actuarial Accrued Liability	
	Regular	Police/ Fire	Regular	Police/ Fire	Regular	Police/ Fire
	Regular	Fire	Regular	Fire	Regular	Fire
2007	\$4,615.8	\$1,696.8	116.0%	214.4%	78.8%	71.1%
2008	5,363.0	1,895.2	123.8	219.4	77.7	70.8
2009	6,929.3	2,173.9	155.1	240.1	73.4	68.9
2010	7,950.5	2,401.8	178.4	264.5	71.2	67.8
2011	8,514.1	2,491.0	196.5	282.4	70.6	68.4
2012	8,729.4	2,476.5	206.2	289.5	71.2	70.1
2013	10,331.9	2,544.0	243.7	295.7	68.9	71.1
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

\*Information provided by Segal Consulting, the System's actuary.

**STATISTICAL SECTION**  
**OPERATIONS**

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**SCHEDULE 9**  
**PARTICIPATING EMPLOYERS**  
(Page 1 of 3)

**State of Nevada and Related Agencies**

Board of Examiners for Alcohol & Drug Abuse Counselors  
Legislative Counsel Bureau  
Liquefied Petroleum Gas Board  
Nevada Rural Housing Authority  
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 Veterinary Medical Examiners  
State Personnel

**University of Nevada System**

University of Nevada, Las Vegas  
University of Nevada, Reno

**Schools**

100 Academy of Excellence  
Academy for Career Education  
Alpine Academy Charter School  
American Preparatory Academy of Nevada  
Andre Agassi College Preparatory Academy  
Bailey Charter Elementary School  
Beacon Academy of Nevada  
Carson City School District  
Carson Montessori School  
Churchill County School District  
Clark County School District  
Coral Academy Las Vegas  
Coral Academy of Science Charter School  
Delta Academy  
Discovery Charter School  
Doral Academy of Nevada

Douglas County School District  
Elko County School District  
Elko Institute for Academic Achievement  
Esmeralda County School District  
Equipo Academy  
Eureka County School District  
Explore Knowledge Charter School  
Founders Academy of Las Vegas  
High Desert Montessori School  
Honors Academy of Literature  
Humboldt County School District  
ICDA Charter High School  
Imagine School at Mountain View  
Innovations Charter School  
Lander County School District  
Las Vegas Charter School of the Deaf  
Leadership Academy of Nevada  
Learning Bridge Charter School  
Lincoln County School District  
Lyon County School District  
Mater Academy of Nevada  
Mariposa Academy of Language and Learning  
Mineral County School District  
Nevada Connections Academy  
Nevada State High School  
Nevada Virtual Academy  
Nye County School District  
Oasis Academy  
Odyssey Charter School  
Pershing County School District  
Pinecrest Academy of Nevada  
Quest Academy  
Rainbow Dreams Academy  
Rainshadow Charter School  
Sierra Nevada Academy  
Silver Sands Montessori Charter School  
Silver State High School  
Somerset Academy of Las Vegas  
Storey County School District  
Washoe County School District  
White Pine County School District

**Counties**

Churchill County  
Clark County  
Douglas County

**SCHEDULE 9**  
**PARTICIPATING EMPLOYERS**  
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**Counties (continued)**

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  
Lander County Sewer and Water  
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  
Conservation District of Southern Nevada  
Douglas County Mosquito District  
East Fork Fire Protection District  
East Fork Swimming Pool District  
Elko Convention and Visitors Authority  
Elko County Agricultural Association  
Elko Volunteer Fire Department  
Fernley Swim Pool District  
Gardnerville Ranchos General Improvement District  
Gerlach General Improvement District  
Grass Valley Volunteer Fire Department  
Henderson District Public Libraries  
Incline Village Visitor's/Convention Bureau  
Indian Hills Improvement District  
Kingsbury General Improvement District  
Lahontan Conservation District



**SCHEDULE 9**  
**PARTICIPATING EMPLOYERS**  
(Page 3 of 3)

**Special Districts and Agencies (continued)**

Las Vegas Convention/Visitors Authority  
Las Vegas/Clark County Library District  
Las Vegas Metropolitan Police Department  
Lovelock Volunteer Fire Department  
Mason Valley Fire District  
Mineral County Housing Authority  
Mt. Charleston Fire Protection District  
Nevada Association of Counties  
Nevada Tahoe Conservation District  
North Lake Tahoe Fire Protection District  
North Lyon County Fire District  
Palomino Valley General Improvement District  
Pershing County Volunteer Fire Department  
Regional Transportation Commission  
Reno Housing Authority  
Reno/Sparks Convention and Visitors Authority  
Reno-Tahoe Airport Authority  
Round Hill General Improvement District  
RTC of Southern Nevada  
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  
Town of Kingston  
Truckee Meadows Fire Protection District  
Truckee Meadows Regional Planning Agency  
White Pine County 474 Fire Protection District  
White Pine County Tourism and Recreation Board  
Winnemucca Rural Volunteer Fire  
Winnemucca Volunteer Fire Department  
Workforce Connections

**SCHEDULE 10  
PRINCIPAL PARTICIPATING EMPLOYERS**

<b>2007</b>			
<u>Participating Agencies</u>	<u>Covered Employees</u>	<u>Rank</u>	<u>Percentage of Total System</u>
Clark County School District	31,447	1	30.3%
State of Nevada	15,307	2	14.8
Clark County	7,429	3	7.2
Washoe County School District	7,279	4	7.0
Las Vegas Metropolitan Police Department	4,853	5	4.7
University Medical Center of Southern Nevada	3,778	6	3.6
Washoe County	2,936	7	2.8
City of Las Vegas	2,921	8	2.8
University of Nevada, Reno	2,180	9	2.1
City of Henderson	2,018	10	2.0
Subtotal	80,148		77.3
All other	23,545		22.7
Total 2007 (166 Agencies)	103,693		100.0%

<b>2016</b>			
<u>Participating Agencies</u>	<u>Covered Employees</u>	<u>Rank</u>	<u>Percentage of Total System</u>
Clark County School District	32,693	1	31.1%
State of Nevada	18,017	2	17.1
Washoe County School District	7,348	3	7.0
Clark County	7,196	4	6.8
Las Vegas Metropolitan Police Department	5,007	5	4.8
University Medical Center of Southern Nevada	3,346	6	3.2
City of Las Vegas	2,630	7	2.5
Washoe County	2,383	8	2.3
City of Henderson	2,124	9	2.0
University of Nevada, Reno	1,893	10	1.8
Subtotal	82,637		78.6
All other <sup>a</sup>	22,530		21.4
Total 2016 (202 Agencies)	105,167		100.0%

<sup>a</sup> In 2016 "All other" consisted of:		
<u>Agency Type</u>	<u>Number of Agencies</u>	<u>Covered Employees</u>
State of Nevada and Related Agencies	21	493
University of Nevada System	1	1,788
Schools	55	8,549
Counties	14	2,747
Cities	17	4,171
Hospitals	7	743
Utility, Irrigation, and Sanitation Districts	18	816
Special Districts and Agencies	59	3,223
Subtotal	192	22,530
Largest Ten Participating Employers	10	82,637
Total	202	105,167

**STATISTICAL SECTION**  
**OPERATIONS**

**SCHEDULE 11**

**AVERAGE AGE AND SERVICE STATISTICS FOR MEMBERS\***

As of June 30	Regular		Police/Fire	
	Average Age	Average Years of Service	Average Age	Average Years of Service
2007	45.0	8.3	39.3	9.7
2008	45.1	8.4	39.3	9.8
2009	45.2	8.6	39.4	9.8
2010	45.8	9.2	39.8	10.3
2011	46.1	9.6	40.1	10.7
2012	46.4	10.0	40.4	11.1
2013	46.5	10.1	40.6	11.3
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

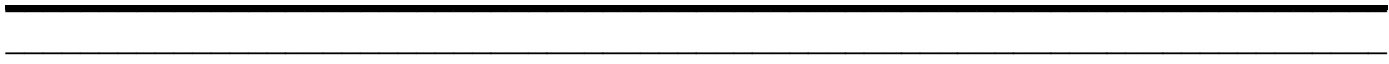
**SCHEDULE 12**

**AVERAGE SALARIES FOR MEMBERS\***

As of June 30	Regular	Increase (Decrease)	Police/Fire	Increase (Decrease)
2007	\$ 43,355		\$ 66,316	
2008	46,159	6.5 %	70,194	5.8 %
2009	48,151	4.3	71,669	2.1
2010	49,407	2.6	73,373	2.4
2011	49,248	(0.3)	73,895	0.7
2012	48,808	(0.9)	72,523	(1.9)
2013	48,626	(0.4)	72,637	0.2
2014	48,057	(1.2)	71,990	(0.9)
2015	47,840	(0.5)	72,417	0.6
2016	47,922	0.2	73,179	1.1
Average annual increase 2007 – 2016		1.1 %	1.1 %	

\* Information provided by Segal Consulting

Fiscal Year 2016 Consumer Price All Urban Index (CPI) 1.01%



## **PLAN SUMMARY**

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## **Administration**

PERS provides retirement, disability, and death 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, 2016, were \$3.12 for each Regular member and benefit recipient and \$3.37 for each Police/Fire member and benefit recipient.

## **Membership**

An employee of a participating public employer is required to be a member of the System from the first day of service if he or she is employed in a position which 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, 2015, the EPC contribution rates are 28.00% for Regular members and 40.50% for Police/Fire members.

### **Employee/Employer Contribution Plan**

Effective July 1, 2015, under this plan, the Regular member and the employer each contribute 14.50% of compensation to the System. Police/Fire members and their employers each contributed 20.75% of compensation. Employee contributions made under this plan are refundable upon termination of employment. Employer contributions are not refundable.

## **Service**

Public employees, other than school employees, earn service credit for years, months, and days actually worked. 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.

## **PLAN SUMMARY**

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### **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.

### **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.

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:

1. 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.

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

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

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

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



## **PLAN SUMMARY**

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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. The option provides to the beneficiary, upon retiree's death and 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 if they began receiving benefits at least three years before the effective date of the increase. 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 if they began receiving benefits at least three years before the effective date of the increase. 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 if they began receiving benefits at least three years before the effective date of the increase. 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; 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).

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.

Eligible survivors:

1. Spouse or registered domestic partner
2. Each unmarried dependent child under age 18, or up to age 23 if a full-time student.
2. 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 or registered domestic partner would receive \$450 per month and each dependent child would receive \$400 per month. The spouse or registered domestic partner 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.

## **PLAN SUMMARY**

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If a member dies with more than ten years of service credit, the spouse or registered domestic partner 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.

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.

### **Legislative Update**

Recent legislation made changes to a number of plan provisions, including a reduction in the benefit accrual rate for Regular members, a change in retirement eligibility criteria for Regular members, a reduction in post-retirement benefit increases, a limitation on compensation used to determine plan benefits, and several other changes through the approval of Senate Bill 406. These changes are effective July 1, 2015, and generally applicable only to members whose effective date of membership is on or after July 1, 2015. The sunset on the critical labor shortage exception to the reemployment restrictions was repealed.