

Boise | Coeur d'Alene | Pocatello

PERSI PERSI A Component Unit of the State of Idaho

2017 Comprehensive Annual Financial Report

as of and for

FISCAL YEAR 2017

Ended June 30, 2017



Helping Idaho Public Employees Build a Secure Retirement

Public Employee Retirement System of Idaho A Component Unit of the State of Idaho



Comprehensive Annual Financial Report As of and for Fiscal Year Ended June 30, 2017

This Comprehensive Annual Financial Report was prepared by:

- Financial:Alex Simpson, Financial Executive OfficerBrenda Cronin, CPA, Senior AccountantCecile McMonigle, Portfolio Accountant
- Investments: Robert M. Maynard, Chief Investment Officer Richelle Sugiyama, Investment Officer
- Administration: Jenny Flint, Public Information Officer



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PERSI MISSION STATEMENT

To provide a sound retirement system and high quality service and education to help Idaho public employees build a secure retirement.

CORE VALUES



VISION

To be the premier public retirement system, respected by customers, peers, and the community, and known for professional service, technological advancement, and fund stability.

FIDUCIARY DUTY OF LOYALTY

The primary duty of the Retirement Board and PERSI staff, as fiduciaries, is that of loyalty, or acting with an "eye single" to the interests of the beneficiaries. PERSI is required by law to make all its decisions solely in the interest of the beneficiaries and to avoid, at all costs, serving the interests of any other party not a beneficiary of the system.



C.L. "Butch" Otter, Governor, State of Idaho

RETIREMENT BOARD



Jeff Cilek, Chairman Term expires July 1, 2020



Celia Gould Term expires July 1, 2018



Joy Fisher Term expires July 1, 2019

PERSI EXECUTIVE ADMINISTRATIVE STAFF

Donald D. Drum, Executive Director Michael L. Hampton, Deputy Director Cheryl George, Deputy Attorney General Robert M. Maynard, Chief Investment Officer Alex Simpson, Financial Executive Officer Kelly Cross, Program Manager Diane Kaiser, Defined Contribution Manager Larry Sweat, Information Technology Manager Lisa Conn, Quality Assurance Auditor Casey Hartwig, Member Services Manager



J. Kirk Sullivan Term expires July 1, 2021



Park Price Term expires July 1, 2022

🔷 Introductory Section ᡐ

PROFESSIONAL CONSULTANTS

Frazier Technology Ventures, LP, Seattle, WA

Genesis Asset Managers, LTD, Channel Islands

Goense Bounds & Partners, LP, Highland Park, IL

Galen Management, LLC, Stamford, CT

Actuary:	Milliman, Inc., Seattle, WA	
Auditor:	Eide Bailly, LLP, Boise, ID	
Medical:	Managed Medical Review Organization, Novi, MI	
Investment:	AEW Capital Management, L.P. Boston, MA Alban Row Investments, LLC, Mt. Pleasant, SC Berkadia Commercial Mortgage LLC, Irvine, CA Callan Associates, Inc., San Francisco, CA	Chartwell Consulting, LLC, Sunapee, NH Hamilton Lane Advisors, LLC, Philadelphia, PA Robert Storer, Juneau, AK
Legal:	Foster Pepper, PLLC, Seattle, WA Ice Miller, LLP, Indianapolis, IN Whiteford, Taylor & Preston, LLP, Baltimore, MD	
Other:	BCA Publications, Montreal, Quebec Bloomberg, New York, New York Capital Economics LTD, London CT Corporation, Carol Stream, IL Empower Retirement, Denver, CO Yardeni Research Inc, Glen Head, NY	
Investment Custodians:	Bank of New York Mellon Asset Servicing, Pittsb Wells Fargo Bank of Idaho, Boise, ID	rgh, PA
Blackstone Group, LP, N BLS Capital, Copenhage Brandes Investment Part Bridgepoint Capital LTD, Capital Guardian Trust C Cascade Affordable Hous Cerberus Capital Manage Clearwater Advisors LLC	b, Boston, MA ew York, NY New York, NY New York, NY n, San Francisco, CA anagement, Inc., Boston, MA ew York, NY n ners, LP, San Diego, CA London ompany, Brea, CA sing, LLC Seattle, WA ement, LP, New York, NY , Boise, ID	Hamilton Lane Advisors, LLC, Santa Clara, CA Hamilton Lane, GP, Baja Cynwyd, PA Highway 12 Capital Partners, LLC, Boise, ID Ida-West Operating Services, Inc., Boise, ID Income Research Management, Boston, MA JH Whitney & Co., New Canaan, CT Kohlberg Kravis Roberts & Co., LP, New York, NY Kohlberg & Co., Mt Kisco, NY Leonard Green & Partners, LP, Los Angeles, CA Lindsay Goldberg, LLC, New York, NY Littlejohn Associates, LLC, Greenwich, CT Longview Partners, LP, Channel Islands Mondrian Investment Partners, LTD, London Mountain Pacific Investment Advisers, Inc., Boise, ID Nautic Partners, LLC, Providence, RI Olympic Investors, LLC, Seattle, WA
CVC Capital Partners Ad D.B. Fitzpatrick & Co., In: Donald Smith & Co., Inc. Endeavour Capital Partner Enhanced Equity Partner Epic Ventures, LLC, Salt Fiera Capital, Montreal First Reserve Corporation	, New York, NY ers, LP, Portland, OR s, LLC, New York, NY Lake City, UT n, Greenwich, CT	Olympic Investors, LLC, Seattle, WA Peregrine Capital Management, Inc., Minneapolis, MN Providence Equity Partners, LLC, Providence, RI Prudential Investment Management LLC, New York, NY State Street Global Advisors, Boston, MA TPG Capital, LP, San Francisco, CA The Gores Group, LLC, Beverly Hills, CA Tukman Grossman Capital Management, Inc., Larkspur, C/
I rezier Leebeeleeu Veet	man LLL Contrin M/A	Voritoo Conital II) Now Vark NV

TPG Capital, LP, San Francisco, CA The Gores Group, LLC, Beverly Hills, CA Tukman Grossman Capital Management, Inc., Larkspur, CA Veritas Capital, LP New York, NY Walter Scott & Partners LTD, Edinburgh W. Capital Partners, LLC, New York, NY Western Asset Management Co., Pasadena, CA

Additional information on the above-mentioned investment professionals can be found on pages 85-86 in the Investment Section of this report. Fees and commissions are found on page 90-91.





Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Public Employee Retirement System of Idaho

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2016

Executive Director/CEO





Public Pension Coordinating Council

Recognition for Administration 2017

Presented to

Public Employee Retirement System of Idaho

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

Presented by the Public Pension Coordinating Council, a confederation of

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

alan Helinple

Alan H. Winkle Program Administrator



Organizational Chart (As of June 30, 2017)

Retirement Board

	Michael L. Hampton Deputy Director	Jenny Flint Public Information Officer	Cheryl George Deputy Attorney General	
Donald D. Drum Executive Director	Elizabeth Conner Management Assistant	Kathy Adams Administrative Assistant		
Robert M. Maynard Chief Investment Officer	Richelle Sugiyama Investment Officer	Rose Marie Sawicki Administrative Assistant	Investment Managers See Investment Section for a list (pages 87-88)	
	Diane Kaiser Choice Plan Manager	Lena Rupp Administrative Assistant		
Kelly Cross	Carmen Brooks	Kelsey White	Maria Quitugua	Vacant
Program Manager	Training Specialist	Training Specialist	Training Specialist	Training Specialist
Alex Simpson	Eric Carpenter	Cecile McMonigle	Kelly Rowlands	Barbara Sargent
Financial Executive Officer	Financial Specialist Principal	Portfolio Accountant	Portfolio Accountant	Financial Technician
	Brenda Cronin	Bev Ross	Ellise Fowler	Barbara Weirick
	Financial Specialist Sr.	Financial Technician	Financial Technician	Financial Technician
	Mei Liu	Tess Myers	Brian Dealy	Sharon Simon
	Financial Technician	Administrative Assistant	Financial Technician.	Financial Support Tech.
	Adel Stacy Financial Specialist			
Lisa Conn	Catharine Atchison	Dusty Schild	Brett Harper	Vacant
Quality Assurance Manager	Business Analyst	Retirement Specialist	Retirement Specialist	Retirement Specialist
Larry Sweat	Branden Kennah	Stacy Parr	Andrea Fonnesbeck	Darren Trumbull
Information Technology Manager	IT Resource Manager	Web Master	Project Manager	IT Sys Integr. Analyst, Sr.
	Kurtis Leatham	Jason Smith	Kris Colt	Randy Graybeal
	IT Sys Integr. Analyst	IT Sys Integr. Analyst, Assoc	IT Info. System Tech	IT Network Analyst
	Timothy Wolfrum Technical Writer			
Casey Hartwig	Shasta Wardle	Jess Simonds	Shelia Summers	Sherry Slocum
Member Services Manager	Office Services Supervisor	Office Services Supervisor	Retirement Specialist	Technical Records Spec
	Linda Parker	Andrea Colglazier	Bonnie Chaffin	Wayne Millar
	Retirement Specialist	Technical Records Specialist	Customer Service Rep	Technical Records Spec
	Cathy Miles	Debera Anderson	April Bias-Fourstar	Stephen Mytrysak
	Retirement Specialist	Tech Records Specialist	Retirement Specialist	Technical Records Spec.
	Sheena Olszewski	Theresa Froehlke	Mary Naccarato	Mary Holleron
	Technical Records Spec	Customer Service Rep.	Technical Records Spec.	Technical Records Spec
	Karen Oster	Eliza Storms	Tina Durant	Cathy Andrews
	Customer Service Rep	Customer Service Rep.	Technical Records Spec.	Imaging Specialist.
	Ginger Braeburn Customer Service Rep(temp)	Josiah Bratt Customer Service Rep(temp)	Janet Cole Office Specialist	



THE SYSTEM

The Public Employee Retirement System of Idaho (the System) is the administrator of seven fiduciary funds. This includes three defined benefit retirement plans, the Public Employee Retirement Fund Base Plan (PERSI Base Plan) the Firefighters' Retirement Fund (FRF) and the Judges' Retirement Plan (JRF); two defined contribution plans, the Public Employee Retirement Fund Choice Plan 401(k) and 414(k) (PERSI Choice Plans); and two Sick Leave Insurance Reserve Trust Funds – one for state employers and one for school district employers.

The Retirement Board consists of five members, each appointed by the Governor to fulfill a 5-year term. The Board meets monthly to conduct System business, usually on the third Tuesday of each month at 8:30 a.m. at PERSI's headquarters office in downtown Boise.

Administrative expenditures, consisting of the personnel costs, operating expenditures, and capital outlay necessary to operate the System, are limited to those approved and appropriated by the Legislature for that purpose. In Fiscal Year 2017 (FY 2017), these costs totaled \$9,157,812 including \$1,244,674 depreciation and amortization, which are not cash expenditures and, therefore, not appropriated.

The majority of the System's 67 staff works in the headquarters office located at 607 North 8th Street, Boise, Idaho. There are two staff members in the Coeur d'Alene office, and two in the Pocatello office. The Executive Director and Investment Officers are exempt positions appointed by the Retirement Board to serve at its pleasure. The Deputy Director and Public Information Officer are exempt positions serving under the Executive Director. The Deputy Attorney General is assigned to PERSI by the Office of the Attorney General. All other staff members serve under statutes and personnel rules governing classified state service.

The System staff oversees the investment of the trust corpus and new contributions with professional investment managers and funding agents. The Retirement Board maintains fiduciary responsibility for investment policy, asset allocation, and the selection of individual investment managers as discussed in the Investment Section.

SUMMARY OF PLAN PROVISIONS

DEFINED BENEFIT "BASE PLAN" PROVISIONS

Note: The items in parentheses are the provisions applicable to members designated as either PERSI firefighters or as PERSI police officer members for retirement purposes.

MEMBER CONTRIBUTION RATE

The employee contribution rate is set by statute at 60% (72%) of the employer rate. As of June 30, 2017, it was 6.79% (8.36%).

EMPLOYER CONTRIBUTION RATE

The employer contribution rate set by the Retirement Board was 11.32% (11.66%) as of June 30, 2017.

SERVICE RETIREMENT

ELIGIBILITY

Five years of service and age 65 (age 60 or between 60 and 65, depending on the ratio of police officer/firefighter service to total credited service).



AMOUNT OF ALLOWANCE

For each year of credited service, the monthly service retirement allowance as of June 30, 2017, was 2% (2.3% for police/firefighters) of the monthly average salary of the member's highest 42 consecutive months.

MINIMUM MONTHLY BENEFIT ALLOWANCE

Until February 28, 2017: for each year of service, the monthly minimum benefit allowance was \$25.62 (\$30.75) to a maximum of the member's accrued benefit. Effective March 1, 2017 the monthly minimum benefit allowance was \$25.90 (\$31.08).

DISABILITY TO SERVICE RETIREMENT

The regular retirement allowance for disability changes to service retirement allowance when the member reaches service retirement age. The disabled member completes the normal retirement application, offering the ability to select other retirement options.

OPTIONAL FORMS

Retirees may also choose 50% or 100% contingent annuitant options as well as Social Security "bridge" options. These are actuarial equivalents of the normal form based on the mortality and interest assumptions adopted by the Retirement Board. The allowance is payable for the life of the retiree and designated contingent annuitant.

EARLY RETIREMENT

ELIGIBILITY

Five years of service and age 55 (age 50 or between 50 and 55, depending on the ratio of police officer/firefighter service to total credited service).

AMOUNT OF ALLOWANCE

Unreduced accrued service retirement allowance if age plus service, upon separation from employment, total 90 (80, or between 80 and 90, depending on the ratio of police officer/firefighter service to total credited service); otherwise, the accrued service retirement allowance is reduced 3% for each of the first 5 years by which the early retirement date precedes the date the member would be eligible to receive the unreduced benefit, and by 5.75% for each additional year to a maximum of a second 5 years. The unreduced benefit entitlement may be either at the service retirement eligibility date or the date eligible for the rule of 90(80).

FORMS

Regular retirement allowance; contingent annuitant allowances for the life of the retiree and a designated contingent annuitant; Social Security level income option for the life of the retiree only or for the life of the retiree and designated survivor.

DISABILITY RETIREMENT

ELIGIBILITY

Active members must have 5 years of service, be unable to perform work of *any* kind, and be expected to remain disabled for life. They are eligible from first day on the job if the disability is due to occupational causes.



AMOUNT OF ALLOWANCE

Projected service retirement allowance based on the highest 42-consecutive month average salary at the time of disability. The benefit is calculated using the accrued service at the time of disability plus the service which would have accrued through service retirement age had the disability not occurred. If a member has less than 360 months of service as of the date he is eligible for disability retirement, he will be given credit for the months of service he would have earned from the date of disability to the date he would have reached Service Retirement Age (65 for general members/62 for police and firefighters) had he not become disabled (360 months of credited service maximum). In other words, PERSI will give members up to 30 years of credit or to Service Retirement Age, whichever comes first. Monthly allowance is payable after all temporary compensation ceases and is offset by the amount payable as income benefit under worker's compensation law, except when offset by Social Security. Effective July 1, 2009, public safety officers who are injured in the line of duty and determined to be permanently disabled under Idaho Code 59-1302(12), may be eligible to receive a one-time, lump-sum payment of \$100,000.

DISABILITY TO SERVICE RETIREMENT

The regular retirement allowance for disability changes to service retirement allowance when the member reaches service retirement age. The disabled member completes the normal retirement application offering them the ability to select other retirement options.

DEATH BENEFITS

AFTER RETIREMENT

Under the normal form of the retirement allowance, a Social Security adjustment option, or a disability retirement, the balance, if any, of the member's accumulated contributions and interest at retirement over all payments received is paid to the beneficiary in a lump sum. In the case of a disability retirement, the beneficiary may waive the lump sum if the retiree is married so that the spouse will receive a lifetime monthly allowance, or the beneficiary may take a lump-sum payment of two times the amount in the member's account at the time of disability retirement minus any amount paid. Under the contingent annuitant options, the designated annuitant receives a lifetime monthly benefit following the member's death. If the survivor dies before the balance of the member's accumulated contributions and interest has been paid, the balance will be paid to the beneficiary in a lump sum. If the member's designated contingent annuitant predeceases him/her, the member's allowance will be recalculated to a single life payment.

BEFORE RETIREMENT

- 1 Non-vested Members:
 - a Beneficiary receives a lump sum payment of the member's accumulated contributions plus interest.
- 2 Vested Members:
 - a Beneficiary receives a lump sum payment of two times the member's accumulated contributions plus interest.
 - b If the member is married, and the spouse is the sole beneficiary, the spouse may select a lump sum payment or a lifetime monthly benefit.
 - c If the member is married, but the spouse is not the sole beneficiary, the beneficiary may waive the lump sum, in which case, a lifetime monthly benefit is available to the surviving spouse.



3 A \$100,000 death benefit for duty-related deaths for police officers/firefighters became effective July 1, 2003.

SEPARATION BENEFIT

Accumulated member contributions with regular interest is payable upon becoming an inactive member separated from eligible employment. The Regular Interest Rate in effect for FY17 was 1.29% from January 1 through June 30, 2017 (2.39% from July 1 through December 31, 2016) compounded monthly per annum.

POSTRETIREMENT ADJUSTMENTS

An annual postretirement adjustment based on and limited by a cost-of-living factor reflecting the changes in the Consumer Price Index-Urban (CPI-U) is effective in March each year. If the CPI-U change from August of the previous year to August of the second previous year is 1% or more, a 1% mandatory adjustment is made. The Board may authorize additional discretionary adjustments based on the CPI-U increase (up to a total maximum annual COLA of 6% or the CPI-U rate, whichever is lower) if it determines that the System can do so and still maintain an appropriately funded position as required by <u>Idaho Code</u> Section 59-1355(1). When discretionary COLA adjustments in excess of the 1% are authorized by the Board, they are reported to the Legislature. If the Legislature has not acted on the Board adjustment by the 45th day of the legislative session, the discretionary COLA, if any, becomes effective on March 1 of that year.

The Board is also authorized to award postretirement adjustments for prior years in which the actual amount of adjustment was less than the CPI-U for those years. If the CPI-U change is downward, in no event will any benefit be reduced below its initial amount.

The net COLA authorized and implemented March 1, 2017 was up to 1.1%.





Governor C. L. "Butch" Otter

Retirement Board Jeff Cilek, Chairman J. Kirk Sullivan Joy Fisher Celia R. Gould Park Price

Executive Director Donald D. Drum

Phones

Answer Center 208-334-3365 FAX 208-334-3805

<u>Toll Free</u> Answer Center 1-800-451-8228 Employer Line 1-866-887-9525

> Mailing Address P.O. Box 83720 Boise ID 83720-0078

Boise

Office Location Address 607 North 8th Street Boise ID 83702-5518

Pocatello

Office Location Address 1246 Yellowstone Ave., Ste. A5 Pocatello ID 83201

Coeur d' Alene Office Location Address 2005 Ironwood Pkwy #226 Coeur d' Alene ID 83814-2680

> **Choice 401(k) Plan Record Keeper** 1-866-437-3774

www.persi.idaho.gov

Equal Opportunity Employer

December 5, 2017

Dear Governor Otter, Legislators, and Members of the Retirement System:

We are pleased to present to you the Public Employee Retirement System of Idaho (the System) comprehensive annual financial report, for the fiscal year ended June 30, 2017 (FY 2017). This financial report is a historical perspective of benefits, services, and fiscal activities of the System. Included is a summary of our actuarial valuations, an independent auditors' report, an investment summary, and a statistical section.

Generally accepted accounting principles require management to provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The System's MD&A can be found immediately following the independent auditors' report.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PERSI for its comprehensive annual financial report for the fiscal year ended June 30, 2016. This was the 26th consecutive year. PERSI has achieved this prestigious award. To be awarded a Certificate of Achievement, a government 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 comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to GFOA to determine its eligibility for another certificate.

For the 15th consecutive year, PERSI has been awarded the *Public Pension Coordinating Council Standards Award*. This award signifies that PERSI complies with the standard benchmarks for public defined benefit systems in the United States. The standards require a high level for the following: comprehensive benefit program, funding adequacy, accepted actuarial and audit practices, investment policy and evaluation, and member communications. This award is given to 50 to 60 public retirement systems each year.

This Letter of Transmittal is intended to serve as an overview of the System and to convey information on the topics that follow.



PLAN HISTORY

The Public Employment Retirement System of Idaho (PERSI) was created by the thirty-seventh Legislature, Regular Session of 1963 with funding effective July 1, 1965. It is a tax qualified, defined benefit system to which both the member and the employer contribute. Participation in the System is mandatory for eligible state and school district employees and available to other public employers and their employees on a contractual basis.

When the Teachers Retirement System of Idaho was abolished, members of that system were integrated into PERSI, and all other eligible school district employees became PERSI members effective July 1, 1967.

Legislative amendments since 1965 have made it possible for municipal police officer retirement funds to merge with the System, and two of the five police officer systems have since merged. The other three are being phased out, and police officers hired since 1969 have become PERSI members.

Legislation in 1979 mandated the Firefighters' Retirement Fund be administered by PERSI effective October 1, 1980. Paid firefighters who were members of the original system retained their original benefit entitlement, while paid firefighters hired after October 1, 1980, were entitled to PERSI benefits. An actuarial valuation of the firefighter member benefit entitlement is conducted at least every other year, separate from the annual PERSI valuation.

In January 2001, PERSI implemented a "Gain Sharing" program as a way to distribute \$155 million in excess investment earnings back to our active members, retirees, and employer members. Retirees received their gain sharing as a "13th check." Employers received their share as a contribution "holiday." Some 53,000 eligible active members received their portion as deposits into newly created defined contribution (DC) accounts. This new plan, named the "PERSI Choice 401(k) Plan," supplemented PERSI's traditional Defined Benefit (DB) "Base" Plan. It allowed employees for the first time to actively participate in saving for their retirement.

At the time of inception, the PERSI Choice 401(k) Plan was somewhat unique in the public sector. PERSI obtained permission from the Internal Revenue Service to expand a grandfathered State 401(k) to our members statewide. While some public employees were familiar with 457 or 403(b) plans, a 401(k) was something new to them. Many of our members had never had the opportunity to make such pre-tax voluntary contributions.

PERSI assumed the administration for the Judges' Retirement Fund (JRF) starting July 1, 2014.

SERVICES PROVIDED

The ability of the System to serve both employee and employer members at the local level through the Boise, Pocatello, and Coeur d' Alene offices remains a key factor for efficient administration. The merging of other retirement systems with PERSI, plus statutory amendments over the years, have produced both multiple and diverse member benefit entitlements and administrative requirements. These can best be analyzed and explained to the members through personal contact with knowledgeable System staff members.

In its 52nd year of operation, the System continued a wide range of services to both employee and employer members. Members may visit the PERSI Web site, call, email, or visit one of the three offices for personal information and assistance regarding credited service, account balances, eligibility, benefit options and amounts, and other retirement matters.

Members receive advance notice of service retirement qualification and are provided with estimates of monthly allowances. They also receive information regarding the availability of alternate forms of retirement payments. Retirement applications are processed in a timely fashion, and monthly payments are made promptly. Direct deposit of benefit payments is available to retired members as is withholding for income tax, medical insurance, or other purposes.



System retirees are provided notices whenever their net benefit amount changes. This notice gives retirees a list of their itemized deductions from their gross benefit. Retirees may also access additional account information through the online web portal.

Separation and death benefits are paid in an orderly manner and as rapidly as possible. Employee contributions and earned interest are posted to individual member accounts each month, and an annual statement is provided to each member confirming their average monthly salary, credited service, contributions, and earned interest. In addition, a report of benefits accrued to date is provided along with an estimate of benefits projected ahead to various retirement ages.

PERSI's employer units are responsible for reporting and handling retirement transactions and activities. They are provided regular training and assistance through monthly newsletters, employer training sessions throughout the State, and personal contacts with PERSI staff, as needed.

Upon request, public employers interested in affiliation with the System are counseled and provided with information regarding employee benefits, cost, and procedures associated with joining. Conversely, employers considering withdrawal are provided information and employee benefit projections to enable them to make an informed decision.

Pre-retirement and financial planning workshops, offered on a regular basis throughout the State, cover financial planning, budgeting, investment basics, and Social Security, Medicare, and System benefits.

EMPLOYEE AND EMPLOYER MEMBERSHIP

During FY 2017, the number of active PERSI members Increased from 68,517 to 70,073. The number of retired members or annuitants receiving monthly allowances increased from 44,181 to 45,468. The number of inactive members who have not been paid a separation benefit increased from 31,862 to 34,151. Of these inactive members, 12,669 have achieved vested eligibility. Total membership in PERSI increased from 144,560 to 149,692 during the fiscal year. There are currently 783 public employers in Idaho who are PERSI members. Participating employers are listed in the Statistical Section of this report.

MANAGEMENT RESPONSIBILITY

The System's management is responsible for the complete and fair presentation of the data and the accompanying disclosures in this report. The financial statements and supplemental schedules included in this report have been prepared in accordance with generally accepted accounting principles for governmental accounting and reporting as pronounced or adopted by the Governmental Accounting Standards Board.

INDEPENDENT AUDIT

The System is audited annually, and for the fiscal year ended June 30, 2017, the audit was conducted by Eide Bailly, LLP, an independent firm of Certified Public Accountants. Refer to the Independent Auditors' Report for their audit opinion.

INTERNAL ACCOUNTING CONTROL

As an agency of the State of Idaho, the System's administrative expenses are subject to the State's budget controls. Management is responsible for maintaining a system of internal accounting control designed to provide reasonable assurance transactions are executed in accordance with management's general or specific authorization and are recorded as needed to maintain accountability for assets to permit preparation of financial statements. Internal controls have inherent limitations and their costs should not outweigh their benefits. Internal control procedures have been established, and a budget report is prepared for the Board. We believe the internal controls in effect during FY 2017 adequately safeguard the assets and provide reasonable assurance regarding the proper recording of financial transactions.



FINANCIAL HIGHLIGHTS

Collection of employer and employee contributions, as well as income and gains from investments, provides the reserves necessary to finance retirement benefits. These income sources totaled \$2,581,149,797 for all pension funds during the fiscal year ended June 30, 2017.

ADDITIONS:	
Contributions	\$ 681,143,211
Transfers/Rollovers In	14,836,646
INVESTMENT INCOME:	
Net Appreciation (Depreciation) in Fair Value of Investments	1,578,593,605
Interest, Dividends and Other Investment Income	355,346,980
Less: Investment Expenses	(48,807,174)
Net Investment Income	1,885,133,411
OTHER INCOME	36,529
Total Additions	\$2,581,149,797

The payment of benefits is the primary expense of a retirement system. The payments, together with the expenses to administer the Plan, constitute the total expenses of the System. Expenses for FY 2017 are as follows:

DEDUCTIONS:

Benefits and Refunds	\$ 946,264,014
Administrative Expenses	 9,157,812
Total Deductions	\$ 955,421,826

ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS

Future benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future salary. The actuarial present value of future benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Simply put, it is the amount that would have to be invested on the valuation date so the amount invested plus investment earnings will provide sufficient assets to pay total future benefits when due.

The actuarial present value was calculated as part of an actuarial valuation at July 1, 2017. Significant actuarial assumptions used include: a gross investment return rate of present and future assets of 7.5% compounded annually, (7.0% plus 0.50% for expenses); projected salary increases of 3.75% per year compounded annually, attributable to general wage increases; additional projected salary increases attributable to seniority/merit, up to 6.25% per year, depending on service and employee classification, and; 1.00% per year attributable to postretirement benefit increases.



At June 30, 2017, the unfunded actuarial liability (UAAL) for the PERSI Base Plan, on a current contribution basis, was \$1.8 billion with an amortization period of 16.2 years, which is less than the 25 year maximum allowed by statute. The UAAL differs from the Net Pension Liability (NPL) in that the long-term expected rate of return for the UAAL was 7.0%, or 7.5% reduced by .4% for expected investment expenses and .1% for expected administrative expenses. This is in contrast to the discount rate used to determine the Total Pension Liability (TPL) and NPL for purposes of GASB reporting. According to GASB Statement 67, the discount rate used to calculate TPL and NPL must be net of investment expenses but not administrative expenses. Therefore, TPL and NPL have been determined using a discount rate of 7.10%.

	P	ERSI Base Plan 2017	 FRF 2017	. <u> </u>	JRF 2017
Total pension liability Plan fiduciary net position	\$	16,868,510,591 15,296,682,365	\$ 289,382,253 375,177,883	\$	103,556,547 82,936,029
Employers' net pension liability (asset)	\$	1,571,828,226	\$ (85,795,630)	\$	20,620,518
Plan fiduciary net position as a percentage of total pension liability		90.68%	 129.65%		80.09%

ECONOMIC CONSIDERATIONS

The System operates within a dynamic economic environment, as do all investment funds. The objective of the Retirement Board is to minimize the effect of these external influences, where possible, by diversifying among a broad range of asset classes and investment management styles, both domestically and internationally. Such diversification, combined with prudent management by experienced investment professionals, increases the probability the earnings objective will be achieved. The investment return for Fiscal Year 2017 was 12.67% gross, 12.31% net of investment expenses, and 12.25% net of all expenses.

Defined benefit pension systems plan for and make decisions based on the long term (20 to 25 year) nature of pension funding and benefits. PERSI is funded on a sound actuarial basis, which protects future benefits for participants. Over the long-term, the Plan's investment assets have exceeded their expected returns. Short-term fluctuations in investment performance make good headline news, but are much less important when viewed in the long range context of pension plans. Sound investment strategies that are, in the words of CIO Bob Maynard, "Simple, Transparent, Focused, and Patient" along with reasonable actuarial assumptions are the key ingredients to a successful, well funded pension plan.

INVESTMENT STRATEGY AND POLICIES

The Retirement Board utilizes and directs agents to provide whatever investment management and custodial functions best achieve the System's investment objectives. The Board establishes asset allocation policy, diversification guidelines, custodial functions including safe-guarding of investments, and investment guidelines and restrictions. Each money manager is generally granted full discretion in making investment decisions within their guidelines. The Board, staff, and consultants monitor and evaluate investment results. The Board, in its administration of this System and management of the investment program, is guided by the fiduciary standards in Section 59-1301 of the <u>Idaho Code</u> and the Idaho Uniform Prudent Investor Act, in Sections 68-501 through 68-514 of the <u>Idaho Code</u> and is empowered in its sole discretion to limit, control, and designate the types, kinds, and amounts of investments.



PERSI's total fund return was 12.25% net of all expenses for Fiscal Year 2017 due to a stronger investment market. The policy benchmark return is 7.0%, net of all expenses. PERSI continues to rank in the top quartile over the long term when compared to our peer universe of other state-wide public pension funds across the country.

The investment mix at fair value as of the end of Fiscal Year 2017 was 60% domestic and global equity, 13% international equity, and 27% percent fixed income. The System's investment outlook is long term, allowing the portfolio to take advantage of the favorable risk-return characteristics of equities by placing more emphasis on this category. The portfolio is broadly diversified with additional diversification achieved through domestic and international investing. See the Management's Discussion and Analysis and Investment Section of this report for more detailed analysis and information.

FUNDING STATUS

The funding objective of PERSI is to accumulate sufficient assets to ensure funds will be available to meet current and future benefit obligations to participants on a timely basis. If the level of funding is high, the ratio of assets to the actuarial accrued liability is also greater, which means better investment income potential. Each year an independent actuary engaged by PERSI calculates the amount of the annual contribution the plans must make to fully meet their obligations to their members. As of July 1, 2017, the PERSI Base Plan had an amortization period of 16.2 years and a funding ratio of 89.6% of the present value of the projected benefits earned by employees. The closed Firefighters' Retirement Fund is fully funded as of the July 1, 2017 valuation. The Judges' Retirement Fund had a funding ratio of 79.35% and amortization period of 14.2 years. When the amortization period exceeds the statutory limit of 25 years, the Board reviews contribution rates. The actuarial method for calculating accrued liability for all three plans is Entry Age Normal with the objective of maintaining employer contributions approximately level as a percent of member payroll. For a more in-depth discussion of PERSI's funding, see Management's Discussion and Analysis and the Actuarial Section of this report.

MAJOR INITIATIVES

PERSI's #1 priority is "Personalized Customer Service". In 2017, an independent research firm (CEM) rated PERSI's business practices against eight similar public retirement systems. These results help us develop and improve service levels, set goals and manage costs. Here's some of what they found: PERSI's service score remains above average among our peers. PERSI's total service score was 77 out of a possible 100, equaling the peer median. Generally, higher service scores mean faster turnaround times, more availability, more choice and higher quality service. Key areas that affect our service score include: paying benefits on-time, processing new retirees, secure website capability, and timely call center service. Our administrative cost per member was \$75. This was \$73 below the peer average of \$148. This data reflects PERSI's commitment and dedication to providing excellent customer service while controlling costs. Our attention to customer service has always been one of our cornerstones, and PERSI leadership continues to believe personalized customer service is key to all generations of members. We cannot afford to have any generation ignore and/or be uninformed about the benefits of PERSI.

Communication between PERSI and our employers, members, and retirees remains a significant focal point. We continue making progress implementing our new \$13 million pension administration system which is currently the largest project ever undertaken by PERSI. IRIS has greatly reduced inconsistencies in payroll reporting and improved the quality of member data used by PERSI. Every employer is now using the IRIS to report payroll information to PERSI. Our Employer Service Center, as well as our Education and Communication Training Unit, work closely with employers, to assist in answering matters with the new system.

PERSI's educational outreach remains focused on making sure members, employers and lawmakers understand and appreciate the value of the PERSI benefit. Our training staff continues to work directly with employers, engaging members earlier in their careers, and providing expanded workshop offerings



explaining the value of the PERSI benefit. We are committed to providing on-location workshops for members in every county of Idaho in 2017, and meeting that goal. Technology has a place in our outreach, so long has it strengthens but never replaces in-person efforts. We continue to evaluate our methods but only utilize automation if we believe it provides increased value.

While we are very pleased PERSI broke through the \$16 billion ceiling for the first time this year, we must work harder to preserve what has been gained and address challenges as they emerge. We are sincerely grateful to the Idaho Legislature for their wisdom during times of modest market returns. Idaho statute has measures in place that keep required contributions to the fund set at a rate that will sustain the fund during less than stellar market years. Due to this statute, in October 2016, PERSI's Board voted to recommend a 1% total contribution rate increase which would have become effective July 1, 2018. However, this past October (2017) the Board voted to postpone this rate increase due to a successful year.

ACKNOWLEDGMENTS

This financial report of the Public Employee Retirement System of Idaho was prepared by staff under the leadership of the Retirement Board. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a method of determining responsible stewardship for the assets contributed by the members and their employers.

This report is being sent to the Governor, State Legislators, and other interested parties.

Respectfully submitted,

Jeff Cilek, Chairman

Donald D. Drum, Executive Director

Alex Simpson, Financial Executive Officer

SECTION **PINANCIAI**





CPAs & BUSINESS ADVISORS

INDEPENDENT AUDITOR'S REPORT

To the Retirement Board **Public Employee Retirement System of Idaho** Boise, Idaho

Report on the Financial Statements

We have audited the accompanying financial statements of the pension and other trust funds of the Public Employee Retirement System of Idaho (the System), which comprise the statement of fiduciary net position as of June 30, 2017, and the related statement of changes in fiduciary net position, for the year then ended, and the related notes to the financial statements.

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.

Auditor's 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. 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 auditor's 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 fiduciary net position of the System as of June 30, 2017, and the changes in fiduciary net position of the Plan for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the Public Employee Retirement System of Idaho's June 30, 2016 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 11, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information on pages 21-28 and 59-69 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information 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 basic financial statements as a whole. The introductory, investment, actuarial and statistical sections are presented for purposes of additional analysis and are not a required part of the financial statements.

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

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.



Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 10, 2017, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

ide Bailly LLP

Boise, Idaho October 10, 2017



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

MANAGEMENT'S DISCUSSION AND ANALYSIS YEAR ENDED JUNE 30, 2017

Management is pleased to provide Management's Discussion and Analysis ("MD&A") of the financial activities of the Public Employee Retirement System of Idaho (the "System" or "PERSI") as of and for the year ended June 30, 2017. The June 30, 2016 amounts are combined and are provided for comparative purposes. This overview and analysis is designed to focus on current known facts and activities and resulting changes.

The System administers seven fiduciary funds. These consist of three defined benefit pension trust funds – the PERSI Base Plan, the Firefighters' Retirement Fund (FRF) and the Judges' Retirement Fund (JRF), two defined contribution pension trust funds – the PERSI Choice Plan 401(k) and 414(k), and two Sick Leave Insurance Reserve trust funds – State and Schools.

Financial Highlights

• The net position for all pension and other funds administered by the System increased \$1.6 billion during Fiscal Year 2017 and decreased \$40.6 million during the Fiscal Year 2016. The change in the defined benefit plans reflects the total of contributions received and an investment return greater than benefits paid and administrative expenses. Changes in net position for the years ended June 30, 2017 and 2016 were as follows:

	2017	 2016
PERSI Base Plan	\$ 1,415,239,322	\$ (70,539,031)
FRF	29,608,734	(7,246,721)
JRF	7,487,390	(1,018,991)
PERSI Choice Plan 414(k)	2,317,049	(5,035,147)
PERSI Choice Plan 401(k)	112,936,999	33,746,842
Sick leave - State	23,600,175	5,140,646
Sick leave - Schools	34,538,302	 4,376,818
Total increase (decrease) in plan net position	\$ 1,625,727,971	\$ (40,575,584)

Assets for the three defined benefit plans, the PERSI Base Plan, FRF and JRF, are pooled for investment purposes. For the Fiscal Years ended June 30, 2017 and 2016, the rate of return net of investment expenses on the investment assets are detailed below (these are plan-level returns). For the defined contribution plans, the PERSI Choice Plan 401(k) and 414(k), individual participant returns will vary depending on their specific investment choices. Returns for Choice Plan options can be found on the PERSI website under Investments/Choice Plan.

	2017	2016
PERSI Defined Benefit Plans	12.3%	1.5%
Sick Leave Insurance Reserve Fund	13.3%	1.8%

• All of the plans experienced investment gains in Fiscal Year 2017 as a result of positive market performance. Net investment income for all of the funds administered by the System for the Fiscal Years ended June 30, 2017 and 2016, was \$1.9 billion and \$228 million, respectively.

🚸 Financial Section 🚸

	2017	2016
PERSI Base Plan	\$ 1,695,891,750	\$ 204,778,070
FRF	41,488,825	5,083,454
JRF	9,152,903	1,092,130
PERSI Choice Plan 414(k)	6,091,087	866,171
PERSI Choice Plan 401(k)	83,229,064	8,855,749
Sick leave - state	21,515,574	3,356,390
Sick leave - schools	32,991,024	3,919,755
Total increase in net investment income	\$ 1,890,360,227	\$ 227,951,719

• As of June 30, 2017 and 2016, the net pension liability (asset) was as follows:

	PER SI Base Plan 2017	 FRF 2017	 JRF 2017
Total pension liability Plan fiduciary net position	\$ 16,868,510,591 15,296,682,365	\$ 289,382,253 375,177,883	\$ 103,556,547 82,936,029
Employers' net pension liability (asset)	\$ 1,571,828,226	\$ (85,795,630)	\$ 20,620,518
Plan fiduciary net position as a percentage of total pension liability	90.68%	 129.65%	 80.09%
	PERSIBasePlan 2016	 FRF 2016	 JRF 2016
Total pension liability Plan fiduciary net position	\$ 15,911,317,335 13,884,163,748	\$ 291,820,746 345,569,149	\$ 99,229,007 75,448,639
Employers' net pension liability (asset)	\$ 2,027,153,587	\$ (53,748,403)	\$ 23,780,368
Plan fiduciary net position as a percentage of total pension liability	87.26%	 118.42%	 76.03%
Sick Leave Insurance Reserve Fund (table presented in millions)	I	 2017	 2016
Total OPEB liability Plan fiduciary net position		\$ 300.0 472.0	\$ 286.0 437.2
Employers' net OPEB liability (asset)		\$ (172.0)	\$ (151.2)
Plan fiduciary net position as a percentage of total OBEB asset		 157.3%	 152.9%

The System's funding objective is to meet long-term benefit obligations through contributions and investment income and provide a reserve against market fluctuations. The ratio listed above gives an indication of how well this objective has been met at a specific point in time. The higher the ratio, the better the plan is funded.

PERSI assumed the administration for the JRF fund starting July 1, 2014.



Using the Annual Financial Report

This discussion and analysis is intended to serve as an introduction to the System's financial statements. The financial section is comprised of four additional components: (1) fund financial statements, (2) notes to financial statements, (3) required supplementary information, and (4) additional supplementary schedules.

Fund Financial Statements — There are two financial statements presented for the fiduciary funds. The statements of fiduciary net position as of June 30, 2017 and 2016 indicates the fiduciary net position available to pay future benefits and gives a snapshot at a particular point in time. The statements of changes in fiduciary net position for the years ended June 30, 2017 and 2016 provides a view of the current year's activity. It details the additions and deductions to the individual funds and supports the change to the prior year's ending net position on the statements of fiduciary net position. All pension fund statements are presented on a full accrual basis and reflect all trust activities, as incurred.

Notes to Financial Statements — The notes provide additional information essential for a full understanding of the data provided in the fund financial statements. The notes to the financial statements can be found on pages 33-57 of this report.

Required Supplementary Information — The required supplementary information consists of Schedule of Net Pension Liability, Schedule of Changes in Net Pension Liability, Schedule of Contributions, Schedule of Investment Returns and related notes concerning the methods and assumptions used in calculations of actuarially determined contributions. In addition, required supplementary information includes Schedule of Net Other Post Employment Benefit (OPEB) Liability (Asset), Schedule of Changes in OPEB Liability (Asset), Schedule of Contributions – Sick Leave Insurance Retirement Fund, Schedule of Investment Returns – Sick Leave Insurance Retirement Fund as well as related notes concerning the methods and assumptions used in the calculation of the OPEB liability (asset).

Additional Supplementary Schedules — The additional schedules (Schedule of Investment Expenses and Schedule of Administrative Expenses) are presented for additional analysis.

Comparative Financial Statements

Defined Benefit Pension Trust Funds — The PERSI Base Plan, the Firefighters' Retirement Fund, and the Judges' Retirement Fund are qualified plans under the Internal Revenue Code and provide retirement, disability and death benefits to the employees of affiliated employers. Benefits are funded by member and employer contributions and by earnings on investments. Assets for these plans are pooled only for investment purposes.



Defined Benefit Pension Trust Funds Net Position

	As of	As of		
	June 30, 2017	June 30, 2016	\$ Change	% Change
Assets:				
Cash and cash equivalents	\$ 3,028,145	\$ 4,040,182	\$ (1,012,037)	-25.0%
Investments sold receivable	73,087,813	167,859,370	(94,771,557)	-56.5%
Other receivables	52,042,118	48,753,444	3,288,674	6.7%
Investments - at fair value	15,713,578,491	14,344,593,357	1,368,985,134	9.5%
Prepaid retiree benefits	68,432,153	64,755,500	3,676,653	5.7%
Capital assets - net of				
accumulative depreciation	11,981,951	11,791,827	190,124	1.6%
Due from other plans	14,465	11,299	3,166	28.0%
Total assets	15,922,165,136	14,641,804,979	1,280,360,157	8.7%
Lia bilitie s:				
Investment purchased payable	114,075,579	286,890,388	(172,814,809)	-60.2%
Benefits and refunds payable	385,133	309,960	75,173	24.3%
Other liabilities	13,644,649	12,880,302	764,347	5.9%
Total liabilities	128,105,361	300,080,650	(171,975,289)	-57.3%
Net Position:				
Net investment in capital assets	11,981,951	11,791,827	190,124	1.6%
Amounts held in trust	15,782,077,824	14,329,932,502	1,452,145,322	10.1%
Net Position	\$ 15,794,059,775	\$14,341,724,329	\$ 1,452,335,446	10.1%

The fair value of investments increased due to the combination of contributions received and an investment return of 12.31% (net of investment expenses) exceeding benefits and administrative expenses. Liabilities for benefits and refunds payable vary at Fiscal Year-End depending on member request and timing. Change in asset values and timing of payments can affect the balance of liabilities at the statements of fiduciary net position date.

The percent change in investments sold receivable and investments purchased payable fluctuates as the volume of trading activity by the System's professional investment managers' changes. The cash balance change was due to normal fluctuations in operating cash requirements and the timing of transfers to investment managers.



Defined Benefit Pension Trust Funds Changes in Net Position

	As of	As of		
	June 30, 2017	June 30, 2016	\$ Change	% Change
Additions: Member contributions Employer contributions Investment income Other additions Total additions	\$ 237,667,445 367,766,975 1,746,533,478 34,312 2,352,002,210	\$ 223,072,826 344,603,477 210,953,654 27,854 778,657,811	\$ 14,594,619 23,163,498 1,535,579,824 <u>6,458</u> 1,573,344,399	6.5% 6.7% 727.9% <u>23.2%</u> 202.1%
Deductions: Benefits and refunds paid Administrative expenses Total deductions	890,739,571 8,927,193 899,666,764	850,463,930 6,998,624 857,462,554	40,275,641 1,928,569 42,204,210	4.7% <u>27.6%</u> 4.9%
Change in Net Position	\$ 1,452,335,446	\$ (78,804,743)	\$ 1,531,140,189	

Investment income for the Fiscal Year 2017 was \$1.7 billion as a result of the gross investment return of 12.67%. Contributions and other additions totaled \$605.4 million. Total additions including investment income and contributions totaled \$2.4 billion. Additions were more than benefits and administrative expenses paid of \$899 million by \$1.5 billion for 2017. Investment income for the Fiscal Year 2016 was \$211 million; the gross investment return was 1.78%. Contributions and other additions totaled \$557 million resulting in total additions of \$779 million. The benefits and administrative expenses paid of \$857 million were more than additions by \$79 million for 2016.

For Fiscal Year 2017, the increase in benefits and refunds paid was a result of an increase in the number of retirees and the annual Cost of Living Adjustment (COLA) increase for benefits paid to retirees. The COLA adjustment for 2017 was 1.1% based on date of retirement compared to 2016 which was .2% up to 1% based on date of retirement.

Defined Contribution Pension Trust Funds

During Fiscal Year 2017, the System administered two defined contribution plans. The PERSI Choice Plans, qualified plans under Internal Revenue Code, consist of a 401(k) plan and a 414(k) plan and provide another retirement benefit option to members of the Defined Benefit Pension Plans.

The PERSI Choice Plans were created during Fiscal Year 2001. The 401(k) Plan consists of employee voluntary contributions, rollover contributions, and some employer matching contributions. The 414(k) Plan represents the gain sharing allocation made to eligible PERSI members during Fiscal Year 2001. The assets of these plans are pooled for investment purposes, but the 414(k) Plan cannot be used to pay the benefits of the 401(k) Plan and vice versa.



Defined Contribution Pension Trust Funds Net Position

	As of June 30, 201	As of 7 June 30, 2016	\$ Change	% Change
Assets:				
Cash	\$ 462,6	604 \$ 281,590	\$ 181,014	64.3%
Short-term investments	1,405,7	35 811,780	593,955	73.2%
Investments-at fair value	831,098,6	684 716,995,107	114,103,577	15.9%
Receivables	2,813,4	57 2,373,428	440,029	18.5%
Total assets	835,780,4	720,461,905	115,318,575	16.0%
Liabilities				
Other liabilities	232,0	167,483	64,527	38.5%
Net Position	\$ 835,548,4	70 \$ 720,294,422	\$ 115,254,048	16.0%

Net position increased from Fiscal Year 2016 to Fiscal Year 2017. The change reflects a positive return in the investment market and excess contributions compared to benefits paid out. The change in cash is due to the timing of a transfer of funds at the end of the month. Receivables include contributions that are not yet recorded by the record keeper at year end plus accrued interest and dividends. The change in other liabilities consists of amount due to the base plan, administrative expenses payable and stale dated checks payable.

Defined Contribution Pension Trust Funds Changes in Net Position

	J	As of une 30, 2017	Ju	As of ine 30, 2016	 \$ Change	% Change
Addition s:						
Member contributions	\$	48,333,290	\$	45,299,030	\$ 3,034,260	6.7%
Employer contributions		5,475,485		4,778,923	696,562	14.6%
Transfers and rollovers in		14,836,646		11,868,500	2,968,146	25.0%
Investment income		89,320,151		9,721,920	 79,598,231	818.8%
Total additions		157,965,572		71,668,373	 86,297,199	120.4%
Deductions:						
Benefits and refunds paid		42,585,245		41,363,965	1,221,280	3.0%
Administrative expenses		126,279		1,592,713	 (1,466,434)	-92.1%
T otal deductions		42,711,524		42,956,678	 (245,154)	-0.6%
Change in Net Position	\$	115,254,048	\$	28,711,695	\$ 86,542,353	301.4%

The change in net position was impacted for the year by a positive investment return for the fiscal year. Member contributions increased due to an increase in salary deferrals as well as an increase in the number of members actively contributing. Transfers and rollovers in represent rollovers from other plans. Changes in employer contributions vary up or down according to individual employers' desire to match employee contributions. The increase in benefits and refunds paid is a result of an increase in the number of retirees receiving benefits.

Other Trust Funds

During Fiscal Year 2017, the System administered two Sick Leave Insurance Reserve Fund trusts. The PERSI Sick Leave Insurance Retirement Fund provides payment of eligible postretirement insurance premiums on behalf of retired state and public school district employees, based on accumulated unused sick leave at the time of retirement. The Fund's contributions are financed by state agency and school district employers of the System which make up the two separate trusts which are comingled for investment purposes.



Sick Leave Insurance Reserve Funds Net Position

	As of June 30, 2017	As of June 30, 2016	\$ Change	% Change
Assets:				
Cash	\$ 53,684	\$ 40,805	\$ 12,879	31.6%
Investments-at fair value	468,487,335	410,625,545	57,861,790	14.1%
Prepaid in surance premium	1,350,318	1,436,628	(86,310)	-6.0%
Due from other funds	2,123,036	1,767,238	355,798	20.1%
T otal assets	472,014,373	413,870,216	58,144,157	14.0%
Lia bilitie s:				
Other liabilities	44,317	38,637	5,680	14.7%
Net Position	\$ 471,970,056	\$ 413,831,579	\$ 58,138,477	14.0%

The net position increased in Fiscal Year 2017 from Fiscal Year 2016 because of positive investment returns and contributions exceeding benefits paid.

Sick Leave Insurance Reserve Funds Changes in Net Position

	Ju	As of une 30, 2017	Ju	As of ine 30, 2016	 \$ Change	% Change_
Addition s:						
Employer contributions	\$	21,900,016	\$	20,783,321	\$ 1,116,695	5.4%
Investment income		54,506,598		7,276,145	47,230,453	649.1%
Other additions		2,217		1,249	968	77.5%
Total additions		76,408,831		28,060,715	 48,348,116	172.3%
Deduction s:						
Benefits and refunds paid		18,166,014		18,438,911	(272,897)	-1.5%
Administrative expenses		104,340		104,340	 -	0.0%
Total deductions		18,270,354		18,543,251	 (272,897)	-1.5%
Change in Net Position	\$	58,138,477	\$	9,517,464	\$ 48,621,013	510.9%

The changes in net position reflect a net investment return of 13.3% resulting in \$54 million in investment income, compared to \$7 million for Fiscal Year 2016. The increase in other additions was due to an increase in interest earnings on the cash balance held at the Idaho State Treasurer's Office.

Plan Membership

This table reflects PERSI Base Plan and PERSI Choice Plans membership as of June 30, 2017 and 2016.

Base Plan	2017	2016	
A	70.070	CO 547	
Active participants	70,073	68,517	
Vested - Base Plan	42,347	42,414	
Non-vested - Base Plan	27,729	26,103	
Retirees and beneficiaries	45,468	44,181	
Terminated and vested	12,669	12,251	

🚸 Financial Section ᡐ

Choice Plan	2017	2016	
Participants	39,035	37,738	
Actively contributing	15,397	15,381	
Periodic installment payments	1,946	1,979	

Retirees and Beneficiaries (Base Plan)

While the above table reflects changes in active participants, the following table demonstrates the changes in Base Plan retirees and beneficiaries for the Fiscal Year 2017 and 2016.

	2017	2016	
Beginning - July 1	44,181	42,657	
New Retirements	2,708	2,634	
Death of Beneficiary	(1,421)	(1,110)	
Ending - June 30	45,468	44,181	

Investment Activities

Long-term (20-25 year) asset growth is vital to the Defined Benefit Plans' current and continued financial stability. Therefore, trustees have a fiduciary responsibility to act with prudence and discretion when making plan investment decisions. To assist the Board in this area, a comprehensive formal investment policy is updated periodically. As managers are added, specific detailed investment guidelines are developed, adopted, and become part of that manager's agreement.

Portfolio performance is reviewed monthly by the Board and its consultants. Performance is evaluated individually, by money manager style, and collectively by investment type and for the aggregate portfolio. Investment types include both domestic and international equities, domestic and international fixed income, private equity and real estate.

Economic Factors

At July 1, 2017, PERSI's Base Plan had a net pension liability of \$1.6 billion, a decrease over the July 1, 2016 liability of \$2 billion. The investment return net of all expenses for 2017 was 12.25% compared to the assumed return of 7.0%. The change in net pension liability is due in large part to an improvement in the investment market. These results and decisions enable PERSI to meet the mandate set by the legislature when it created PERSI to "Provide a secure retirement for public employees in Idaho". The amortization period of the unfunded liability for FY17 is 16.2 years which is less than the 25 year maximum allowed by statute.

Since inception, the cumulative funding of the plan is 59% investment income, 26% employer contributions and 15% member contributions. PERSI is viewed as a well-run and conservatively managed pension plan compared to plans nationally. This reputation stems from sound decisions made by the legislature and the Board.

The Board has and will continue to make appropriate choices regarding investments, contributions, and actuarial assumptions with the goal of maintaining the long-term sustainability of the plan.



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

STATEMENTS OF FIDUCIARY NET POSITION JUNE 30, 2017 WITH COMPARATIVE FINANCIAL INFORMATION FOR JUNE 30, 2016

			5				
	PERSI	Firefighters'	Firefighters' Judges'		PERSI Choice Plan		
Base Plan		Retirement Fund	Retirement Fund	414(k)	401(k)		
ASSETS							
Cash and cash equivalents	\$ 2,670,597	\$ 65,684	\$ 291,864	\$ 37,979	\$ 424,625		
Investments—at fair value							
Fixed income investments							
Domestic	3,713,963,067	91,345,425	20,122,157	-	-		
International	10,450,363	257,028	58,613	-	-		
Idaho commercial mortgages	645,620,443	15,879,122	3,498,301	-	-		
Short-term investments	220,070,693	5,412,669	1,192,455	-	1,405,735		
Real estate equities	606,992,573	14,929,065	3,288,995	-	-		
Equity securities							
Domestic	6,019,998,996	148,062,691	32,619,423	-	-		
International	3,132,891,461	77,053,890	16,975,603	-	-		
Private equity	905,711,747	22,276,103	4,907,608	-	-		
Mutual, collective,							
unitized funds				57,531,961	773,566,723		
Total investments	15,255,699,343	375,215,993	82,663,155	57,531,961	774,972,458		
Receivables							
Investments sold	70,967,187	1,736,139	384,487	-	-		
Administrative fee	-	-	-	13,165	145,310		
Contributions	3,473,256	62,280	-	-	600,003		
Interest and dividends	47,099,222	1,152,185	255,175	147,241	1,907,738		
Total receivables	121,539,665	2,950,604	639,662	160,406	2,653,051		
Assets used in plan operations - net	11,981,951	-	-	-	-		
Due from other plans	14,465	-	-	-	-		
Prepaid retiree benefits	68,432,153	-	-	-	-		
Total assets	15,460,338,174	378,232,281	83,594,681	57,730,346	778,050,134		
LIABILITIES							
Accrued liabilities	11,192,828	270,241	58,544	11,905	205,640		
Benefits and refunds payable	375,888	9,245	-	-	-		
Due to other plans	2,072,073	50,963	-	1,202	13,263		
Investments purchased	110,751,522	2,723,949	600,108		-		
Total liabilities	124,392,311	3,054,398	658,652	13,107	218,903		
NET POSITION							
Net position restricted for							
postemployment benefits other than							
pensions and net position restricted							
for pensions and amounts held in							
trust	\$ 15,335,945,863	\$ 375,177,883	\$ 82,936,029	\$ 57,717,239	\$ 777,831,231		



Sic	k Leave Insuran:	ce Res	erve Fund	Totals				
State		S	Schools		2017	2016		
\$	21,179	\$	32,505	\$	3,544,433	\$	4,362,577	
	55,134,272	7	2,372,803		3,952,937,724	3	,320,340,055	
	-		-		10,766,004		26,474,473	
	-		-		664,997,866		675,293,078	
	-		-		228,081,552		403,999,837	
	-		-		625,210,633		476,657,856	
	103,573,056	16	8,324,538		6,472,578,704	6	,329,350,646	
	26,576,485	4	2,506,181		3,296,003,620	2	,597,135,254	
	-		-		932,895,458		926,779,483	
	-		-		831,098,684		716,995,107	
	185,283,813	28	3,203,522		17,014,570,245	15	,473,025,789	
	-		_		73,087,813		167,859,370	
	-		-		158,475		148,046	
	-		-		4,135,539		5,965,867	
	-		-		50,561,561		45,012,959	
	-		-		127,943,388		218,986,242	
	-		-		11,981,951		11,791,82	
	811,274		1,311,762		2,137,501		1,778,53	
	398,840		951,478		69,782,471		66,192,128	
	186,515,106	28	5,499,267		17,229,959,989	15	,776,137,10	
	17,496		26,821		11,783,475		11,307,88	
			20,021		385,133		309,960	
	-		-		2,137,501		1,778,53	
	-		-		114,075,579		286,890,388	
	17,496		26,821		128,381,688		300,286,77	

\$ 186,497,610	\$ 285,472,446	\$ 17,101,578,301	\$ 15,475,850,330



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION YEAR ENDED JUNE 30, 2017 WITH COMPARATIVE FINANCIAL INFORMATION FOR JUNE 30, 2016

			Pension Trust Fund	s	
	PERSI	Firefighters'	Judges'	PERSI Cho	oice Plan
	Base Plan	Retirement Fund	Retirement Fund	414(k)	401(k)
ADDITIONS					
Contributions					
Members	\$ 237,032,668	\$ 4,385	\$ 630,392	\$ –	\$ 48,333,290
Employers	356,367,389	7,452,987	3,946,599	-	5,475,485
Transfers and rollovers in					14,836,646
Total contributions	593,400,057	7,457,372	4,576,991	-	68,645,421
Investment income					
Net appreciation in fair value					
of investments	1,411,348,507	34,527,177	7,612,667	6,192,544	69,442,737
Interest, dividends and					
other investment income	330,010,734	8,073,963	1,780,730	47,320	15,434,233
Less investment expenses	(45,467,491)	(1,112,315)	(240,494)	(148,777)	(1,647,906)
Total investment					
income - net	1,695,891,750	41,488,825	9,152,903	6,091,087	83,229,064
Other- net	29,366		4,946		-
Total additions	2,289,321,173	48,946,197	13,734,840	6,091,087	151,874,485
DEDUCTIONS					
Benefits and refunds paid to					
members and beneficiaries	865,271,715	19,294,441	6,173,415	3,763,547	38,821,698
Administrative expenses	8,810,136	43,022	74,035	10,491	115,788
Total deductions	874,081,851	19,337,463	6,247,450	3,774,038	38,937,486
INCREASE/(DECREASE) IN NET POSITION	1,415,239,322	29,608,734	7,487,390	2,317,049	112,936,999
NET POSITION Beginning of year	13,920,706,541	345,569,149	75,448,639	55,400,190	664,894,232
End of year	\$ 15,335,945,863	\$ 375,177,883	\$ 82,936,029	<u> </u>	\$ 777,831,231



Other Trust Funds					
Si	ck Leave Insurand			tals	
	State	Schools	2017		2016
\$	_	\$-	\$ 286,000,735	\$	266,796,049
	7,136,693	14,763,323	395,142,476		371,741,528
			 14,836,646		11,868,500
	7,136,693	14,763,323	695,979,857		650,406,077
	21,590,656	33,1 06 ,133	1,583,820,421		(70,562,706)
	-	_	355,346,980		343,793,935
	(75,082)	(115,109)	(48,807,174)		(45,279,510)
	21,515,574	32,991,024	1,890,360,227		227,951,719
	30	2,187	 36,529		29,103
	28,652,297	47,756,534	2,586,376,613		878,386,899
	5 6 4 6 6 7 4	10 155 010	0.5.4.400.000		
	5,010,974	13,155,040	951,490,830		910,266,806
	41,148	63,192	 9,157,812		8,695,677
	5,052,122	13,218,232	960,648,642		918,962,483
	23,600,175	34,538,302	1,625,727, 9 71		(40,575,584)
	162,897,435	250,934,144	 15,475,850,330		15,516,425,914
\$	186,497,610	\$ 285,472,446	\$ 17,101,578,301	\$	15,475,850,330



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

NOTES TO FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2017

NOTE 1. GENERAL DESCRIPTION OF THE FUNDS

General — The Public Employee Retirement System of Idaho (the "System" or "PERSI") is the administrator of seven plans including three defined benefit retirement plans, the Public Employee Retirement Fund Base Plan ("PERSI Base Plan"), the Firefighters' Retirement Fund (FRF); and the Judges' Retirement Fund (JRF); and two defined contribution plans, the Public Employee Retirement Fund Choice Plans 401(k) and 414(k) ("PERSI Choice Plan"). PERSI also administers two Sick Leave Insurance Reserve Trust Funds, which qualify as other postemployment benefits plans (OPEB), one for state employers and one for school district employers.

Reporting Entity — The System is a fiduciary fund of the State of Idaho (the "State") and is included in the State of Idaho Comprehensive Annual Financial Report. The basic financial statements of the System include the financial activities of all of the above funds. A five member retirement board (the "Board"), appointed by the Governor and confirmed by the Idaho Senate, manages the System. State law requires that two members of the Board be active PERSI members with at least ten years of service and three members who are Idaho citizens not members of the System except by reason of having served on the Board. Responsibilities of the Board include selecting the funding agents, establishing funding policy, and setting contribution rates.

Defined Benefit Retirement Plans Administration — The PERSI Base Plan and FRF are both cost-sharing, multiple-employer defined benefit retirement plans that provide benefits based on members' years of service, age, and highest average salary. In addition, benefits are provided for disability, death, and survivors of eligible members or beneficiaries.

Statutes governing the PERSI Base Plan are Title 59, Chapter 13 of the <u>Idaho Code</u>. Statutes governing FRF are Title 72, Chapter 14 of the <u>Idaho Code</u>.

Members become fully vested in their retirement benefits with five years of credited service (5 months for elected or appointed officials). Members are eligible for retirement benefits upon attainment of the ages specified for their employment classification. The annual service retirement allowance for each month of credited service is 2.0% (2.3% for police/firefighters) of the average monthly salary for the highest consecutive 42 months.

Effective July 1, 2014, by statute, PERSI assumed administration of the Judges' Retirement Fund (JRF). The JRF is a single employer defined benefit plan that provides benefits based on members' years of service, age and annual compensation. Statutes governing the Judges' Retirement Fund are Title 1, Chapter 20 of the <u>Idaho Code</u>.

JRF members, having left office or retired, are eligible for retirement benefits based on age and years of service (a minimum of four years) as specified in statute.

Plans Membership - State agencies, school districts, cities, counties, highway districts, water and sewer districts, and other political subdivisions contribute to the System.



As of June 30, 2017 and 2016, and the number of participating employer units in the PERSI Base Plan was:

	2017	2016
Cities	154	152
School districts	166	163
Highway and water districts	132	131
State subdivisions	98	98
Counties	44	44
Other	189	187
Total	783	775

As of June 30, 2017 and 2016, the number of benefit recipients and members in the PERSI Base Plan consisted of the following:

	2017	2016
Members:		
Active	70,073	68,517
Terminated and vested	12,669	12,251
Retirees and beneficiaries	45,468	44,181
Total	128,210	124,949

FRF has 22 participating employer units all consisting of fire departments that also participate in PERSI. As of June 30, 2017, there was 1 active member and 518 retired members or beneficiaries, collecting benefits from FRF. The FRF covers a closed group of firefighters who were hired before October 1, 1980, and who receive benefits in addition to those provided under the Base Plan. The cost of these additional benefits is paid by FRF member and employer contributions and receipts from a fire insurance premium tax.

JRF as of June 30, 2017 had 51 active members and 98 retired members or beneficiaries collecting benefits from JRF.

Benefits Provided - The benefit payments for the PERSI Base Plan, FRF and JRF are calculated using a benefit formula adopted by the Idaho Legislature. The Base Plan is required to provide a 1% minimum cost of living increase per year provided the Consumer Price Index increases 1% or more. The Retirement Board has the authority to provide higher PERSI Base Plan cost of living increases to a maximum of the Consumer Price Index movement or 6%, whichever is less; however, any amount above the 1% minimum is subject to review by the Idaho Legislature.

The cost of living increase for the FRF retirees is based on the increase in the statewide average firefighter's wage for employer units who belong to the FRF plan.



Adjustments to JRF benefits are made by either the PERSI COLA as described above or by a statutory adjustment which is based on active judge's salaries. Whether the PERSI COLA or the statutory adjustment applies depend on the date the judge first assumed office, on or before July 1, 2012 and/or by whether the judge (if it was an option available) made an irrevocable election to use the PERSI COLA.

Contributions - The PERSI Base Plan, FRF and JRF benefits are funded by contributions from members and employers and earnings from investments. Additional FRF funding is obtained from receipts from a state fire insurance premium tax. Member and employer contributions are paid as a percentage of member compensation. PERSI Base Plan, FRF and JRF member contribution rates are determined by the Board within limitations, as defined by state law. The Board may make periodic changes to employer and employee contribution rates (expressed as percentages of annual covered payroll) that are adequate to accumulate sufficient assets to pay benefits when due. Contributions are based on actuarial assumptions, the benefit formulas, and employee groups of the System. Costs of administering the fund are financed through the contributions and investment earnings of the System.

Level percentages of payroll normal costs are determined using the Entry Age Normal Cost Method for the PERSI Base Plan, FRF and JRF. Under the Entry Age Normal Cost Method, the actuarial present value of the projected benefits of each individual included in the actuarial valuation is allocated as a level percentage of each year's earnings of the individual between entry age and assumed exit age.

The PERSI Base Plan and the JRF Plan amortizes any net pension liability based on a level percentage of payroll. The payroll for employees covered by the PERSI Base Plan and JRF Plan was \$3,089,555,264 and \$6,162,190, respectively for the year ended June 30, 2017.

Net pension liability for FRF is the difference between the pension liability of the FRF benefits not provided by the Base Plan and the FRF assets. The payroll for active employees covered by the FRF Plans was \$143,932.

The Base Plan contribution rates for employees are set by statute at 60% of the employer rate for general employees and 72% for police and firefighters. As of June 30, 2017, the employee rate was 6.79% for general employees and 8.36% for police and firefighters. The employer contribution rate is set by the Retirement Board and was 11.32% for general employees and 11.66% for police and firefighters.

The total FRF employer contribution rate as of June 30, 2017, was 25.31% which includes the employer excess rate of 13.65% plus the PERSI class 2 firefighter's rate of 11.66%. The FRF member rate for the year for class B is 11.45% which is 3.09% above the class 2 rate of 8.36%.

Idaho Statute 59-1394(1)(a) requires 50% of the gross receipts by the State of the tax on fire insurance premiums, as provided by Idaho Statute 41-402 is perpetually appropriated for the purpose of partially funding the benefit requirements of Chapter 14, Title 72 of the Idaho Code (Fireman's Retirement Fund).

The JRF employee contribution rate is 18.50% of the employer contribution rate as set by the Board. As of June 30, 2017, the employee contribution rate was 10.23% and the employer contribution rate was 55.28%. Active employees who have 20 or more years of service are exempt from employee contributions

Upon termination of employment, PERSI Base Plan participants are entitled to accumulated member contributions plus interest, accrued at 1.29% from January 1, 2017 through June 30, 2017 (2.39% from July 1, 2016 through December 31, 2016) compounded monthly per annum, and are refundable. Withdrawal of such accumulated contributions results in forfeiture of the member's



accrued benefit; however, state law does include provisions for reinstatement of forfeited service upon repayment of the accumulated contributions plus interest.

JRF employees with less than four years of service are entitled to a refund of accumulated member contributions plus interest, accrued at 6.50% per annum.

Defined Contribution Retirement Plans — The PERSI Choice Plans are defined contribution retirement plans. The statute governing the PERSI Choice Plans is <u>Idaho Code</u> Title 59, Chapter 13.

The PERSI Choice Plans made up of a qualified 401(k) plan and a 414(k) plan. The assets of the two plans within the PERSI Choice Plans are commingled for investment purposes. Participants can direct their investment mix with some trading frequency restrictions. Participants have fifteen investment options: two balanced funds, four fixed income funds and eight equity funds and one specialty fund. Participants investing in the Total Return Balanced Fund and the PERSI Short-Term Investment Portfolio pay investment management fees of .27% and .11%, respectively. Since inception of the plans, participants have paid investment management fees for all other options.

The 401(k) portion of the PERSI Choice Plans is open to all active PERSI members. Employees can make tax-deferred contributions up to 100% of their gross salary less deductions and subject to the Internal Revenue Service (IRS) annual contribution applicable limit for the age of the employee. The 414(k) portion of the PERSI Choice Plans was established for gain sharing allocations from the PERSI Base Plan. The gain sharing amount (if any) is based on funding levels in the Base Plan and is subject to Board approval. Eligibility for gain sharing requires twelve months of active PERSI Base Plan membership as defined in Idaho statutes and PERSI rules.

Participants may allocate their assets in 1% increments among the investment options; however, if no allocation preference is indicated, a default investment election to the PERSI Total Return Fund (TRF) is made. The TRF is a unitized fund comprised of investment accounts of the PERSI Base Plan.

As of June 30, 2017, there were 39,035 participants, with balances in the PERSI Choice Plans. Some of these participants are in both the 401(k) Plan and the 414(k) Plan. As of June 30, 2017, the Choice Plan 401(k) had 28,047 participants, and the Choice Plan 414(k) had 22,380.

Optional Retirement Plan – Certain junior colleges and university employees participate in an optional retirement plan (ORP) in accordance with the provisions of <u>Idaho Code</u> 33-107(A) and (B). For university employees who opted out of PERSI in 1993, the employer by statute pays 1.49% of ORP payroll in lieu of a withdrawal liability payment to PERSI with a payoff date of July 1, 2025. The junior colleges were paid in full as of June 30, 2011.

Sick Leave Insurance Reserve Trust Funds (OPEB) - PERSI administers the Sick Leave Insurance Reserve Fund cost sharing, multiple-employer defined benefit OPEB plans that provides healthcare benefits. The Sick Leave Insurance Retirement Fund is classified as a trust fund. For state and school employers, unused sick leave benefits are subject to the guidance of Governmental Accounting Standard Board (GASB) Statement 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans.

The Sick Leave Insurance Retirement Fund is made up of two trust funds administered by PERSI - a trust for payment of school district employee benefits and a trust for payment of state employee benefits. The statutes governing the Sick Leave Insurance Retirement Fund are <u>Idaho Code</u>, Sections 67-5333, 33-1216, 59-1365, and 33-1228.



The Sick Leave Insurance Retirement Fund is a fund that exists for the payment of unused sick leave benefits in the form of insurance premiums for state and school district employees who separate from service by reason of retirement. The assets of the two trusts are commingled for investment purposes.

The System administers these trusts on behalf of the participating employers. Employers' contributions are a percentage of payroll collected each pay cycle and are held in trust for future benefits. The school districts and the State are responsible for any unfunded benefit obligations, respectively, through contribution rate adjustments.

Membership in the Sick Leave Insurance Retirement Fund as of June 30, 2016 valuation

	State	School
Members:		
Active	22,269	30,464
Retirees and beneficiaries	4,145	5,910
Total	26,414	36,374

School District Employees — For school district employees, the unused sick leave amount available for benefit is limited to one-half of their eligible sick leave balance and rate of compensation at retirement.

State Employees — State employees are limited to the number of allowable hours of sick leave they may use as part of the unused sick leave program as follows:

Credited Hours of State Service	Maximum Allowable Sick Leave Hours
0-10,400 (0-5 years)	420
10,401-20,800 (5-10 years)	480
20,801-31,200 (10-15 years)	540
31,201+ (15 years or more)	600

Members may use one-half of sick leave hours accrued up to the allowable maximum multiplied by their rate of compensation at retirement.

The rate for state agency contributions was 0.65% of covered salary at June 30, 2017.

Contribution percentages are based on the number of days of paid sick leave earned during the contract year. The sick leave contribution rates for schools are as follows:

Days Earned	Beginning - June 30, 2006
9–10 days	1.16 %
11-14 days	1.26 %
More than 14 days	Individual rate to be set by the Retirement
	Board based on current cost and actuarial
	data and reviewed biennially.



NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting — The System's basic financial statements are prepared utilizing the accrual basis of accounting. Employee and employer contributions are recognized as additions to net position when due and receivable, pursuant to formal commitments and statutory or contractual requirements, investment income is recognized when earned, and benefit payments and refunds and other expenses are recorded when the benefits are due and payable in accordance with the plans' terms. The pension funds are accounted for on a flow of economic resources measurement focus.

The significant GASB standards affecting the System are:

- GASB Statement No. 34 Financial Statements and Management's Discussion and Analysis for State and Local Governments,
- GASB Statement No. 37, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments: Omnibus,
- GASB Statement No. 38, Certain Financial Statement Note Disclosures,
- GASB Statement No. 40, Deposit and Investment Risk Disclosures,
- GASB Statement No. 44, Economic Condition Reporting: The Statistical Section,
- GASB Statement No. 51, Accounting and Financial Reporting for Intangible Assets,
- GASB Statement No.53, Accounting and Financial Reporting for Derivative Instruments,
- GASB Statement No.67 Financial Reporting for Pension Plans,
- GASB Statement No. 69 Government Combinations and Disposal of Government Operations,
- GASB Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68, and
- GASB Statement No. 72 Fair Value Measurement and Application
- GASB Statement No. 74 Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans
- GASB Statement No. 76 The Hierarchy of Generally Accepted Accounting Principles for State and Local Government
- GASB Statement No. 82 Pension Issues

Investments — The System's investments are presented at fair value. Purchases and sales are recorded at the trade date. At month end, there may be certain pending trades that were initiated by managers but not confirmed and, therefore, are not included in the fair value of investments. Investments of the PERSI Base Plan, FRF, JRF and the PERSI TRF (an option of the PERSI Choice Plan) are pooled for investment purposes as is disclosed in Note 3.

The Board utilizes and directs individual fund managers to provide whatever investment management and custodial functions the Board has determined best achieves the System's investment objectives. Each fund manager is generally granted full discretion in making investment decisions, within asset allocation policy, portfolio investment policy, specific investment guidelines and other special restrictions set by contract with the Board. The Board monitors overall investment performance and periodically evaluates the performance of each fund manager. The Board in its administration of the System and management of the investment program is guided by the Idaho Uniform Prudent Investor Act, Sections 68-501 through 68-514 of the Idaho Code and of fiduciary responsibilities in the Idaho Code, Section 59-1301, and is empowered in its sole discretion to limit, control, and designate the types and amounts of investments. The Board has adopted an investment policy including policy related to deposit and investment risks identified in GASB Statement No. 40, *Deposit and Investment Risk Disclosures*.

The fair value of investments is based on published market prices and quotations from major investment brokers, when available. Mortgages have been valued on the basis of their future principal and interest payments discounted at prevailing interest rates for similar instruments of



matching duration. The fair value of real estate investments is based on industry practice. For recent acquisitions, cost closely approximates fair value. The fair value of longer term real estate holdings is estimated based on the System's consultant assessments and/or independent appraisals. Short-term investments are reported at fair value, when published market prices and quotations are available, or at cost plus accrued interest, which approximate fair value. The fair values of private equity limited partnership investments by their nature have no readily ascertainable market prices. Similar to real estate, cost closely approximates fair value for recent acquisitions. Thereafter, the fair values of limited partnership funds are based on the valuations as presented by the general partner, approved by the funds' advisory committee, and reviewed by consultants. Generally, the companies within a fund are valued by the general partner, taking into account many factors such as the purchase price, estimated liquidation value, significant events like initial public offerings, bankruptcies, and additional rounds of financing, and other relevant factors. Because of the lack of published market prices for these investments, the estimated fair values may differ significantly from the values that would have been used had a ready market for the investments existed. Although these differences could be material to the individual company values, private equity represents 6.1% of total investments. PERSI's real estate and commercial mortgage investments are 4.3% and 4.2%, respectively of total investments.

Investment expenses presented within the statements of changes in plan fiduciary net position do not include fees and costs for private equity investments nor does it include fees and commissions related to public equity transactions. These fees and costs are presented, for information purposes, within the Investment Section of PERSI's Comprehensive Annual Financial Report in the Schedule of Costs for Private Equity Partnerships and the Schedule of Broker Fees and Commissions. These costs are captured within the net asset value for investments as reported in the statements of plan net position and the statements of changes in plan fiduciary net position.

The System purchases forward currency contracts for certain international investments and United States of America agency-guaranteed collateralized mortgage obligations for the purpose of enhancing liquidity, reducing transaction or other costs, or partially hedging an existing exposure. The System may incur minor recording costs for forward contracts until the settlement date. Potential future obligations for the forward contracts are not recognized until the contract expiration date.

The following is the Board's adopted asset allocation policy (adopted February 2016) as of June 30, 2017:

30%
55%
15%
0%
100%

Use of Estimates — The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of net assets and liabilities, disclosure of contingent liabilities, and the actuarial present value of accumulated plan benefits at the date of the financial statements. Actual results could differ from those estimates. The System utilizes various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the financial statements.



Assets Used in Plan Operations — These assets represent buildings, equipment, and computer software development costs used by the System and are recorded at cost. Depreciation and amortization are calculated on the straight-line method over the estimated useful lives of the assets. The estimated useful life for buildings is 30-50 years. The estimated useful life of computer software development costs is 10-15 years. Computer and technology equipment has a 3-5 year useful life.

Totals — The basic financial statements include certain prior-year summarized comparative information in total. Such information does not include sufficient detail 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 basic financial statements for the year ended June 30, 2016, from which the summarized information was derived.

NOTE 3. DEPOSITS AND INVESTMENTS

A. Deposits

Cash and cash equivalents are deposited with various financial institutions and are carried at cost plus accrued interest. Cash balances represent operating cash accounts held by various banks and on deposit with the State Treasurer. In accordance with Idaho Code Sections 67-1210 and 67-1210A, the State Treasurer invests cash not needed to meet immediate obligations in the pooled Idle Short-Term Fund. Deposits are held by its agent in the State Treasurer's name. Pooled balances are available on demand. Cash deposits in other bank accounts are covered by federal depository insurance up to \$250,000. The System does not have a policy for custodial credit risk related to cash on deposit at local financial institutions.

Cash and cash equivalents Held by the State Treasurer FDIC insured/collateralized Uninsured and uncollateralized	\$ 2,505,383 911,450 127,600
Total	\$ 3,544,433

B. Investments

Investments of the pension trust funds are reported at fair value. See Note 2 for more details. The Board maintains a formal Statement of Investment Policy, which addresses governing provisions and additional guidelines for the investment process. This includes policies pertaining to asset allocation and risk described in subsequent sections. Refer to Note 2 for additional asset allocation information. In fulfilling its responsibilities, the Board has contracted with investment managers, a master global custodian, other custodians, and a cash manager. Manager contracts include specific guidelines regarding the PERSI investments under management.

The following investments, risks disclosures and rate of return do not include assets from the Sick Leave Insurance Retirement Fund or other non-TRF Choice Plan options. Based on the assets that are being excluded, they do not apply to these disclosures thus is appropriate to exclude.

Derivatives Mortgage-Backed Securities TIPS Custodial Credit Risk Concentration of Credit Risk



Investments at fair value as of June 30, 2017, are as follows:

Domestic fixed income	\$ 3,825,430,649
Co-mingled domestic fixed income (Sick Leave Insurance Reserve Fund)	127,507,075
International fixed income	10,766,004
Idaho commercial mortgages	664,997,866
Short-term investments	228,081,552
Real estate	625,210,633
Domestic equities	6,200,681,110
Co-mingled domestic equity (Sick Leave Insurance Reserve Fund)	271,897,594
International equities	3,226,920,954
Co-mingled international equity (Sick Leave Insurance Reserve Fund)	69,082,666
Private equity	932,895,458
Mutual, collective, and unitized funds	 831,098,684
Total Investments	\$ 17,014,570,245

Concentrations - In line with policy, the System does not have any investments from a single issuer (excluding explicitly guaranteed governments) that represent more than 5% of the System's net assets.

Derivatives — Derivatives are financial obligations whose value is derived from underlying debt or equity securities, commodities, or currencies. Any derivative instruments held by PERSI are for investment purposes only and all information is disclosed within the investment footnotes. The derivatives held by PERSI are reported in the US dollar denomination. They are designed, among other things, to help investors protect themselves against the risk of price changes. In accordance with its investment policy, the System, through its external investment managers, holds investments in futures, options, and forward foreign currency contracts. Only a few selected managers are permitted to use derivatives. In every case, the types of derivatives used and limits on their use are defined in manager contracts and are monitored on an ongoing basis.

Futures contracts are contracts for delayed delivery or receipt of securities in which the seller agrees to make delivery and the buyer agrees to take delivery at a specified future date, of a specified instrument, at a specified price. Market risk arises due to market price and interest rate fluctuations that may result in a decrease in the fair value of futures contracts. Futures contracts are traded on organized exchanges and require initial margin in the form of cash or marketable securities. Each day the net change in the futures contract value is settled in cash with the exchanges. Holders of futures contracts look to the exchange for performance under the contract. Accordingly, the credit risk due to the nonperformance of counterparties to futures contracts is minimal. At June 30, 2017, the System had futures contracts with a fair value of \$545,627 which is included in fixed income investments. Cash equivalents and short-term investments in amounts necessary to settle the futures contracts were held in the portfolio so that no leverage was employed, in accordance with the System's Statement of Investment Policy.



At June 30, 2017, the System had the following net futures contracts exposure:

FUTURES Cash and Cash Equivalents	Exposure covered by contract
90 Day Eurodollar	\$ (44,321,188)
Australian Dollar Foreign Currency	(997,750)
British Pound Foreign Currency	163,063
Canadian Dollar Foreign Currency	2,935,120
Euro Foreign Currency	3,583,438
Japanese Yen Foreign Currency	(8,464,500)
Mexican Peso Foreign Currency	2,179,600
Total Cash and Cash Equivalents	(44,922,217)
Fixed Income	
US Ultra Bond	(5,805,625)
US Treasury Bond	(5,225,375)
US 10yr Ultra	(14,829,375)
US 10yr Treasury Note	(21,842,438)
US 5yr Treasury Note	123,374,227
US 2yr Treasury Note	37,603,031
Euro BOBL	450,631
Euro-BTP (Buoni del Tesoro Poliennali)	6,627,759
Euro-BUXL 30 yr Bond	(373,005)
Euro-Bund	(19,754,429)
Japan 10yr Bond	(6,679,868)
Total Fixed Income	93,545,533
Net Futures Exposure	\$ 48,623,316

Option contracts are contractual agreements giving the purchaser the right, but not the obligation, to purchase or sell a financial instrument at a specified price within a specified time. The option's price is usually a small percentage of the underlying asset's value. Options strategies used by the System are designed to provide exposures to positive market moves and limit exposures to interest rate and currency fluctuations. At June 30, 2017, the Base Plan, TRF, JRF, and FRF had option contracts payable with a fair value of \$126,648, which is included in Domestic Fixed Income and \$(64,018) which is included in Investments Purchased.



At June 30, 2017, the System had the following net options exposure:

OPTIONS	Exposure covered by contract	
Fixed Income Cash/Cash Equivalents-Purchased Call Options Cash/Cash Equivalents-Purchased Put Options Fixed Income-Purchased Call Options Fixed Income-Purchased Put Options Total Fixed Income	\$ 15,330 39,445 10,172 <u>61,701</u> 126,648	
Investments Purchased Cash/Cash Equivalents-Written Call Options Cash/Cash Equivalents-Written Put Options Fixed Income-Written Call Options Fixed Income-Written Put Options Total Investments Purchased	(6,300) (225) (21,555) (35,938) (64,018)	
Net Option Exposure	\$ 62,630	

Forward Foreign Currency Exchange Contracts are carried at fair value by the System. The System has entered into foreign exchange contracts to purchase or sell currency at various dates in the future at a specific price. Some of the System's international and real estate investment managers use forward contracts to hedge the exposure of investments to fluctuations in foreign currency. Forward foreign exchange contracts are negotiated between two counterparties. The System could sell the forward contract at a loss, or if it were to continue to hold the contract, the System may make a termination payment to the counterparty to cancel its obligation under the contract and then buy the currency on the open market. The System could also incur a loss if its counterparties failed to perform pursuant to the terms of their contractual obligations. Controls are established by the System and the investment managers to monitor the creditworthiness of the counterparties. The System's investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. As of June 30, 2017, the System had entered into forward currency contracts to sell foreign currencies with a fair value of \$45,565,964 and had entered into forward currency contracts to buy foreign currencies with a fair value of \$45,684,519. Forward currency contracts are receivables or payables reported as investments sold or investments purchased. A net unrealized loss of \$118,555 at June 30, 2017 was recorded, which represent the loss which would occur from executing these forward foreign currency contracts.

Mortgage-Backed Securities — These investments are valued based on the cash flows from interest and principal payments on the underlying mortgages. As a result, they are sensitive to prepayments, which are likely to occur in declining interest rate environments, thereby reducing the value of the securities. Details regarding interest rate risk for these investments are included in the Interest Rate Risk section on pages 45 and 46.

TIPS — Treasury Inflation Protected Securities (TIPS) are fixed income securities issued by the U.S. Treasury that pay a fixed coupon rate plus an adjustment for subsequent inflation. At June 30, 2017, the System had invested in TIPS with a fair value of \$1,528,518,588.

C. Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the System. The System's investment policies requires each portfolio manager to maintain a reasonable credit risk level relative to its benchmark and provided expected credit risk exposures in their portfolio guidelines. If the actual credit risk exposure falls outside of these



expectations, managers will be required to report these occurrences to Staff and these disclosures are to be made available to the Board.

As of June 30, 2017, the System's fixed income assets that are not government guaranteed represented 48.4% of the fixed income portfolio. The System's fixed income assets are shown with current credit ratings in the table on the next page.

Credit Quality	Base F	Pla	n	JRI	=	Total Return Fund					
S&P Rating Level	Domestic	I	nternational	Domestic	Int	ternational		Domestic	Int	ternational	Total
Short Term											
A-1+	\$ 14,299,690	\$	- 1	\$ 75,623	\$	-	\$	605,789	\$	-	\$ 14,981,102
A-1	28,357,373		-	149,966		-		1,201,327		-	29,708,666
Long Term											
AAA	97,376,214		736,491	514,968		3,895		4,125,228		31,201	102,787,997
AA*	324,597,371		-	1,716,614		-		13,751,184		-	340,065,169
A	381,522,025		3,573,606	2,017,656		18,899		16,162,729		151,392	403,446,307
BBB	494,247,466		1,602,638	2,613,798		8,475		20,938,209		67,894	519,478,480
BB	9,961,357		2,206,519	52,680		11,669		422,001		93,475	12,747,701
В	4,359,106		-	23,053		-		184,668		-	4,566,827
CCC	3,572,652		-	18,894		-		151,351		-	3,742,897
CC	1,556,809		-	8,233		-		65,952		-	1,630,994
С	-		-	-		-		-		-	-
D	1,088,155		-	5,755		-		46,098		-	1,140,008
Not rated	166,788,017		2,995,485	882,048		15,841		7,065,777		126,900	177,874,068
Total Credit Risk fixed	1,527,726,235		11,114,739	8,079,288		58,779		64,720,313		470,862	1,612,170,216
income securities											
U.S. Government	2,490,059,003		-	13,168,527		-		105,488,405		-	2,608,715,935
Pooled Investments-(unrated)	15,624,884		-	82,631		-		661,930		-	16,369,445
Pooled Investments-Sick	10,024,004			02,001				001,000			10,000,440
Leave Insurance Retirement											
Fund (unrated)	-		-	-		-		-		-	127,507,075
Idaho Mortgages	661,499,565		-	3,498,301		-		28,023,649		-	693,021,515
Total	\$ 4,694,909,687	\$	11,114,739	\$ 24,828,747	\$	58,779	\$	198,894,297	\$	470,862	\$ 5,057,784,186
:											

*Includes US Government Agencies implicitly guaranteed by US Government: FHLB \$14,239,189; FHLMC \$55,609,028; FNMA \$86,838,822

Each portfolio is managed in accordance with operational guidelines that are specific as to expected portfolio characteristics that usually, but not always, include credit quality and exposure levels. The System's investment policy requires managers to provide PERSI with expected credit risk exposures in their portfolio guidelines. If the actual credit risk exposure falls outside of these expectations, managers will be required to report these occurrences to staff and these disclosures are to be made available to the Board.

D. Custodial Credit Risk

Custodial credit risk is the risk that in the event of a financial institution or bank failure, the System would not be able to recover the value of their deposits and investments that are in the possession of an outside party. The System mitigates custodial credit risk by requiring in policy, to the extent possible, that investments be clearly marked as to PERSI ownership and be registered in the System's name. All securities are required to be delivered to a third-party institution mutually agreed upon by the bank and the System.

The System's cash and deposits are swept daily by the System's custodian and cash manager into short-term investment funds. Clearwater Advisors, LLC is the System's cash manager and invests the bulk of the System's cash, approximately 90.0%, in short-term instruments held at the custodian bank. Of the remaining cash and deposits at June 30, 2017, approximately 2.9% or, \$6,885,130, was held by various counterparties not in the System's name. The remainder, approximately 7.1%, is invested in custodial bank-maintained collective investment funds.



E. Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of a government's investment in a single issuer. The System's operational guidelines for investments in any corporate entity are stated in each individual manager's specific portfolio guideline.

Per the Systems Investment policy, managers will provide expected concentration of credit risk exposures in their portfolio guidelines. If the concentration of credit risk exceeds expectations, managers are required to report these occurrences to Staff and these disclosures are to be made available to the Board. For the portfolio as a whole, Staff will report to the Board at a regular Board Meeting if the exposure to a non-US government guaranteed credit exceeds 5% of the System's invested assets.

F. Interest Rate Risk

Market or interest rate risk is the greatest risk faced by an investor in the debt securities market. The price of a debt security typically moves in the opposite direction of the change in interest rates. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed within the portfolio using the effective duration methodology. The methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve. All of the System's fixed income portfolios are managed in accordance with operational guidelines which include an expected range of interest rate risk in the portfolio. Per the System's investment policy, managers will provide PERSI with the expected portfolio duration in their portfolio guidelines. If the duration of the portfolio differs from expectations, managers are to be required to report these occurrences to Staff and these disclosures are to be made available to the Board. The reporting of effective duration found in the tables that follow quantifies the interest rate risk of the System's fixed income assets. Some of the large durations are due to the use of options and forward foreign currency contracts. For line items below reported as "N/A," the duration calculation is not available. A negative duration can occur when floating rate securities trade at a discount.



Effective duration of domestic fixed income assets by security type:

	Effective		Fair Value A llocations						
Investment	Duration in Years		DB Plan	Ju	dges' Plan	Tot	al Return Fund		Total
As set-back ed Securities	1.58	s	24 578 422		129.971	s	1 0 41 4 54	s	25 747 554
		3	24,576,432	3		3	1,041,151	3	
As set-back ed Securities	N/A		41,521		220		1,759		43,500
Mortgages	2.42		29,321,974		155,067		1,242,191		30,719,232
Mortgages	N/A		704,961		3,728		29,865		738,554
Commercial Paper	0.41		28,357,373		149,966		1,201,327		29,708,666
Corporate Bonds	7.45	1	1,035,369,110		5,475,487		43,862,188		1,084,706,785
Corporate Bonds	N/A		434,511		2,298		18,407		455,216
Fixed Income Derivatives	312.96		116,045		614		4,916		121,575
Fixed Income Derivatives	N/A		44,895		237		1,902		47,034
Government Agencies	8.20		72,679,076		384,359		3,078,963		76,142,398
Government Agencies	N/A		-		-		-		-
Government Bonds	7.20	1	1,031,647,636		5,455,807		43,704,532		1,080,807,975
Government MBS*	1.95		150,901,163		798,032		6,392,749		158,091,944
Government MBS*	N/A		71,705		379		3,038		75,122
Pooled Investments	0.08		15,838,302		83,760		670,971		16,593,033
Pooled Investments - Sick Leave Insurance									
Retirement Fund Domestic Fixed Income Fund	N/A		N/A		N/A		N/A		127,507,075
Private Placements	4.68		130,915,210		692,337		5,548,068		137,153,615
Private Placements	N/A		53,395,988		282,381		2,262,058		55,940,427
TIPS	8.78	1	1,458,994,220		7,715,803		61,808,565		1,528,518,588
Idaho Mortgages	N/A		661,499,565		3,498,301		28,023,647		693,021,513
Total		S 4	4,694,909,687	s	24,828,747	s	198,894,297	s	5,046,139,806
*(MRS-Mortogoe-backed Securities)									

*(MBS-Mortgage-back ed Securities)

Effective duration of international fixed income assets by security type:

	Effective	Fair Value A llocations							Tatal	
Investment	Duration in Years		DB Plan	Judg	ges' Plan	Total	Return Fund		Total	
Asset Backed Securities	0.739	s	48,683	s	257	s	2,062	s	51,002	
Asset Backed Securities	N/A		110,069		582		4,663		115,314	
Fixed Income Derivatives	-503.94		12,302		65		521		12,888	
Government Bonds	6.42		10,943,685		57,875		463,616		11,485,178	
Total	=	s	11,114,739	s	58,779	s	470,862	s	11,644,380	

G. Foreign Currency Risk

Foreign currency risk is the risk that changes in currency exchange rates will adversely impact the fair value of an investment. The System's currency risk exposures, or exchange rate risk, primarily reside within the international equity investment holdings. The System expects the managers of these holdings to maintain adequately diversified portfolios to limit foreign currency risk. Per the System's investment policy, the individual manager guidelines will outline the expected current exposures (either specifically or through ranges of security exposures to particular currency areas) of the underlying portfolio and if the actual currency exposure differs from the expected, managers are to be required to report these occurrences to Staff and these disclosures are to be made available to the Board. Currency gains and losses will result from exchange rate fluctuations. The System's exposure to foreign currency risk expressed in U.S. dollars as of June 30, 2017, is highlighted in the table that follows. Negative fair values related to variable-rate debt instruments that are highly sensitive to changes in interest rates.



	Short-term		- -4	_	Total USD Equivalent Fair
CURRENCY	Investments		Equity	Fixed Income	Value
ARGENTINA PESO	\$ 40,726	\$	_	\$ 514,960	\$ 555,686
AUSTRALIAN DOLLAR	87,018		74,008,980	-	74,095,998
BRAZIL REAL	2,610,630		105,232,878	2,421,755	110,265,263
CANADIAN DOLLAR	155,149		12,754,320	941,984	13,851,453
CHILEAN PESO	58,395		8,231,771	-	8,290,166
CHINESE YUAN RENMINBI	(4,488,895		-	550,685	(3,938,210)
COLOMBIAN PESO	15,698	•	2,927,293	-	2,942,991
CZECH KORUNA	51,169		1,147,034	-	1,198,203
DANISH KRONE	455,146		110,433,631	-	110,888,777
EGYPTIAN POUND	28,177	,	1,867,234	-	1,895,411
EURO CURRENCY UNIT	834,148	1	704,828,670	393,832	706,056,650
HONG KONG DOLLAR	478,061		427,270,892	-	427,748,952
HUNGARIAN FORINT	49,340)	7,050,541	-	7,099,882
INDIAN RUPEE	1,626,742	2	-	-	1,626,742
INDONESIAN RUPIAH	1,685,005	i	22,184,306	-	23,869,311
ISRAELI SHEKEL	22,451		2,171,470	-	2,193,921
JAPANESE YEN	(756,101)	383,395,053	1,056,798	383,695,750
KENYAN SHILLING		-	1,843,586	-	1,843,586
MALAYSIAN RINGGIT	43,491		19,568,698	-	19,612,188
MEXICAN NEW PESO	166,126		42,248,818	3,749,219	46,164,164
MOROCCAN DIRHAM	22,162	2	1,774,012	-	1,796,174
NEW TAIWAN DOLLAR	(2,171,163	5)	161,616,623	-	159,445,460
NEW ZEALAND DOLLAR	2,456	5	1,224,256	-	1,226,712
NORWEGIAN KRONE	71,850)	4,342,009	-	4,413,859
PHILIPPINES PESO	113,893	6	13,215,201	-	13,329,094
POLISH ZLOTY	36,273	;	18,382,239	-	18,418,511
POUND STERLING	1,581,602	2	500,813,839	379,500	502,774,941
ROMANIAN LEU	85	;	1,154,152	-	1,154,236
RUSSIAN RUBLE (NEW)	173,313	5	17,339,480	1,811,114	19,323,907
S AFRICAN COMM RAND	79,815	;	37,535,072	-	37,614,887
SINGAPORE DOLLAR	74,119)	80,067,156	-	80,141,275
SOUTH KOREAN WON	(76,409))	292,204,385	-	292,127,976
SRI LANKA RUPEE	84,053	5	-	-	84,053
SWEDISH KRONA	47,128	1	57,468,504	-	57,515,632
SWISS FRANC	2,685,103	6	255,277,970	-	257, 9 63,074
THAILAND BAHT	31,466		29,947,338	-	29,978,804
TURKISH LIRA	54,217		33,299,158		33,353,375
Total value of investments subject					
to foreign currency risk	\$ 5,972,436	\$	3,432,826,570	\$ 11,819,848	\$ 3,450,618,854

H. Rate of Return

For the years ended June 30, 2017 and 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 12.31 percent and 1.51 percent, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.



NOTE 4. FAIR VALUE

GASB Statement No. 72, *Fair Value Measurement and Application*, (Statement 72) specifies a hierarchy of valuation classifications based on whether the inputs to the valuation techniques used in each valuation classification are observable or unobservable. These classifications are summarized in the three broad levels listed below:

Level 1-Unadjusted quoted prices for identical instruments in active markets, that the reporting entity has the ability to access at the measurement date.

Level 2-Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are directly or indirectly observable. Examples would be matrix pricing, market corroborated pricing and inputs such as yield curves and indices.

Level 3-Valuations derived from valuation techniques in which significant inputs or significant value drivers are unobservable and may rely on the reporting entity's own assumptions, but the market participant's assumptions that may be used in pricing the asset or liability.

Inputs used to measure fair value might fall in different levels of the fair value hierarchy, in which case the Plan defaults to the lowest level input that is significant to the fair value measurement in its entirety. These levels are not necessarily an indication of the risk or liquidity associated with the investments. In determining the appropriate levels, the Plan performed a detailed analysis of the assets and liabilities that are subject to Statement 72.

Fair Value Measurements Using Quoted Prices in Active Markets for Significant Other Significant Identical Assets Observable inputs Unobservable (Level 1) Inputs (Level 3) June 30, 2017 (Level 2) Instruments by fair value level Short Term Securities s 76.282.800 s s 76,282,800 s Fixed Income Securities: 2,631,945,790 2,612,762,870 19.182.920 U.S. Government Asset back ed-Securitized 391 212 548 390.508.924 703.624 941.363.453 941.383.453 Corporate 693.021.512 Idaho Mortgages 693 021 512 143,214,369 Non-U.S. Government 143.214.369 2,612,762,870 703.624 Total Fixed Income Securities 4.800.757.672 2.187.291.178 Equities: Domestic 5.707.407.003 5.707.407.003 Developed Mark ets 2,682,981,159 2,682,981,159 -_ Emerging Mark ets 1,341,744,889 1,341,744,889 Total Equities 9,732,133,051 9,732,133,051 90,032,542 73,826,204 2,873,522 13,332,816 Preferred Securities Convertible or Exchangeable Securities 150.880 150.880 --Futures 592.368 592.368 Mutual Funds-Defined Contribution investment options 69.105.989 69,105,989 s Total investments by fair value level* 14.789.055.302 \$ 12,488,420,482 \$ 2,268,447,500 14,187,320

The following table presents fair value measurements as of June 30, 2017:

* The Total Return Fund and Short Term Investment Portfolio are unitized Defined Contribution investment

options included with the Equity and Fixed Income totals above and Private Equity Partnerships and Private Real totals on the next page.



		Unfund ed	Redemption	Redemption
Investments measured at the net asset value (NAV)	Fair Value	Commitments	Frequency	Notice
Private Equity Partnerships:				
Growth Equity	28,580,099	\$ 1,432,406	N/A	N/A
Corporate Finance/Buyout	727,544,367	425,920,592	N/A	N/A
Distressed Debt	34,392,526	25,291,721	N/A	N/A
Co/Direct Investment	63,270,898	20,823,387	N/A	N/A
Secondaries	19,303,133	61,103,166	N/A	N/A
Venture Capital	99,137,543	22,897,089	N/A	N/A
Private Real Estate:				
Open Ended Co-mingled Insurance Company separate accor	60,296,199	N/A	N/A	N/A
Affordable Housing	51,029,718	N/A	N/A	N/A
Multifamily properties (Olympic)	153,517,870	N/A	N/A	N/A
Value added apartments	164,541,393	N/A	N/A	N/A
Office/Industrial properties	174,454,851	N/A	N/A	N/A
Industrial	39,915,944	N/A	N/A	N/A
Development properties	58,804,507	N/A	N/A	N/A
Collective Funds:				
REIT Index Collective Fund	2,970,402	N/A	Daily	None
TIPS Index Collective Fund	911,499	N/A	Daily	None
US Broad Equity Market Index Collective Fund	9,422,822	N/A	Daily	None
Emerging Equity Market Index Fund	971,948	N/A	Daily	None
US Large Cap Equity Market Index Collective Fund	24,485,180	N/A	Daily	None
US Bond Market Index Collective Fund	11,032,158	N/A	Daily	None
International Equity Index Collective Fund	6,486,814	N/A	Daily	None
US Small/Midcap Equity Index Collective Fund	15,296,732	N/A	Daily	None
Sick Leave Insurance Reserve Trust Fund				
Russell 3000 Index Co-Mingled Fund	271,897,593	N/A	Daily	Trade date less 2 days
Government Credit Bond Index Co-Mingled Fund	127,507,074	N/A	Daily	Trade date less 2 days
MSCI ACWI Ex-US Strategy Co-mingled Fund	69,082,666	N/A	Bi-Monthly	Trade date less 2 days
Total investments measured at the NAV	2,214,813,932			
Total investments measured at fair value	\$ 16,983,869,234			

Investment derivative instruments	
Foreign Exchange Contracts-Receivable	\$ 45,565,964
Foreign Exchange Contracts-Payable	 (45,684,519)
Total Investment derivative instruments	\$ (118,555)

The Plan uses a Fair Value Hierarchy (FVH) report within the custodial reporting system that is based on asset class and utilizing a proprietary matrix. The custodian uses several third party vendors to establish pricing. When possible, secondary vendor pricing is used to check for accuracy against the primary vendor's price. The pricing vendors provide detailed pricing and reference data outlining their inputs, pricing applications, models, and methodologies. FVH reporting is reviewed and researched if inconsistencies are observed.

<u>Short Term Securities</u>: These are Level 2 and include commercial paper and other short term notes.

Equities: Equities at Level 1 are using quoted prices for identical securities in an active market. Level 3 equities have very limited trading volume and use the last quoted price available on the trade data.

Fixed Income: These securities are primarily in Level 1 and 2. Information such as sector groupings, benchmark curves, like security benchmarking, reported trades, broker/dealer quotes and other reference data are all used to assist with pricing of all types securities. Specifically, these categories used the following methodologies. *US Government* Electronic fixed income trade platform and broker feeds are used and reviewed for consistency and outliers. *Asset backed/*



Securitized Uses volatility-driven multi-dimensional spread tables and Option Adjusted Spread and prepayment model. Corporate and Non US Government Multi-dimensional relational models are used along with option adjusted spread. Idaho Mortgages The fair value of the commercial mortgage portfolio is calculated daily. Expected cash flows for loans are discounted with rates that are based on the U.S. Treasury yield curve. The relevant discount rates include a spread above Treasury yields that accounts for credit and liquidity risk.

Mutual Funds: Valued at the daily closing price as reported by the fund and reported as Level 1. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

Private Equity Partnerships: This are reported at the Net Asset Value (NAV) and includes limited partnerships invested in the following strategies: Growth Equity, Corporate Finance/Buyout, Distressed Debt, Co/Direct Investments, Secondaries, and Venture Capital. Fair value is obtained by using a valuation provided by the General Partner, adjusting for interim cash flows and rolling forward to the measurement date of the Plan. A gatekeeper is used to monitor values, cash flows, and provide due diligence for new investments. The fair values presented may differ from actual amounts realized from these investments. On average, distributions received through the liquidation of underlying assets/investments can occur over the span of 5-15 years.

Real Estate: Real Estate Investment Trusts (REITs) are publicly traded securities and are included with Equities: Domestic, level 1, as those securities are traded in an active market. Private Real Estate These are investments owned directly or with other partnership interests and are in several general categories to include Affordable Housing, Multifamily properties, Value added apartments, Office/Industrial Properties, and Development Properties and are listed with investments measured at the NAV. Each property in the Portfolio is externally appraised at a minimum every year. Appraisals are completed by third-party MAI certified appraisers. For properties not subject to an external appraisal during a quarter, internal valuations are completed by AEW (the Plan's private real estate consultant) (or Pinnacle and reviewed by AEW), based on updated operational performance at the subject property and any relevant sale comparable. A discounted cash flow analysis is utilized to determine asset value. Prior to finalizing the values, Altus (an independent professional advisory with expertise in appraisals) reviews every valuation quarterly and communicates its questions/findings to AEW before approval. The valuation of the Affordable Housing properties is calculated by a third party valuation and accounting specialist in the affordable housing industry once a year at December 31st. Development properties are initially valued at their accumulated cost amounts until completion, upon which an appraisal is done. Prudential This is an open ended co-mingled insurance company separate account comprised primarily of real estate investments either directly owned or through partnership interests and mortgage and other loans on income producing real estate. Fair value is generally determined through an appraisal process that is conducted by independent appraisers within a reasonable amount of time following acquisition and no less frequently than annual thereafter. On average, distributions received through the liquidation of underlying assets/investments can occur over the span of 5-15 years.

<u>Collective Trust Funds</u>: There are eight collective trust funds offered as investment options in the Defined Contribution Plan, reported at the Net Asset Value. The NAV is based on the value of the underlying investments. Collective Trusts are regulated, but not registered investment vehicles.

<u>Co-Mingled Funds</u>: These are the investment vehicles used for the Plan's Sick Leave Insurance Reserve Trust Fund where funds are pooled from numerous plans They are valued at net asset value of units held at the end of the period based upon the fair value of the underlying investments.

Derivatives: Foreign Currency Forward Contracts use a market approach with foreign exchange rates.



NOTE 5. NET PENSION LIABILITY

The components of the net pension liability of the participating employers as of June 30, 2017 and 2016 are as follows:

	PERSIBasePlan	FRF	JRF
	2017	2017	2017
Total pension liability	\$ 16,868,510,591	\$ 289,382,253	\$ 103,556,547
Plan fiduciary net position	15,296,682,365	375,177,883	82,936,029
Employers' net pension liability (asset)	\$ 1,571,828,226	\$ (85,795,630)	\$ 20,620,518
Plan fiduciary net position as a percentage of total pension liability	90.68%	129.65%	80.09%
	PERSIBasePlan	FRF	JRF
	2016	2016	2016
Total pension liability	\$ 15,911,317,335	\$ 291,820,746	\$ 99,229,007
Plan fiduciary net position	13,884,163,748	345,569,149	75,448,639
Employers' net pension liability (asset)	\$ 2,027,153,587	\$ (53,748,403)	\$ 23,780,368
Plan fiduciary net position as a			

The net pension liability is calculated using a discount rate of 7.1%, which is the expected rate of return on investments reduced by investment expenses. The unfunded liability as reported in Management's Discussion and Analysis is calculated using 7.0%, which is the expected rate of return on investments reduced by investment and administrative costs. The net pension liability was determined by an actuarial valuation as of July 1, 2017, applied to all prior periods included in the measurement. Actuarial valuation involves estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. Experience studies were performed for the period 2011 through 2015 for the PERSI Base Plana and the FRF; and 2008 through 2013 for the JRF. These studies reviewed all economic and demographic assumptions other than mortality. Mortality and all economic assumptions were studied in 2014 for the period from July 1, 2009 through June 30, 2013 for all funds.



Actuarial Assumptions – The following are the actuarial assumptions and the entry age normal cost method, applied to all periods included in the measurement:

Actuarial Assumptions	PERSIBasePlan	FRF	JRF
Inflation	3.25 percent	3.25 percent	3.25 percent
Salary increases	4.25-10.00 percent	3.75 percent	3.75 percent
Salary inflation	3.75 percent	3.75 percent	3.75 percent
Investment rate of return *	7.10 percent	7.10 percent	7.10 percent
Cost of Living (COLA) adjustments	1.00 percent	3.75 percent	**

*net of pension plan investment expense

**3.75 percent or 1.00 percent depending on whether the member was hired on or before July 1, 2012 and by whether the judge (if it was an option available) made an irrevocable election to use the PERSI COLA

Mortality rates were based on the RP - 2000 combined table for healthy males or females as appropriate with the following offsets:

- Set back 3 years for teachers
- No offset for male fire and police
- Forward one year for female fire and police
- Set back one year for all general employees and all beneficiaries

The long-term expected rate of return on pension plan investments was determined using the building block approach and a forward-looking model in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Even though history provides a valuable perspective for setting the investment return assumption, the System relies primarily on an approach which builds upon the latest capital market assumptions. The assumptions and the System's formal policy for asset allocation are shown below. The formal asset allocation policy is somewhat more conservative than the current allocation of PERSI's assets.

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation.



Capital Market Assumptions

Asset Class	Expected Return [*]	Expected Risk	Strategic Normal	Strategic Ranges
Equities			70%	66%-77%
Broad Domestic Equity	9.15%	19.00%	55%	50%-65%
International	9.25%	20.20%	15%	10%-20%
Fixed Income	3.05%	3.75%	30%	23%-33%
Cash	2.25%	0.90%	0%	0%-5%
			Expected	
	Expected	Expected	Real	Expected
Total Fund	Return [*]	Inflation	Return	Risk
Actuary	7.00%	3.25%	3.75%	N/A
Portfolio	6.58%	2.25%	4.33%	12.67%

* Expected arithmetic return net of fees and expenses

Data provided by Callan Associates 2015

Actuarial Assumptions

Assumed Inflation - Mean	3.25%
Assumed Inflation - Standard Deviation	2.00%
Portfolio Arithmetic Mean Return	8.08%
Portfolio Long-Term Expected Geometric Rate of Return	7.50%
Assumed Investment Expenses	0.40%
Long-Term Expected Geometric Rate of Return, Net of Investment Expenses	7.10%

Discount rate – The discount rate used to measure the total pension liability was 7.10%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate. Based on these assumptions, the pension plans' net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The long-term expected rate of return was determined net of pension plan investment expense but without reduction for pension plan administrative expense.

Sensitivity of the net pension liability (asset) to changes in the discount rate – The following presents the net pension liability (asset) of PERSI, FRF and JRF employers calculated using the discount rate of 7.10% as well as what the employers' liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	Current				
	1% Decrease 6.10%	Discount Rate 7.10%	1% Increase 8.10%		
Employers' net pension liability (asset) - PERSI	\$3,653,252,197	\$1,571,828,226	\$ (157,890,281)		
Employers' net pension (asset) - FRF	(55,213,989)	(85,795,630)	(111,746,366)		
Employers' net pension liability - JRF	30,985,770	20,620,518	11,743,077		



NOTE 6. NET OPEB ASSET

The components of the net OPEB asset associated with the Sick Leave Insurance Reserve Fund of the participating employers as of June 30, 2017 is as follows.

Dollar amounts in millions

		2016		
Total OPEB liability Plan fiduciary net position	\$	300.0 472.0	\$	286.0 437.2
Employers' net OPEB liability (asset)	\$	(172.0)	\$	(151.2)
Plan fiduciary net position as a percentage of total OBEB asset		157.3%		152.9%

The OPEB asset is calculated using a discount rate of 7.1% which is the expected rate of return on investments reduced by investment expenses. The net OPEB asset was determined by an actuarial valuation as of July 1, 2016, rolled forward to July 1, 2017. Actuarial valuation involves estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Amounts determined regarding the net OPEB asset are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The Board's adopted asset allocation policy for the Sick Leave Insurance Retirement Fund as of June 30, 2017 was 30% Fixed income, 55% US/Global equity, and 15% International equity.

Actuarial Assumptions	
Inflation	3.25 percent
Salary increases	3.75 percent
Salary inflation	3.75 percent
Investment rate of return *	7.10 percent

*net of pension plan investment expense

The long-term expected rate of return on pension plan investments was determined using the building block approach and a forward-looking model in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Even though history provides a valuable perspective for setting the investment return assumption, we rely primarily on an approach which builds upon the latest capital market assumptions. The assumptions and the System's formal policy for asset allocation are shown below. The formal asset allocation policy is somewhat more conservative than the current allocation of PERSI's assets.

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation.

Capital market assumptions as defined in Note 5 apply here.



Actuarial Assumptions

Assumed Inflation - Mean	3.25%
Assumed Inflation - Standard Deviation	2.00%
Portfolio Arithmetic Mean Return	8.08%
Portfolio Long-Term Expected Geometric Rate of Return	7.50%
Assumed Investment Expenses	0.40%
Long-Term Expected Geometric Rate of Return, Net of Investment Expenses	7.10%

Discount rate – The discount rate used to measure the total OPEB liability was 7.10%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate. Based on these assumptions, the pension plans' net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The long-term expected rate of return was determined net of pension plan investment expense but without reduction for pension plan administrative expense.

Sensitivity of the net OPEB liability (asset) to changes in the discount rate – The following presents the net OPEB liability (asset) calculated using the discount rate of 7.10% as well as what the employers' liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	Current						
	1	1% Decrease 6.10%		Discount Rate 7.10%		1% Increase 8.10%	
Net OPEB Liability/(Asset)	\$	(159,600,000)	\$	(172,000,000)	\$	(186,500,000)	



NOTE 7. ASSETS USED IN PLAN OPERATIONS

Assets used in plan operations at June 30, 2017, consist of the following:

	2017	2016
Buildings and improvements	\$ 5,733,863	\$ 5,515,888
Less accumulated depreciation	(4,433,938)	(4,284,972)
Total buildings and improvements	1,299,925	1,230,916
Computer software development - Galena	-	6,331,360
Less accumulated amortization	-	(6,331,360)
Total computer software development - Galena	-	-
Equipment	653,976	607,175
Less accumulated depreciation	(516,050)	(490,204)
Total equipment	137,926	116,971
Computer software development - IRIS	11,968,297	1,077,517
Less accumulated amortization	(1,468,314)	(449,274)
Total computer software development - IRIS	10,499,983	628,243
Equipment - IRIS	254,114	254,114
Less accumulated depreciation	(209,997)	(159,175)
Total equipment	44,117	94,939
Computer software development-in progress - IRIS		9,720,758
Total assets used in plan operations	\$ 11,981,951	\$ 11,791,827

Depreciation expense is a component of administrative expense. For the year ended June 30, 2017, depreciation expense on the buildings and improvements was \$148,967. The equipment had a total depreciation expense of \$76,667 for 2017. In January 2012 development began on the Idaho Retirement Information System (IRIS) system. Costs of the IRIS system are being capitalized and are amortized as each phase is implemented. Beginning May 2013, the Employer Reporting component of IRIS began being amortized over 10 years. As the software is fully implemented, all components of IRIS are being amortized as of September 2016. Amortization for 2017 was \$1,019,040. Equipment purchased for IRIS began being depreciated in May 2013 over 5 years.

NOTE 8. OTHER POST EMPLOYMENT BENEFITS

The State funds, or partially funds, postemployment benefits relating to health, disability, and life insurance. Employees of PERSI participate in the State of Idaho's postemployment benefit programs. The State administers the retiree healthcare plan which allows eligible retirees to purchase healthcare insurance coverage for themselves and eligible dependents. The State provides long-term disability income benefits for active employees who become disabled, generally up to a maximum age of 70. The State provides basic life and dependent life coverage for disabled employees, generally up to a maximum age of 70. For up to 30 months following the date of disability, an employee is entitled to continue healthcare coverage. Benefits costs are paid by PERSI through a rate charged by the State. The primary government (State of Idaho) is reporting the liability for the retiree healthcare and long term disability benefits. Specific details of these other postemployment benefits are available in the Comprehensive Annual Financial Report of the State of Idaho which may be accessed at www.sco.idaho.gov.



NOTE 9. COMMITMENTS

The System had unfunded private equity commitments as of June 30, 2017 of \$612,645,015 and €39,358,794.



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

REQUIRED SUPPLEMENTARY INFORMATION June 30, 2017



SCHEDULE OF CHANGES IN NET PENSION LIABILITY FISCAL YEARS ENDING JUNE 30

PER SI Base Plan				
	2017	2016	2015	2014
Total pension liability changes for the year				
Service cost	\$ 406,910,895	\$ 397,283,921	\$ 384,419,252	\$ 376,800,000
Interest	1,129,286,928	1,088,670,726	1,045,505,462	992,942,358
Effect of plan changes	12,200,000	67,800,000	150,400,000	(1,300,000)
Effect of economic/demographic gains or losses	273,580,592	(104,512,779)	(105,531,304)	(111,248,209)
Effect of assumptions changes or inputs	-	13,100,000	-	74,600,000
Benefit payments, including refunds of member contributions	(864,785,159)	(824.524.533)	(770.593.410)	(729.094.149)
Net change in total pension liabilities	957,193,256	637,817,335	704,200,000	602,700,000
Total pension liability - beginning	15,911,317,335	15,273,500,000	14,569,300,000	13,966,600,000
Total pension liability - ending	16,868,510,591	15,911,317,335	15,273,500,000	14,567,300,000
Plan net position				
Contributions - employer	356,367,389	335,610,100	321,240,628	310,986,283
Contributions - employee	237,032,668	220,866,936	211,468,780	203,890,954
Net investment income	1,692,713,855	202,329,942	367,820,877	2,000,619,926
Other	-	25,283	16,767	-
Benefit payments, including refunds of member contributions	(864,785,159)	(824,524,533)	(770,593,410)	(729,094,149)
Administrative expense	(8,810,136)	(6,806,655)	(6,434,462)	(6,787,811)
Net change in plan net position	1,412,518,617	(72,498,927)	123,519,180	1,779,615,203
Plan net position - beginning	13,884,163,748	13,956,662,675	13,833,143,496	12,053,528,293
Plan net position - ending	15,296,682,365	13,884,163,748	13,956,662,675	13,833,143,496
- -				
Plan net pension liability - ending	\$ 1,571,828,226	\$ 2,027,153,587	\$1,316,837,325	\$ 736,156,504

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



SCHEDULES OF CHANGES IN NET PENSION LIABILITY FISCAL YEARS ENDING JUNE 30

Firefighters' Retirement Fund	2017	2016	2015	2014
Total pension liability changes for the year	2011	2010	2010	2011
Service cost	S -	s -	s -	s -
Interest	20,041,184	20,496,009	21,479,861	21,888,712
Effect of plan changes	(68,748)	(557,863)	(2,100,000)	-
Effect of economic/demographic gains or losses	(3,116,488)	(7,446,350)	(15,100,408)	(5,629,912)
Effect of assumptions changes or inputs	-	-	-	-
Benefit payments, including refunds of member contributions	(19,294,441)	(19,476,228)	(19,874,275)	(19,958,800)
Net change in total pension liabilities	(2,438,493)	(6,984,432)	(15,594,822)	(3,700,000)
Total pension liability - beginning	291,820,746	298,805,178	314,400,000	318,100,000
Total pension liability - ending	289,382,253	291,820,746	298,805,178	314,400,000
Plan net position				
Contributions - employer	7,452,987	7,198,597	11,305,473	14,200,323
Contributions - employee	4,385	6.329	6,168	9.095
Net investment income	41,488,825	5.083.454	9,357,909	50,966,862
Benefit payments, including refunds of member contributions	(19,294,441)	(19,476,228)	(19,874,275)	(19,958,800)
Administrative expense	(43.022)	(13,470,220) (58,873)	(153,719)	(13,330,000)
Net change in plan net position	29.608.734	(7.246.721)	641,556	45.217.480
not onango in plannot position	23.000.134	11.240.1211	041.000	43.217.400
Plan net position - beginning	345,569,149	352,815,870	352,174,314	306,956,837
Plan net position - ending	375,177,883	345,569,149	352.815.870	352,174,314
Plan net pension liability (asset) - ending	\$ (85,795,630)	\$ (53,748,403)	\$ (54,010,692)	\$ (37,774,314)
· · · · -				

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



SCHEDULES OF CHANGES IN NET PENSION LIABILITY FISCAL YEAR ENDING JUNE 30

Judges' Retirement Fund			
	2017	2016	2015
Total pension liability changes for the year			
Transfer in from JRF	s -	s -	\$ 92,302,982
Service cost	3,179,411	3,110,818	3,251,679
Interest	7,055,599	6,888,876	6,589,779
Effect of economic/demographic gains or losses	265,945	(1,647,589)	284,788
Benefit payments, including refunds of member contributions	(8,173,415)	(5,974,937)	(5,577,389)
Net change in total pension liabilities	4,327,540	2,377,168	96,851,839
Total pension liability - beginning	99,229,007	96,851,839	-
Total pension liability - ending	103,556,547	99,229,007	96,851,839
Plan net position			
Contributions - employer	3,946,599	3,370,587	3,595,417
Contributions - employee	630,392	623,754	629,077
Net investment income	9,152,903	1,092,130	2,049,895
Transfer in			75,864,300
Other	4,946	2,571	2,083
Benefit payments, including refunds of member contributions	(6,173,415)	(5,974,937)	(5,577,389)
Administrative expense	(74,035)	(133,096)	(95,733)
Net change in plan net position	7,487,390	(1,018,991)	76,467,630
Plan net position - beginning	75,448,639	76,487,630	-
Plan net position - ending	82,936,029	75,448,639	76,467,630
Plan net pension liability - ending	\$ 20,620,518	\$ 23,780,368	\$ 20,384,209

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See Notes to Required Supplementary Information



SCHEDULE OF NET PENSION LIABILITY (ASSET) FISCAL YEAR ENDING JUNE 30

PERSI Base Plan	2017	2016	2015	2014
Total Pension Liability	\$16,868,510,591	\$ 15,911,317,335	\$ 15,273,500,000	\$ 14,569,300,000
Plan net position	15,296,682,365	13,884,163,748	13,956,662,675	13,833,143,496
Net pension liability (asset)	\$1,571,828,226	\$ 2,027,153,587	\$ 1,316,837,325	\$ 736,156,504
Plan net position as a percentage of				
total pension liability	90.68%	87.26%	91.38%	94.95%
Covered employee payroll	\$ 3,089,555,264	\$ 2,895,430,105	\$ 2,791,109,393	\$ 2,702,945,352
Net pension liability as a percentage				
of covered employee payroll	50.88%	70.01%	47.18%	27.24%
Firefighters' Retirement Fund	2017	2016	2015	2014
rireligitiers Retirement rund	2017	2010	2015	2014
Total Pension Liability	\$ 289,382,253	\$ 291,820,746	\$ 298,805,178	\$ 314,400,000
Plan net position	375,177,883	345,569,149	352,815,870	352,174,314
Net pension liability (asset)	\$ (85,795,630)	\$ (53,748,403)	\$ (54,010,692)	\$ (37,774,314)
Plan net position as a percentage of				
total pension liability	129.65%	118.42%	118.08%	112.01%
Covered employee payroll	\$ 70,568,501	\$ 68,017,833	\$ 63,780,545	\$ 63,017,405
Net pension liability (asset) as a percentage				
of covered employee payroll	-121.58%	-79.02%	-84.68%	-59.94%
Judges' Retirement Fund	2017	2016	2015	2014
Total Pension Liability	\$ 103,556,547	\$ 99,229,007	\$ 96,851,839	s -
Plan net position	82,936,029	75,448,639	76,467,630	-
Net pension liability (asset)	\$ 20,620,518	\$ 23,780,368	\$ 20,384,209	ş -
Plan net position as a percentage of				
total pension liability	80.09%	76.03%	78.95%	0.00%
Covered employee payroll	\$ 6,162,190	\$ 6,097,302	\$ 6,149,339	S -
Net pension liability as a percentage	÷ 0,102,130	÷ 0,001,002	÷ 0,1+5,555	• -
of covered employee payroll	334.63%	390.01%	331.49%	0.00%
or coror of omployoo payroli	004.0076	555.0176	551.4570	0.0076

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



SCHEDULE OF CONTRIBUTIONS FISCAL YEARS 2008-2017

			PER SI BA SE PLA	N	
	Actuarially	Actual	Contribution		Contribution
	Determined	Employer	Deficiency	Covered	as a % of
Fiscal Year	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2008	\$ 251,362,544	\$ 273,335,059	\$(21,972,515)	\$ 2,578,933,669	10.60%
2009	232,091,865	284,608,663	(52,516,798)	2,683,535,923	10.61%
2010	260,316,830	284,932,419	(24,615,589)	2,684,360,943	10.61%
2011	326,554,992	279,174,844	47,380,148	2,627,850,654	10.62%
2012	327,832,536	277,143,887	50,688,649	2,619,568,411	10.58%
2013	295,502,818	285,440,860	10,061,958	2,697,575,738	10.58%
2014	325,041,599	310,986,283	14,055,316	2,702,945,352	11.51%
2015	327,101,958	321,240,628	5,861,330	2,791,109,393	11.51%
2016	297,262,331	335,610,100	(38,347,769)	2,895,430,105	11.59%
2017	337,212,145	356,367,389	(19,155,244)	3,089,555,264	11.53%
		Firef	ighters' Retiremer	nt Fund	
	Actuarially	Actual	Contribution		Contribution
	Determined	Employer	Deficiency	Covered	as a % of
Fiscal Year	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2008	\$ 1,826,307	\$ 12,870,406	\$(11,044,099)	\$ 52,097,173	24.70%
2009	1,826,307	13,215,989	(11,389,682)	55,747,655	23.71%
2010	7,959,283	13,542,331	(5,583,048)	58,360,452	23.20%
2011	7,959,238	13,313,715	(5,354,477)	59,337,447	22.44%
2012	1,666,127	13,486,309	(11,820,182)	59,883,692	22.52%
2013	1,666,127	14,227,314	(12,561,187)	62,969,139	22.59%
2014	1,119,619	14,200,323	(13,080,704)	63,017,405	22.53%
2015	-	11,305,473	(11,305,473)	63,780,545	17.73%
2016	-	7,198,597	(7,198,597)	68,017,833	10.58%
2017	-	7,452,987	(7,452,987)	70,568,501	10.56%
			dges' Retirement I	Fund	
	Actuarially	Actual	Contribution		Contribution
	Determined	Employer	Deficiency	Covered	as a % of
Fiscal Year	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2015	\$ 3,492,825	\$ 3,595,417	\$ (102,592)	\$ 6,149,339	58.47%
2016	3,463,268	3,370,587	92,681	6,097,302	55.28%
2017	3,604,265	3,946,599	(342,334)	6,162,190	64.05%

See Notes to Required Supplementary Information



SCHEDULE OF INVESTMENT RETURNS YEAR ENDED JUNE 30, 2017

Investment Returns

	2017	2016	2015	2014	2013
Annual money weighted rate of return,					
net of investment expenses	12.3%	1.5%	2.7%	16.9%	8.8%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



PUBLIC EMPLOYEE RETIREMENT SICK LEAVE INSURANCE RESERVE FUND

SCHEDULE OF CHANGES IN NET OPEB LIABILITY (ASSET) YEAR ENDED JUNE 30, 2017

Dollar amounts shown in millions

	 2017
Total OPEB liability changes for the year Service cost Interest	\$ 11.7 20.5
Effect of plan changes Effect of ecomonic/demographic gains or losses Effect of assumptions changes or inputs	- -
Benefit payments, including refunds of member contributions Net change in total OBEB liability	 <u>(18.2)</u> 14.0
Total OPEB liability - beginning Total OPEB liability - ending	286.0 300.0
Plan net position Contributions - employer Net investment income Benefit payments, including refunds of member contributions Administrative expense Net change in plan net position	 21.9 31.2 (18.2) (0.1) 34.8
Plan net position - beginning Plan net position - ending Plan net OPEB asset - ending	\$ 437.2 472.0 172.0

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



PUBLIC EMPLOYEE RETIREMENT SICK LEAVE INSURANCE RESERVE FUND

SCHEDULE OF NET OPEB LIABILITY (ASSET) YEAR ENDED JUNE 30, 2017

Dollar amounts shown in millions	2017		2016	
Total OPEB Liability Plan net position Net OPEB liability (asset)	\$	300.0 472.0 (172.0)	\$ \$	286.0 437.2 (151.2)
Plan net position as a percentage of total OPEB liability		157.3%		152.9%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See Notes to Required Supplementary Information



PUBLIC EMPLOYEE RETIREMENT SICK LEAVE INSURANCE RESERVE FUND

SCHEDULE OF CONTRIBUTIONS - OPEB YEAR ENDED JUNE 30, 2017

		Sick Leave	Insurance Reserve	e Fund - State	
	Actuarially	Actual	Contribution		Contribution
	Determined	Employer	Deficiency	Covered	as a % of
Fiscal Year	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2017	\$ 4,282,016	\$ 7,136,693	\$ (2,854,677)	\$ 1,097,952,769	0.65%
		Sick Leave I	nsurance Reserve	Fund - School	
	Actuarially	Actual	Contribution		Contribution
	Determined	Employer	Deficiency	Covered	as a % of
Fiscal Year	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2017	\$ 8,064,000	\$ 14,763,323	\$ (6,699,323)	\$ 1,240,615,378	1.19%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



PUBLIC EMPLOYEE RETIREMENT SICK LEAVE INSURANCE RESERVE FUND

SCHEDULE OF INVESTMENT RETURNS – SICK LEAVE INSURANCE RETIREMENT FUND YEAR ENDED JUNE 30, 2017

	<u>2017</u>
Annual money weighted rate of return,	
net of investment expenses	13.3%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



See Notes to Required Supplementary Information PUBLIC EMPLOYEE RETIREMENT FUND, FIREFIGHTERS' RETIREMENT FUND, JUDGES' RETIREMENT FUND, AND SICK LEAVE INSURANCE RESERVE FUND

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION YEAR ENDED JUNE 30, 2017

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the employers' contributions are calculated as of June 30, 2017 for PERSI, as of June 30, 2017 for FRF and as of June 30, 2017 for JRF. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule.

	PERSI Base Plan	FRF	JRF
Valuation date Actuarial cost method	June 30, 2015 Entry age normal	June 30, 2016 Entry age normal	June 30, 2017 Entry age normal
Amortization method	Level percentage of projected payroll open	Level dollar amount - open	Level percentage of projected payroll open
Remaining amortization period	25 years	N/A	25 years
Asset valuation method	Market Value	Market Value	Market Value
Actuarial assumptions:			
Investment Rate of Return - Gross	7.50%	7.50%	7.50%
Projected salary increases	4.25%-10.00%	3.75%	3.75%
Includes salary inflation	3.75%	3.75%	3.75%
Postretirement benefit increase	1.00%	3.75%	1.00% or 3.75%
Implied price inflation rate	3.25%	3.25%	3.25%
Discount Rate - Actuarial Accrued Liability	7.00%	7.00%	7.00%

The valuation date for the Sick Leave Insurance Reserve Fund is as of June 30, 2016 rolled forward to June 30, 2017.

Actuarial Assumptions	Sick Leave Insurance Reserve Fund
Inflation	3.25 percent
Salary increases	3.75 percent
Salary inflation	3.75 percent
Investment rate of return *	7.10 percent

*net of pension plan investment expense



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

ADDITIONAL SUPPLEMENTARY SCHEDULES June 30, 2017



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

SCHEDULE OF INVESTMENT EXPENSES YEAR ENDED JUNE 30, 2017

INVESTMENT AND RELATED SERVICES:	
Adelante Capital \$	3,925,902
AEW Capital Management	5,420,124
Baring Asset Management, Inc.	1,332,573
BCA Publication, Inc.	7,875
Bernstein, Sanford C.	4,849,115
	66,023
Bloomberg, LP BLS Capital	674,713
BNY Mellon Trust	-
Brandes Investment Partners, LP	2,914,992
-	1,822,610
Capital Guardian Trust Company	1,316,403
Capital Economics (N.A.) Ltd	10,500
Clearwater Advisors, LLC	740,496
D.B. Fitzpatrick & Co., Inc.	2,804,247
Donald Smith & Company	3,449,879
Fiera Capital	556,830
Genesis Asset Managers, Ltd.	2,230,724
Hamilton Lane	121,272
IR+M (Income Research & Management)	100,466
Longview Partners	2,908,148
Mellon Capital Management	1,850,028
Mondrian Investment Partners	1,375,659
Mountain Pacific Investment Advisors, Inc.	1,728,631
Peregrine Capital Management	2,167,313
Prudential Investments	606,415
State Street Global Advisors	703,506
Tukman Grossman Capital Management, Inc.	1,854,794
Walter Scott & Partners LTD	557,009
Wells Fargo Bank	78,620
Western Asset	897,110
Yardarni Research	7,500
TOTAL INVESTMENT AND RELATED SERVICES	47,079,477
CONSULTING AND OTHER SERVICES:	
Alban Row	93,394
Berkadia Commercial Mortgage	35,000
Callan Associates	413,078
Chartwell Consulting	77,755
CT Corporation	1,679
Choice Plan Managers	110,727
Eide Bailly, LLP	58,520
Foster, Pepper, Shefelman PLLC	360,345
Hamilton Lane Advisors, Inc.	200,000
Ice Miller LLP	992
Milliman, Inc.	284,237
Robert Storer	90,665
Whiteford, Taylor & Preston	1,305
TOTAL CONSULTING AND OTHER SERVICES	1,727,697
	1,121,001
TOTAL	48,807,174



PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO

SCHEDULE OF ADMINISTRATIVE EXPENSES YEAR ENDED JUNE 30, 2017

PORTFOLIO-RELATED EXPENSES: Personnel expenses Operating expenses	\$ 695,144 180,963
	 876,107
OTHER ADMINISTRATIVE EXPENSES:	
Personnel expenses	3,390,923
Operating expenses	3,341,454
Building depreciation expense	148,967
Equipment depreciation expense	76,667
Software amortization expense	 1,019,040
	 7,977,051
SICK LEAVE FUND EXPENSES — Administrative expenses	 104,340
JUDGES' FUND EXPENSES Administrative Expenses	 74,035
DEFINED CONTRIBUTION FUND - Administrative expenses	 126,279
Total	\$ 9,157,812





CPAs & BUSINESS ADVISORS

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

To the Retirement Board **Public Employee Retirement System of Idaho** Boise, Idaho

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the pension and other trust funds of the Public Employee Retirement System of Idaho (the System or PERSI), as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Public Employee Retirement System of Idaho's basic financial statements, and have issued our report thereon dated October 10, 2017.

Internal Control over Financial Reporting

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

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

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



Compliance and Other Matters

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

Purpose of this Report

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

P sde Bailly LLP

Boise, Idaho October 10, 2017

SECTION



REPORT ON INVESTMENT ACTIVITY OVERVIEW OF FISCAL YEAR 2017

Note: The investment section of the CAFR was compiled using information from the System's custodial bank. Bank of New York Mellon, our consultant, Callan Associates, and internally generated data. Unless otherwise noted, investment returns are based on investment fair market values and made on a time weighted return methodology, gross of investment fees and consistent with Global Investment Performance Standards.

It was a good, and possibly a great, year. At last there was a fiscal year without a late spring/early summer collapse (although with a noticeable mini "tech wreck" in the final few days). The fund ended the year with a 12.7% return (12.3% net of investment fees and expenses) at \$16.38 billion and an estimated 91.1% funded ratio (having started out the fiscal year at 86.2%). The sick leave fund ended the year with a gross return of +13.3% at \$468.5 million.

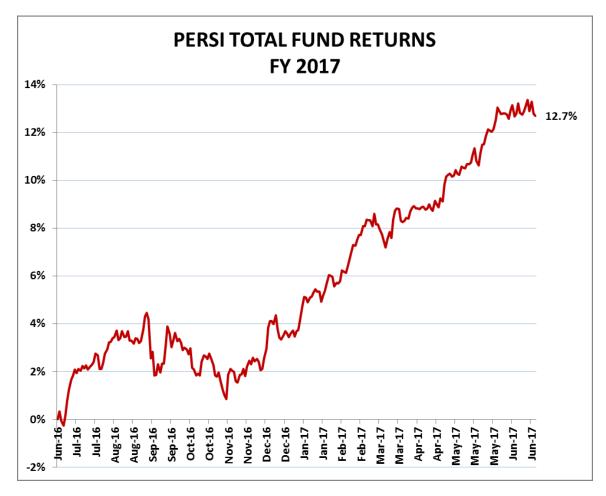
PERSI reached all time return and asset level highs at the start of the final week of the fiscal year (\$16.5 billion and 13.4% fiscal year to date returns on Monday, June 26th), but those highs moderated somewhat as tech stocks took a beating in the final two days and overseas holdings also dipped somewhat.

It was a very good fiscal year for global and international equities. US equities returned +18.5%, World equities returned +18.9% (with PERSI's global managers handily outperforming at +23.0%), EAFE returned +20.8% and Emerging Markets returned +24.2%. Fixed income ended the year, as expected when the year started, slightly negative at -0.3%. Private equity (+12.3%) and Private Real Estate (+10.2%) had good absolute years, but lagged the public general equity markets significantly. After a number of years of leading the pack, REITs had a terrible year, down -2.4% although Adelante did have significant outperformance and was up +2.0% for the year.

The individual star of the year, however, was Peregrine, with the best absolute return of +29.6%, outpacing their large cap growth index by +10.3%. Genesis (+19.2%), while having good absolute returns, had the poorest relative returns to benchmarks (-5.0% to their benchmark). Our new managers (BLS, Fiera, Walter Scott, and IR+M) all had a strong initial quarter of performance. The fund ended the fiscal year behind the 55% US equity, 15% EAFE, and 30% US Bond reference benchmark by -0.3%, due to the inability of private markets to keep up with the surging US equity market since mid-November and the poor performance of REITs.

All in all, a good strong year after two years of very mediocre returns (+1.8% in FY 2016 and +3.0% in FY 2015).





The year was a tale of three markets. The later summer/early fall saw continued new highs in both PERSI and in the US equity market. The markets continue to recover from the unexpected Brexit vote as the political chaos in the UK calmed, UK and European central banks lent support, and the reelection of Abe in Japan renewed promises of aggressive stimulus. Economic news also supported the market, with the US, in particular, continuing to show steady but low growth with a strong labor market. On the other hand, corporate earnings remained soft, Asia (both China and Japan) still seemed to be seeking a bottom, and the remainder of the world still battled reduced trade and debt worries.

As the Fall progressed, the string of record highs the capital markets reached during the late summer came to an end over concern that central banks had ended the easing momentum and that monetary support had bottomed. Increasingly hawkish statements from a number of Fed governors, ECB reluctance to take additional easing steps (along with problems with Deutsche Bank), and uncertainty from Japan all caused the markets to retreat from record highs reached in the first week of September. Electoral uncertainty added to the nervousness. But of central impact was a noticeable corporate earnings recession that became apparent in the late fall and early winter, along with a string of disappointing economic numbers.

This reversed along with the election victory of Donald Trump. Good economic numbers along with a so-called "Trump effect" (expectations of increased fiscal stimulus with reduced taxation and regulation) ignited a rally in the US capital markets that essentially lasted for the rest of the fiscal year. As the new calendar year progressed, this momentum was reinforced by stabilizing commodity prices and a noticeable bottoming and then recovery of economic prospects in both Europe and Asia. Emerging markets, in particular, benefited from improved global economic prospects and the continued supporting policies of the central banks. As the fiscal year drew to a close, corporate earnings started to show a noticeable recovery, further underpinning an equity market that was, by traditional measures,



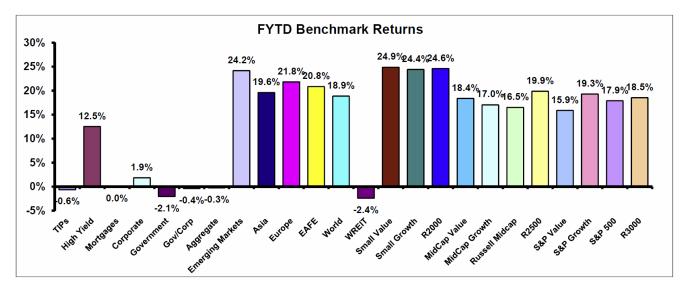
showing signs of overvaluation. The fiscal year ended with equity markets, at best, appearing fully valued and with some commentators starting to worry about a "bond bubble".

This fiscal year therefore saw the re-energization of the remarkable capital market advancement since the fiscal crisis of 2008-2009. It also saw the return to a period of relative calm following the U.S. debt downgrade of 2011, with capital market volatility reaching near all-time lows.









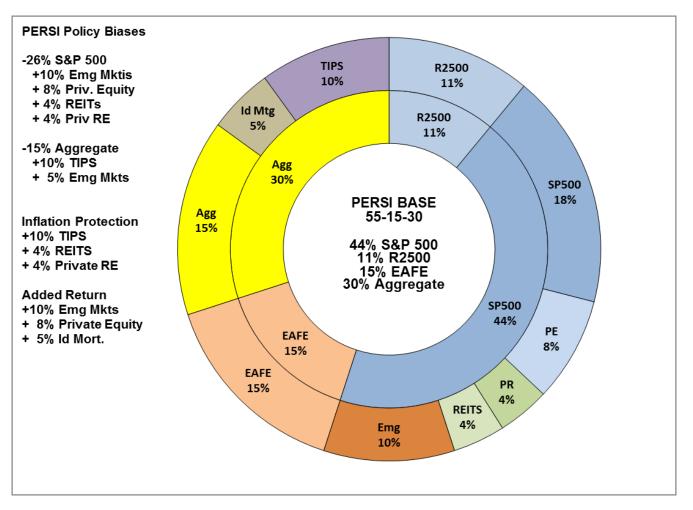
As noted earlier, the equity markets had a very good year. The S&P 500 returned +17.9% and the Russell 2500 mid/small cap did even better with +19.9%, resulting in an overall R3000 return of +18.5%. Large cap "growth" stocks outpaced large cap "value" stocks for the year, but the situation was reversed for mid and small cap U.S. stock. Small cap stocks had a stunning year, returning over +24%. MSCI EAFE (developed international markets) had an outstanding +20.8% year, with Europe outperforming Asia. Emerging markets, for the first time in over 5 years, noticeably outperformed the developed markets with gains of +24.2%. Private equity (+12.3%) and private real estate (+10.2%) had good absolute returns, but noticeably lagged the public equity markets. Public real estate (REITS), after years of outperformance, gave back much of their relative gains with losses of -2.4% Investment grade bonds (-0.3%) and TIPS [Treasury Inflation Protected Securities] (-0.6%) were "dead money" for the year.

These markets, in fact, explain another feature of this fiscal year – that PERSI actual returns again trailed the reference 55% Russell 3000, 15% MSCI EAFE, 30% Barclay's Aggregate benchmark ["55-15-30"] by -0.3%.

As with fiscal years 2014 - 2016, this "underperformance" exactly reflects PERSI's intended structure – one that has been in place for the past two decades. PERSI's strategic biases have consistently reduced the 55-15-30 benchmark's bias to the S&P 500 by -26% (from a 44% weighting to an 18% weight). That money has been shifted to Emerging Markets (10% weight), Private Equity (8% weight), Private Real Estate (4% weight), and REITS (4% weight). The other major shift, with smaller return consequences, has been to take 15% of the monies from the Barclay's Aggregate 30% reference weight and shifted to a 10% general weighting of TIPS, and 5% weight in the Idaho Commercial Mortgage program. These biases account for all of the disparity between actual returns and the 55-15-30 return.

[PERSI's weighting to small cap equities and EAFE is the same as the 55-15-30 reference benchmark, with an 11% weighting to mid/small cap US stocks, and a 15% weighting to MSCI EAFE stocks. All of these weightings "look through" the activities of the active managers, and account for their biases (such as a tendency to overweight small cap stocks) in individual portfolio construction. Staff monitors active manager portfolios to assure that overall portfolio characteristics remain consistent with our long-term strategic biases].





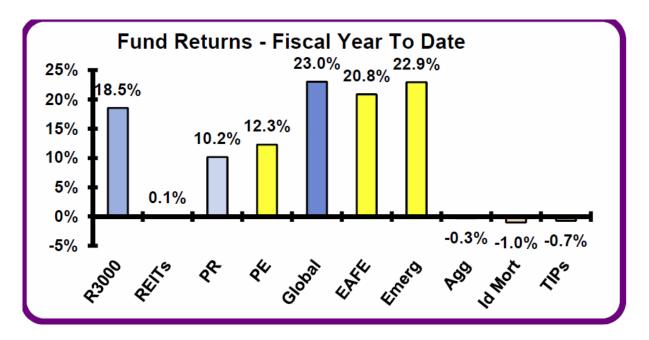
These shifts have been a basic feature of PERSI's strategic structure for at least the past two decades, and have been responsible for practically all of PERSI's relative performance both to peers and to the base reference 55-15-30 benchmark – both when PERSI is a top performing fund and also when it lags its peers.

The central idea is that when the S&P 500 is one of the best performing capital markets in the world, PERSI will normally have no problem meeting its funding goals (as occurred in the mid-1990s and recently). The problem PERSI faces is when the S&P 500 is a mediocre or terrible market both absolutely and relatively that PERSI needs protection – as occurred in the first decade of the 2000s.

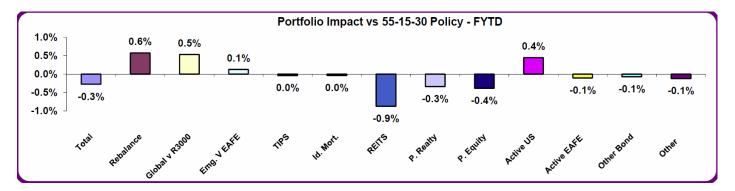
Besides additional diversification, PERSI has shifted money to other areas for purposes of increased inflation protection (S&P 500 to REITS and Private Real Estate, Barclay's Aggregate to TIPS) and long-term added return (S&P 500 to emerging markets and private equity, Barclay's Aggregate to private debt in the Idaho Commercial Mortgage Program). All of these strategic biases go back decades, (private real estate began in 1981, the small cap and emerging market bias has been in place since the late 1980s, the Idaho Commercial Mortgage program began in the late 1980s, and the REIT and TIPS biases were added in 1997-1998).



The overall impacts of each of the PERSI strategic biases were largely neutral, with global equities and rebalancing the major positive influences, and real estate and private equity the greatest detractors:



Weighting these returns by the amount of money invested in those areas generates the relative contribution of each area (and active management) to portfolio returns relative to the 55-15-30 reference portfolio.



PERSI's institutional peer returns for the fiscal year have been good: handily above the median institutional and public fund. Long term returns (ten years plus) also continue to be significantly above average: Medium term returns (5 years), however, are "in the pack" (around median) and reflect the significant underperformance of emerging markets, private real estate, REITs and TIPS over those medium term years:

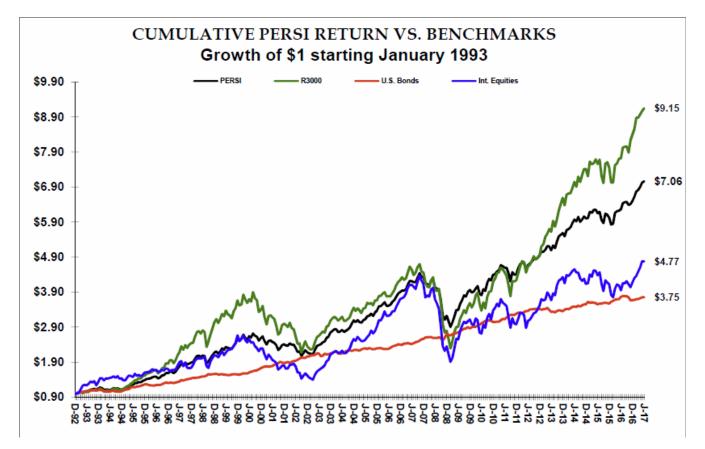


RANKINGS IN CALLAN PUBLIC FUND AND MELLON MASTER TRUST UNIVERSES June 30, 2017 Percentile Rankings over Period

(1 is highest, 100 is lowest)

	1 Q	1Yr	3Yrs	5Yrs	10Y	15Y	20 Y
PERSI Return (%)	3.6	12.7	5.8	8.6	5.3	7.7	7.1
Callan Median Public	3.0	12.4	5.3	8.8	5.4	7.1	6.8
Mellon Median Trust	3.2	12.2	5.3	8.5	5.3		
PERSI Rank (Percentile)							
Callan Public Funds	10	42	32	55	56	15	29
Mellon Master Trust	32	39	32	46	50		

PERSI's annualized return over the last 20 years has been 7.1% while the 55-15-30 reference benchmark return has returned 6.7%. Since 1993, each dollar then invested in PERSI has returned over seven fold, to \$7.06:





PERSI's basic and relatively simple approach has served the fund well both over the past year and over the longer term. It encountered few issues in the turbulent period of the last ten years, and has survived relatively unscathed through all of the crises of the past 25 years.

The overall PERSI US equity component returned +15.5%, underperforming the general US equity market (R3000) which returned +18.5%. Real estate was the marked underperformer after having carried the fund for the previous 3 years. Adelante had returns of +2.0%, beating the REIT index by +4.4%, while the REIT index fund slightly underperformed with returns of -2.6%.

Peregrine was the star of the rest of the public equity markets, with the best total return of 29.6% as well as the best relative return – beating their large cap growth index by +10.3%. Donald Smith, with a return of +21.7% was next, outperforming their index by +1.8%. Mountain Pacific slightly underperformed their midcap mandate with returns of +18.7%, underperforming by -1.2%. Private equity had a comparatively mediocre year with a +12.3% gain.

Global equity had a great year, collectively outperforming the MSCI World market index with a gain of +23.0% compared to the index gain of +18.9%. All global equity managers beat the index, led by Bernstein Global (+22.9%), followed by Brandes (+22.6%) and then Longview (+19.2%), The newly hired managers BLS, Fiera, and Walter Scott also had index beating performance in their first three months of service.

Developed market international equity (MSCI EAFE) gained +20.8% for the year, underperforming emerging market equity (MSCI Emerging Markets) at +24.2%% for the first time in six years. Mondrian, our developed markets manager trailed the EAFE index with a +16.6% return. Bernstein Emerging (+25.6%) outperformed their index, while Genesis (+19.2%) underperformed.

PERSI fixed income matched the Bloomberg Barclay's Aggregate index with a loss of -0.3%. This return included the SSGA TIPs return of -0.7%. Western had an index beating return of +3.6%, and Clearwater also outperformed with returns of +0.5%. Idaho Mortgages, which are priced off of the Treasury yield curve, had a trailing year with a loss of -1.1%, as did DBF mortgage backed securities portfolio with a -0.4% loss. IR+M, our new fixed income manager outperformed their Bloomberg Barclays Government Credit bond index in their first three months of performance.

In summary, a good to great overall year for PERSI.

ROBERT M. MAYNARD Chief Investment Officer



INVESTMENT SUMMARY FOR THE YEAR ENDED JUNE 30, 2017

Types of Investment	Fair Value		Percent of Total Fair Value
Short-term Investments Fixed Income		\$228,081,552	1.5%
Domestic International	3,825,430,649 10,766,004		24.3% 0.1%
Commercial Mortgages Total Fixed Income	664,997,866	4,501,194,519	<u>4.2%</u> 28.6%
Equity		.,,	
Domestic Equity International Equity	6,200,681,110 3,226,920,954	0.407.000.004	39.5% 20.5%
Total Equity		9,427,602,064	60.0%
Private Equity Real Estate	-	932,895,458 625,210,633	5.9% 4.0%
Total Base Plan Investments	-	\$15,714,984,226	100.0%
Other Funds:			
Sick Leave Insurance Reserve Fund Choice Plan 414(k)		468,487,335 57,531,961	
Choice Plan 401(k)	-	773,566,723	
Total Investments in All Funds	-	\$17,014,570,245	



Schedule of Investments by Account (including interest and dividends receivable) as of June 30, 2017

PERSI Base Plan, Firefighters' Retirement Fund, and Judges' Plan

PERSI base Flan, Filenginers Retirement Fund, and Judges Flan	
Adelante Capital Management	\$ 523,093,205
Advent International, LP	53,212,885
Apollo Management, LP	47,953,540
American Securities Opportunities Associates II, LLC	24,276,591
Baring Asset Management-Global Equity	130,318
Bernstein-Emerging Markets	336,569,145
Bernstein-Global Equity	404,702,495
Blackstone Capital Partners, LP	93,655,253
BLS Capital	421,602,992
BNY Mellon Capital Management-International Stock Index	682,467,875
BNY Mellon Capital Management-Mid Cap Completion	253,122,510
BNY Mellon Capital Management-R2000 Small Cap	188,667,093
BNY Mellon Capital Management-S&P 500 Large Cap	2,057,985,653
BNY Mellon Capital Management-REIT Index	332,145,975
BNY Mellon Capital Management-Emerging Market Index	638,797,744
Brandes Investment Partners	400,231,928
Bridgepoint Cap LTD	31,775,496
Capital Guardian	371,338
Cascade	48,966,232
Cerberus Investment Partners	8,725,207
Chisholm Management, LP	1,055,629
Clearwater Advisors, LLC-TBAs	193,902,029
CVC European Equity	26,100,730
D.B. Fitzpatrick & CoFixed Income	96,247,044
D.B. Fitzpatrick & CoIdaho Mortgages	667,159,883
Donald Smith & Co.	410,261,765
Endeavour Capital	35,586,933
Enhanced Equity, LP	2,173,353 12,582,883
Epic Venture Fund Fiera Capital	406,101,575
First Reserve Fund XI	11,441,315
Frazier Technology Ventures II, LP	21,040,570
Galen Associates, LP	30,267,632
Genesis Asset Managers	329,464,716
Goense Bounds & Partners, LP	1,552,702
Gores Capital Partners, LLP	12,151,480
Green Equity Investors IV, LP	24,642,089
Hamilton Lane Co - Investment Fund, LP	57,857,722
Hamilton Lane Secondary Fund, LP	18,084,279
Highway 12 Ventures, LP	56,215,092
Ida-West	2,854,697
IR + M	193,388,255
JH Whitney & Co, LLC	3,871,652
KKR 2006 Fund, LP	49,481,675
Kohlberg & Co.	39,160,360
Koll Partners, LLP	420,016,786
Lindsay Goldberg & Bessemer	31,197,323
Littlejohn, LP	71,960
Longview Partners	403,016,603
Mellon Transition Management Services	3,433,387
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Mondrian Investment Partners	433,521,647	
Mountain Pacific Investment Advisors	497,146,730	
Newbridge Asia, LP	2,427,766	
Olympic IDA Fund II, LLC	147,310,082	
Peregrine Capital Management	433,240,436	
PERSI Cash in Short-Term Investment Pool	21,809,410	
Providence Equity Partners, LLP	58,857,703	
Prudential Investments	57,858,008	
State Street Global Advisors-Fixed Income	1,692,990,725	
State Street Global Advisors-TIPS	1,459,816,426	
T3 Partners, LP	122,238,118	
Veritas Capital Partners, LP	51,944,527	
W. Capital Partners, LP	438,296	
Walter Scott LTD	405,791,577	
Western Asset Management	207,187,308	
Zesiger Capital Group	93,744	
Zesiger Capital Group-Private Equity	19,589,206	
Total Base Plan and Firefighters' Retirement Fund		\$ 15,721,097,303
Choice Plan	11 000 150	
Mellon Capital Management U.S. Bond Market Index Fund	11,032,156	
Mellon Capital Management U.S. Small/Mid Cap Equity Index Fund	15,296,733	
Mellon Capital Management U.S. Broad Market Equity Equity Index Fund	9,422,822	
Mellon Capital Management International Equity Index Fund	6,486,814	
Mellon Capital Management U.S. Large Cap Equity Index Fund	24,465,180	
Mellon Capital Management Emerging Market Equity Index Fund	971,948	
Mellon Capital Management U.S. Treasury Inflation-Protected Securities (TIPS) Index Fund	911,499	
Mellon Capital Management U.S. REIT Index Fund	2,970,402	
Brandes International Equity Fund	7,124,281	
Calvert SI Balance Fund	2,208,624	
Dodge and Cox Income Fund	12,453,262	
PERSI Choice Plan Contribution Holding Account	1,405,735	
PERSI Choice Plan Loan Fund	9,066,634	
Rowe Price Small Cap Fund	22,724,348	
Total Return Fund	662,502,091	
Vanguard Growth & Income Fund	24,595,467	
PERSI Short Term Investment Portfolio	20,921,406	
Total Choice Plan		. 834,559,402
Sick Leave Insurance Reserve Fund		
State Street Global Advisors-Domestic Equity	271,897,594	
State Street Global Advisors-International Equity	69,082,666	
State Street Global Advisors-Fixed Income	127,507,075	
Total Sick Leave Insurance Reserve Fund	121,001,010	468,487,335
		,
Total Market Value, Including Investment Receivables and Payables		17,024,144,040
		17,021,111,010
Add: Investments Purchased Payable		114,075,579
Less: Investments Sold Receivable		(73,087,813)
Less: Interest and Dividends Receivable		(50,561,561)
Total Market Value, Net of Investment Receivables and Payables		\$ 17,014,570,245
		÷ 11,011,010,240



Investment Results for the Year Ended June 30, 2017

	TOTAL	% OF	Invocto	nont Dor	formanco for	Poriode	Ending
MANAGERS	MKT VAL	TOTAL F		1 YR.	formance for 3 YRS. * 5		-
	(MILLIONS)	FUND					
	• • • • •	4.00/	10.0	10.0	0.0	447	0.4
MELLON CAPITAL MANAGEMENT MID CAP MELLON CAPITAL MANAGEMENT R2000 SMALL CAP	\$ 263.8 196.6	1.6% 1.2%	19.8 24.8	19.8 24.8	6.6 7.5	14.7 13.8	8.1 7.0
MELLON CAPITAL MANAGEMENT N2000 CMALE CAP	2,144.7	13.2%	17.9	17.9	9.6	14.6	7.2
MOUNTAIN PACIFIC	518.1	3.2%	18.7	18.7	12.3	16.9	10.2
DONALD SMITH & CO.	427.6	2.6%	21.7	21.7	3.2	13.4	6.7
PEREGRINE TOTAL U.S. PUBLICLY TRADED EQUITY	451.5	2.8% 24.6%	29.6	29.6 20.4	<u>17.1</u> 9.6	17.6 14.9	9.5
BENCHMARK - Russell 3000	4,002.3	24.0%	18.5	18.5	9.0	14.9	7.3
PRIVATE EQUITY		0.00/				0.5	10.0
IDA-WEST GALEN III	3.0 31.5	0.0% 0.2%	0.0 7.2	0.0 7.2	0.0 1.7	3.5 2.2	13.2 1.6
PROVIDENCE EQ PARTNERS	61.3	0.4%	17.6	17.6	13.0	9.6	9.4
CHISOLM PARTNERS	1.1	0.0%	(9.0)	(9.0)		13.3	18.5
LITTLEJOHN II L.P.	0.1	0.0%	(3.1)	(3.1)		19.1	15.9
GOENSE BOUNDS	1.6	0.0%	4.1	4.1	0.8	(2.5)	(8.1)
HWY 12 FD VENTURE LP T3 PARTNERS II L.P.	58.6 127.4	0.4%	10.3 15.3	10.3 15.3	3.4 15.8	6.5 18.3	2.3 10.7
APOLLO MGMT LP	50.0	0.3%	10.4	10.4	2.8	13.7	16.3
GREEN EQUITY IV L.P.	25.7	0.2%	24.2	24.2	13.3	17.5	14.8
GORES CAPITAL AD LLC	12.7	0.1%	18.2	18.2	0.4	0.8	7.1
W CAPITAL PARTNERS	0.5	0.0%	(50.9)	(50.9)	. ,	(27.5)	(17.6)
FRAZIER TECH VENTURES II	22.0	0.1%	1.8	1.8	5.8	22.0	8.4
KOHLBERG & CO. HAMILTON SECONDARY	40.8 18.8	0.2% 0.1%	10.3 12.0	10.3 12.0	16.8 8.8	12.6 8.9	12.4 9.1
CVC EUROPEAN EQUITY	27.2	0.1%	48.7	48.7	18.4	19.2	14.8
HAMILTON LANE CO-INVESTMENT FUND	60.3	0.3%	15.2	15.2	7.7	14.1	6.3
BRIDGEPOINT EUROPE III	33.1	0.2%	10.9	10.9	1.4	5.9	3.4
NEWBRIDGE ASIA LP	2.5	0.0%	(9.1)	(9.1)		(5.4)	
JH WHITNEY EQUITY PARTNERS IV	4.0	0.0%	(30.9)	(30.9)		(5.7)	
BLACKSTONE CAPITAL PARTNERS ENHANCED EQUITY FUND LP	97.6 2.3	0.6% 0.0%	15.2 0.0	15.2 0.0	10.6 0.0	16.5 0.0	7.1 0.0
LINDSEY, GOLDBERG, BESSEMER	32.5	0.0%	8.6	8.6	4.7	6.7	7.6
KKR 2006 FUND	51.6	0.3%	21.9	21.9	15.2	16.1	10.4
FIRST RESERVE FUND XI	11.9	0.1%	(13.1)	(13.1)	(33.7)	(22.1)	(10.5)
CERBERUS INST PARTNERS	9.1	0.1%	36.2	36.2	17.7	15.3	9.7
EPIC VENTURE FUND	13.1	0.1%	10.2	10.2	8.7	11.8	
ADVENT INTERNATIONAL AMERICAN SECURITIES OPPORTUNITIES FUND II	55.5 25.3	0.3% 0.2%	19.5 53.8	19.5 53.8	14.7 14.5	19.9 14.1	
VERITAS CAPITAL PARTNERS	54.1	0.2%	16.0	16.0	14.5	14.1	
ENDEAVOUR CAPITAL PARTNERS	37.1	0.2%	(1.9)	(1.9)		5.4	
ZESIGER CAPITAL GROUP	20.4	0.1%	0.0	0.0	(3.6)	(3.3)	(2.2)
TOTAL PRIVATE EQUITY	992.7	6.0%	12.3	12.3	6.5	9.6	8.1
REAL ESTATE							
KOLL PARTNERS	437.7	2.6%	11.0	11.0	16.7	1.9	(3.4)
OLYMPIC IDA FUND II	153.5	0.9%	14.1	14.1	12.8	17.6	6.1
CASCADE	51.0	0.3%	3.0	3.0	15.3	5.7	
ADELANTE - PUBLIC R/E	545.1	3.3%	2.0	2.0	10.5	11.2	5.5
MELLON CAPITAL MANAGEMENT REIT INDEX PRUDENTIAL	346.1 60.3	2.2% 0.4%	(2.6) 7.7	(2.6) 7.7	7.8 12.0	11.9	5.2
TOTAL R/E MANAGERS	1,593,7	9.7%	4.6	4.6	12.0	8.5	3.1
BENCHMARK - NCREIF			7.3	7.3	10.6	10.7	6.7
TOTAL U.S. EQUITY	6,588.7	40.3%	15.5	15.5	9.6	12.6	6.9
BENCHMARK - Russell 3000			18.5	18.5	9.1	14.6	7.3
GLOBAL EQUITY							
BARING ASSET MANAGEMENT ¹	0.1	0.0%	62.4	62.4	18.5	17.4	8.8
BRANDES INVST PARTNERS	417.1	2.5%	22.6	22.6	3.1	11.3	1.8
CAPITAL GUARDIAN ¹	0.4	0.0%	74.9	74.9	20.3	21.0	8.4
BERNSTEIN GLOBAL	421.8	2.6%	22.9	22.9	4.9	13.5	0.8
LONGVIEW PARTNERS BLS CAPITAL**	420.0 439.4	2.6% 2.7%	19.2	19.2	9.8	16.7	
FIERA CAPITAL**	423.2	2.6%					
WALTER SCOTT**	422.9	2.6%					
TOTAL GLOBAL EQUITY	2,544.9	15.6%	23.0	23.0	6.4	12.0	3.5
	0 433 0	55 00/	17 4	17 /	07	10.4	E 7
TOTAL U.S./GLOBAL EQUITY BENCHMARK - Russell 3000	9,133.6	55.9%	17.4 18.5	17.4 18.5	8.7 9.1	12.4 14.6	5.7
			10.5	10.0	9.1	14.0	1.5



Investment Results for the Year Ended June 30, 2017

MANAGERS TOTAL MKT VAL FUND TOTAL FISCAL TVR: 3 YRS.* 5 YRS.* 10YRS.* INTERNATIONAL EQUITY GENESIS INVESTMENTS 343.3 2.1% 19.2 19.2 0.5) 3.9 3.9 MELLON CAPITAL MANAGEMENT INTL STK INDX 711.2 4.3% 20.7 20.7 1.5 9.1 1.4 MONDRIAN 711.2 4.3% 20.7 20.7 1.5 9.1 1.4 MONDRIAN 711.2 4.3% 20.7 2.5 2.5 1.0 2.0 BERNSTEIN EMERGING 350.8 2.1% 25.5 2.5 1.0 - TOTAL INTERNATIONAL EQUITY 2,522.8 15.4% 21.1 21.1 1.0 6.3 2.1 TOTAL EQUITY 11,656.4 71.3% 18.2 18.2 7.2 11.2 6.1 BENCHMARK - Russell 3000 18.5 18.5 9.1 14.6 7.3 FUED INCOME 100.3 0.6% (0.4) (0.4) 2.2 7.2 4.4 8.5 </th
(MILLIONS) INTERNATIONAL EQUITY GENESIS INVESTMENTS 343.3 2.1% 19.2 (0.5) 3.9 3.9 MELLON CAPITAL MANAGEMENT INTL STK INDX 711.2 4.3% 20.7 20.7 1.5 9.1 1.4 MONDRIAN 451.8 2.8% 16.6 16.6 1.0 8.9 2.0 BERNSTIEN EMERGING 350.8 2.1% 25.5 23.5 1.0 0.4 TOTAL INTERNATIONAL EQUITY 2,522.8 15.4% 21.1 21.1 1.0 6.3 2.1 EAFE INDEX NET 2.03 20.3 1.2 8.7 1.0 TOTAL EQUITY 2,522.8 18.5 9.1 14.6 7.3 BENCHMARK - Russell 3000 18.5 18.5 9.1 14.6 7.3 FIXED INCOME 003 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO FIXED 1065.4 71.3% 18.2 18.2 7.2 11.2 5.1 BENCHMARK - Russell 3000 100.3 0.6% (0.4) (0.4) 2
INTERNATIONAL EQUITY GENESIS INVESTMENTS 343.3 2.1% 19.2 (0.5) 3.9 3.9 MELLON CAPITAL MANAGEMENT INTL STK INDX 711.2 4.3% 20.7 20.7 1.5 9.1 1.4 MONDRIAN 451.8 2.8% 16.6 16.6 1.0 8.9 2.0 BERNSTEIN EMERGING 350.8 2.1% 22.6 25.6 1.6 4.1 0.4 MELLON CAPITAL MANAGEMENT EMERGING STK INDX 665.7 4.1% 22.5 23.5 1.0 0.63 2.1 TOTAL INTERNATIONAL EQUITY 2.522.8 15.4% 21.1 21.1 1.0 6.3 2.1 EAFE INDEX NET 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 BENCHMARK - Russell 3000 18.5 18.5 9.1 14.6 7.3 FIXED INCOME 100.5 695.3 4.2% (1.1) (1.1) 4.3 3.1 6.5 SGACHIPS 1,764.4 10.8% (0.4) (0.4) (0.7) 0.7 0.2 5.4 UBF & C
GENESIS INVESTMENTS 343.3 2.1% 19.2 (0.5) 3.9 3.9 MELLON CAPITAL MANAGEMENT INTL STK INDX 711.2 4.3% 20.7 20.7 1.5 9.1 1.4 MONDRIAN 451.8 2.8% 16.6 16.6 1.0 8.9 2.0 BERNSTINE MERGING 350.8 2.1% 22.5 2.6 1.6 4.1 0.4 MELLON CAPITAL MANAGEMENT EMERGING STK INDX 707.4 1.7 23.5 23.5 1.0 - TOTAL INTERNATIONAL EQUITY 2,522.8 15.4% 21.1 21.1 1.0 6.3 2.1 EAFE INDEX NET 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 BENCHMARK - Russell 3000 11,656.4 71.3% 18.2 18.5 9.1 14.6 7.3 FIXED INCOME 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO-IDAHO MTGS 1521.3 9.3% 0.65 0.7 0.7 0.7 0.2 4.3 SGA-TIPS 1,521.3 9.3% 0.6<
GENESIS INVESTMENTS 343.3 2.1% 19.2 (0.5) 3.9 3.9 MELLON CAPITAL MANAGEMENT INTL STK INDX 711.2 4.3% 20.7 20.7 1.5 9.1 1.4 MONDRIAN 451.8 2.8% 16.6 16.6 1.0 8.9 2.0 BERNSTINE MERGING 350.8 2.1% 22.5 2.6 1.6 4.1 0.4 MELLON CAPITAL MANAGEMENT EMERGING STK INDX 707.4 1.7 23.5 23.5 1.0 - TOTAL INTERNATIONAL EQUITY 2,522.8 15.4% 21.1 21.1 1.0 6.3 2.1 EAFE INDEX NET 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 BENCHMARK - Russell 3000 11,656.4 71.3% 18.2 18.5 9.1 14.6 7.3 FIXED INCOME 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO-IDAHO MTGS 1521.3 9.3% 0.65 0.7 0.7 0.7 0.2 4.3 SGA-TIPS 1,521.3 9.3% 0.6<
MELLON CAPITAL MANAGEMENT INTL STK INDX 711.2 4.3% 20.7 20.7 1.5 9.1 1.4 MONDRIAN 451.8 2.8% 16.6 16.6 1.0 8.9 2.0 BERNSTEIN EMERGING 350.8 2.1% 25.6 25.6 1.6 4.1 0.4 MELLON CAPITAL MANAGEMENT EMERGING STK INDX 665.7 4.1% 23.5 1.0 0.4 0.4 TOTAL INTERNATIONAL EQUITY 2.522.8 15.4% 21.1 21.1 1.0 6.3 2.1 EAFE INDEX NET 11,656.4 71.3% 18.2 7.2 11.2 5.1 BENCHMARK - Russell 3000 18.5 18.5 9.1 14.6 7.3 FIXED INCOME 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO-IDAHO MTGS 695.3 4.2% (1.1) (1.1) 4.3 3.1 6.5 STATE ST ADV-FX 1,764.4 10.8% (0.4) (0.4) 2.7 2.4 4.8 SSGA-TIPS 1.2% 0.5 0.5 2.7 2.3 4.3
MONDRIAN BERNSTEIN EMERGING 451.8 2.8% 16.6 1.0 8.9 2.0 BERNSTEIN EMERGING MELLON CAPITAL MANAGEMENT EMERGING STK INDX TOTAL INTERNATIONAL EQUITY EAFE INDEX NET 350.8 2.1% 25.6 25.6 1.6 4.1 0.4 665.7 4.1% 23.5 23.5 1.0 1.0 6.3 2.1 TOTAL INTERNATIONAL EQUITY EAFE INDEX NET 2,522.8 15.4% 21.1 20.3 2.0.3 1.2 8.7 1.0 TOTAL EQUITY BENCHMARK - Russell 3000 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 DBF & CO FIXED 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 DBF & CO FIXED 18.5 18.5 9.1 14.6 7.3 FIXED INCOME 695.3 4.2% (1.1) (1.1) 4.3 3.1 6.5 SGA-TIPS 1,764.4 10.8% (0.4) (0.4) (2.7) 2.4 4.8 SSGA-TIPS 1,521.3 9.3% (0.7)
MELLON CAPITAL MANAGEMENT EMERGING STK INDX TOTAL INTERNATIONAL EQUITY EAFE INDEX NET 665.7 4.1% 23.5 23.5 1.0 TOTAL INTERNATIONAL EQUITY EAFE INDEX NET 2,522.8 15.4% 21.1 21.1 1.0 6.3 2.1 TOTAL EQUITY BENCHMARK - Russell 3000 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 DBF & CO FIXED 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO FIXED 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO FIXED 100.3 0.6% (0.4) (0.4) 2.7 2.4 4.8 SGA-TIPS 1,764.4 10.8% (0.4) (0.4) 2.7 2.4 4.8 SGA-TIPS 1,521.3 9.3% (0.7) 0.7 0.2 5.4 CLARWATER-TBA 202.1 1.2% 0.5 0.5 2.7 2.3 4.3 WESTERN ASSET 21.5 1.2% 0.5 0.5 2.7
TOTAL INTERNATIONAL EQUITY EAFE INDEX NET 2,522.8 15.4% 21.1 21.1 1.0 6.3 2.1 TOTAL EQUITY BENCHMARK - Russell 3000 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 DBF & CO FIXED DBF & CO FIXED DBF & CO FIXED 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO FIXED DBF & CO FIXED 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 CLEARWATER-TBA 100.3 0.6% (0.4) (0.4) 2.7 2.4 4.8 VESTERN ASSET 1,764.4 10.8% (0.4) (0.4) 2.7 2.4 4.8 VESTERN ASSET 1,521.3 9.3% (0.7) (0.7) 0.7 0.2 5.4 VESTERN ASSET 21.5 1.2% 0.5 0.5 2.7 2.3 4.3 IR+M** 201.5 1.2% 0.3 (0.3) 2.1 1.6 5.0 UNALLOCATED CASH MELLON TRANSITION MANAGEMENT SERVICES ¹ 22.7 0.1% 2.0 2.0 4.3 3.4 4.3
EAFE INDEX NET 20.3 20.3 1.2 8.7 1.0 TOTAL EQUITY BENCHMARK - Russell 3000 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 BENCHMARK - Russell 3000 18.5 18.5 9.1 14.6 7.3 FIXED INCOME DBF & CO FIXED DBF & CO-IDAHO MTGS STATE ST ADV-FX 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO-IDAHO MTGS STATE ST ADV-FX 100.3 0.6% (0.4) (0.4) 2.7 2.4 4.8 SSGA-TIPS CLEARWATER-TBA 1,521.3 9.3% (0.7) 0.7 0.2 5.4 WESTERN ASSET 202.1 1.2% 0.5 0.5 2.7 2.3 4.3 IR+M** 201.5 1.2% 0.5 0.5 2.7 2.3 4.5 OTHER UNALLOCATED CASH (0.3) (0.3) 2.1 1.6 5.0 UNALLOCATED CASH 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) (22.1) 7.3
TOTAL EQUITY BENCHMARK - Russell 3000 11,656.4 71.3% 18.2 18.2 7.2 11.2 5.1 FIXED INCOME DBF & CO-IDAHO MTGS STATE ST ADV-FX 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 DBF & CO-IDAHO MTGS STATE ST ADV-FX 100.3 0.6% (0.4) (0.4) 1.9 1.8 4.0 SSGA-TIPS 1,764.4 10.8% (0.4) (0.4) 2.7 2.4 4.8 SSGA-TIPS 1,764.4 10.8% (0.4) (0.4) 2.7 2.4 4.8 SSGA-TIPS 1,764.4 10.8% (0.4) (0.4) 2.7 2.4 4.8 SSGA-TIPS 1,521.3 9.3% (0.7) 0.7 0.2 5.4 CLEARWATER-TBA 202.1 1.2% 0.5 0.5 2.7 2.3 4.3 WESTERN ASSET 215.9 1.3% 3.6 3.6 4.4 4.6 6.3 IR+M** 0.3 (0.3) (0.3) 2.1 1.6 5.0 BENCHMARK - BC Aggregate Bonds (0.3) (0.3) 2.5 2.2
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STATE ST ADV-FX 1,764.4 10.8% (0.4) (0.4) 2.7 2.4 4.8 SSGA-TIPS 1,521.3 9.3% (0.7) (0.7) 0.7 0.2 5.4 CLEARWATER-TBA 202.1 1.2% 0.5 0.5 2.7 2.3 4.3 WESTERN ASSET 215.9 1.3% 3.6 3.6 4.4 4.6 6.3 IR+M** 201.5 1.2% 0.3 (0.3) 2.1 1.6 5.0 BENCHMARK - BC Aggregate Bonds (0.3) (0.3) 2.5 2.2 4.5 OTHER UNALLOCATED CASH 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) (22.1) 7.3 4.3
SSGA-TIPS 1,521.3 9.3% (0.7) (0.7) 0.7 0.2 5.4 CLEARWATER-TBA 202.1 1.2% 0.5 0.5 2.7 2.3 4.3 WESTERN ASSET 215.9 1.3% 3.6 3.6 4.4 4.6 6.3 IR+M** TOTAL FIXED INCOME 201.5 1.2% 1.6 5.0 BENCHMARK - BC Aggregate Bonds (0.3) (0.3) 2.1 1.6 5.0 OTHER UNALLOCATED CASH 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) (22.1) 7.3 4.3
WESTERN ASSET 215.9 1.3% 3.6 3.6 4.4 4.6 6.3 IR+M** TOTAL FIXED INCOME 1.2% 1.2% 1.6 5.0 BENCHMARK - BC Aggregate Bonds (0.3) (0.3) 2.1 1.6 5.0 OTHER UNALLOCATED CASH 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) (22.1) 7.3
IR+M** 201.5 1.2% TOTAL FIXED INCOME 4,700.8 28.6% (0.3) (0.3) 2.1 1.6 5.0 BENCHMARK - BC Aggregate Bonds (0.3) (0.3) 2.5 2.2 4.5 OTHER 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) 7.3
TOTAL FIXED INCOME BENCHMARK - BC Aggregate Bonds 4,700.8 28.6% (0.3) (0.3) 2.1 1.6 5.0 OTHER UNALLOCATED CASH MELLON TRANSITION MANAGEMENT SERVICES ¹ 22.7 0.1% 2.0 2.0 4.3 3.4 4.3
BENCHMARK - BC Aggregate Bonds (0.3) (0.3) (0.3) 2.5 2.2 4.5 OTHER UNALLOCATED CASH 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) 7.3
OTHER UNALLOCATED CASH 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) 7.3
UNALLOCATED CASH 22.7 0.1% 2.0 2.0 4.3 3.4 4.3 MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) (22.1) 7.3
MELLON TRANSITION MANAGEMENT SERVICES ¹ 3.6 0.0% (22.1) 7.3
TOTAL OTHER 26.3 0.1%
COMBINED TOTAL ² 16,383.5 100.0% 12.7 12.7 5.8 8.6 5.3
BENCHMARK - 55% Russell 3000 12.9 12.9 6.0 10.0 5.8
30% BC Aggregate Bonds
15% MSCI EAFE Index
Add: Other PERSI DC Choice Plan Investments 172.1
Sick Leave Fixed Income Investments 127.5
Sick Leave Equity Securities 341.0
Investments Purchased 114.1
Less: Interest and Dividends Receivable (50.6)
Investments Sold (73.1)
Total Pension Fund Investments
Net of Receivables \$17,014.5
*Rates of Return are annualized **Accounts opened less than one year

¹Large inflows/outflows in this account results in widely variable results

²Total Return Fund/Judges' Retirement Fund included in investment results

Performance is gross of fees

Prepared using a time weighted rate of return per BNY Mellon - Global Risk Solutions



Schedule of Investment Income for the Last Six years

Year	Interest	Dividends	Gains & Losses *	Total
2012	\$117,140,608	\$165,467,250	\$(86,288,779)	\$196,319,079
2013	110,329,885	180,373,163	817,663,490	1,108,366,538
2014	105,237,909	220,530,606	1,907,625,265	2,233,393,780
2015	114,333,491	198,258,329	153,584,037	466,175,857
2016	106,500,811	224,510,654	(65,219,864)	265,791,601
2017	119,967,098	220,630,874	1,538,645,824	1,879,243,796

*Includes realized and unrealized gains and losses and other investment income.

Largest Stock Holdings (by Market Value) June 30, 2017

	Shares	Stock	Market Value
1	40,740	SAMSUNG ELECTRONICS CO LTD	\$ 84,638,333
2	694,171	MASTERCARD INC	84,307,067
3	521,112	SIMON PROPERTY GROUP INC	84,295,077
4	83,483	AMAZON.COM INC	80,811,544
5	536,435	APPLE INC	77,257,368
6	1,038,333	MICROSOFT CORP	71,572,293
7	74,865	ALPHABET INC-CL C	68,032,071
8	1,015,942	CITIGROUP INC	67,946,200
9	475,509	JOHNSON & JOHNSON	62,905,085
10	416,218	FACEBOOK INC	62,840,593

A complete list of portfolio holdings is available upon request.

Largest Bond Holdings (by Market Value) June 30, 2017

	Par	Bonds	Description	Market Value
1	66,460,135	US TREASURY INFLATION INDEX SECURITY	0.125% 04/15/2019 DD 04/15/14	\$ 65,820,258
2	65,303,524	US TREASURY INFLATION INDEX SECURITY	0.125% 04/15/2020 DD 04/15/15	64,969,947
3	61,379,988	US TREASURY INFLATION INDEX SECURITY	0.125% 04/15/2021 DD 04/15/16	60,549,763
4	57,032,389	US TREASURY INFLATION INDEX SECURITY	0.125% 01/15/2022 DD 01/15/12	55,267,261
5	56,719,335	US TREASURY INFLATION INDEX SECURITY	0.625% 01/15/2026 DD 01/15/16	55,555,539
6	56,008,365	US TREASURY INFLATION INDEX SECURITY	1.125% 01/15/2021 DD 01/15/11	52,829,101
7	55,749,866	US TREASURY INFLATION INDEX SECURITY	0.125% 07/15/2022 DD 07/15/12	54,029,182
8	54,781,562	US TREASURY INFLATION INDEX SECURITY	0.125% 01/15/2023 DD 01/15/13	53,404,448
9	54,261,665	US TREASURY INFLATION INDEX SECURITY	0.625% 01/15/2024 DD 01/15/14	54,077,194
10	53,217,399	US TREASURY INFLATION INDEX SECURITY	0.375% 07/15/2023 DD 07/15/13	53,802,389

A complete list of portfolio holdings is available upon request.



Schedule of Fees and Commissions for the Year Ended June 30, 2017

	Base		Commission
Broker Name	Commission	Total Shares	per Share
STATE STREET GLOBAL MARKETS LLC, BOSTON	\$ 626,651	1,048,626,958	\$ 0.0006
STATE STREET BK & TR CO (SEC), LONDON	424,803	198,981,461	0.0021
GOLDMAN SACHS & CO, NY	201,196	24,808,014	0.0081
UBS SECURITIES LLC, STAMFORD	178,458	2,512,185	0.0710
MERRILL LYNCH INTL LONDON EQUITIES	132,407	65,310,365	0.0020
MERRILL LYNCH PIERCE FENNER SMITH INC NY	112,712	9,908,640	0.0114
MORGAN STANLEY & CO INC, NY	96,378	20,809,638	0.0046
BARCLAYS CAPITAL INC./LE, NEW JERSEY	81,949	2,067,606	0.0396
J.P. MORGAN CLEARING CORP, NEW YORK	80,261	3,478,106	0.0231
BERNSTEIN SANFORD C & CO, NEW YORK	72,171	4,896,063	0.0147
GOLDMAN SACHS INTL, LONDON (GSILGB2X)	64,726	6,782,597	0.0095
DEUTSCHE BK INTL EQ, LONDN (DEUTGB22EEQ)	64,145	10,259,226	0.0063
STIFEL NICOLAUS	61,790	3,249,107	0.0190
MORGAN STANLEY & CO, LONDON (MSLNGB2X)	60,792	9,654,435	0.0063
CITIGROUP GLOBAL MARKETS LTD, LONDON	60,684	9,929,378	0.0061
J P MORGAN SECURITIES INC, BROOKLYN	50,700	3,064,387	0.0165
MERRILL LYNCH PIERCE FENNER, WILMINGTON	49,076	5,713,420	0.0086
CITIGROUP GBL MKTS INC, NEW YORK	48,422	2,446,621	0.0198
CITIGROUP GBL MKTS/SALOMON, NEW YORK	45,917	18,675,394	0.0025
J P MORGAN SECS LTD, LONDON	43,821	4,368,324	0.0100
NATIONAL FINL SVCS CORP, NEW YORK	41,111	1,710,298	0.0240
UBS WARBURG, LONDON	41,110	4,341,579	0.0095
CREDIT SUISSE, NEW YORK (CSUS)	40,744	2,356,857	0.0173
JEFFERIES & CO INC, NEW YORK	38,929	1,296,051	0.0300
MACQUARIE BANK LTD, HONG KONG	38,912	21,844,628	0.0018
CREDIT SUISSE (EUROPE), LONDON	38,686	6,816,725	0.0057
Other Brokers under \$35,000	1,397,090	4,159,646,984	0.0003

TOTAL BROKER COMMISSIONS

4,193,654 5,653,555,047 \$ 0.37065

A complete list of broker commissions is available from PERSI upon request. PERSI does not require that investment managers use specific brokers.

\$



Schedule of Fees and Commissions for the Year Ended June 30, 2017

PRIVATE EQUITY COSTS BY ACCOUNT

Advent International GPE, L.P.	\$ 690,484
*Ascribe Capital LLC	1,026,193
Apollo Investment Fund, L.P.	9,549
Blackstone Capital Partners, L.P.	1,391,187
Bridgepoint Capital LTD	539,037
CVC European Equity Partners, L.P.	328,660
Enhanced Equity Funds, L.P.	322,765
Endeavour Capital Fund, L.P.	957,545
Epic Ventures Fund LLC	45,000
First Reserve, L.P.	149,997
Hamilton Lane Co-Investment Fund, L.P.	(181,192)
Hamilton Lane Secondary Funds, L.P.	425,000
Highway 12 Venture Funds, L.P.	161,750
J.H. Whitney, L.P.	37,498
KKR, L.P.	262,422
Kohlberg Investors, L.P.	277,720
Lindsay Goldberg, L.P.	944,365
Nautic Partners LP	(9,965)
Providence Equity Partners III, L.P.	445,070
TPG, L.P.	(1,782,135)
Veritas Capital Partners, LLC	311,971
TOTAL	\$ 6,352,921

*formerly American Securities Opportunities

Schedule of Fees and Commissions for the Year Ended June 30, 2017

Investment Fees		Average Assets nder Management	Fees	Basis Points
Investment Manager Fees				
Equity Managers	\$	9,067,794,725		35
Fixed Income Managers		4,264,990,594		15
Real Estate Managers	-	683,996,607	6,026,539	88
Total Average Assets	\$	14,016,781,926		
Total Investment Manager Fees			43,803,778	31
a in the antidessection for the sector of produce			88-33 • SAME CON• BEECKARA	
Other Investment Service Fees				
Custodian/Record Keeping Fees			2,995,291	
Investment Consultant Fees			1,001,790	
Legal Fees			362,642	
Actuary/Audit Service Fees			342,757	
Total Investment Service Fees			4,702,480	3
Total Defined Benefit Plans/Defined Contribution Plans' Fees			\$48,506,258	34
Total Defined Contribution Plans' Fees			110,725	
Total Other Trust Funds' Fees				
			190,191	-
Total Fees			\$48,807,174	-
Notal Broker Food are Included on a Constate Schedule				

Note: Broker Fees are Included on a Separate Schedule



STATEMENT OF INVESTMENT POLICY AND GUIDELINES

I. Introduction

The Retirement Board ("Board") of the Public Employee Retirement System of Idaho ("PERSI", "System") hereby establishes its Statement of Investment Policy for the investment of the trust funds ("Trust") in accord with Idaho Code Chapter 13, Title 59.

II. Statutory Requirements

The investment of the Trust will be in accord with all applicable laws of the state of Idaho.

A. Sole Interest of Beneficiaries

Investments will be solely in the interest of the participants and beneficiaries and for the exclusive purpose of providing benefits to the participants and their beneficiaries and defraying reasonable expenses of administration.

B. Prudent Investments

Investments will be made with the judgment and care under the circumstances then prevailing, which people of prudence, discretion and intelligence exercise in the management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable outcome as well as the probable safety of their capital. Investments will be diversified so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.

C. Fiduciary Duties

The Board and its agents, including staff, consultants, and investment managers, will discharge their duties with respect to the Trust assets solely in the interest of the members and retired employees, and with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

III. Investment Goals

A. General Objective

1. Purpose

The purpose of the investment of Trust assets is to provide funds to meet the obligations of the Public Employee Retirement System of Idaho (PERSI) while incurring the appropriate amount of risk consistent with attaining that goal. The Board will invest the assets of the Trust and will reduce risk through diversification of the assets of the Trust.

2. Considerations

In determining the returns needed by the System, the acceptable risk levels, and the allowable investments, the Board will consider:

- the purpose of the plan,
- the projected return of the portfolio as it relates to the funding objectives of the plan,
- the effect of particular investments on the total portfolio,
- the diversification of the portfolio, and
- the liquidity needs and the current return relative to the anticipated cash flow requirements.



B. Specific PERSI return and risk objectives

1. Investment Returns

(a) Actuarial Assumptions

In projecting obligations and the returns needed to meet those obligations, the Board will consider studies performed by actuaries hired by the Board. The actuary uses an investment return assumption of 7.50% before fees and expenses in balancing projected obligations, projected contributions, and projected returns on assets. The return assumption after fees of administering the system and its investments is 7.00%. Assuming all of the actuarial assumptions are accurate, this 7.0% net return will suffice to: (1) assure the payment of statutorily required benefits, which includes a 1% Cost of Living Adjustment (COLA); and (2) maintain the reduction of the level of the unfunded liability (if any) on the scheduled amortization (one year at a time). The assumed 7.0% net return will not be sufficient to fund either discretionary COLAs (2-6%), retroactive COLAs, accelerate the amortization of the unfunded liability, build a stabilization reserve, or allow for gain-sharing distributions.

(b) Inflation and Salary Assumptions

This 7.50% rate before fees and 7.00% rate net of fees assume an inflation rate of 3.25% and an annual general state salary growth rate of 3.75%. To the extent that either inflation or salary growth are higher or lower than these rates, then the investment returns needed will also be higher or lower than the assumed 7.00% net, although not on a 1:1 ratio.

(c) Relation to Funding Policy

As set out in the Board's funding guidelines, to the extent investment markets allow, it is the desire of the Board to provide discretionary COLAs, accelerate the amortization of any unfunded liability, and provide for gain-sharing. It is also the goal of the Board to maintain a reasonable amortization of any unfunded liability, and not to exceed the 25 year amortization period set by statute. Therefore, it is the goal of the Board to set an expected rate of return above the actuarially assumed return so that (1) discretionary COLAs will have a reasonable chance of being consistently funded and (2) the scheduled amortization of any unfunded liability is not unreasonably jeopardized. Returns above that amount will be used to build a stabilization reserve and to distribute to the System participants through gain-sharing.

(d) Periodic Specific Return Goals

Because of the inflation sensitivity of both the returns needed by the System and the size of annual COLAs, an exact target return (either real or nominal) cannot be set in advance. Nonetheless, under most reasonable actuarial assumptions, PERSI has a relatively stable real return goal of between 4.75% - 5.25% if consistent funding of discretionary COLAs and providing for gain sharing is included as an objective. Consequently, specific return goals for upcoming periods will be set out in the strategic asset allocations periodically adopted by the Board.

2. Investment Risk and Asset Allocations

(a) Diversification Among Asset Classes

In controlling the risk level that is appropriate for the Trust, the Board will diversify the assets of the Trust among various asset classes as the Board may from time to time adopt as appropriate asset classes. The specific asset classes to be used will be set in conjunction with the asset allocation adopted from time to time by the Board.

(b) Review of Asset Classes and Asset Allocation

In setting allocations, the Board will focus on assuring that the expected long-term returns of the System will meet expected long-term obligations with the appropriate level of risk sufficient to meet those objectives. Unless circumstances materially change, the Board will at least once every five years determine the appropriate asset classes for the investment of Trust assets and conduct asset allocation studies to help determine the long term strategic allocations among desired asset classes so as to meet long-term return objectives with the appropriate level of risk.



(c) Content of Asset Allocations

The asset allocation will set out:

- the asset classes to be used,
- the long-term "normal" percentage of assets to be invested in each asset class,
- the short to intermediate term ranges that will be considered allowable temporary deviations from the normal allocation,
- the investment risk and return expectations for each asset class,
- the numerical investment return and risk expected to be realized, and
- the relation of the expected investment return to the real and actuarially assumed investment return.

(d) Strategic Policies

In addition to asset allocation, the Board may from time to time authorize or adopt strategic policies. "Strategic policies" are actions by the Board to allow investment in asset types that have not been singled out as "asset classes" in the asset allocation process, to overweight particular sectors within an asset class, or to employ particular strategies in the investment of Trust assets. The purposes of these actions are either to increase the return above the expected return or to reduce risk.

IV. Investment Structure

A. Overall Structure

In making specific investment policy decisions, the Board will have as an overall goal a flexible, simplified structure with clear roles and accountability.

1. Board Ultimately Responsible

The Board is ultimately responsible for all investment activities. In exercising this responsibility, the Board will hire investment personnel and agents and delegate various investment functions to those personnel and agents. Where the Board does not delegate investment powers or duties, the Board will either satisfy itself that it is familiar with such matters, or will retain persons who are familiar with such matters to consult or assist the Board in the exercise of those responsibilities. Where the Board delegated to a person who is familiar with such matters, and the Board will monitor and review the actions of those to whom responsibilities are delegated.

2. General Roles and Responsibilities of Board and Agents

The Board will favor a structure that accommodates a citizen Board and a small staff. The Board and staff will concentrate their activities on:

- making strategic decisions, primarily concerning asset allocation and strategic policies;
- adjusting the mix between passive and active managers depending on, among other considerations, near-term concerns regarding the U.S. and other capital markets;
- delegating and monitoring all other activities, including hiring and monitoring investment managers; and
- maintaining a reporting system that provides a clear picture of the status of the fund on a reasonably concurrent basis to both the Board and PERSI's constituencies.

The Board will rely on outside agents, and primarily investment managers, to be responsible for nonstrategic decisions. This responsibility includes those investment decisions with shorter-term consequences such as the best near-term securities, regions, asset types, or asset classes.



B. Direct (Non-Delegated) Responsibilities of the Board 1. Specific Responsibilities

The Board will be directly responsible for

- Setting investment policy,
- Determining the investment structure of the Trust,
- Determining the asset classes to be utilized,
- Setting the asset allocation,
- Determining or authorizing strategic policies;
- Hiring agents to implement the asset allocation;
- · Hiring agents to implement strategic policies; and
- Monitoring the compliance of those agents with the investment policies and allocations determined by the Board.

2. Delegation and Monitoring of Specific Investment Activities

The Board will normally delegate investment decisions concerning specific securities or assets, or the tactical allocations of assets among asset types, to outside agents. The Board will retain direct responsibility for the monitoring of the activities of those agents through periodic reports from its staff or consultants. The Board may choose to exercise direct investment responsibility if unusual market conditions or other circumstances so indicate.

C. Employees, Consultants, and Advisors to the Board

1. Investment Staff

(a) Duties of Chief Investment Officer and Other Staff

The Board will hire a Chief Investment Officer and such other staff as it considers appropriate who will be generally responsible for the oversight of the investment of Trust assets, and, as part of that overall responsibility, will: (1) supervise, monitor, and evaluate the performance of the investment managers hired by the Board to assure compliance with investment policy and individual guidelines; (2) assist the Board in developing and adjusting investment policy, including reviewing and modifying the asset allocation as conditions warrant; (3) research current market conditions, evaluate new products, and seek out new approaches to improve portfolio return, reduce risk, and reduce costs and fees; (4) work with the consultants, custodians, investment managers, and other agents in the performance of their assigned duties; and (5) assist the Board with education and other efforts to promote good decision making. Except in special circumstances, PERSI staff will not be responsible for the investment, purchase, or sale of specific assets.

(b) Allocation of New Net Contributions

The Chief Investment Officer shall allocate new net contributions to or withdraw net distributions from the system among investment managers in accordance with the strategic and tactical ranges established by the Board in the asset allocation. The Chief Investment Officer shall report to the Board regularly on the allocation of new net contributions or the withdrawal of net distributions.

(c) Tactical Asset Allocation and Rebalancing

With prior notice to the Board, the Chief Investment Officer may shift assets among managers (including between passive and active managers) as long as the asset allocation is maintained within the strategic ranges. If conditions do not permit giving prior Board notice, the Chief Investment Officer is authorized to move assets among investment managers within the ranges established by the Board. If such action is taken, the Chief Investment Officer shall notify the Chairman of the Board as soon as is practical either that action is contemplated or has been taken, as circumstances warrant.



(d) Minimum Qualifications of Chief Investment Officer

The Chief Investment Officer shall at least: (a) have a graduate degree in finance, law, or business administration or (b) be a Chartered Financial Analyst; or (c) have three or more years of experience in the investment of trust assets.

2. Actuaries

The Board will hire an actuary to provide studies that will: (1) determine the long term obligations faced by the System through annual actuarial valuations, (2) set out return objectives or assumptions that will be sufficient to meet those obligations; and (3) provide reviews at least once every four years of the actuarial valuation process, including updating the projections and assumptions in light of the experience of the System. The Board will set its long-term return objectives after considering information provided by those studies.

3. Investment Consultants

The Board will hire a qualified independent consultant, whose relationship does not impose a conflict of interest with the Board or staff, to provide investment performance measurement at least quarterly with the report available to the Board within two months of the quarter end. The report will at least compare actual investment returns of the System -- in total, by each asset class, and for each managed portfolio -- with both the investment objectives of the System and a with an appropriate benchmark and peer group. The Board may hire other independent investment consultants as needed to assist the Board in the management of its investment responsibilities, including, but not limited to: (1) performing asset allocation studies, and reviewing and recommending modifications of the asset allocation as conditions warrant; (2) assisting in monitoring the investment managers to assure they are in compliance with the investment policy and their individual guidelines; (3) performing manager evaluations and searches as may be necessary; and (4) assisting in the development and adjustment of investment policy. Except for consultants retained solely for purposes of performance measurement, consultants will be fiduciaries of the Trust.

D. Managers or Agents with Delegated Responsibilities

1. Custodian

(a) Responsibilities

The Board will hire custodians and other agents who will be fiduciaries of the Trust and who will assume full responsibility for the safekeeping and accounting of all assets held on behalf of the Trust. Among other duties, as may be agreed to, the custodian will be responsible for: (a) the receipt, delivery, and safekeeping of securities; (b) the transfer, exchange, or redelivery of securities; (c) the claiming, receipt, and deposit of all dividend, interest, and other corporate actions due the Trust; (d) the daily sweep of all uninvested funds into a cash management account or accounts; and, (e) the provision of reports to PERSI upon agreed time intervals that will include all purchases and sales of securities, all dividend declarations on securities held by the Trust, a list of securities held by the Trust. Unless the Board provides otherwise, the custodian will also be responsible for monitoring class action litigation, filing and collecting claims on PERSI's behalf, and reporting to PERSI on such activities.

(b) Authorization of Collective Investment Trusts

Assets of the Trust may be invested in any collective investment trust, which at the time of the investment provides for the pooling of the assets of plans described in Section 401(a) of the Internal Revenue Code of 1986, as amended, and which is exempt from Federal income tax. Assets of the Trust may be commingled with assets of other trusts if invested in any collective investment trust authorized by this policy. The provisions of the trust agreement, as amended by the trustee thereof from time to time, of each collective investment trust in which Trust assets are invested are by this reference incorporated as a part of the trust estate comprising the Trust. The provisions of the collective investment trust.



2. Investment Managers

The Board will hire investment managers who will be fiduciaries of the Trust and who will be responsible for the investment of Trust assets in specific securities or assets within or among the asset classes.

(a) Minimum Qualifications

Investment managers shall be registered with the Securities and Exchange Commission (unless they are banks, insurance companies, or other category exempted from such registration requirements), have been in the business of investment management at least two years (or the main personnel of the investment management firm have worked together in the business of investment management for at least two years), and, usually, have other United States pension fund assets under management.

(b) Guidelines

Investment Managers shall manage assets in accordance with additional guidelines established by contract and as may be added to or modified from time to time. The additional guidelines will contain minimum diversification requirements that must be followed by that manager. These guidelines will also set out the investment return expected to be achieved by that manager, and shall be linked to a benchmark that represents the passive index fund that would be used to replace the manager's assignment.

(c) Responsibilities and Discretion

Subject to the restrictions set out in this policy or as may be set out in individual contracts or guidelines, an investment manager shall have full discretionary power to direct the investment, exchange, and liquidation of the assets entrusted to that manager. The manager shall place orders to buy and sell securities and, by notice to the custodian, cause the custodian to deliver and receive securities on behalf of the Trust.

(d) Corporate Governance

The Board, unless otherwise stated, will delegate the voting of proxies to the investment manager or custodian. The Board will adopt and from time to time modify a proxy voting policy. The staff will forward PERSI's Proxy Voting Policy to investment managers; however the investment managers will normally have discretion to vote proxies according to their respective proxy voting policies, provided they vote those proxies in the best interest of the System. The Board may from time to time take any other action it deems appropriate in exercising PERSI's proxy voting powers, including but not limited to directing staff to vote individual proxies in a particular manner.

(e) Transactions and Brokerage

All securities transactions shall be executed by reputable broker/dealers or banks, and shall be on a best price and best execution basis.

3. Use of Passive and Active Managers

(a) Purpose and Use of Active Management

The Board recognizes that passive (index fund) investing has lower costs than active investing, with regard to both management fees and transaction costs. Further, the Board also recognizes that there is uncertainty concerning whether active investing can generally outperform passive investing, particularly in the large, liquid, and efficient portions of the capital markets. Also, the Board has great confidence that a passive investment of assets in an efficient asset allocation will likely meet long-term (20 year) obligations.

Contribution rates, COLAs, and the ability to provide for gain-sharing, however, are based on 1-5 year returns. The Board is concerned that over 1-5 year periods the ability to consistently fund COLAs and to keep contribution rates stable are in considerable jeopardy from two sources: (1) expected "normal" market fluctuations are such that annual returns will likely not meet hurdle rates approximately 40% of the time, with actual negative returns to be expected once every six years; and (2) that most of the



Trust assets under the asset allocation will be invested in U.S. capital markets, and are thus vulnerable to poor U.S. returns.

One purpose of active management of Trust assets is to address these two concerns. Active managers will be hired for the purpose of providing greater stability of returns, and better returns, than would be achievable under purely passive management over rolling 3-5 year periods. Active managers will be responsible for timing of markets and the tactical allocation of assets among and within the capital markets (including between the U.S. and international markets).

In addition to providing extra returns, active managers will also be employed to smooth returns, provide higher long-term returns, provide protection in adverse markets, and to add exposure and additional diversification to the portfolio than that achievable solely through investment in passive indices representing the strategic asset allocation and strategic policies.

(b) Structure

In using outside managers, the Board will favor a structure using a reasonable number of managers with broad mandates and benchmarks.

Passive managers will be favored for the core, liquid, efficient markets (such as S&P 500 stocks and U.S. Government/Credit bonds). Active managers will be favored for relatively inefficient markets.

Global managers will be used to provide flexibility in reacting to near-term concerns that may arise concerning any particular region or market, particularly the U.S. capital markets, and to provide an appropriate balance between efficient long-term asset allocations (which favor US assets) and near-term allocations (which have a greater preference for international assets) to meet the real (inflation adjusted) return needs of the System.

Assets under the management of global equity managers will be considered US equity assets for purposes of asset allocation. Consequently, actual allocations to international equities in the overall portfolio from time to time may be above that in the stated asset allocation due to the activities of the global equity managers.

(c) Balance between Passive and Active Management

The balance between active and passive management will be set from time to time with the following considerations in mind: concentration of active investment efforts where there is the most potential for excess returns, implementation of views concerning the state of the U.S. and international capital markets, and reduction of fees and other costs.

(d) Monitoring Standards

Active managers will be monitored under two standards: First, over rolling 3-5 year periods, managers will be expected to exceed, after fees, the benchmark index that represents the passive alternative to the mandate given the manager, and to rank in the top half of the universe of managers that best fits that manager's mandate. Second, over shorter periods of time, managers will be expected to maintain key personnel, a consistent style, and investment capability. Passive managers will be monitored on their ability to track their benchmark index over both short (1 quarter to one year) and long (3 to 5 year) periods. The Board may consider other information it considers relevant, including composite manager indices, in determining whether to retain or terminate managers.

V. Asset Class Policies

A. U.S. Equities

1. Objective

The overall objective of the U.S. equity or Broad Domestic Equity asset class is to obtain, over time, a return after fees that equals or exceeds the returns of the Russell 3000 Index, both absolutely and on a



risk-adjusted basis. For assets under the management of global equity managers, the objective for near-term periods (approximately 5 years or sooner) will be to achieve a return after fees that is equal

to or exceeds the returns of the MSCI World Index or MSCI All Country World Index, both absolutely and on a risk-adjusted basis.

2. Allowable Investments

Managers may invest in stocks that do not pay dividends. Managers may invest in equity securities outside of the Russell 3000 Index, and global equity managers may invest in equity securities outside of the MSCI World Index. Managers may use derivative securities for purposes of enhancing liquidity, reducing transaction or other costs, or partially hedging an existing exposure in the portfolio.

3. Manager Styles

Managers for the U.S. equity asset class may include index funds, style managers (such as value, growth, and capitalization), "core" managers, and global managers.

4. Benchmarks

The Russell 3000 index will be the benchmark for the passive index funds, core managers, and global managers. For near term periods (approximately 5 years or less), the MSCI World or MSCI ACWI indexes are the benchmarks for global equity managers. Other style or capitalization indices maintained by a qualified organization may be used as the benchmark for style managers Active U.S. and global equity managers are expected to exceed, over rolling 3-5 year intervals, the applicable benchmark by 75 basis points annually after fees, and to rank in the top 50th percentile of active managers with similar mandates.

B. International Equities

1. Objective

The overall objective of the International Equity Asset Class is to obtain, over time, a return after fees that equals or exceeds the returns of the MSCI Europe, Australasia, and Far East (MSCI EAFE) Index (unhedged), or the FT Actuaries World ex U.S. Index, both absolutely and on a risk-adjusted basis.

2. Allowable Investments

Managers may invest in stocks that do not pay dividends. Managers may invest in American Depository Receipts or American Depository Shares. Managers may invest in equity securities of companies or in countries that are not included in the indices. Managers may use derivative securities for purposes of enhancing liquidity, reducing transaction or other costs, or partially hedging an existing exposure in the portfolio. Managers may not overhedge their portfolio, although proxy hedging for purposes of liquidity and cost savings is allowed.

3. Manager Styles

Managers for the International Equity asset class may include index funds, general international managers, and regional or specialized managers (such as emerging markets). The Board may from time to time hire a currency overlay manager to hedge the currency exposure in those portfolios where managers do not actively or normally consider hedging their exposure.

4. Benchmarks

The MSCI EAFE Index (unhedged), will be the benchmark for the developed markets passive index fund. Active international developed markets managers may use as their benchmark either the MSCI EAFE index or the MSCI ACWI ex US index (unhedged). The MSCI Emerging Markets Free (MSCI EMF) index will be the benchmark for the emerging markets managers, both active and passive.

Regional or specialized indices (unhedged) maintained by a qualified organization may be used as the benchmark for other active managers. Active international equity managers are expected to exceed,



over rolling 3-5 year intervals, the applicable benchmark by 75 basis points annually after fees, and to rank in the top 50th percentile of active managers with similar mandates.

C. Fixed Income

1. Objectives

The overall objective of the Fixed Income Asset Class is to obtain, over time, a return after fees that equals or exceeds the returns of the Barclays Capital Aggregate Bond Index (Aggregate Bond Index) both absolutely and on a risk-adjusted basis.

The Fixed Income Asset Class shall consist of investments in mortgages and in both dollar and nondollar fixed income securities. Mortgages shall consist of investments in mortgage backed securities, and direct ownership of commercial mortgages through the Idaho Commercial Mortgage Program.

The objective of the non-mortgage fixed income securities other than real return portfolios is to obtain, over time, a return after fees that equals or exceeds the returns of the Barclays Capital Government/Credit Bond Index (Government/Credit Bond Index) on a risk-adjusted basis. The overall objective of the mortgage securities is to obtain, over time, a return after fees that equals or exceeds the returns of the Barclays Capital Mortgage Index (Mortgage Index) on a risk-adjusted basis. The overall objective of the real return fixed income is to obtain, over time, a return after fees that equals or exceeds the returns of the Barclays Capital TIPS Index on a risk-adjusted basis.

2. Allowable Investments

Managers may invest in debt securities that do not pay interest. Active managers may invest in securities in companies or countries that are not included in the indices. Managers may use derivative securities for purposes of enhancing liquidity, reducing transaction or other costs, or partially hedging an existing exposure in the portfolio. Fixed income managers may, at their discretion and to the extent allowed by their contracts and guidelines, use currency forward or futures markets as may be considered appropriate to implement fixed income strategies.

3. Manager Styles

Managers in the Fixed Income asset class may include index funds, domestic bond managers, specialized managers, and global managers.

4. Benchmarks

The Barclays Capital Government/Credit Index or Barclays Capital Aggregate Index will be the benchmark for all non-mortgage fixed income managers except real return fixed income managers. The Barclays Capital TIPS index will be the benchmark for real return fixed income managers. The Barclays Capital Mortgage Index will be the benchmark for all mortgage managers. The Barclays Capital Aggregate Index will be the benchmark for the asset class. Active fixed income managers are expected to exceed, over rolling 3-5 year intervals, the applicable benchmark by 25 basis points annually after fees, and to rank in the top 50th percentile of active managers with similar mandates.

D. Real Estate

1. Objectives

Private equity real estate investments will be considered part of the U.S. Equity asset class. The overall objective of private equity real estate investments is to attain a 5% real rate of return overall, over a long-term holding period, as long as this objective is consistent with maintaining the safety of principal. The 5% real rate of return includes both income and appreciation, is net of investment management fees, and is net of inflation as measured annually by the Consumer Price Index. Over a short term basis, the objective is to earn a nominal minimum income yield of 5% on each individual investment, or inflation plus 3%, whichever is greater.



2. Allowable Investments

Allowable private equity real estate investments include open-end and closed-end commingled real estate funds, direct real estate investments, publicly traded real estate investment trusts and other public real estate companies, private real estate companies and real estate operating venture entities. Allowable investments must be originated and managed by real estate advisors with substantial experience originating and managing similar investments with other institutional investors. The real

estate asset sector is not intended to include solely debt investments; in particular, straight mortgage interests are considered part of the fixed income asset class. The real estate asset sector may include equity-oriented debt investments, including mezzanine loans, that conform with the return targets of the sector.

3. Need for Income Component of Return

Upon closing, each real estate investment must have as a goal the expectation of an annual income return and overall holding period return measured primarily by realized return rather than expected capital appreciation. Thus, a significant portion of real estate investments made should be in existing income producing properties with measurable return expectations rather than purely development properties. However, existing properties with potential for physical enhancement, including development or redevelopment, are acceptable investments.

4. Protection of the Trust

Investment vehicles should be chosen that will protect the Trust, including provision for investments that do not contain debt or liability with recourse beyond the Trust commitment to the related business entity, provision for inspection and evaluation of environmental hazards prior to the purchase of any specific property, and the provision of insurance coverage to protect against environmental and natural hazards.

5. Reporting

A comprehensive reporting system for individual investments, entities and funds will be maintained so that primary operational and economic characteristics are continually defined, and underperforming investments can be identified and remediated. Active asset and portfolio management is required for the management of all non-publicly traded real estate investments. Investment managers shall be required to present periodic operational reports within approved formats, including statements of fair value, audited financial statements and annual business plans.

6. Benchmarks

The MSCI US REIT, Dow Jones Select REIT, NAREIT all Equity, or Wilshire REIT index will be the benchmark for the passive REIT index fund. The National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index or the Open End Core Equity (NFI-ODCE) Value with net will be the benchmarks for the open-end and closed-end funds and private real estate. The asset class in total will be benchmarked against the Russell 3000 index.

7. Asset Allocation

For purposes of asset allocation, real estate investments will be treated as part of the U.S. equity asset class.

E. Alternative Investments

1. Definition and Board Approval

The Board may from time to time authorize the investment of Trust assets in entities or structures that do not fit the asset descriptions listed above. Examples of such investments are venture capital partnerships, private equity, leveraged buy-out funds, private debt, and direct ownership of individual assets such as oil and gas partnerships. These investments shall only be entered into upon the recommendation of a qualified consultant after due diligence and with approval by the Board or a subcommittee appointed by the Board to review the recommendation. Subsequent investments with a



previously approved alternative investment manager do not require additional specific approvals by the Board or subcommittee.

2. Objectives and Benchmarks

If the alternative investment is an equity investment, the objective for the investment will be to exceed, over time and after fees, the return achieved by the Russell 3000 Index times 1.35. If the alternative investment is a debt investment, then the objective will be to exceed, over time and after fees, the returns achieved by the Barclays Capital Government/Credit Index plus 3%. It is recognized that these

investments may experience greater volatility than the comparable publicly traded securities and indices.

3. Asset Allocation

For purposes of asset allocation, alternative equity investments will be treated as part of the U.S. equity asset class, and alternative debt investments will be treated as part of the fixed income asset class.

VI. Strategic Asset Allocation

The following tables summarize the strategic asset allocation of the Trust, including the expected net return and risk of each asset class, the strategic normal asset allocation and allowable ranges, and the expected risk and net return of the Trust as compared to the actuarial assumptions.

(Expected Returns are before fees and expenses)							
ExpectedExpectedStrategicStrategicAsset ClassReturn*RiskNormalRanges							
Equities			70%	66% - 77%			
Broad Domestic Equity	9.15%	19.00%	55%	50% - 65%			
International	9.25%	20.20%	15%	10% - 20%			
Fixed Income	3.05%	3.75%	30%	23% - 33%			
Cash	2.25%	0.9%	0%	0% - 5%			
	Expected Return*	Expected Inflation	Expected Real Return	Expected Risk			
Total Fund		2.250/	3.75%	n/a			
Total Fund Actuary	7.00%	3.25%	5./5/0	II/a			

VII. Deposit and Investment Risk Policy - GASB 40

A. Purpose

The Governmental Accounting Standards Board has identified that state and local governments have deposits and investments which are exposed to risks that may result in losses. GASB Statement number 40 (GASB 40) is intended to inform users of the financial statements about the risks that could affect the ability of a government entity to meet its obligations. GASB 40 has identified general deposit and investment risks as credit risk, including concentration of credit risk and custodial credit risk, interest rate risk, and foreign currency risk and requires disclosures of these risks and of policies related to these risks. This portion of the Investment Policy addresses the monitoring and reporting of those risks.

In general, the risks identified in GASB 40, while present, are diminished when the entire portfolio is viewed as whole. For example, interest rate risk experienced by fixed income instruments often react in the exact opposite direction as that experienced by equities. Thus, interest rate exposure as set out in GASB 40 will not reflect the cross-influences of impacts across the broad range of investments that



make up the PERSI portfolio. And, in fact, the general underlying measures used in GASB 40 across most of the risks identified (credit, concentration, and interest rate risk in particular) were tools that were developed primarily for portfolios dominated by fixed income investments, and are often only poorly transferred, if at all, to portfolios, like PERSI's, that are dominated by equity interests.

Consequently, it is the policy of PERSI that the risks addressed in GASB 40 are to be monitored and addressed primarily through the guidelines agreed to by those managers, and by regular disclosures in reports by managers of levels of risks that may exceed expected limits for those portfolios.

B. Specific Areas of Risk

1. Credit Risk

Summary: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to PERSI.

Policy: Managers will provide PERSI with expected credit risk exposures in their portfolio guidelines. If the actual credit risk exposure falls outside of these expectations, managers will be required to report these occurrences to Staff and these disclosures are to be made available to the Board.

2. Custodial Credit Risk

Summary: Custodial credit risk is the risk that in the event of a financial institution or bank failure, the System would not be able to recover the value of their deposits and investments that are in the possession of an outside party.

Policy: PERSI minimizes exposure to custodial credit risk by requiring that investments, to the extent possible, be clearly marked as to PERSI ownership and further to the extent possible, be held in the System's name.

3. Concentration of Credit Risk

Summary: Concentration of credit risk is the risk of loss that may be attributed to the magnitude of a government's investment in a single issue.

Policy: Managers will provide PERSI with expected concentration of credit risk exposures in their portfolio guidelines. If the concentration of credit risk exceeds expectations, managers are to be required to report these occurrences to Staff and these disclosures are to be made available to the Board. For the portfolio as a whole, staff will report to the Board at a regular Board meeting if the exposure to a non-US government guaranteed credit instrument exceeds 5% of the total PERSI portfolio.

4. Interest Rate Risk

Summary: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Interest rate risk to PERSI's fixed income portfolio is monitored using the effective duration methodology. Effective duration measures the volatility of the price of a bond given a change in interest rates, taking into account the optionality on the underlying bond.

Policy: Managers will provide PERSI with the expected portfolio duration in their portfolio guidelines. If the duration of the portfolio differs from expectations, managers are to be required to report these occurrences to Staff and these disclosures are to be made available to the Board.

5. Foreign Currency Risk

Summary: Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. PERSI's currency risk exposures, or exchange rate risk, primarily reside within the international equity investment holdings.



Policy: The PERSI Board recognizes that international investments (equity or fixed income) will have a component of currency risk associated with it. Currency risk and hedging exposures are dependent on the underlying international exposure, which fluctuates over time. The individual manager guidelines will outline the expected currency exposures (either specifically or through ranges of security exposures to particular currency areas) of the underlying portfolio and if the actual currency exposure differs from the expected, managers are to be required to report these occurrences to Staff and these disclosures are to be made available to the Board.

SECTION ** ACTUARIAL





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October 19, 2017

Retirement Board Public Employee Retirement System of Idaho State of Idaho P.O. Box 83720 Boise, ID 83720

Members of the Board:

Milliman has performed annual actuarial valuations for the Public Employee Retirement System of Idaho (PERSI) since the System's inception. It is anticipated that future actuarial valuations will be performed every year with the next valuation to be as of July 1, 2018. Various benefit increases have occurred since the System was established in 1965. The most recent significant benefit changes were effective July 1, 2000.

Contribution Rates

The financing objective of the System is to establish contribution rates that will tend to remain level as percentages of payroll. From 1993 to 2017, the total contribution rate has been between 15.82% and 18.75%; year by year detail including employer and member rates is shown in the table on the following page.

At July 1, 2002, the combined overall contribution rate was 15.78%. Our July 1, 2002 valuation found that the contribution rates were not sufficient to amortize the unfunded actuarial accrued liability within 25 years of the valuation date, as required by Section 59-1322, Idaho Code. Therefore, in November 2002, the Board approved three 1% contribution rate increases to take effect on July 1, 2004, July 1, 2005, and July 1, 2006. Effective July 1, 2003, the contribution rate for Fire and Police employers was also increased by 0.1% to offset the cost of the \$100,000 duty related death benefit. The July 1, 2004 contribution rate increases took effect as scheduled. Due to investment gains, the other two increases were deferred and ultimately in October 2007 the Board cancelled the scheduled contribution rate increases.

The July 1, 2009 valuation found that the contribution rates were insufficient to amortize the unfunded actuarial accrued liability within 25 years of the valuation date. Therefore, in December 2009, the Board approved three contribution rate increases to take effect: 1.5% on July 1, 2011, 1.5% on July 1, 2012, and 2.28% on July 1, 2013. In December 2010, these scheduled rate increases were each delayed one year. In December 2011, these scheduled rate increases were again each delayed one year. On July 1, 2013, the first contribution rate increase went into effect as scheduled. In October 2013, the remaining two scheduled rate increases were each delayed one year; in September 2014 these increases were cancelled altogether.



The July 1, 2016 valuation found that the contribution rates were insufficient to amortize the unfunded actuarial accrued liability within 25 years of the valuation date. Therefore, in October 2016, the Board approved a 1.0% contribution rate increase to take effect on July 1, 2018.

The historical changes in contribution rates since 1993 are shown in the table below. Note that weighted total values may change even if rates by group do not change.

		Weight	phted Total Fire & Police		General/Teachers		
Year of		Member	Employer	Member	Employer	Member	Employer
Change	Total Rate	Rate	Rate	Rate	Rate	Rate	Rate
4000	47.400/	0 540/	40.05%	7.000/	40.070/	0.000/	10.000/
1993	17.16%	6.51%	10.65%	7.82%	10.87%	6.38%	10.63%
1994	18.75	7.12	11.63	8.53	11.85	6.97	11.61
1998	17.78	6.75	11.03	8.10	11.25	6.60	11.01
2000	15.78	5.98	9.80	7.21	10.01	5.86	9.77
2003	15.82	6.01	9.81	7.21	10.11	5.86	9.77
2004	16.84	6.41	10.43	7.65	10.73	6.23	10.39
2008	16.88	6.44	10.44	7.65	10.73	6.23	10.39
2009	16.89	6.45	10.44	7.69	10.73	6.23	10.39
2013	18.39	7.03	11.36	8.36	11.66	6.79	11.32
2018*	19.42	7.42	12.00	8.81	12.28	7.16	11.94
*This row s	hows rates that wil	I take effect acc	ording to the July	1 2018 contri	hution rate incre	ase as currently	scheduled

This row shows rates that will take effect according to the July 1, 2018 contribution rate increase as currently scheduled.

Our July 1, 2017 actuarial valuation found that the System's current rates are sufficient to pay the System's normal cost rate of 14.83%. As of July 1, 2017, there is an unfunded actuarial liability of \$1,766.6 million. The contribution rates as currently scheduled are sufficient to amortize the Unfunded Actuarial Accrued Liability (UAAL) in 16.2 years, which is lower than the 25-year amortization period required by statute.

Funding Status

Based on the July 1, 2017 actuarial valuation, the unfunded actuarial accrued liability was decreased by \$772.1 million due to an asset gain recognized as of July 1, 2017. Specifically, the System's assets earned a gross return before expenses of 12.67%, which is 5.17% above the actuarial assumption of 7.50%. All other actuarial experience gains and losses increased the actuarial accrued liability by \$277.8 million. Thus, the total experience gain for the year was \$494.3 million.

The UAAL increased by \$9.0 million due to the March 1, 2017 Discretionary COLA of 0.10%, and by \$3.3 million due to the increase in future contribution rates scheduled to take effect in 2018. In addition, the UAAL increased by \$42.5 million because actual contributions plus assumed investment returns were less than the normal cost and the interest on the UAAL.

All of these items resulted in a total actuarial gain of \$439.5 million and a change in funding status from an 86.3% funding ratio on July 1, 2016 to 89.6% on June 30, 2017. The funding ratio is the ratio of the actuarial value of the assets over the value of the actuarial accrued liability.

Comparison to GASB Statement No. 67 Liabilities

The long-term expected rate of return on investments is 7.50%, including 0.40% for expected investment expenses and 0.10% for expected administrative expenses. For purposes of determining the System's funding status and UAAL, we use a discount rate that is net of all expenses (7.00%). All figures shown in this report have been calculated using this discount rate.

This is in contrast to the discount rate used to determine the Total Pension Liability (TPL) and Net Pension Liability (NPL) for purposes of GASB reporting. According to GASB Statement 67, the discount



rate used to calculate TPL and NPL must be net of investment expenses but not administrative expenses. Therefore, TPL and NPL have been determined using a discount rate of 7.10%. Results and further details on these items can be found in our GASB 67 Report.

Assumptions

Our July 1, 2017 actuarial valuation report presented summaries of the actuarial assumptions and methods used in the valuation. The last major experience study, completed in June 2016, covered the period July 1, 2011 through June 30, 2015. The next major experience study, to be completed in 2018, will cover the period July 1, 2013 through June 30, 2017.

Certification Statement

In preparing this letter, we relied, without audit, on information (some oral and some in writing) supplied by PERSI's staff. This information includes, but is not limited to, statutory provisions, member census data, and financial information. We found this information to be reasonably consistent and comparable with data used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the System and to reasonable expectations which, in combination, represent our best estimate of anticipated experience under the System. We believe that all of these assumptions and methods meet the parameters set by Actuarial Standards of Practice (ASOPs).

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

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Actuarial computations under GASB Statements No. 67 and 68 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed exhibits have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of the System. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to



release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

- (a) The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.
- (b) The System may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

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

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this letter is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and Fellows of the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The enclosed Exhibits 1 through 9 provide further related information. Milliman is completely responsible for these exhibits. Specifically, they are:

- Exhibit 1 Summary of Actuarial Assumptions and Methods
- Exhibit 2 Schedule of Active Member Valuation Data
- Exhibit 3 Schedule of Retiree and Beneficiary Valuation Data
- Exhibit 4 Schedule of Funding Progress
- □ Exhibit 5 Solvency Test
- Exhibit 6 Analysis of Actuarial Gains or Losses
- Exhibit 7 Schedule of Contributions from the Employer and All Other Contributing Entities
- Exhibit 8 Schedule of Contributions from the Employer Expressed as a Percentage of Payroll
- □ Exhibit 9 Provisions of Governing Law

We would like to express our appreciation to Don Drum, Executive Director of the System, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

Respectfully submitted,

Mark C Olleman

Mark C. Olleman, F.S.A., M.A.A.A. Principal and Consulting Actuary

MCO/JDB/mji

Jeffy O. Rulli

Jeffrey D. Bradley, F.S.A., M.A.Á.A. Principal and Consulting Actuary



EXHIBIT 1: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS EFFECTIVE JULY 1, 2017

1. Investment Return (Adopted July 1, 2012)

The annual rate of investment return on the assets of the System is assumed to be 7.50% (including 0.50% for expenses) compounded annually.

2. Actuarial Value of Assets (Adopted July 1, 1994)

All assets are valued at market as of the valuation date.

3. Actuarial Assumptions

The actuarial assumptions and methods were adopted by the Board based upon recommendations from the retained actuary. The actuarial assumptions are based on periodic studies of the System's actual experience.

4. Mortality (Adopted July 1, 2014)

Contributing Members, Service Retirement Members, and Beneficiaries

• Teachers

Males RP-2000 Combined Table for Healthy Individuals for males, set back three years.

Females RP-2000 Combined Table for Healthy Individuals for females, set back three years.

• Fire & Police

- *Males* RP-2000 Combined Table for Healthy Individuals for males, with no offset.
- *Females* RP-2000 Combined Table for Healthy Individuals for females, set forward one year.

10% of Fire and Police active member deaths are assumed to be duty related. This assumption was adopted July 1, 2008.



• General Employees and All Beneficiaries

- *Males* RP-2000 Combined Table for Healthy Individuals for males, set back one year.
- *Females* RP-2000 Combined Table for Healthy Individuals for females, set back one year.

All mortality tables are adjusted with generational mortality adjustments using projection scale AA as shown in Table A-8B of the July 1, 2017 valuation report. The projection scale is applied from the year 2000 to the year in which the mortality assumption is being applied.

• Disabled Members

For disabled members, the mortality rates used in the valuation are the rates from the RP-2000 table for disabled individuals for respective sexes, with a one-year setback for males and a one-year set forward for females.

All mortality tables are adjusted with generational mortality adjustments using projection scale AA as shown in Table A-8B of the July 1, 2017 valuation report. The projection scale is applied from the year 2000 to the year in which the mortality assumption is being applied.

5. Service Retirement (Adopted July 1, 2016)

Annual rates of retirement assumed to occur among persons eligible for a service retirement are illustrated in the following table:

	Fire & Police		General Employees					
		Male Fema			nale			
	First Year		First Year		First Year			
Age	Eligible	Thereafter	Eligible	Thereafter	Eligible	Thereafter		
55	21%	18%	22%	10%	26%	18%		
60	17	22	26	17	26	18		
65	40	40	33	50	37	52		
70	*	*	18	20	18	21		
	Teachers							

	М	ale	Fer	nale		
	First Year		First Year			
Age	Eligible	Thereafter	Eligible	Thereafter		
55	19%	5%	10%	10%		
60	30	18	26	18		
65	36	46	49	49		
70	*	*	*	*		

* For all ages older than the age indicated, retirement is assumed to occur immediately.



6. Early Retirement (Adopted July 1, 2016)

Annual rates of retirement assumed to occur among persons eligible for a reduced early retirement benefit are illustrated in the following table:

		General Employees		Tea	chers
Age	Fire & Police	Male	Female	Male	Female
50	4%	*	*	*	*
55	5	3%	3%	6%	6%
60		5	6	14	12

* For all ages younger than the age indicated, withdrawal is assumed to occur (see Section 7).

7. Other Terminations of Employment (Adopted July 1, 2016)

Assumed annual rates of termination are illustrated below. Rates are based only on years of service.

Years of	Fire and	General E	mployees	Teac	hers
Service	Police	Male	Female	Male	Female
5	6.6%	8.8%	10.3%	5.5%	6.0%
10	4.2	5.5	6.4	3.1	3.1
15	2.8	3.5	4.0	1.9	1.8
20	1.7	2.4	2.9	1.3	1.3
25	1.5	1.7	2.5	1.2	1.2
30	1.5	1.5	2.5	1.2	1.2

8. Disability Retirement (Adopted July 1, 2016)

Annual rates assumed for disability retirement are illustrated in the following table:

		General E	mployees	Teac	hers
Age	Fire & Police	Male	Female	Male	Female
25	.01%	.01%	.01%	.01%	.05%
35	.03	.03	.01	.02	.04
45	.10	.11	.10	.07	.07
55	.61	.32	.28	.20	.30

25% of Fire and Police active member disabilities are assumed to be duty related. This assumption was adopted July 1, 2009.



9. Future Salaries (Adopted July 1, 2016)

In general, the total annual rates at which salaries are assumed to increase include 3.75% per annum for increase in the general wage level of the membership plus increases due to promotions and longevity. The general wage level increases are due to inflation and increases in productivity. The total ultimate rates assumed are illustrated below.

Years of	Fire and	General Employees		Teach	ners
Service	Police	Male Female		Male	Female
5	7.02%	6.03%	6.45%	7.07%	7.17%
10	5.57	5.10	5.46	7.17	7.38
15	4.89	4.63	4.68	5.20	5.33
20	4.42	4.37	4.42	4.48	4.56

10. Vesting (Adopted July 1, 2016)

The following table illustrates the assumed probability that vested terminating members will elect to receive deferred benefits instead of withdrawing accumulated contributions.

	Fire and	General Employees		Tead	chers
Age	Police	Male	Female	Male	Female
25	48%	52%	61%	75%	84%
35	53	71	70	79	88
45	65	76	73	82	85
55					

11. Growth in Membership (Adopted July 1, 2012)

In general, the combined effects of stable active membership and salary levels are assumed to produce a 3.75% average annual expansion in the payroll of covered members.

12. Interest on Employee Contributions (Adopted July 1, 2016)

The credited interest rate on employee contributions is assumed to be 8.50%.

13. Postretirement Benefit Increases (Cost of Living Adjustments)

A nondiscretionary postretirement increase of 1% per year is assumed for the valuation. See Exhibit 3 for total discretionary and nondiscretionary increases granted by the Board for the past ten years.

14. Actuarial Cost Method

The individual entry age actuarial cost method is used. The normal cost rates used in this valuation were calculated based on all current active members as of July 1, 2017, for each sex and type of employee in the valuation. The normal costs and projected fiscal year 2017 salaries for all active members were calculated. The ratio of the two is the aggregate normal cost rate. The current normal cost rate was adopted in October, 2017 in conjunction with the July 1, 2017 actuarial valuation.

The unfunded actuarial accrued liability (UAAL) created by this method, including gains and losses, is amortized as a level percentage of the System's projected payroll.



Commencing July 1, 2007, 1.49% of the payroll of higher education faculty covered by the Optional Retirement Program (ORP) is payable to PERSI until July 1, 2025. Commencing July 1, 1997, 3.83% of the payroll of community college and post-secondary vocational educational institutions covered by the ORP was payable to PERSI until July 1, 2011. The difference between the future ORP contributions and the actuarial accrued liability computed under the actuarial cost method is the portion of the actuarial accrued liability used to determine the UAAL, or funding reserve, for PERSI.

15. Experience Studies

The last experience study was completed in 2016 for the period July 1, 2011 through June 30, 2015 and reviewed economic assumptions and all demographic assumptions except mortality. Economic assumptions and mortality will be studied in 2018 for the period from July 1, 2013 through June 30, 2017. Assumptions were adopted as noted.

16. Recent Changes

Demographic assumptions were changed based on the 2016 Experience Study. These changes were first effective for the July 1, 2016 valuation.

The 2017 valuation results reflect the March 1, 2017 Discretionary COLA of 0.10% as well as the contribution rate increase scheduled to go into effect on July 1, 2018.



EXHIBIT 2: SCHEDULE OF ACTIVE MEMBER VALUATION DATA

			Annual Salaries	*
Valuation Date July 1	Number	Annual Valuation Payroll	Average Annual Pay	% Increase in Average Annual Pay
2008	66,765	\$2,540,568,000	\$38,052	4.4%
2009	67,813	2,644,665,000	38,999	2.5
2010	67,020	2,622,461,000	39,130	0.3
2011	65,798	2,572,044,000	39,090	-0.1
2012	65,270	2,567,659,000	39,339	0.6
2013	65,535	2,634,566,000	40,201	2.2
2014	66,223	2,676,344,000	40,414	0.5
2015	67,008	2,756,913,000	41,143	1.8
2016	68,517	2,833,369,000	41,353	0.5
2017	70,073	3,040,649,000	43,393	4.9

*Actuarial valuation payroll is computed as the sum of the annualized salaries for all active members, and differs from the actual payroll shown in the financial section of the annual report.



EXHIBIT 3: SCHEDULE OF RETIREE AND BENEFICIARY VALUATION DATA ⁽¹⁾

			COLA Perc	centage		
Valuation Date				Increases (Granted	
July 1	Total	Added	Removed	Previous March 1		
2008	30,912	2,160	867	2.0		
2009	32,197	2,235	950	1.0		
2010	33,625	2,335	907	-1.48% +		
				Partial Res		
2011	35,334	2,652	943	1.0		
2012	37,150	2,769	953	1.0		
0040	20.047	0.045	1.010	1.0		
2013	38,947	2,815	1,018	1.0		
2014	40,776	2,852	1,023	1.0		
2015	42,657	2,889	1,008	1.70% + 2.30%		
0040	44 404	0.004	4 4 4 0	Partial Restoration		
2016	44,181	2,634	1,110	0.20% + 0.80% Partial Restoration		
2017	45,468	2,746	1,459	Partial Res	loration	
2017	43,400	2,740	1,459	1.1		
		Anr	ual Benefits			
Valuation Date	Total Rolls	Added to	Removed		% Increase	
July 1	End of Year	Rolls (2)	from Rolls	Average	in Average	
			-			
2008	\$459,077,000	\$45,072,000	\$8,191,000	\$14,851	4.2%	
2009	491,946,000	42,698,000	9,829,000	15,279	2.9	
2010	526,020,000	43,382,000	9,308,000	15,644	2.4	
2011	567,933,000	51,647,000	9,734,000	16,073	2.7	
2012	611,045,000	53,184,000	10,072,000	16,448	2.3	
2013	651,466,000	51,630,000	11,209,000	16,727	1.7	
2010	694,946,000	54,963,000	11,483,000	17,043	1.9	
2011			11,100,000	17,010	1.0	

(1) Information regarding the number of retirees and beneficiaries added to, and removed from, the rolls was not used in the actuarial valuations.

11,730,000

13,712,000

18,000,000

17,681

17,955

18,391

3.7

1.5

2.4

70,985,000

52,788,000

60,923,000

(2) Includes postretirement increases.

754,201,000

793,277,000

836,200,000

2015

2016

2017



EXHIBIT 4: SCHEDULE OF FUNDING PROGRESS (ALL DOLLAR AMOUNTS IN MILLIONS)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL) ⁽¹⁾	Present Value of Future ORP Contributions	Unfunded Actuarial Accrued Liabilities (UAAL) ⁽²⁾	Funded Ratio ⁽³⁾	Covered Payroll ⁽⁴⁾	UAAL as a Percentage of Covered Payroll
July 1, 2007	\$10,402.0	\$11,211.8	\$60.9	\$748.9	93.3%	\$2,578.9	29.0%
July 1, 2009	8,646.0	11,732.2	59.6	3,026.6	74.1	2,683.5	112.8
July 1, 2010	9,579.8	12,187.9	52.3	2,555.8	78.9	2,684.4	95.2
July 1, 2011	11,360.1	12,641.2	48.5	1,232.6	90.2	2,627.9	46.9
July 1, 2012	11,306.2	13,396.7	47.0	2,043.5	84.7	2,619.6	78.0
July 1 2012	10.052.5	14 172 0	45.2	2 074 4	05.2	2 607 6	76.9
July 1, 2013	12,053.5	14,172.9	45.3	2,074.1	85.3	2,697.6	
July 1, 2014	13,833.1	14,928.1	42.7	1,052.3	92.9	2,702.9	38.9
July 1, 2015	13,956.7	15,488.2	41.3	1,490.2	90.4	2,791.1	53.4
July 1, 2016	13,884.2	16,128.3	38.0	2,206.1	86.3	2,909.3	75.8
July 1, 2017	15,296.7	17,101.0	37.7	1,766.6	89.6	3,089.6	57.2

(1) Actuarial present value of benefits less actuarial present value of future normal costs based on entry age actuarial cost method.

(2) Actuarial accrued liabilities less actuarial value of assets and present value of future ORP contributions. Amounts reported in this table do not include the value of any discretionary COLA or Gain Sharing allocations granted after the valuation date. If negative, amount is referred to as a funding reserve.

(3) Funded Ratio is the ratio of the actuarial value of assets over the actuarial accrued liabilities less the present value of future ORP contributions.

(4) Covered Payroll includes compensation paid to all active employees on which contributions are calculated. Covered Payroll differs from the Active Member Valuation Payroll shown in Exhibit 2 which is an annualized compensation of only those members who were active on the actuarial valuation date.



EXHIBIT 5: SOLVENCY TEST (ALL DOLLAR AMOUNTS IN MILLIONS)

		Actuarial	Accrued Liabilit	ies For			
		Active		Active Members (Employer	Portion	of Actuarial	Accrued
Actuarial	Actuarial	Member	Retirees and	Financed	Liabilities	s Covered b	by Assets
Valuation	Value of	Contributions	Beneficiaries	Portion)	(A)	(D)	
Date	Assets	(A)	(B)	(C)	(A)	(B)	(C)
July 1, 2008	\$10,402.0	\$2,642.0	\$5,022.9	\$3,546.9	100.0	100.0	77.2%
July 1, 2009	8,646.0	2,867.7	5,396.2	3,468.3	100.0	100.0	11.0
July 1, 2010	9,579.8	2,813.7	5,820.0	3,554.2	100.0	100.0	26.6
July 1, 2011	11,360.1	2,838.9	6,284.8	3,517.5	100.0	100.0	63.6
July 1, 2012	11,306.2	3,114.9	6,925.0	3,356.8	100.0	100.0	37.7
July 1, 2013	12,053.5	3,304.1	7,425.2	3,443.6	100.0	100.0	38.5
July 1, 2014	13,833.1	3,268.7	8,125.8	3,533.6	100.0	100.0	69.0
July 1, 2015	13,956.7	3,468.5	8,565.6	3,454.1	100.0	100.0	55.7
July 1, 2016	13,884.2	3,652.6	9,097.0	3,378.7	100.0	100.0	33.6
July 1, 2017	15,296.7	3,554.1	9,609.7	3,937.2	100.0	100.0	54.2



EXHIBIT 6: ANALYSIS OF ACTUARIAL GAINS OR LOSSES (ALL DOLLAR AMOUNTS IN MILLIONS)

	Gain(Loss) for Period					
	2	2014-2015		2015-2016		016-2017
Investment Income Investment income was greater (less) than expected.	\$	(587.5)	\$	(742.9)	\$	772.1
Pay Increases Pay increases were less (greater) than expected.		91.7		165.5		(198.0)
Membership Growth (Additional) liability for new members.		(17.9)		(13.6)		(18.9)
Return to Employment Less (more) reserves were required for terminated members returning to work.		(12.4)		(11.3)		(10.2)
Death After Retirement Retirees died younger (lived longer) than expected.		22.5		11.8		17.6
Cost of Living Adjustment (COLA) Different Automatic COLA than expected. ⁽¹⁾		68.5		NA		NA
Other Miscellaneous gains (and losses) resulting from other causes. ⁽²⁾		(46.3)		(44.0)	_	(68.3)
Total Gain (Loss) During the Period From Actuarial Experience	\$	(481.4)	\$	(634.5)	\$	494.3
Contribution Income Actual contributions were greater (less) than the normal cost and interest on the Unfunded Actuarial Accrued Liability.		43.5		0.3		(42.5)
Non-Recurring Items Changes in actuarial assumptions caused a gain (loss) ⁽³⁾ Changes in actuarial methods caused a gain (loss) Changes in plan provisions caused a gain (loss) ⁽⁴⁾ Changes to Contribution Rate Increase Schedule		None None None None		(13.2) None (68.5) <u>None</u>	_	None None (9.0) <u>(3.3)</u>
Composite Gain (Loss) During the Period	\$	(437.9)	\$	(715.9)	\$	439.5

Note: Effects related to losses are shown in parentheses. Numerical results are expressed as a decrease (increase) in the actuarial accrued liability.

(1) For 2015, this reflects the increase in CPI of 0.20%.

(2) Reflects losses on active and inactive member experience.

(3) For 2015-2016, this reflects changes made to the demographic assumptions adopted according to the 2016 Experience Study

(4) For 2015-16 this reflects the 0.80% retroactive COLA, effective March 1, 2016. For 2016-17 this reflects the 0.10% discretionary COLA, effective March 1, 2017.



EXHIBIT 7: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER AND ALL OTHER CONTRIBUTION ENTITIES (ALL DOLLAR AMOUNTS IN MILLIONS)

Fiscal Year Ending	Covered Employee Payroll ⁽¹⁾	Actual PERSI Employer Contributions Dollar Amount ⁽²⁾	Actual ORP Contributions Dollar Amount	Total Actual Employer Contributions	Actuarially Determined Contribution (ADC) ⁽³⁾	Percentage of ADC Dollars Contributed
6/30/08	\$2,578.9	\$269.2	\$4.1	\$273.3	\$251.4	109%
6/30/09	2,683.5	280.2	4.4	284.6	232.0	123
6/30/10	2,684.4	280.2	4.7	284.9	260.3	109
6/30/11	2,627.9	274.3	4.8	279.1	326.5	85
6/30/12	2,619.6	273.5	3.7	277.2	327.9	84
6/30/13	2,697.6	281.6	3.8	285.4	295.5	97
6/30/14	2,702.9	307.1	3.9	311.0	325.0	96
6/30/15	2,791.1	317.0	4.2	321.2	327.1	98
6/30/16	2,909.3	331.1	4.5	335.6	298.7	112
6/30/17	3,089.6	351.6	4.8	356.4	337.2 (4)	106
6/30/09 6/30/10 6/30/11 6/30/12 6/30/13 6/30/14 6/30/15 6/30/16	2,683.5 2,684.4 2,627.9 2,619.6 2,697.6 2,702.9 2,791.1 2,909.3	280.2 280.2 274.3 273.5 281.6 307.1 317.0 331.1	4.4 4.7 4.8 3.7 3.8 3.9 4.2 4.5	284.6 284.9 279.1 277.2 285.4 311.0 321.2 335.6	232.0 260.3 326.5 327.9 295.5 325.0 327.1 298.7	123 109 85 84 97 96 98 112

(1) Computed as the dollar amount of the actual PERSI employer contribution made as a percentage of payroll divided by the Actual PERSI contribution rate expressed as a percentage of payroll.

- (2) The actual PERSI employer contributions are expressed as a percentage of payroll. Employer contributions are made as a percentage of actual payroll in accordance with statute and the Board's Funding Policy. Thus, the actual employer contributions set by both statute and the Board's Funding Policy may differ from the computed Actuarially Determined Contribution (ADC), employer contribution rate for GASB disclosure purposes. Dollar amounts shown exclude additional receipts due to merger of retirement systems.
- (3) For PERSI employers, the ADC, formerly known as the Annual Required Contribution (ARC), is equal to the normal cost rate plus a 25-year amortization of any Unfunded Actuarial Accrued Liability or minus a 25-year amortization of any Funding Reserve amount. The ADC determined as of the valuation date is applicable for employer fiscal years commencing July 1 of the calendar year following the valuation date. For Optional Retirement Plan (ORP) employers, the ADC is equal to 1.49% of salaries of university members in the ORP until 2025 and 3.83% of salaries of junior college members in the ORP until 2011.
- (4) The ADC for the PERSI fiscal year ending June 30, 2016 is based on 10.76% of covered payroll as computed in the 2015 valuation. For valuations prior to 2012, the ADC rate determined as of the valuation date was applicable for employer fiscal years commencing October 1 of the calendar year following the valuation date.



EXHIBIT 8: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER EXPRESSED AS A PERCENTAGE OF PAYROLL

Actual PERSI Employer Contribution % ⁽¹⁾	Actuarially Determined Contribution (ADC) % ⁽²⁾	Percentage of ADC Contributed
10.44%	9.588%	109%
10.44	8.483	123
10.44	9.523	109
10.44	12.243	85
10.44	12.375	84
10.44	10.813	97
11.36	11.880	96
11.36	11.570	98
11.38	10.110	113
11.38	10.760 ⁽³⁾	106
	Employer Contribution % ⁽¹⁾ 10.44% 10.44 10.44 10.44 10.44 10.44 10.44 11.36 11.36 11.38	Actual PERSI Employer Contribution % (1)Determined Contribution (ADC) % (2)10.44%9.588%10.448.48310.449.52310.4412.24310.4412.37510.4410.81311.3611.88011.3611.57011.3810.110

- (1) The actual PERSI employer contributions are expressed as a percentage of payroll. Employer contributions are made as a percentage of actual payroll in accordance with statute and the Board's Funding Policy. Thus, the actual employer contributions set by both statute and the Board's Funding Policy may differ from the computed Actuarially Determined Contribution (ADC), employer contribution rate for GASB disclosure purposes. Dollar amounts shown exclude additional receipts due to merger of retirement systems.
- (2) For PERSI employers, the ADC, formerly known as the Annual Required Contribution (ARC), is equal to the normal cost rate plus a 25-year amortization of any Unfunded Actuarial Accrued Liability or minus a 25-year amortization of any Funding Reserve amount. The ADC determined as of the valuation date is applicable for employer fiscal years commencing July 1 of the calendar year following the valuation date. For Optional Retirement Plan (ORP) employers, the ADC is equal to 1.49% of salaries of university members in the ORP until 2025 and 3.83% of salaries of junior college members in the ORP until 2011.
- (3) The ADC for the PERSI fiscal year ending June 30, 2017 is based on 10.76% of covered payroll as computed in the 2015 valuation. For valuations prior to 2012, the ADC rate determined as of the valuation date was applicable for employer fiscal years commencing October 1 of the calendar year following the valuation date.



EXHIBIT 9: PROVISIONS OF GOVERNING LAW

	All actuarial calculations are based on our understanding of the statutes governing the Public Employee Retirement System of Idaho, as contained in Sections 59-1301 through 59-1399, inclusive, of the Idaho Code, with amendments effective through July 1, 2017. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the Idaho Code. This summary does not attempt to cover all the detailed provisions of the law. Only those benefits in effect through July 1, 2016 are considered in this valuation. The items in parentheses are the provisions applicable to firefighters and police officers.
Effective Date	The effective date of the Retirement System was July 1, 1965.
Member Contribution Rate	The member contribution rate effective July 1, 2017 is 6.79% (8.36%) of salary. As described in our July 1, 2017 Actuarial Valuation, there is a rate increase scheduled for July 1, 2018. The currently scheduled rate increase is reflected in this report. The member contribution rate is fixed at 60% (72%) of the employer contribution rate. For firefighters and police officers, the 72% adjustment is applied after reducing the employer rate by 0.10% for the 2003 addition of a \$100,000 death benefit for fire and police members who die in the line of duty. After the 72% is applied, the resulting rate is increased by 0.04% for the lump sum duty disability benefit. Member contributions have been "picked up" on a pre-tax basis by the employer since June 30, 1983 (Sections 59-1331 and 59-1332).
Employer Contribution Rate	The employer contribution rate is set by the Retirement Board (Section 59-1322). As described in our July 1, 2017 Actuarial Valuation, there is a rate increase scheduled for July 1, 2018. The currently scheduled rate increase is reflected in this report.
Service Retirement Allowance	<i>Eligibility</i> Age 65 (60) with five years of service including six months of membership service (Section 59-1341). <i>Amount of Allowance</i> For each year of credited service, the annual service retirement allowance is 2.0% (2.3%) of the highest 42-month average salary (Section 59-1342).



Service Retirement	
Allowance	
(continued)	

Minimum Benefit

\$60 (\$72) annual allowance for each year of service. The dollar amounts increase after 1974 according to the rate of cost of living increases in retirement allowances (Section 59-1342).

Maximum Benefit

In no case may a member's regular retirement benefit exceed the highest three-year average salary of the member (Section 59-1342).

Normal Form

Straight life retirement allowance plus any death benefit (Section 59-1351).

Optional Form

Actuarial equivalent of the normal form under the options available, according to the mortality and interest basis adopted by the Board (Section 59-1351).

Early RetirementEligibilityAllowanceAge 55 (50) with five years of service, including six months of
membership service (contributing members only) (Section 59-

1345).

Amount of Allowance

Full accrued service retirement allowance if age plus service equals 90 (80); otherwise, the accrued service retirement allowance, reduced by 3% for each of the first five years by which the early retirement date precedes the date the member would be eligible to receive the full accrued benefit, and by 5.75% for each additional year (Section 59-1346).

Vested Retirement Allowance

Eligibility

Former contributing members with five years of membership service are entitled to receive benefits after attaining age 55 (50) (Section 59-1345).

Amount of Allowance

Same as early retirement allowance (Section 59-1345).

Disability Retirement Allowance Five years of membership service. For a police officer or a firefighter hired after July 1, 1993, who is disabled from an occupational cause, there is no service requirement (Section 59-1352).



Amount of Allowance

Projected service retirement allowance based on accrued service plus service projected to age 65 (60) (latter limited to excess of 30 years over accrued service) less any amount payable under workers' compensation law (Section 59-1353).

Normal Form

Temporary annuity to age 65 (60) plus any death benefit. Service retirement allowance becomes payable at age 65 (60) (Section 59-1354).

Safety Member Lump Sum Duty Disability Benefit

Fire and Police members who are disabled in the line of duty are eligible for a \$100,000 lump sum benefit, in addition to the annuity benefits discussed above (Section 59-1352A).

Death Benefits After Retirement

Under the normal form of the retirement allowance, the excess, if any, of the member's accumulated contributions with interest at retirement over all payments received. Otherwise, payable according to the option elected (Section 59-1361).

Before Retirement

- A. An automatic joint and survivor option applied to the actuarial equivalent of the member's accrued service retirement allowance is paid to the surviving spouse of a member with at least five years of service who dies while:
 - i. contributing;
 - ii. not contributing, but eligible for benefits; or
 - iii. retired for disability,
- or
- B. If a member with at least five years of service has no spouse, a lump sum payment is made equal to twice the accumulated contributions with interest (Section 59-1361).
- or
- C. If a member with at least five years of service has no spouse, a lump sum payment is made equal to twice the accumulated contributions with interest (Section 59-1361).

Fire and police members are entitled to an additional \$100,000 payment if death occurs in the line of duty. (Section 59-1361 A).

Withdrawal Benefits Accumulated contributions with interest (Section 59-1358). The interest rate is determined by the Board (Section 59-1301(26)).



PostretirementPostretirement benefit increases are based on changes in the
Consumer Price Index. The measurement period for changes in
the CPI-U is August to August. The COLA changes are
implemented effective on the March 1 following the
measurement period.

If the CPI-U increases by at least 1%, the COLA is at least 1%. If the CPI-U increases by more than 1%, an additional postretirement increase of up to 5% each year (but not more than the increase in the CPI-U) may be authorized by the Board, subject to the approval of the Legislature.

If the CPI-U increases by less than 1% or decreases, the COLA is automatic, based on the change in the CPI. If a negative COLA is applicable, the negative COLA cannot decrease benefits by more than 6%. Additionally, a negative COLA cannot decrease a member's benefit below the amount of the benefit at the initial benefit date.

If a COLA is implemented that is less than the increase in the CPI-U, members' benefits will not retain their full inflation adjusted purchasing power. In such cases, the Board may implement a Restoration of Purchasing Power (ROPP) COLA at a later date to bring those members closer to 100% of inflation adjusted purchasing power. As with a discretionary COLA, a ROPP is subject to approval of the Legislature. (Section 59-1355).

Gain Sharing Beginning in 2000, under Section 59-1309, <u>Idaho Code</u>, the Board may allocate all or a portion of "extraordinary gains" to active and retired members and employers as Gain Sharing.

Extraordinary gains are defined as the excess, if any, at the close of the fiscal year of the Assets over Actuarial Accrued Liabilities plus an amount necessary to absorb a one standard deviation market event without increasing contribution rates, as determined by the Board. Under the Board's current investment policy, assets in excess of a 113% funded ratio are considered extraordinary gains. The Board has the authority to rescind the Gain Sharing up to the date of distribution.





October 19, 2017

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Retirement Board Public Employee Retirement System of Idaho State of Idaho P.O. Box 83720 Boise, ID 83720

Members of the Board:

Milliman has performed annual actuarial valuations of the Idaho Firefighters' Retirement Fund (FRF) from 1981 through 1988 and biennial valuations from July 1, 1990 to July 1, 2000. Starting with the July 1, 2001 valuation, actuarial valuations occurred annually through the July 1, 2007 valuation. From July 1, 2007 through July 1, 2013 the valuations were again biennial. Beginning with the July 1, 2014 valuation they have been performed annually once again. The most recent actuarial valuation was for July 1, 2017; the next is scheduled for July 1, 2018.

Contribution Rates

FRF covers a closed group of firefighters who were hired before October 1, 1980 and who receive benefits in excess of those provided under the Public Employee Retirement System of Idaho (PERSI). The cost of these excess benefits is paid by member contributions, employer contributions, and receipts from a fire insurance premium tax. Employer contributions comprise two elements: 8.65% of the salaries of covered members and an additional rate applied to the salaries of all firefighters of the employer. The additional rate is designed to meet the costs of the Fund not covered by other resources. <u>Idaho Code</u> Section 59-1394 requires the cost of the excess benefits to be retired by the schedule of contributions over a given period of time not to exceed 50 years.

On September 16, 2014 the PERSI Board moved to reduce the Additional Employer Contribution Rate from the current 17.24% to 5.00%. In accordance with this decision, the additional employer contribution rate for excess benefits (shown in Exhibit 8) was reduced to a rate of 5.00% of payroll, effective January 1, 2015.

FRF benefits were offset by PERSI benefits effective October 1, 1980. Effective July 1, 1990, all members hired after June 30, 1978 are to receive the same FRF benefits as members hired earlier.

Effective October 1, 1994, the PERSI benefits and contributions were increased. The FRF additional contribution rate to fund the excess benefits was decreased to 15.40% and the total employer contributions for FRF members remained fixed at 35.90% for Class A & B firefighters and 27.25% for Class D firefighters.

The Retirement Board lowered the PERSI contribution rates starting October 31, 1997 and made the reduction permanent as of April 25, 2000. The FRF excess contribution rate was increased to 17.24% since the total employer contributions for FRF members remained fixed at the 35.90%/ 27.25% rates.



The Retirement Board raised the PERSI contribution rates, with the first increase effective July 1, 2004, and additional increases effective July 1, 2005 and July 1, 2006 an additional 0.1% contribution was added to provide for a \$100,000 death benefit for duty related deaths. The FRF excess contribution rate was maintained at 17.24%. The July 1, 2004 rate increase took effect as scheduled, but the other two rate increases were delayed by the Board to July 1, 2006 and July 1, 2007.

After the July 1, 2006 PERSI and FRF valuation reports were completed, the PERSI Board delayed the effective date of the scheduled contribution rate increases to July 1, 2008 and July 1, 2009. In October 2007, the Board cancelled the remaining scheduled contribution rate increases.

After the July 1, 2009 PERSI and FRF valuation reports were completed, the PERSI Board approved three new contribution rate increases scheduled for July 1, 2011, July 1, 2012, and July 1, 2013. These were adopted in December 2009 due to a significant drop in funded status because of investment losses in the year ending June 30, 2009.

Due to the 12.01% investment return in the year ending June 30, 2010, in December 2010, the PERSI Board delayed the scheduled contribution rate increases for July 1, 2011, July 1, 2012, and July 1, 2013, to July 1, 2012, July 1, 2013, and July 1, 2014, respectively.

Due to the 20.25% investment return in the year ending June 30, 2011, in December 2011, the Board delayed the scheduled contribution rate increases for July 1, 2012, July 1, 2013, and July 1, 2014, to July 1, 2013, July 1, 2014, and July 1, 2015, respectively.

On July 1, 2013, the first of three scheduled contribution rate increases went into effect. This raised the member contribution for Class D Firefighters from 7.69% to 8.36%. It also increased the PERSI Rate employer contribution from 10.73% to 11.66% for all firefighter groups.

In December 2013, the Board delayed the scheduled contribution rate increases for July 1, 2014 and July 1, 2015 to July 1, 2015 and July 1, 2016, respectively.

In September 2014 the scheduled contribution rate increases scheduled for July 1, 2015 and July 1, 2016 were cancelled.

On January 1, 2015, the additional employer contribution rate was decreased from 17.24% to 5.00%.

Funding Status

Based on the July 1, 2017 actuarial valuation, there is currently no Unfunded Actuarial Accrued Liability (UAAL) to amortize. This is consistent with the results from the July 1, 2016 valuation. The Fund's original funding goal is to amortize the liabilities by June 30, 2018 (40 years from July 1, 1978). The current amortization period of zero is less than the statutory maximum of 50 years.

The UAAL was decreased by \$5.9 million due to an asset gain partially recognized as of July 1, 2017. Specifically, the Fund's assets earned an annual average net return after expenses of 12.25% for the 2016-17 fiscal year which was more than the actuarial assumption of 7.00%. The UAAL was also reduced by \$3.2 million due to the February 1, 2017 FRF COLA being 2.85%, which was less than the actuarial assumption of 3.75%.

All experience gains and losses (including the asset loss) over the one-year period since the prior valuation resulted in the UAAL being decreased by \$9.1 million. The UAAL increased by \$0.2 million because actual contributions plus assumed investment returns were less than the normal cost and the interest on the UAAL.



The funding status increased from a 123.3% funding ratio on July 1, 2016, to 126.6% on June 30, 2017. The funding ratio is the ratio of the actuarial value of the assets over the value of the actuarial accrued liability.

Comparison to GASB Statement No. 67 Liabilities

The long-term expected rate of return on investments is 7.50%, including 0.40% for expected investment expenses and 0.10% for expected administrative expenses. For purposes of determining the Fund's funding status and UAAL, we use a discount rate that is net of all expenses (7.00%). The figures shown in this report have been calculated using this discount rate.

This is in contrast to the discount rate used to determine the Total Pension Liability (TPL) and Net Pension Liability (NPL) for purposes of GASB reporting. According to GASB Statement 67, the discount rate used to calculate TPL and NPL must be net of investment expenses but not administrative expenses. Therefore, TPL and NPL have been determined using a discount rate of 7.10%.

For the July 1, 2017 valuation, 3-year smoothing is used to calculate the actuarial value of plan assets. This is in contrast to the Fiduciary Net Position (FNP) used for purposes of GASB reporting. According to GASB Statement 67, the FNP must be based on the plan's market value of assets at the valuation date. Therefore, FNP has been determined without any asset smoothing.

Results and further details on these items can be found in our GASB 67 Report.

Assumptions

Our July 1, 2017 actuarial valuation report presented summaries of the actuarial assumptions and methods used in the valuation. The FRF assumptions generally reflect the assumptions used for the PERSI Fire and Police members, but are modified to reflect the characteristics expected of the closed group of FRF members.

The mortality assumptions for the plan were changed on July 1, 2014, in conjunction with changes to the assumptions for the PERSI Base Plan, as described in Appendix A of the July 1, 2014 valuation. The next major PERSI experience study, to be completed in 2018, will study mortality and economic assumptions and will cover the period July 1, 2013 through June 30, 2017.

Certification Statement

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the PERSI staff. This information includes, but is not limited to; benefit descriptions, employee data, and financial information. In our examination of such data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing or if our assumptions regarding incomplete data are incorrect. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

All costs, liabilities rates of interest, and other factors have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Fund and reasonable expectations) and which in combination, offer our best estimate of anticipated experience affecting the Fund. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the System and to reasonable expectations which, in combination, represent our best estimate of anticipated experience under the System. We believe that all of these assumptions and methods meet the parameters set by Actuarial Standards of Practice (ASOPs).



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

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the Fund. Actuarial computations under GASB Statements No. 67 and 68 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed exhibits have been made on a basis consistent with our understanding of the Fund's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of the Fund. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

- (a) The Fund may provide a copy of Milliman's work, in its entirety, to the Fund's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Fund.
- (b) The Fund may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

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

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this letter is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and Fellows of the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The enclosed Exhibits 1 through 9 provide further related information. Milliman is completely responsible for these exhibits. Specifically, they are:

- Exhibit 1 Summary of Actuarial Assumptions and Methods
- Exhibit 2 Schedule of Active Member Valuation Data
- Exhibit 3 Schedule of Retiree and Beneficiary Valuation Data



Exhibit 4	Schedule of Funding Progress
Exhibit 5	Solvency Test
Exhibit 6	Analysis of Actuarial Gains or Losses
Exhibit 7	Schedule of Contributions from the Employer and All Other
	Contributing Entities
Exhibit 8	Contribution Rates as a Percent of Pay
Exhibit 9	Provisions of Governing Law

Respectfully submitted,

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MCO/JDB/mji



EXHIBIT 1: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS EFFECTIVE JULY 1, 2017

1. Investment Return (Adopted July 1, 2012)

The annual rate of investment return on the assets of the Fund is assumed to be 7.50% (including 0.50% for expenses), compounded annually.

2. Actuarial Value of Assets (Adopted September 2014)

For the July 1, 2014 valuation all assets are valued at market as of the valuation date. Use of 3-year smoothing to calculate the actuarial value of plan assets is being implemented prospectively: the July 1, 2015 valuation used a 2-year smoothing; the July 1, 2016 valuation and July 1, 2017 valuation use a 3-year smoothing.

3. Actuarial Assumptions

The actuarial assumptions and methods were adopted by the PERSI Board based upon recommendations from the retained actuary. The actuarial assumptions are based on periodic studies of the PERSI total fund's actual experience.

4. Service Retirement, Disability Retirement, and Termination (Adopted July 1, 2016)

The actively employed members of FRF are fully eligible for unreduced service retirement. They are assumed to retire at the valuation date. No future withdrawals or disabilities are anticipated.

5. Mortality (Adopted July 1, 2014)

The mortality rates used for all members of the Fund, active and retired, are from the RP-2000 Combined Mortality Table for males with generational mortality adjustments with ages unadjusted. The mortality rates assumed for spouses are from the RP-2000 Combined Mortality Table for females with generational mortality adjustments; with ages set back one year. For disabled members, the mortality rates used in the valuation are from the RP-2000 Mortality Table for disabled males with generational mortality adjustments, set back one year. These tables are illustrated in Table A-2A of the July 1, 2017 valuation report.

The Generational mortality adjustments provide a margin for future mortality improvements. The adjustments are applied from the base year of the tables (2000) to the year in which the mortality assumption is applied. The adjustments are done using the standard RP-2000 projection scale (Scale AA). These tables are illustrated in Tables A-2A and A-2B of the July 1, 2017 valuation report.

6. Future Salaries (Adopted July 1, 2016)

This assumption is not applicable since all remaining actively employed members are assumed to retire at the valuation date. No future withdrawals, disabilities, or salary increases are anticipated.

7. Replacement of Terminated Members

The FRF is a closed group. No new members are permitted. The total number of firefighters in PERSI (including those hired October 1, 1980 and later) is assumed to remain unchanged from year to year.



8. Postretirement Benefit Increases (Cost of Living Adjustments) (Adopted July 1, 2013)

FRF benefits are based on paid salary and are assumed to increase at the same rate as the average paid firefighter's salary, or 3.75% per year. For members whose FRF benefits are offset by their PERSI benefits, the PERSI benefits are assumed to have post-retirement benefit increases of 1.00% per year. The assumptions regarding PERSI future post-retirement benefit increases is part of the funding policy for the FRF.

9. Probability of Marriage

It is assumed that there is an 85% probability that the member has an eligible spouse. The spouse's age is assumed to be three years younger than the member's.

10. Fire Insurance Premiums (Adopted July 1, 2004)

The fire insurance premiums received for the plan year ending June 30, 2017, amounted to \$3,802,450 or approximately 5.23% of all firefighters' covered compensation during the same period. Future fire insurance premiums are expected to provide contributions as a decreasing percentage of compensation, due to the assumption that the firefighters' covered compensation (including Class D members) will increase at the rate of 3.75% per year, but future fire insurance premiums are assumed to increase at a rate of only 3.25% per year. The rate for the increase for covered compensation was adopted July 1, 2012. The rate for the increase of fire insurance premiums was adopted July 1, 2010.

11. Actuarial Cost Method (Adopted July 1, 1998)

Costs are determined based on the entry age normal cost method. The actuarial present value of future benefits not provided by PERSI less the present value of future normal costs equals the actuarial accrued liability. The UAAL is equal to the actuarial accrued liability less the actuarial value of the assets. The UAAL is amortized as a level dollar amount over a fixed amortization period. The current amortization period is zero since the UAAL at July 1, 2017 is negative.

The Actuarially Determined Contribution (ADC) is then the total of the normal cost allocated to the current plan year plus the amortization payment on the UAAL. Prior to July 1, 2006, the UAAL was amortized over a closed 40-year period from July 1, 1996. This assumption was adopted July 1, 1998, but applied retroactively to the July 1, 1996 valuation.

12. Experience Studies

The last experience study was for the period July 1, 2011, through June 30, 2015, and reviewed economic assumptions as well as all demographic assumptions except mortality. Mortality assumptions and economic assumptions will be studied in 2018 for the period from July 1, 2013, through June 30, 2017. The FRF assumptions generally reflect the assumptions used for the PERSI Fire and Police members, but are modified to reflect the characteristics expected of the closed group of FRF members.

13. Recent Changes

The results reflect the PERSI Base Plan Discretionary COLA of 0.10% which went into effect March 1, 2017.



			Annual Salaries	
Valuation Date July 1	Number	Total ⁽¹⁾	Average	Annual Increase in Average
2005	20	\$ 1,526,466	\$ 76,323	12.8%
2006	13	1,034,693	79,592	(0.6)
2007	10	791,125	79,113	5.2
2009	5	437,818	87,564	2.6
2011	4	368,842	92,211	2.6
2013	3	307,849	102,616	5.5
2014	2	198,646	99,323	(3.2)
2015	2	203,998	101,999	2.7
2016	2	207,697	103,849	1.8
2017	1	143,932	143,932	38.6

EXHIBIT 2: SCHEDULE OF ACTIVE MEMBER VALUATION DATA

(1) Annualized average salaries for covered members for the 12-month period commencing July 1 to June 30 of the previous calendar year.



_		Number		COLA
Valuation Date July 1			Removed	Increases Granted Previous January 1
2005	599	25	8	4.33%
2006	597	10	12	4.36
2007	590	5	12	2.42
2009	573	6	23	5.10
2011	566	14	21	3.30
2013	551	3	18	2.18
2014	545	3	9	2.48
2015	535	1	11	(0.34)
2016	524	3	14	`1.73 [´]
2017	517	2	9	2.85

EXHIBIT 3: SCHEDULE OF RETIREE AND BENEFICIARY VALUATION DATA (1)

		An	nual Benefits		
Valuation Date July 1	Total ⁽²⁾	Added ⁽³⁾	Removed	Average	Annual Increases in Average
2005	\$21,699,127	\$1,833,685	\$229,634	\$36,226	4.9%
2006	22,636,930	1,320,848	383,045	37,918	4.7
2007	22,992,269	754,703	399,364	38,970	2.8
2009	24,598,935	2,442,928	836,262	42,930	5.0
2011	25,998,263	2,147,165	747,837	45,933	3.4
2013	26,499,035	1,255,415	754,643	48,093	2.3
2014	26,856,909	784,008	426,134	49,279	2.5
2015	26,319,030	(33,958)	503,921	49,194	(0.2)
2016	26,285,792	576,922	610,160	50,164	2.0
2017	26,687,801	815,356	413,347	51,621	2.9

(1) Information regarding the number of retirees and beneficiaries added to, and removed from, the rolls was not used in the actuarial valuations.

(2) Combined annual benefits from FRF and PERSI. The FRF benefits comprised \$19,528,704 of the 2017 total.

(3) Includes postretirement increases (or decreases, if applicable) for all retirees and beneficiaries.



EXHIBIT 4: SCHEDULE OF FUNDING PROGRESS (All Dollar Amounts in Millions)

Actuarial Valuation Date July 1	Actuarial Value of Assets ⁽¹⁾	Actuarial Accrued Liabilities (AAL) ⁽²⁾	Unfunded Actuarial Accrued Liabilities (UAAL) ⁽³⁾	Funded Ratio	Covered Payroll ⁽⁴⁾	UAAL as a Percentage of Covered Payroll
2005	\$227.2	\$309.1	\$81.9	73.5%	\$42.2	194.1%
2006	248.8	312.3	63.5	79.7	45.0	141.1
2007	291.5	314.8	23.3	92.6	47.6	48.9
2009	225.3	325.3	100.0	69.3	55.7	179.5
2011	290.4	311.5	21.1	93.2	59.3	35.6
2013	307.0	321.5	14.5	95.5	63.0	23.0
2014	352.2	315.6	(36.6)	111.6	63.0	(58.1)
2015	360.4	301.9	(58.5)	119.4	63.8	(91.7)
2016	363.4	294.7	(68.7)	123.3	68.0	(101.0)
2017	369.8	292.2	(77.6)	126.6	70.6	(109.9)

(1) For the July 1, 2014 valuation and all preceding valuations, assets are valued at market as of the valuation date. Use of 3year smoothing to calculate the actuarial value of plan assets has been implemented prospectively: the July 1, 2015 valuation used a 2-year smoothing; the July 1, 2016 valuation and the July 1, 2017 valuation use a 3-year smoothing.

(2) Actuarial present value of future excess benefits less actuarial present value of excess statutory contributions over amounts required by PERSI, for years prior to 1996. For years after 1996, the excess of the actuarial present value of future excess benefits less the present value of future normal cost contributions under the entry age cost method.

- (3) Actuarial accrued liabilities less actuarial value of assets.
- (4) Covered Payroll includes compensation paid to all active firefighters for whom contributions were made to FRF. Covered Payroll differs from the Active Member Valuation Payroll shown in Exhibit 2, which is an annualized compensation of only those members hired prior to October 1, 1980, who were active on the actuarial valuation date. For years prior to 1996, Covered Payroll is estimated. See footnote to Exhibit 7.



EXHIBIT 5:	SOLVENCY TEST
	(All Dollar Amounts in Millions)

		Actuarial Liabilities ⁽¹⁾ for					
Actuarial Valuation	Actuarial	(A)	(B)	(C) Active Members (Employer	Portion of Actuarial Liabilities Covered by Assets		
Date	Value of	Active	Detire ee erd	Financed			
July 1	Assets (2)	Member Contributions	Retirees and Beneficiaries	Portion)	(A)	(B)	(C)
2005	\$227.2	\$0.1	\$301.6	\$7.4	100.0%	75.3%	0.0%
2006	248.8	0.0	308.1	4.2	100.0	80.8	0.0
2007	291.5	0.0	312.0	2.8	100.0	93.4	0.0
2009	225.3	0.0	324.0	1.3	100.0	69.5	0.0
2011	290.4	0.0	310.7	0.8	100.0	93.5	0.0
2013	307.0	0.0	320.4	1.1	100.0	95.8	0.0
2014	352.2	0.0	314.9	0.7	100.0	100.0	100.0
2015	360.4	0.0	301.3	0.6	100.0	100.0	100.0
2016	363.4	0.0	294.0	0.7	100.0	100.0	100.0
2017	369.8	0.0	291.7	0.5	100.0	100.0	100.0

(1) Computed based on funding policy methods and assumptions.

(2) For the July 1, 2014 valuation and all preceding valuations, assets are valued at market as of the valuation date. Use of 3year smoothing to calculate the actuarial value of plan assets has been implemented prospectively: the July 1, 2015 valuation used a 2-year smoothing; the July 1, 2016 valuation and the July 1, 2017 valuation use a 3-year smoothing.



EXHIBIT 6: ANALYSIS OF ACTUARIAL GAINS OR LOSSES (All Dollar Amounts in Millions)

	Gain (Loss) for Period		
	2014-2015	2015-2016	2016-2017
Investment Income Investment income was greater (less) than expected, net of asset smoothing, if applicable.	\$ (7.6)	\$ (3.9)	\$ 5.9
COLAs COLAs were less (greater) than expected.	15.3	7.8	3.2
Other Miscellaneous gains (and losses) resulting from other causes including retirees dying younger (living longer) than expected.	0.5	0.4	0.0
Total Gain (Loss) During the Period From Actuarial Experience	\$ 8.2	\$ 4.3	\$ 9.1
Contribution Income Actual contributions plus assumed investment returns were greater (less) than the normal cost and interest on the UAAL.	14.3	5.9	(0.2)
Non-Recurring Items Effect of automatic 0.20% PERSI COLA Changes in actuarial assumptions and benefits caused a gain (loss).	(0.6) NA	NA NA	NA NA
PERSI Restoration of Purchasing Power and Discretionary COLA	NA	NA	NA
Composite Gain (Loss) During the Period	\$ 21.9	\$ 10.2	\$ 8.9

Note: Effects related to losses are shown in parentheses. Numerical results are expressed as a decrease (increase) in the actuarial accrued liability.



Idaho Firefighters' Retirement Fund

EXHIBIT 7: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER AND ALL OTHER CONTRIBUTING ENTITIES (Actual Dollar Amounts)

Fiscal Year Ending	Covered Employee Payroll ⁽¹⁾	Statutory Employer Contributions (2)	Additional Employer Contributions (2)	Insurance Premium Payment from the State	Total Employer Contributions	Actuarially Determined Contribution (ADC) ⁽³⁾	Percentage of ADC Contributed
2008	\$52,097,173	\$ 54,297	\$8,981,553	\$ 3,834,553	\$12,870,403	\$1,826,307	704.7%
2009	55,747,655	41,362	9,610,896	3,563,731	13,215,989	1,826,307	723.6
2010	58,146,207	36,937	10,024,405	3,480,989	13,542,331	7,959,238	170.1
2011	59,337,447	31,616	10,229,773	3,052,326	13,313,715	7,959,238	167.3
2012	59,883,692	25,532	10,323,948	3,136,829	13,486,309	1,666,127	809.4
2013	62,969,139	25,617	10,855,876	3,345,821	14,227,314	1,666,127	853.9
2014	63,017,405	25,032	10,864,197	3,311,094	14,200,323	1,119,619	1,268.3
2015	63,780,545	17,259	7,720,025	3,568,189	11,305,473	0	NA
2016	68,017,833	17,723	3,400,892	3,779,982	7,198,597	0	NA
2017	70,568,501	12,273	3,638,264	3,802,450	7,452,987	0	NA

(1) Computed as the dollar amount of the actual employer contribution made as a percentage of payroll divided by the contribution rate, expressed as a percentage of payroll.

(2) Employer contributions are made as a percentage of actual payroll rather than as a dollar amount. The Statutory Employer FRF contributions in excess of PERSI required contributions are payable only on Class A & B active member payroll. The Additional Employer FRF contributions are payable on Class A & B and Class D active member payrolls.

(3) Starting July 1, 1996, the ADC, formerly known as the Annual Required Contribution (ARC), is computed as a dollar amount based on the entry age cost method and future payroll contributions from Class A & B members only. The ADC is computed for GASB reporting purposes only. The actual employer contributions as a percentage of payroll varied from those determined by the actuarial valuation based on the funding policy as shown in Table D-2 of the actuarial valuation report. Thus, as long as the actual contributions are made as a percentage of payroll under the current funding policy methods and assumptions, as required by the most recent actuarial valuation, the actual dollar amount of the employer contributions will differ from the dollar amount of the ADC.



Idaho Firefighters' Retirement Fund

EXHIBIT 8: CONTRIBUTION RATES AS A PERCENT OF PAY

	State Contributions	Employer Contributions			Total Employer Contributions For Members		
Year ⁽¹⁾	Fire Insurance Premium Tax ⁽²⁾	PERSI Rate	Statutory FRF Rate	Additional Rate	Social Security	Hired Before 10/1/80 ⁽³⁾	Hired After 9/30/80 ⁽⁴⁾
Effective Date:	July 1	October 1	January 1	October 1	January 1	October 1	October 1
2005 2006 2007 2009 2011	6.70% 6.60 6.90 5.20 5.10	10.73% 10.73 10.73 10.73 10.73 10.73	8.65% 8.65 8.65 8.65 8.65	17.24% 17.24 17.24 17.24 17.24 17.24	7.65% 7.65 7.65 7.65 7.65	36.62% 36.62 36.62 36.62 36.62	35.62% 35.62 35.62 35.62 35.62
2013 2014	5.30 5.20	11.66 11.66	8.65 8.65	17.24 17.24 ⁽⁵⁾	7.65 7.65	37.55 37.55	36.55 36.55
2015 2016 2017	5.60 5.60 5.20	11.66 11.66 11.66	8.65 8.65 8.65	5.00 5.00 5.00	7.65 7.65 7.65	25.31 25.31 25.31	24.31 24.31 24.31

(1) Rates become effective on dates shown in given year. Biennial valuations were performed 1988-2000.

(2) Rate expressed as a percentage of the value of future fire insurance premium taxes over the value of future covered compensation.

(3) PERSI rate plus Statutory FRF rate plus additional rate.

(4) PERSI rate plus additional rate plus Social Security.

(5) Effective January 1, 2015, the Additional Employer Contribution Rate decreased from 17.24% to 5.00%.



Idaho Firefighters' Retirement Fund

EXHIBIT 9: PROVISIONS OF GOVERNING LAW

This exhibit outlines our understanding of the laws governing the Idaho Firefighters' Retirement Fund (FRF), compared with the provisions that apply to firefighters of the Public Employee Retirement System of Idaho (PERSI), as contained in Sections 59-1301 through 59-1399 for PERSI and Sections 72-1401 through 72-1472 for FRF, inclusive of the <u>Idaho Code</u> through July 1, 2017. Each currently active firefighter hired before October 1, 1980, is entitled to receive the larger of (a) a benefit based on the FRF provisions, considering all of his service as a firefighter, and (b) a PERSI benefit, based on membership service beginning October 1, 1980, plus prior service rendered before July 1, 1965. Firemen hired October 1, 1980 and later (Class D members) are not entitled to FRF benefits.

In 1990, the law was changed to provide benefits to all members of FRF equally. Prior to the change, members hired after July 1, 1978, and before October 1, 1980, (Class C members) received a lower level of benefits. Class A members are members hired prior to July 1, 1976, who chose Option 1, where contributions are calculated on the basis of statewide average paid firefighter's salary. Benefits are based on the statewide average salary in effect at the date of retirement. Class B members are all Option 2 members hired prior to July 1, 1978, where contributions are calculated on the basis of the individual's annual average salary, but benefits are based on actual pay.



Retirement Provisions Affecting Firefighters In Idaho

July 1, 2017

Public Employee Retirement System Firefighters' Retirement Fund

Member Contribution Rate Service Retirement Allowance	8.36% of salary.	11.45% of salary. ⁽¹⁾
Eligibility	Age 60 with five years of service, including six months of membership service.	20 years of service. ⁽²⁾
Amount of Annual Allowance	2.30% of the highest 3.5-year average salary for each year of credited service.	40% of final five-year average salary ⁽¹⁾ plus 5.00% of average salary for each year of service in excess of 20 years.
Maximum Benefit	100% highest three-year average salary.	65% of final five-year average salary.
Minimum Benefit	For retirement during or prior to 1974, \$72 annual allowance for each year of service, increasing in subsequent years at the rate of cost-of-living increases in retirement allowances.	None.

(1) For firefighters employed prior to July 1, 1976, who chose Option 1, contributions are calculated on the basis of the statewide average paid firefighter's salary. Benefits are based on the statewide average salary in effect at the date of retirement.

For firefighters employed prior to July 1, 1976, who chose Option 2, contributions are based on the individual members' salaries for the prior year. Benefits are based on actual pay.

(2) Completed years of service. No partial years of service are recognized.



Public Employee Retirement System

Firefighters' Retirement Fund

Non-Duty Disability Retirement Allowance

Eligibility	Five years of membership service.	Five years of service. ⁽²⁾
Amount of Annual Allowance	Projected service retirement allowance based on accrued service plus service projected to age 60 (projected service is limited to excess of 30 years over accrued service), less any amount payable under workers' compensation law.	2.00% of final five-year average salary ⁽¹⁾ times years of service ²⁾ , or same as service retirement benefit if eligible.
Normal Form	Temporary annuity to age 60 plus any death benefit.	Payable for firefighter's lifetime, with 100% of benefit continued to eligible surviving spouse or children.
Duty Disability Retirement Allowance		
Eligibility	If hired after July 1, 1993, no service requirement, otherwise same as non- duty disability retirement.	No age or service requirements.
Amount of Annual Allowance	Same as non-duty disability retirement.	65% of final five-year average salary.
Normal Form	Same as non-duty disability retirement.	Same as non-duty disability retirement.
Special Disability Benefit		
Eligibility	Firefighters hired after October 1, 1980 and prior to July 1, 1993, with less than 10 years of service.	None.
Benefit	Same as FRF disability benefit.	None.

(1) For firefighters employed prior to July 1, 1976, who chose Option 1, contributions are calculated on the basis of the statewide average paid firefighter's salary. Benefits are based on the statewide average salary in effect at the date of retirement.

For firefighters employed prior to July 1, 1976, who chose Option 2, contributions are based on the individual members' salaries for the prior year. Benefits are based on actual pay.

(2) Completed years of service. No partial years of service are recognized.



Firefighters' Retirement Fund

Death Benefits Befor	е
Retirement	

Eligibility	Five years of service for surviving spouse's benefit.	Non-duty death: Five years of service. ⁽²⁾ Duty death: No service requirement. Benefits are payable to surviving spouse or, if no eligible surviving spouse, to unmarried children under 18.		
Amount of Benefit	 Accumulated contribution with interest, or The surviving spouse of a member with five years of service who dies while: 	100% of the benefit the firefighter would have received as a duty or non- duty disability allowance, depending on cause of his death.		
	 i. contributing; ii. noncontributing, but eligible for benefits; or iii. retired for disability receives an automatic joint and survivor option applied to the actuarial equivalent of the member's accrued service retirement allowance. 			
Normal Form Payable for member's lifetime, with death benefit determined by option selected at retirement.		Payable for firefighter's lifetime, with 100% of benefit continued to eligible surviving spouse or children.		
Optional Form Actuarial equivalent of the normal form under the options available according to the mortality and interest basis adopted by the Board.		None.		
Death Benefits After Retirement				
Eligibility	Designated beneficiary or estate.	Surviving spouse or, if no eligible surviving spouse, unmarried children under 18.		
Amount of Benefit	Under the normal form of the retirement allowance, the excess, if any, of the member's accumulated contributions with interest at retirement over all payments received. Otherwise payable according to the option elected.	100% of firefighter's retirement allowance.		

(2) Completed years of service. No partial years of service are recognized.



Public Employee Retirement System

Firefighters' Retirement Fund

Early Retirement Allowance		
Eligibility	Age 50 with five years of service including six months of membership service (contributing members only).	None.
Amount of Allowance	Full accrued service retirement allowance if age plus service equals 80; otherwise, the accrued service retirement allowance reduced by 3.00% for each of the first five years by which the early retirement date precedes the date the member would be eligible to receive his full accrued benefit, and by 5.75% for each additional year.	None.
Vested Retirement Allowance		
Eligibility		Firefighters who terminate after five years of service ⁽²⁾ are entitled to receive benefits beginning at age 60.
Amount of Allowance	Same as early retirement allowance.	2.00% of final five-year average salary times years of service ⁽²⁾ .
Withdrawal Benefit	Accumulated contributions with interest.	Accumulated contributions with interest.

(2) Completed years of service. No partial years of service are recognized.

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Public Employee Retirement System

Firefighters' Retirement Fund

Post-Retirement Increases

Amount of Adjustment

Increases are based on a cost-of-living factor reflecting the changes in the Consumer Price Index, subject to a maximum total increase or decrease of 6.00% in any year.

If the Consumer Price Index increases by at least 1% from August to August, 1.00% annual postretirement а increase is effective the following March. An additional postretirement increase of up to 5.00% each year may be authorized by the Board if it finds that the value of the System's assets are no less than its actuarial liabilities, includina those created by the additional increase.

If the CPI-U increases by less than 1% or decreases, the COLA is automatically equal to the change in the CPI-U. A decrease cannot be more than 6%. Member benefits cannot decrease below the amount at the initial benefit date.

Benefits increase or decrease by the same percentage by which the average paid firefighter's salary increases or decreases. The change for the year is effective each February.





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October 19, 2017

Retirement Board Public Employee Retirement System of Idaho State of Idaho P.O. Box 83720 Boise, ID 83720

Members of the Board:

Milliman has performed annual actuarial valuations of the Judges' Retirement Fund of the State of Idaho (JRF) beginning with the June 30, 2010 actuarial valuation. Until June 30, 2014, the JRF was an independent Fund. Beginning with the July 1, 2014 actuarial valuation, the Fund has been administered by the Public Employee Retirement System of Idaho (PERSI). It is anticipated that future actuarial valuations will be performed every year with the next valuation to be as of July 1, 2018.

Contribution Rates

The financing objective of the Fund is to establish contribution rates that will tend to remain level as percentages of payroll. The current total contribution rate is 74.10%: 62.53% employer contribution rate and 11.57% employee contribution rate. Based on the July 1, 2017 valuation assumptions and valuation results, this contribution rate will be sufficient to amortize the Unfunded Actuarial Accrued Liability (UAAL) over the required 25-year period ending July 1, 2042.

Funding Status

Based on the July 1, 2017 actuarial valuation, the UAAL was decreased by \$3.935 million due to an asset gain recognized as of July 1, 2017. Specifically, the Fund's assets earned a net return after accounting for all expenses of 12.16%, which is 5.16% above the actuarial assumption of 7.00%. All other experience gains and losses increased the actuarial liability by \$0.335 million. Thus, the total experience gain for the year was \$3.600 million.

Also, the UAAL increased by \$0.475 million because actual contributions plus assumed investment returns were less than the normal cost and the interest on the UAAL.

The current contribution rates are adequate to amortize the Normal Cost and UAAL balance over the required 25-year period.

The funding status increased from a 75.33% funding ratio on July 1, 2016, to 79.35% on July 1, 2017. The funding ratio is the ratio of the actuarial value of the assets over the value of the actuarial accrued liability.



Comparison to GASB Statement No. 67 Liabilities

The long-term expected rate of return on investments is 7.50%, including 0.40% for expected investment expenses and 0.10% for expected administrative expenses. For purposes of determining the Fund's funding status and UAAL, we use a discount rate that is net of all expenses (7.00%). The figures shown in this report have been calculated using this discount rate.

This is in contrast to the discount rate used to determine the Total Pension Liability (TPL) and Net Pension Liability (NPL) for purposes of GASB reporting. According to GASB Statement 67, the discount rate used to calculate TPL and NPL must be net of investment expenses but not administrative expenses. Therefore, TPL and NPL have been determined using a discount rate of 7.10%. Results and further details on these items can be found in our GASB 67 and 68 Report.

Assumptions

Our July 1, 2017 actuarial valuation report presented summaries of the actuarial assumptions and methods used in the valuation. The last major experience study of the JRF assumptions covered the period of June 30, 2003 to June 30, 2008. Economic and mortality assumptions generally reflect the assumptions used for the PERSI valuation.

The last major PERSI experience study, completed in 2016, covered the period July 1, 2011 through June 30, 2015.

Certification Statement

In preparing this letter, we relied, without audit, on information (some oral and some in writing) supplied by PERSI's staff. This information includes, but is not limited to, statutory provisions, member census data, and financial information. We found this information to be reasonably consistent and comparable with data used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the System and to reasonable expectations which, in combination, represent our best estimate of anticipated experience under the System. We believe that all of these assumptions and methods meet the parameters set by Actuarial Standards of Practice (ASOPs).

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



Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Actuarial computations under GASB Statements No. 67 and 68 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed exhibits have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of the System. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

- (a) The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.
- (b) The System may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

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

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this letter is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and Fellows of the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



The enclosed Exhibits 1 through 9 provide further related information. Milliman is completely responsible for these exhibits. Specifically, they are:

- Exhibit 1 Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data Exhibit 2
- Schedule of Retiree and Beneficiary Valuation Data Exhibit 3
- Exhibit 4 Schedule of Funding Progress
- Exhibit 5 Solvency Test
- Analysis of Actuarial Gains or Losses Exhibit 6
- Schedule of Contributions from the Employer Exhibit 7
- Schedule of Contributions from the Employer Expressed as a Exhibit 8
 - Percentage of Covered Payroll Provisions of Governing Law

Exhibit 9

Respectfully submitted,

Bret D. Juton

Bret D. Linton, F.S.A., M.A.A.A. Principal and Consulting Actuary

BDL/JDB/rc

Jeffy O. Rully

Jeffrey D. Bradley, F.S.A., M.A.A.A. Principal and Consulting Actuary



EXHIBIT 1: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS EFFECTIVE JULY 1, 2017

1. Investment Return (Adopted July 1, 2014)

The annual rate of investment return on the assets of the Fund is assumed to be 7.50% (including 0.50% for expenses), compounded annually.

2. Actuarial Value of Assets

All assets are valued at market as of the valuation date.

3. Actuarial Assumptions

The actuarial assumptions and methods were adopted by the PERSI Board based upon recommendations from the retained actuary. The actuarial assumptions are based on periodic studies of the PERSI total fund's actual experience.

4. Service Retirement

Annual rates of retirement assumed to occur among persons eligible for a service retirement are illustrated in the following table:

Age	Rate of Retirement ⁽¹⁾
55	4%
60	12
65	50
70	75
71	100

(1) Eligibility occurs after 20 years of service, attained age 55 with 15 years of service, attained age 60 with 10 years of service, or attained age 65 with four years of service.

5. Mortality (Adopted July 1, 2014) Contributing Members, Service and Disability Retirement Members, and Beneficiaries

MalesRP-2000 Combined Table for Healthy Individuals for males,
set back one year.FemalesRP-2000 Combined Table for Healthy Individuals for females,
set back one year.

All mortality tables are adjusted with generational mortality adjustments using projection scale AA as shown in Table A-4B of the July 1, 2017 valuation report. The projection scale is applied from the year 2000 to the year in which the mortality assumption is being applied.



6. Disability Retirement

Annual rates assumed for disability retirement are illustrated in the following table:

Age	Annual Rate
25	.032%
35	.119
45	.277
55	.870

7. Other Terminations of Employment

There are no other employment termination assumptions that are valued.

8. Future Salaries (Adopted July 1, 2014)

The rate of annual salary increase assumed for the purpose of the valuation is 3.75%.

9. Growth in Membership (Adopted July 1, 2014)

In general, the combined effects of stable active membership and salary levels are assumed to produce a 3.75% average annual expansion in the payroll of covered members.

10. Interest on Employee Contributions

The credited interest rate on employee contributions is assumed to be 6.50%.

11. Postretirement Benefit Increases (Cost of Living Adjustments) (Adopted July 1, 2014)

Any member who assumed office prior to July 1, 2012 is assumed to have a postretirement increase of 3.75% per year. However, for members who made an irrevocable election prior to August 1, 2012 to have their postretirement benefit increases based on Idaho Code Section 59-1355, a postretirement increase of 1.00% per year is assumed instead.

Any member who assumed office on or after July 1, 2012, is assumed to have a postretirement increase of 1.00% per year.

12. Probability of Marriage

The marriage assumption for all members is 100%. Males are assumed to be 2 years older than their spouses.

13. Actuarial Cost Method

The actuarial valuation is prepared using the entry age actuarial cost method. Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit. The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets and (b) the actuarial present value of future normal costs is called the unfunded actuarial accrued liability (UAAL). The UAAL, if positive, is amortized as a level percentage of the projected salaries of present and future members of the Fund during various amortization periods. In effect, this means



that UAAL amortization payments are assumed to grow at the same rate as the General Wage increase assumption (currently 3.75%).

The normal cost rates used in this valuation were calculated based on all current active members as of July 1, 2017 for each sex and type of employee in that valuation. The actuarial present values of projected benefits and of projected salaries for all active members were calculated. The ratio of the two is the aggregate normal cost rate.

14. Experience Studies

The last experience study was for the period July 1, 2003, through June 30, 2008, and reviewed economic and demographic assumptions. PERSI may wish to consider another experience study in the near future. Mortality assumptions were updated July 1, 2014, to reflect the findings in the most recent PERSI experience study. The mortality assumptions for PERSI General members are used for the JRF plan. The JRF economic assumptions generally reflect the assumptions used for the PERSI valuation.

15. Recent Changes

There have been no changes to the valuation assumptions since the prior valuation.

The results do reflect the October 2015 Board decision to increase total contribution rates to 74.10% effective July 1, 2017.



			Annual Salaries	
Valuation Date July 1	Number	Total ⁽¹⁾	Average	Annual Increase in Average
2015	52	\$ 6,543,000	\$ 125,827	NA
2016	53	6,886,500	129,934	3.3%
2017	50	6,690,000	133,800	3.0%

EXHIBIT 2: SCHEDULE OF ACTIVE MEMBER VALUATION DATA

(1) Annualized average salaries for covered members for the 12-month period commencing July 1 to June 30 of the current valuation period.



Valuation Date		Number		Increase	DLA s Granted us Year
July 1	Total	Added	Removed	JRF	PERSI
2015 2016 2017	92 94 101	8 2 8	2 0 1	0.00% 3.70% ⁽²⁾ 6.59% ⁽²⁾	1.70% 0.20% 1.10%
2017	101	0	I	0.59%	1.10%
		An	nual Benefits		
Valuation Date					Annual Increases in
July 1	Total	Added ⁽³⁾	Removed	Average	Average
2015	\$5,873,186	\$545,609	\$121,376	\$63,839	NA

250,942

690,100

EXHIBIT 3: SCHEDULE OF RETIREE AND BENEFICIARY VALUATION DATA⁽¹⁾

(1) Information regarding the number of retirees and beneficiaries added to, and removed from, the rolls was not used in the actuarial valuations.

0

73,888

65,150

66,736

2.1%

2.4%

(2) JRF COLA's are based on salary increase of position previously held by the retiree. Pay raises vary by position. The raises effective July 1, 2016 ranged from 0.00% to 3.70%. The raises effective July 1, 2017 ranged from 2.49% to 6.59%.

(3) Includes postretirement increases for all retirees and beneficiaries.

6,124,128

6,740,340

2016

2017



EXHIBIT 4: SCHEDULE OF FUNDING PROGRESS (All Dollar Amounts in Thousands)

Actuarial Valuation Date July 1	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accrued Liabilities (UAAL) ⁽²⁾	Funded Ratio	Covered Payroll ⁽³⁾	UAAL as a Percentage of Covered Payroll
2015	\$76,468	\$ 97,780	\$21,312	78.2%	\$6,149	346.6%
2016	75,449	100,159	24,710	75.3%	6,097	405.3%
2017	82,936	104,521	21,585	79.3%	6,162	350.3%

(1) Actuarial present value of benefits less actuarial present value of future normal costs based on entry age actuarial cost method.

- (2) Actuarial accrued liabilities less actuarial value of assets.
- (3) Covered Payroll includes compensation paid to all active judges for whom contributions were made to JRF. Covered Payroll differs from the Active Member Valuation Payroll shown in Exhibit 2, which is an annualized compensation of only those members who were active on the actuarial valuation date.



EXHIBIT 5: SOLVENCY TEST (All Dollar Amounts in Thousands)

		Actua	arial Liabilities for				
Actuarial Valuation	Actuarial	(A)	(B)	(C) Active Members (Employer	-	arial ed by	
Date July 1	Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Financed Portion)	(A)	(B)	(C)
2015 2016 2017	\$76,468 75,449 82,936	\$3,130 3,574 3,013	\$70,487 72,304 78,511	\$24,163 24,281 22,997	100.0% 100.0% 100.0%	100.0% 99.4% 100.0%	11.8% 0.0% 6.1%



EXHIBIT 6: ANALYSIS OF ACTUARIAL GAINS OR LOSSES (All Dollar Amounts in Thousands)

	Gain (Loss) fo	r Period
_	2015-2016	2016-2017
Investment Income Investment income was greater (less) than expected, net of asset smoothing, if applicable.	\$(4,184)	\$3,935
Pay Increases Pay increases and COLAs were less (greater) than expected.	1,462	(416)
Other Miscellaneous gains (and losses) resulting from other causes, includes gains or losses due to retiree mortality experience.	207	81
Total Gain (Loss) During the Period From Actuarial Experience	\$(2,515)	\$3,600
Contribution Income Actual contributions plus assumed investment returns were greater (less) than the normal cost and interest on the UAAL.	(883)	(475)
Non-Recurring Items Effect of automatic 0.2% PERSI COLA Changes in actuarial assumptions and benefits caused a gain (loss). PERSI Restoration of Purchasing Power and Discretionary COLA	NA NA NA	NA NA NA
Composite Gain (Loss) During the Period	\$(3,398)	\$3,125

Note: Effects related to losses are shown in parentheses. Numerical results are expressed as a decrease (increase) in the UAAL.



EXHIBIT 7: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER (Actual Dollar Amounts)

Fiscal Year Ending	Covered Employee Payroll ⁽¹⁾	Total Actual Employer Contributions ⁽²⁾	Actuarially Determined Contribution (ADC) ⁽³⁾	Percentage of ADC Dollars Contributed
6/30/15	\$6,149,339	\$3,595,417	\$3,492,825	103%
6/30/16	6,097,302	3,370,587	3,463,268	97%
6/30/17	6,162,190	3,946,599	3,604,265	109%

- (1) Computed as the dollar amount of the actual employee contribution made as a percentage of payroll divided by the contribution rate, expressed as a percentage of payroll.
- (2) The actual JRF employer contributions are expressed as a percentage of payroll. Employer contributions are made as a percentage of actual payroll in accordance with statute and the Board's Funding Policy. Thus, the actual employer contributions set by both statute and the Board's Funding Policy may differ from the computed Actuarially Determined Contribution (ADC) employer contribution rate for GASB disclosure purposes.
- (3) The ADC is computed as a dollar amount based on the entry age cost method and future payroll contributions from members. The ADC is computed for GASB reporting purposes only. As long as the actual contributions are made as a percentage of payroll under the current funding policy methods and assumptions, as required by the most recent actuarial valuation, the actual dollar amount of the employer contributions will differ from the dollar amount of the ADC.



EXHIBIT 8: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER EXPRESSED AS A PERCENTAGE OF COVERED PAYROLL

Fiscal Year Ending	Actual JRF Employer Contribution % ⁽¹⁾	Annual Determined Contribution (ADC) % ⁽²⁾	Percentage of ADC Contributed
6/30/15	58.47%	56.80%	103%
6/30/16	55.28%	56.80%	97%
6/30/17	64.05%	58.49%	109%

⁽¹⁾ The actual JRF employer contributions are expressed as a percentage of covered payroll. Employer contributions are made as a percentage of actual payroll in accordance with the Idaho Codes. Thus, the actual employer contributions set by the Idaho Codes may differ from the computed ADC employer contribution rate for GASB disclosure purposes.

⁽²⁾ The ADC is equal to the employer normal cost rate plus a 25-year amortization of any UAAL or minus a 25-year amortization of any Funding Reserve amount.



EXHIBIT 9: PROVISIONS OF GOVERNING LAW

	All actuarial calculations are based on our understanding of the statutes governing the Judges' Retirement Fund of the State of Idaho, as contained in Sections 1-2001 through 1-2012, inclusive, of the Idaho Code, with amendments effective through July 1, 2017. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the Idaho Code. This summary does not attempt to cover all the detailed provisions of the law. Members seeking specific plan provisions should consult their member handbook. Only those benefits in effect through July 1, 2017 are considered in this valuation.
Effective Year	The effective date of the Retirement Fund was 1947.
Member Contribution Rate	The member contribution rate effective July 1, 2017 is 11.57% of salary. Members contribute to the plan during the first 20 years of service (Section 1-2004B).
Employer Contribution Rate	The employer contribution rate effective July 1, 2017, 62.53% of salary is contributed by the State, during the first 20 years of service (Section 1-2004A).
Service Retirement Allowance	<i>Eligibility</i> Age 65 with four years of service, 60 with 10 years of service, 55 with 15 years of service, or any age with 20 years of service (Section 1-2001).
	Amount of Allowance The annual service retirement allowance is 5.0% multiplied by the number of years served as either justice or judge or both, for the first 10 years of credited service plus 2.5% multiplied by the remaining number of years of credited service as either justice or judge or both, but in any event the total shall not be greater than 75%.
	For members who assumed office before July 1, 2012, the retirement allowance is multiplied by the current annual compensation of the highest office in which he or she served.
	For members who assumed office on or after July 1, 2012, the initial retirement allowance is multiplied by the annual compensation at the time of retirement of the highest office in which he or she served (Section 1-2001).
Service Retirement Allowance (continued)	<i>Normal Form</i> For members who first assumed office before July 1, 2012, monthly payments for life under a fully subsidized 50% Joint



and Survivor annuity.

For members who first assumed office on or after July 1, 2012, monthly payments for life under a fully subsidized 30% Joint and Survivor annuity (Section 1-2001, 1-2001b, and 1-2009).

Vested RetirementEligibilityAllowanceVested former contributing members are entitled to receive
benefits upon reaching the eligibility age requirements in
Section 1-2001.

Amount of Allowance

Accrued service retirement allowance (Section 1-2001).

Disability RetirementEligibilityAllowanceFour years of membership service. (Section 1-2001).

Amount of Allowance

The annual service retirement allowance is 5.0% multiplied by the number of years served as either justice or judge or both, for the first 10 years of credited service plus 2.5% multiplied by the remaining number of years of credited service as either justice or judge or both, but in any event the total shall not be greater than 75%.

For members who assumed office before July 1, 2012, the annual retirement allowance is multiplied by the current annual compensation of the highest office in which he or she served.

For members who assumed office on or after July 1, 2012, the annual service retirement allowance is multiplied by the annual compensation at the time of retirement of the highest office in which he or she served (Section 1-2001).

Normal Form

For members who first assumed office before July 1, 2012, monthly payments for life under a fully subsidized 50% Joint and Survivor annuity.

For members who first assumed office on or after July 1, 2012, monthly payments for life under a fully subsidized 30% Joint and Survivor annuity (Section 1-2001, 1-2001b, and 1-2009).

Death Benefits After Retirement or Termination For members who first assumed office before July 1, 2012, 50% of the judge's retirement benefit is continued to the surviving spouse.

For members who first assumed office on or after July 1, 2012, 30% of the judge's retirement benefit is continued to the surviving spouse.

Upon termination or retirement, a member may elect to have 100% of his or her accrued retirement benefit continued to his



or her surviving spouse upon his or her death. Such election results in a reduction of his or her monthly benefit to the actuarial equivalent of their assumed normal retirement benefit, which is a 50% surviving spouse benefit if first assumed office before July 1, 2012, or a 30% surviving spouse benefit if first assumed office on or after July 1, 2012 (Sections 1-2001b and 1-2009).

Before Retirement or Termination

An amount equal to the benefit the judge would have received had he or she elected a 100% Joint and Survivor benefit before his or her death (Section 1-2009).

- **Withdrawal Benefits** Accumulated contributions with credited interest at 6.5% per annum, compounded annually (Section 1-2001).
- PostretirementFor members who first assumed office before July 1, 2012,
postretirement benefit increases are in proportion to increases
in the salary of the highest office in which the member served
(Section 1-2001).

Members who assumed office before July 1, 2012, had until August 1, 2012 to make an irrevocable election to have their postretirement benefit increases based on the Consumer Price Index as described in Idaho Code Section 59-1355. Those that made this election will instead receive the benefit increases described below.

For members who first assumed office on or after July 1, 2012, and those who made the election described in the prior paragraph, postretirement benefit increases are based on changes in the Consumer Price Index. The measurement period for changes in the CPI-U is August to August. The COLA changes are implemented effective on the July 1 following the measurement period.

Postretirement Increases (continued) If the CPI-U increases by at least 1%, the COLA is at least 1%. If the CPI-U increases by more than 1%, an additional postretirement increase of up to 5% each year (but not more than the increase in the CPI-U) may be authorized by the Board, subject to the approval of the Legislature, if it finds that the Public Employee Retirement System of Idaho's (System) assets are no less in value than its actuarial liabilities, including those created by the additional increase.

If the CPI-U increases by less than 1% or decreases, the COLA is automatic, based on the change in the CPI. If a negative COLA is applicable, the negative COLA cannot decrease benefits by more than 6%. Additionally, a negative COLA cannot decrease a member's benefit below the amount of the benefit at the initial benefit date.

If a COLA is implemented that is less than the increase in the



CPI-U, members' benefits will not retain their full inflationadjusted purchasing power. In such cases the Board may implement a Restoration of Purchasing Power (ROPP) COLA at a later date to bring those members closer to 100% of inflation adjusted purchasing power. As with a discretionary COLA, a ROPP is subject to approval of the Legislature and requires that the System's assets are no less in value than its actuarial liabilities, including those created by the additional increase. (Section 59-1355).

- **Pop-Up Benefit** Section 1-2001b, paragraph (2), provides a judge with a pop-up benefit if the named contingent annuitant predeceases the judge. This benefit equals what they would have received had they not elected the 100% Joint and Survivor form of payment.
- Retirement Under Paragraph (b) Section 1-2001(2), paragraph (b), provides any person now serving as justice of the supreme court, a judge of the court of appeals, or a district judge of a district court an additional 2.5% multiplied by 5 years senior judge service but in any event the total shall not be greater than 75% of the current annual compensation of the highest office held while in active service. The five years of senior judge service is required for this benefit. This benefit is not available with the age 55 and 15 years of service retirement for those judges who first took office after July 1, 2012.

SECTION **STATICAL**



The objectives of the Statistical Section are to provide additional historical perspective, context, and relevant details to assist readers in using the information in the financial statements, notes to the financial statements, and the required supplementary information in order to understand and assess the System's economic condition. In support of these objectives, the System has implemented GASB Statement No. 44, *Economic Condition Reporting: The Statistical Section.*

The System is the administrator of seven fiduciary funds including three defined benefit retirement plans - the Public Employee Retirement Fund Base Plan (PERSI Base Plan) the Firefighters' Retirement Fund (FRF) and the Judges' Retirement Plan (JRF); two defined contribution plans - the Public Employee Retirement Fund Choice Plans 401(k) and 414(k) (PERSI Choice Plan); and two Sick Leave Insurance Reserve Trust Funds – one for state employers and one for school district employers. The data in Tables 1 through 4 of this section was provided by the System's actuary and Choice Plan record keeper. The data in the remaining tables was provided by the System's own records.

During FY 2017, the number of active PERSI members increased from 68,517 to 70,073. The number of retired members or annuitants receiving monthly allowances increased from 44,181 to 45,468. The number of inactive members who have not been paid a separation benefit increased from 31,862 to 34,151 Of these inactive members, 12,669 have achieved vested eligibility. Total membership in PERSI increased from 144,560 to 149,692 during the fiscal year. Table 1 of this section illustrates the diversity of our employee membership, and Table 2 shows how the membership distribution of active, retired, and inactive members has changed over the years.

As of June 30, 2017 there were 783 public employers in Idaho who were PERSI members. Tables 8 and 9 of this section illustrate the diversity of our employer participation.

Table 1

_	Acti	ve Member	S	Inactive Members		Retirees		
		Non-			Non-			
	Vested	vested	Total	Vested	vested	Total		Total
Cities	4,618	2,816	7,434	1,742	1,493	3,235	4,127	14,796
Female	1,354	1,005	2,359	599	627	1,226	1,451	5,036
Male	3,264	1,811	5,075	1,143	866	2,009	2,676	9,760
Counties	4.948	3,591	8,539	1,121	1,933	3,054	3,838	15,431
Female	2,380	1,850	4,230	620	1,089	1,709	1,988	7,927
Male	2,568	1,741	4,309	501	844	1,345	1,850	7,504
Schools	19,286	12,198	31,484	4,740	9,642	14,382	20,032	65,898
Female	14,404	9,306	23,710	3,766	7,516	11,282	14,442	49,434
Male	4,882	2,892	7,774	974	2,126	3,100	5,590	16,464
State	10,261	7,100	17,361	3,929	7,057	10,986	13,728	42,075
Female	5,315	3,677	8,992	2,268	3,927	6,195	7,014	22,201
Male	4,946	3,423	8,369	1,661	3,130	4,791	6,714	19,874
All Others	3,234	2,021	5,255	1,137	1,357	2,494	3,743	11,492
Female	954	767	1,721	595	812	1,407	1,604	4,732
Male	2,280	1,254	3,534	542	545	1,087	2,139	6,760
Grand Total	42,347	27,726	70,073	12,669	21,482	34,151	45,468	149,692
Female	24,407	16,605	41,012	7,848	13,971	21,819	26,499	89,330
Male	17,940	11,121	29,061	4,821	7,511	12,332	18,969	60,362

Distribution of Membership by Group



Table 2

Changes in Membership – PERSI Base Plan

	Active Members			Retired	Retired Members		
Fiscal Year Ended	Number	Average Age	Average Years of Service	Number	Average Age	Number	
2008	66,765	46.2	10.3	30,912	71.8	23,712	
2009	67,813	46.5	10.4	32,197	71.8	23,086	
2010	67,020	46.7	10.6	33,625	71.3	24,119	
2011	65,798	46.9	10.8	35,334	71.5	25,489	
2012	65,270	46.9	10.8	37,150	71.6	26,682	
2013	65,535	46.8	10.7	38,947	71.6	27,110	
2014	66,223	46.6	10.5	40,776	71.7	28,273	
2015	67,008	46.5	10.4	42,657	71.6	29,827	
2016	68,517	46.8	10.1	44,181	71.8	31,862	
2017	70,073	46.6	9.9	45,468	72.2	34,151	

Table 3a

Retired Members by Type of Benefit – PERSI Base Plan

		Type of Retirement			Option Se	elected
Amount of Monthly Benefit	Total Number of Retirees	Normal	Disability	Beneficiary	Joint & Survivor ¹	Straight Life ²
\$0 - 250	5,390	4,733	6	651	1,465	3,925
251 - 500	6,261	5,660	48	553	1,532	4,729
501 - 750	5,039	4,473	151	415	1,319	3,720
751 - 1,000	3,957	3,484	148	325	1,110	2,847
1,001 - 1,250	3,472	3,026	170	276	1,032	2.440
1,251 - 1,500	2,860	2,450	190	220	852	2,008
1,501 - 1,750	2,550	2,226	170	154	827	1,723
1,751 - 2,000	2,305	2,034	154	117	794	1,511
Over 2,000	13,634	12,785	512	337	5,202	8,432
Totals	45,468	40,871	1,549	3,048	14,133	31,335

¹Joint & Survivor (also known as Contingent Annuitant)

²Single Life Options include Straight Life, Cash Refund, Social Security and all other FOPs.



Table 3b Retired Members by Type of Benefit – Firefighters' Retirement Fund

		Type of Retirement			Option S	Selected
Amount of Monthly Benefit	Total Number of Retirees	Normal	Disability	Beneficiary	Joint & Survivor ¹	Straight Life ²
\$0 - 250	6	4		2	4	2
251 - 500	10	1		9	1	9
501 - 750	7	4		3	4	3
751 - 1,000	4	3		1	3	1
1,001 - 1,250	17	13		4	13	4
1,251 - 1,500	13	9	1	3	10	3
1,501 - 1,750	15	11	2	2	13	2
1,751 - 2,000	20	14	2	4	16	4
Over 2,000	425	288	25	112	313	112
Totals	517	347	30	140	377	140

¹Joint & Survivor (also known as Contingent Annuitant)

²Single Life Options include Straight Life, Cash Refund, Social Security and all other FOPs.

Monthly benefit refers to the benefit payable by the FRF plan (total benefit less PERSI benefit). All FRF retirees and disableds are valued with two benefits and two options.

- 1) The benefit payable by the FRF plan is valued using a Straight Life option.
- 2) The total benefit is valued using a Spouse Reversionary option (spouse benefit payable upon the death of the retiree or disabled).
- All FRF beneficiaries are valued using a Straight Life option.

Table 3c

Retired Members by Type of Benefit – Judges' Retirement Fund

		Type of Retirement			Option S	Selected
Amount of Monthly Benefit	Total Number of Retirees	Normal	Disability	Beneficiary	Joint & Survivor ¹	Straight Life ²
\$0-2,000	7	1		6	1	6
2,001 – 2,500	3	1		2	1	2
2,501 -3,000	5	2		3	2	3
3,001 - 3,500	8	3		5	2	6
3,501 - 4,000	8	2		6	2	6
4,001 - 4,500	10	7		3	5	5
4,501 - 5,000	3	2		1	2	1
5,001 - 5,500	4	4			4	
Over 5,500	53	51		2	42	11
Totals	101	73		28	61	40

¹Joint & Survivor (also known as Contingent Annuitant) ²Single Life



Table 3d

Retired Members by Type of Benefit – PERSI Choice Plan

Amount of Monthly Benefit	Total Number of Retirees	Both 414(k) and 401(k)	414(k) Only	401(k) Only
\$0 - 250	72	38	22	12
251 - 500	85	67	2	16
501 - 750	36	25	2	9
751 - 1,000	32	22		10
1,001 - 1,250	12	9		3
1,251 - 1,500	9	6		3
1,501 - 1,750	1	1		
1,751 - 2,000	8	4	1	3
Over 2,000	13	10		3
Totals	268	182	27	59



Table 4a

Average Benefit Payments – PERSI Base Plan

Retirement Effective Dates	es Years Credited S			Service			
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/07 to 6/30/08	¢450	¢200	Ф74 4	¢4 404	¢4 600	MO 004	@0.047
Average monthly benefit Average final average salary	\$459 \$593	\$390 \$2,189	\$714 \$2,686	\$1,104 \$3,177	\$1,623 \$3,666	\$2,331 \$4,041	\$3,217 \$4,628
Number of retired members	42	328	298	267	287	286	439
Period 7/1/08 to 6/30/09 Average monthly benefit	\$320	\$378	\$667	\$1,153	\$1,526	\$2,374	\$3,323
Average final average salary	\$1,002	\$2,294	\$2,606	\$3,248	\$3,654	\$4,198	\$4,790
Number of retired members	44	363	282	311	284	314	472
Period 7/1/09 to 6/30/10							
Average monthly benefit	\$204	\$397	\$742	\$1,086	\$1,571	\$2,411	\$3,385
Average final average salary	\$514	\$2,335	\$2,763	\$3,136	\$3,622	\$4,275	\$4,825
Number of retired members	42	342	330	334	307	324	482
Period 7/1/10 to 6/30/11							
Average monthly benefit	\$112	\$391	\$704	\$1,111	\$1,568	\$2,385	\$3,488
Average final average salary	\$887 38	\$2,442 442	\$2,744 368	\$3,278 370	\$3,697 366	\$4,383 364	\$4,900 581
Number of retired members	30	442	300	370	300	304	501
Period 7/1/11 to 6/30/12							
Average monthly benefit	\$192	\$394	\$747	\$1,138	\$1,634	\$2,426	\$3,430
Average final average salary	\$764 57	\$2,386 504	\$2,885 395	\$3,242 383	\$3,765 400	\$4,302 374	\$4,808 521
Number of retired members	57	504	390	303	400	374	521
Period 7/1/12 to 6/30/13							
Average monthly benefit	\$206	\$413	\$762 \$2.016	\$1,156	\$1,651 \$2,714	\$2,447 \$4,442	\$3,497 \$4,076
Average final average salary Number of retired members	\$1,788 55	\$2,411 544	\$2,916 451	\$3,310 410	\$3,714 399	\$4,443 379	\$4,976 495
Number of retired members	00	011	101	110	000	010	100
Period 7/1/13 to 6/30/14				• • • • •	• • - • •		
Average monthly benefit	\$263	\$403	\$728 \$2,775	\$1,144 \$2,206	\$1,714 \$2,072	\$2,355	\$3,421 \$4,040
Average final average salary Number of retired members	\$1,243 49	\$2,552 519	\$2,775 469	\$3,306 427	\$3,972 490	\$4,333 420	\$4,949 522
Number of realed members	10	010	100		100	.20	022
Period 7/1/14 to 6/30/15	* ~~ (* ~ = ~	A- / -	* 4 • = •	* (= • •	AA 4 4 A	* •••••
Average monthly benefit	\$221 \$1,586	\$370 \$2,354	\$745 \$3,034	\$1,079 \$3,258	\$1,580 \$3,725	\$2,419 \$4,504	\$3,396 \$4,983
Average final average salary Number of retired members	36 په ۲,580	φ2,354 573	\$3,034 457	\$3,258 460	φ3,725 369	¢4,504 423	4,903 558
Period 7/1/15 to 6/30/16	¢074	¢400	\$757	¢1 160	¢1 646	¢0.460	ኖጋ ጋር ዐ
Average monthly benefit Average final average salary	\$374 \$1,420	\$402 \$2,484	\$3,054	\$1,168 \$3,526	\$1,646 \$3,910	\$2,463 \$4,552	\$3,358 \$4,981
Number of retired members	35	463	410	40,020 376	413	423	¢-,501 521
Period 7/1/16 to 6/30/17 Average monthly benefit	\$640	\$417	\$753	\$1,177	\$1,688	\$2,451	\$3,509
Average final average salary	\$1,815	\$2,548	\$3,202	\$3,537	\$3,863	\$4,776	\$5,261
Number of retired members	20	361	411	371	332	427	550
			467				



Table 4b

Average Benefit Payments – Firefighters' Retirement Fund

Retirement Effective Dates	0-4	5 -		<u>s Credited</u> 15 - 19	<u>Service</u> 20 - 24	25 - 29	30+
		-					
Period 7/1/07 to 6/30/08		No	Valuation	Complete	ed		
Period 7/1/08 to 6/30/09 Average monthly benefit Average Final Average Salary Number of retired members							\$315 \$5,440 2
Period 7/1/09 to 6/30/10		No	Valuation	Complete	ed		
Period 7/1/10 to 6/30/11 Average monthly benefit Average Final Average Salary		**	**	**	**	**	**
Period 7/1/11 to 6/30/12		No	Valuation	Complete	ed		
Period 7/1/12 to 6/30/13 Average monthly benefit Average Final Average Salary		**	**	**	**	**	**
Period 7/1/13 to 6/30/14 Average monthly benefit Average Final Average Salary Number of retired members							\$6,256 * 1
Period 7/1/14 to 6/30/15 Average monthly benefit Average Final Average Salary		**	**	**	**	**	**
Period 7/1/15 to 6/30/16 Average monthly benefit Average Final Average Salary		**	**	**	**	**	**
Period 7/1/16 to 6/30/17 Average monthly benefit Average Final Average Salary Number of retired members							\$5,637 * 1

*Average final average salary is not the basis for calculating benefits on the classes of firefighters in the group.

** No retirements for the fiscal year



Table 4c

Average Benefit Payments – Judges' Retirement Plan

Retirement Effective Dates	Years of Service						
	0 - 4*	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/14 to 6/30/15 Average monthly benefit Number of retired members	\$1,895 1	\$4,346 1	\$5,482 1		\$8,417 2		
Period 7/1/15 to 6/30/16 Average monthly benefit Number of retired members			\$8,084 1	\$7,512 1	\$8,794 1		
Period 7/1/16 to 6/30/17 Average monthly benefit Number of retired members		\$4,984 2	\$5,793 2	\$7,294 2		\$4,171 1	\$2,452 1

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available



Table 4d

Average Benefit Payments – PERSI Choice Plan

Retirement Effective Dates	Years of Service						
	0 - 4*	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/07 to 6/30/08 Average monthly benefit Number of retired members		\$1,788 2	\$278 2	\$600 2	\$675 2	\$300 1	\$756 8
Period 7/1/08 to 6/30/09 Average monthly benefit Number of retired members		\$525 3	0	\$452 8	\$542 7	\$817 3	\$360 10
Period 7/1/09 to 6/30/10 Average monthly benefit Number of retired members	\$445 1	\$1,063 7	\$285 7	\$566 19	\$729 11	\$642 8	\$529 28
Period 7/1/10 to 6/30/11 Average monthly benefit Number of retired members	\$445 1	\$913 11	\$378 11	\$511 25	\$794 17	\$621 14	\$674 38
Period 7/1/11 to 6/30/12 Average monthly benefit Number of retired members	\$850 1	\$525 12	\$425 14	\$514 30	\$534 12	\$489 13	\$588 37
Period 7/1/12 to 6/30/13 Average monthly benefit Number of retired members	\$820 2	\$456 14	\$515 14	\$554 27	\$480 22	\$683 17	\$644 44
Period 7/1/13 to 6/30/14 Average monthly benefit Number of retired members	\$120 1	\$890 10	\$534 15	\$1,124 23	\$560 13	\$656 17	\$560 41
Period 7/1/14 to 6/30/15 Average monthly benefit Number of retired members	\$588 2	\$1,665 14	\$844 25	\$1,341 26	\$747 13	\$927 22	\$738 43
Period 7/1/15 to 6/30/16 Average monthly benefit Number of retired members	\$318 5	\$945 18	\$606 37	\$585 26	\$577 29	\$563 29	\$499 48
Period 7/1/16 to 6/30/17 Average monthly benefit Number of retired members	\$694 21	\$844 26	\$737 44	\$670 41	\$494 30	\$776 46	\$588 60

*Average final average salary data not applicable for this defined contribution plan. The average monthly benefit is determined by the retiree and can vary significantly based on the number of months the retiree chooses to receive payments



Table 5

Schedule of Benefit Expenses by Type

	Age & Service Disabilities							
	Bene	efits	Retira	nts (1)		Refu	inds	
Fiscal <u>Year</u>	<u>Retirants</u>	Survivors (2)	Pre-NRA	Post-NRA	<u>Survivors</u>	<u>Death</u>	<u>Separation</u>	Total
PERSI	BASE PLAN a	and FRF						
2012 2013 2014 2015 2016 2017	561,784,458 602,758,058 677,054,949 685,057,604 731,945,232 769,911,801	28,396,660 29,847,798 31,181,280 32,850,337 34,812,098 35.034.939	18,557,300 19,229,642 19,263,836 18,982,851 18,968,148 18,218,550	9,483,506 10,737,466 11,699,605 12,714,575 13,955,913 15,307,442	1,263,805 1,385,697 1,499,603 1,769,618 1,943,926 3,661,761	10,018,545 11,562,936 12,414,898 11,212,116 10,556,133 13,559,082	30,812,354 32,266,986 33,959,615 28,354,914 32,307,543 28,872,581	660,316,628 707,788,583 787,073,786 790,942,015 844,488,993 884,566,156

JUDGES' RETIREMENT PLAN

2015	4,683,420	893,969
2016	5,059,316	915,621
2017	5,173,494	999,921

PERSI CHOICE PLAN

2012	9,464,776
2013	10,251,319
2014	11,147,689
2015	15,662,811
2016	41,363,965
2017	37,358,429

SICK LEAVE INSURANCE RESERVE TRUST FUND

201216,310,005201316,687,698201417,373,642201517,853,009201618,438,911201718,166,014

(1) The split between duty and non-duty disabilities is not available.

(2) Benefit amounts are not available. All survivors are included with the Age & Service Benefits survivors.

NRA = Normal Retirement Age. PERSI members with disability benefits convert to age & service retirants at NRA (60 for Fire & Police, 65 for other members).

Schedule is intended to show information for 6 years. Additional years will be displayed as they become available.



Table 6

History of Cost-of-Living Adjustments

Year (1)	CPI Rate	PERSI COLA Rate	Maximum COLA	Difference	
1980	12.2	6.0	6.0	0.0	
1981	12.6	6.0	6.0	0.0	
1982	10.2	6.0	6.0	0.0	
1983	5.1	5.1	5.1	0.0	
1984	2.9	2.9	2.9	0.0	
1985	4.2	4.2	4.2	0.0	(2)
1986	3.2	1.0	3.2	2.2	(2)
1987	1.5	1.5	1.5	0.0	-
1988	4.5	1.0	4.5	3.5	(2)
1989	4.2	1.0	4.2	3.2	(2)
1990	4.7	4.7	4.7	0.0	
1991	5.6	5.6	5.6	0.0	
1992	3.8	3.8	3.8	0.0	
1993	3.1	3.1	3.1	0.0	
1994	2.8	2.8	2.8	0.0	
1995	2.9	2.9	2.9	0.0	
1996	2.6	2.6	2.6	0.0	
1997	2.9	2.9	2.9	0.0	
1998	2.2	2.2	2.2	0.0	
1999	1.6	1.6	1.6	0.0	(2)
2000	2.3	2.3	2.3	0.0	
2001	3.4	3.4	3.4	0.0	
2002	2.7	2.7	2.7	0.0	
2003	1.8	1.0	1.8	0.8	(3)
2004	2.2	2.2	2.2	0.0	
2005	2.7	2.7	2.7	0.0	(3)
2006	3.6	3.6	3.6	0.0	
2007	3.8	3.8	3.8	0.0	
2008	2.0	2.0	2.0	0.0	
2009	5.4	1.0	5.4	4.4	(4), (5)
2010	-1.48	1.0	-1.48	0.0	(4)
2011	1.15	1.0	1.15	0.15	(5) (6)
2012	3.77	1.0	3.77	2.77	(5)
2013	1.69	1.0	1.69	.69	
2014	1.59	1.0	1.59	.59	
2015	1.7	1.7	1.7	0.0	(5)
2016	.2	.2	.2	0.0	
2017	1.1	. <u> </u> 1.1	1.1	0.0	
				0.0	

(1) For years 1980 through 1986, based on the prior year annual change in CPI-U, August to August, adjustments were effective January 1. Beginning in 1987, adjustments were effective March 1.

Retro-active COLAs were awarded effective March 1, 1999 to re-establish purchasing power for the years 1986, 1988, 1989. (2)

(3) A retro-active COLA was awarded effective March 1, 2005 to re-establish purchasing power for 2003.
 (4) A retro-active COLA of 2.48% was awarded effective March 1, 2010 to re-store partial purchasing power for 2009 for a net COLA of 1%.

(5) A retro-active COLA of up to 2.3% was awarded effective March 1, 2015 to re-establish purchasing power for the years 2009, 2011, 2012.

(6) A retro-active COLA of up to .8% was awarded effective March 1, 2016 to re-establish purchasing power for the year 2011.

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Table 7a

Changes in Net Position - Base Plan (last 10 fiscal years)

	2008	2009	2010
Additions:			
Employee Contributions	170,710,597	180,063,010	178,124,381
Employer Contributions	273,410,279	284,608,663	284,932,418
Investment Income ¹	275,703,902	221,899,829	200,479,456
Gains and Losses	(779,405,404)	(1,920,771,032)	833,597,303
Transfers/Rollovers In			
Other Income	215,297	84,268	12,261
Total additions to plan net position	(59,365,329)	(1,234,115,262)	1,497,145,819
Deductions			
Benefit Payments	448,660,441	483,128,952	517,046,719
Refunds	31,151,910	34,845,676	36,747,852
Administrative Expenses	5,905,580	6,232,678	6,471,359
Transfers/Rollovers Out			
Total deductions to plan net position	485,717,931	524,207,306	560,265,930
Change in net position	(545,083,260)	(1,758,322,568)	936,879,889



2011	2012	2013	2016	2017
178,415,845	179,168,074	184,652,290	220,866,936	237,032,668
279,174,844	277,143,887	285,440,860	335,610,100	356,367,389
231,745,111	240,033,473	247,522,779	277,666,987	284,543,243
1,697,095,152	(102,816,241)	726,899,521	(72,888,917)	1,411,348,507
37,716	24,089	16,311	25,283	29,366
2,386,468,668	593,553,282	1,444,531,761	761,280,389	2,289,321,173
558,619,602	599,848,356	654,141,410	792,705,222	835,774,004
38,753,611	40,830,899	33,845,755	32,307,543	29,497,711
5,973,540	6,231,431	6,308,487	6,806,655	8,810,136
603,346,753	646,910,686	694,295,652	831,819,420	874,081,851
1,783,121,915	(53,357,404)	750,236,109	(70,539,031)	1,415,239,322



Table 7b

Changes in Net Position - FRF Plan

(last 10 fiscal years)

	2008	2009	2010
Additions:			
Employee Contributions	23,190	18,753	16,185
Employer Contributions	12,866,827	13,434,204	13,542,331
Investment Income ¹	7,249,703	5,772,048	5,165,228
Gains and Losses	(20,494,659)	(49,963,011)	21,423,526
Transfers/Rollovers In			
Other Income			
Total additions to plan net position	(354,939)	(30,738,006)	40,147,270
Deductions			
Benefit Payments	17,163,333	17,945,071	18,372,312
Refunds	, ,	, ,	
Administrative Expenses			
Transfers/Rollovers Out			
Total deductions to plan net position	17,163,333	17,945,071	18,372,312
Change in net position	(17,518,272)	(48,683,077)	21,774,958



2011	2012	2013	2014	2015	2016	2017
13,746	11,100	11,136	9,095	6,168	6,329	4,385
13,313,715	13,486,309	14,227,313	14,200,323	11,305,473	7,198,597	7,452,987
5,912,515	6,096,564	6,289,701	8,078,269	6,896,831	6,892,864	6,961,648
43,298,001	(2,611,410)	18,470,947	49,642,989	2,461,078	(1,809,410)	34,527,177
62,537,977	16,982,563	38,999,097	71,930,676	20,669,550	12,288,380	48,946,197
19,238,671	19,637,373	19,801,418	19,958,800	19,874,275	19,476,228	19,294,441
				153,719	58,873	43,022
19,238,671	19,637,373	19,801,418	19,958,800	20,027,994	19,535,101	19,337,463
13,230,071	13,057,575	19,001,410	19,900,000	20,027,994	13,333,101	13,557,405
43,299,306	(2,654,810)	19,197,679	51,971,876	641,556	(7,246,721)	29,608,734



Table 7c

Changes in Net Position - Choice Plan 401(k) (last 10 fiscal years)

	2008	2009	2010	2011
Additions:				
Employee Contributions	34,868,605	35,680,207	33,413,555	33,068,567
Employer Contributions	217,878	153,211	127,154	180,556
Investment Income ¹	6,606,090	6,144,038	6,144,609	7,441,583
Gains and Losses	(20,059,176)	(45,522,778)	20,858,277	51,079,923
Transfers/Rollovers In	8,946,219	6,057,764	4,867,768	7,469,551
Other Income				
Total additions to plan net position	30,579,616	2,512,442	65,411,363	99,240,180
Deductions				
Benefit Payments	3,882,154	4,951,776	6,013,245	7,771,465
Refunds				
Administrative Expenses				
Transfers/Rollovers Out	5,982,049	7,069,099	7,676,334	12,032,837
Total deductions to plan net position	9,864,203	12,020,875	13,689,579	19,804,302
Change in net position	20,715,413	(9,508,433)	51,721,784	79,435,878



2012	2013	2014	2015	2016	2017
32,417,476	36,341,951	39,062,685	42,874,459	45,299,030	48,333,290
383,189	9,119,848	14,230,058	5,166,873	4,778,923	5,475,485
8,267,997	9,431,394	11,462,165	9,589,538	12,385,370	13,786,327
(1,861,880)	31,292,784	69,529,511	9,030,653	(3,529,621)	64,650,113
9,576,929	9,132,179	10,706,301	14,575,338	11,868,500	14,836,646
48,783,711	95,318,156	144,990,720	81,236,861	70,802,202	147,081,861
7,123,041	8,018,315	8,936,739	12,729,966	35,985,817	34,029,074
				1,069,543	115,788
13,323,865	15,382,348	18,901,443	23,364,173		
20,446,906	23,400,663	27,838,182	36,094,139	37,055,360	34,144,862
28,336,805	71,917,493	117,152,538	45,142,722	33,746,842	112,936,999



Table 7d

Changes in Net Position - Choice Plan 414(k) (last 10 fiscal years)

	2008	2009	2010
Additions:			
Employee Contributions			
Employer Contributions			
Investment Income ¹	1,789,833	1,365,004	1,168,118
Gains and Losses	(4,902,983)	(11,880,802)	4,877,123
Transfers/Rollovers In			
Other Income			
Total additions to plan net position	(3,113,150)	(10,515,798)	6,045,241
Deductions			
Benefit Payments	1,749,823	1,814,867	1,690,346
Refunds			
Administrative Expenses			
Transfers/Rollovers Out	1,291,002	1,056,981	1,208,031
Total deductions to plan net position	3,040,825	2,871,848	2,898,377
Change in net position	(6,153,975)	(13,387,646)	3,146,864



2011	2012	2013	2014	2015	2016	2017
		6,462				
1,244,977	1,190,148	1,192,371	1,293,253	901,407	227,137	(101,457)
9,321,922	(564,614)	3,732,343	8,177,394	776,244	639,034	5,758,352
10,566,899	625,534	4,931,176	9,470,647	1,677,651	866,171	5,656,895
2,339,079	2,341,735	2,233,004	2,210,950	2,932,845	5,378,148	3,329,355
					523,170	10,491
1,627,984	1,619,181	1,619,036	1,661,723	2,049,671		
3,967,063	3,960,916	3,852,040	3,872,673	4,982,516	5,901,318	3,339,846
6,599,836	(3,335,382)	1,079,136	5,597,974	(3,304,865)	(5,035,147)	2,317,049



Table 7e

Changes in Net Position – Sick Leave Insurance Reserve Fund – State (last 10 fiscal years)

	2008	2009	2010
Additions:			
Employer Contributions	5,681,376	5,889,260	5,790,947
Net appreciation (depreciation) ¹	(10,878,863)	(9,976,100)	9,814,139
Other Income	10,520	2,554	2,042
Total additions to plan net position	(5,186,967)	(4,084,286)	15,607,128
Deductions			
Benefit Payments	3,628,582	4,328,025	3,656,816
Administrative Expenses	29,823	35,486	39,080
Total deductions to plan net position	3,658,405	4,363,511	3,695,896
Change in net position	(8,845,372)	(8,447,797)	11,911,232

Table 7f

Changes in Net Position – Sick Leave Insurance Reserve Fund – School (last 10 fiscal years)

	2008	2009	2010
Additions:			
Employer Contributions	13,150,921	13,669,429	5,790,947
Net appreciation (depreciation) ¹	(17,999,083)	(16,505,489)	9,814,139
Other Income	17,345	6,054	2,042
Total additions to plan net position	(4,830,817)	(2,830,006)	15,607,128
Deductions			
Benefit Payments	9,238,739	10,011,758	3,656,816
Administrative Expenses	49,167	58,714	39,080
Total deductions to plan net position	9,287,906	10,070,472	3,695,896
Change in net position	(14,118,723)	(12,900,478)	11,911,232

¹Reported net of investment expense.



2011	2012	2013	2014	2015	2016	2017
5,675,940	5,793,204	6,049,837	6,088,489	6,347,903	6,804,354	7,136,693
19,114,477	2,298,334	15,142,268	23,097,449	5,722,685	3,356,390	21,515,574
2,656	3,690	1,290	1,079	600	889	30
24,793,073	8,095,228	21,193,395	29,187,017	12,071,188	10,161,633	28,652,297
3,765,826	3,463,901	4,049,618	4,366,900	4,510,989	4,980,235	5,010,974
39,148	39,346	39,876	40,181	40,375	40,752	41,148
3,804,974	3,503,247	4,089,494	4,407,081	4,551,364	5,020,987	5,052,122
20,988,099	4,591,981	17,103,901	24,779,936	7,519,824	5,140,646	23,600,175

2011	2012	2013	2014	2015	2016	2017
13,307,372	12,866,373	13,380,821	13,264,646	13,521,617	13,978,967	14,763,323
31,830,496	3,796,750	24,479,545	36,880,546	9,043,823	3,919,755	32,991,024
2,064	740	724	327	164	360	2,187
45,139,932	16,663,863	37,861,090	50,145,519	22,565,604	17,899,082	47,756,534
11,502,027	12,846,104	12,638,080	13,006,742	13,342,020	13,458,676	13,155,040
65,192	64,994	64,464	64,159	63,965	63,588	63,192
11,567,219	12,911,098	12,702,544	13,070,901	13,405,985	13,522,264	13,218,232
33,572,713	3,752,765	25,158,546	37,074,618	9,159,619	4,376,818	34,538,302



Table 7g Changes in Net Position – JRF

	2015	2016	2017
Additions:			
Employee Contributions	629,077	623,754	630,392
Employer Contributions	3,595,417	3,370,587	3,946,599
Investment Income ¹	1,523,041	1.505.550	1,540,236
Net appreciation (depreciation)	526,854	(413,420)	7,612,667
Other Income	2,063	2,571	4,946
Total additions to plan net position	6,276,452	5,089,042	13,734,840
Deductions			
Benefit Payments	5,577,389	5,974,937	6,173,415
Administrative Expenses	95,733	133,096	74,035
Total deductions to plan net position	5,673,122	6,108,033	6,247,450
Special Item – Transfer in of Judges' Retirement Fund	75,864,30		
Change in net position	76,467,63	(1,018,991)	7,487,390

¹Reported net of investment expense.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



Table 8

Principal Participating Employers

2017

			Percentage of
	Covered		Total
Participating Employers	Employees	Rank	System
State of Idaho	17,361	1	25%
West Ada School District (formerly Meridian School District)	3,537	2	5%
Boise Ind. School District	3,075	3	4%
Ada County	1,687	4	2%
City of Boise	1,378	5	2%
Pocatello School District	1,344	6	2%
Nampa School District	1,339	7	2%
Bonneville School District	1,102	8	2%
Coeur d'Alene School District	1,047	9	2%
Twin Falls School District	984	10	1%
All other	37,219	-	53%
Total (783 employers)	70,073	-	100%

2008

2000	Covered		Percentage of Total
Participating Employers	Employees	Rank	System
State of Idaho	18,260	1	28%
Meridian School District	3,204	2	5%
Boise Ind School District	3,038	3	5%
Ada County	1,494	4	2%
Nampa School District	1,445	5	2%
City of Boise	1,276	6	2%
Pocatello School District	1,147	7	2%
Idaho Falls School District	1,035	8	1%
Coeur d'Alene School District	1,029	9	1%
Bonneville School District	877	10	1%
All other	33,960	<u>.</u>	51%
Total (611 employers)	66,765	<u>.</u>	100%



Table 9Public Entities Participating in PERSIState AgenciesIdah

Accountancy Board Administration Dept Agriculture Dept Attorney General Barley Commission Bd of Veterinary Med **Bean Commission Beef Council** Board of Education Boise State Univ **Brand Inspector** Comm For The Blind Comm On Hispanic Affairs Commerce Dept Commission On Aging Commission On The Arts Commission for Pardons and Paroles Controller's Office **Correction Dept Correctional Indust** Dairy Council **Dentistry Board** Dept of Environmental Qltv Div of Bldg Safety Div of Financial Mgt **Div of Veteran Services Division of Human** Resources E Idaho Tech College Endowment Fund Investment Bd **Finance Dept** Fish & Game Dept Forest Products Comm Governor`s Office Health & Welfare Dept Health District 1 Health District 2 Health District 3 Health District 4 Health District 5 Health District 6 Health District 7 **Historical Society** House of Reps Id Public Television Idaho Career & Technical Education

Idaho Grape Growers & Wine Producers Commission Idaho Oilseed Commission Idaho Rangeland **Resources Commission** Idaho State Police Idaho State Univ Independent Living Council Industrial Commission Insurance Dept Insurance Fund **Judicial Branch Juvenile Corrections** Labor Dept Lands Dept Lava Hot Springs Foundation Legislative Services Lewis-Clark State College Library Lieutenant Governor Liquor Dispensary Lotterv Medicine Board Military Division Multi-Agency Payroll Nursing Board Occupational License Bur Office of Drug Policy Office of Energy Resources Office of Performance **Evaluations** Office of Species Conservation **Outfitters & Guides** Parks & Recreation Pharmacy Board Potato Commission Prof Eng & Surveyors Public Defense Commission Public Employee Retirement System **Public Util Comm Racing Commission** Real Estate Comm STEM Action Center Secretary of State Senate

Soil Conservation Comm State Appellate Public Defender State Bar Supt Public Inst Tax Appeals Board Tax Commission Transportation Dept Treasurer University of Idaho Vocational Rehab Water Resources Dept Wheat Commission

Counties

Ada County Adams County **Bannock County** Bear Lake County **Benewah Countv Bingham County Blaine County Boise County** Bonner County **Bonneville County Boundary County Butte County** Camas County Canyon County Caribou County Cassia County **Clark County Clearwater County** Custer County Elmore County Franklin County Fremont County Gem County Gooding County Idaho County Jefferson County Jerome County Kootenai County Latah County Lemhi County Lewis County Lincoln County Madison County Minidoka County Nez Perce County **Oneida County Owyhee County** Pavette County

Power County Shoshone County Teton County Twin Falls County Valley County Washington County

Cities

City of Aberdeen City of Albion City of Amer Falls City of Ammon City of Arco City of Ashton City of Athol City of Bancroft City of Basalt City of Bellevue City of Blackfoot City of Bliss City of Bloomington Citv of Boise City of Bonners Ferry City of Bovill City of Buhl City of Burley City of Caldwell City of Cambridge Citv of Cascade City of Castleford City of Challis City of Chubbuck City of Clark Fork City of Coeur d'Alene City of Cottonwood City of Council City of Craigmont City of Culdesac City of Dalton Gardens City of Deary City of Declo City of Donnelly City of Dover City of Downey City of Driggs City of Dubois City of Eagle City of Emmett City of Fairfield City of Filer City of Firth City of Franklin City of Fruitland City of Garden City City of Genesee City of Georgetown

🔷 Statistical Section ᡐ

City of Glenns Ferry City of Gooding City of Grace City of Grangeville City of Greenleaf City of Hagerman City of Hailey City of Hayden City of Hayden Lake City of Hazelton City of Heyburn City of Homedale City of Hope City of Horseshoe Bend City of Idaho City City of Idaho Falls City of Inkom City of Iona City of Island Park City of Jerome City of Juliaetta City of Kamiah City of Kellogg City of Kendrick City of Ketchum City of Kimberly City of Kooskia City of Kootenai City of Kuna City of Lapwai City of Lava Hot Spr City of Lewiston City of Mackay City of Malad City of Malta City of Marsing City of McCall City of McCammon City of Melba City of Menan City of Meridian City of Middleton City of Montpelier City of Moscow **City of Movie Springs** City of Mtn Home City of Mullan City of Nampa City of New Meadows City of New Plymouth City of Newdale City of Nezperce Citv of Notus City of Oakley City of Oldtown City of Orofino

City of Osburn City of Paris City of Parker City of Parma City of Paul City of Payette **City of Pinehurst** City of Plummer City of Pocatello City of Ponderay City of Post Falls City of Potlatch City of Preston City of Priest River City of Rathdrum City of Rexburg City of Richfield City of Rigby City of Riggins City of Ririe City of Roberts City of Rupert City of Salmon City of Sandpoint City of Shelley City of Shoshone City of Smelterville City of Soda Springs City of Spirit Lake City of St Anthony City of St Charles City of St Maries City of Stanley City of Sugar City City of Sun Valley City of Tensed City of Teton City of Tetonia City of Troy City of Twin Falls City of Ucon City of Victor City of Wallace City of Weippe City of Weiser City of Wendell City of Weston City of Wilder City of Winchester City of Worley

Water and Sewer Districts

A&B Irrigation District Aberdeen-Springfield Canal Co Ada Co Drainage Dist #2

Amer Falls Res Dist #1 Amer Falls Res Dist #2 Avondale Irr Dist **Big Lost River Irr Big Wood Canal Co Black Canyon Irrigation** District Boise Proj Bd Contrl Boise-Kuna Irr Dist **Burley Irr Dist Cabinet Mountains Water** District Caldwell Irrigation Lateral District Canyon Hill Irr Dist Cataldo Water Dist Central Shoshone Co Water Dist **Dalton Gardens Irrigation** District E Greenacres Irr Dist East Shoshone Co Wtr Dis Falls Irrigation District Fish Haven Area Recreational Sewer Dist Fremont-Madison Irr Grandview Mutual Canal Co Granite Reeder Water & Sewer Havden Lake **Recreational Water &** Sewer District Hayden Lk Irrigation Dist Idaho Irr District Kalispel Bay Water & Sewer Dist King Hill Irr Dist Kingston Water Dist Kootenai-Ponderay Sewer Dist Lake Irr District Lewiston Orchard Irr Dist Little Wood Riv Irr Dist Milner Low Lift Irr District Minidoka Irr Dist Mtn Home Irr Dist Nampa-Meridian Irr New Sweden Irr Dist New York Irr Dist No Kootenai Water District North Snake Ground Water District

🝑 Statistical Section ᡐ Orofino Cr-Whiskey Cr Water & Sewer District Outlet Bay Water & Sewer Dist Owyhee Proj S Board of Control Payette Lakes Water & Sewer Dist Peoples Canal and Irrigation Co **Pinehurst Water Dist** Pioneer Irr Dist Progressive Irr Dis **Riverside Indep Water** Sew **Riverside Irr Dist Riverside Irr Dist LTD** Roseberry Irr Dist **Ross Point Water Dis** Settlers Irr Dist Snake River Valley Irr Dist Southside Wtr & Swr Dist Star Sewer & Water District Sun Valley Water & Sewer Twin Falls Canal Co W Bonner Water & Sewer Dist Water District #1 Water District #11 Water District #31 Water District #32-C Water District #34 Water District #63 Water District 37 Water District 37N Water District 67 Weiser Irr Dist Wilder Irr District

Highway Districts

Ada County Hwy Dist Atlanta Hwy Dist Bliss Hwy Dist Buhl Hwy Dist Burley Hwy Dist Canyon Hwy Dist #4 Central Hwy Dist Clarkia Better Roads Hwy Dist Clearwater Hwy Dist Cottonwood Hwy Dist Deer Creek Highway District Dietrich Hwy Dist #5 Downey Swan Lake Hwy Dist East Side Hwy District **Evergreen Hwy Dist** Fenn Hwy Dist Ferdinand Hwy Dist Filer Highway District Gem Hwy Dist **Glenns Ferry Hwy Dist** Golden Gate Hwy Dist Gooding Hwy Dist Grangeville Hwy Dist Greencreek Hwy Dist Hagerman Hwy Dist Highway District #1 (Fruitland) Hillsdale Hwy District Homedale Hwy Dist Independent Hwy Dist Jerome Hwy District Kamiah Hwy Dist Keuterville Hwy Dist Kidder-Harris Hwy Dist Kimama Highway District Lakes Hwy District Lost River Highway District Minidoka Co Hwy Dist Mtn Home Hwy Dist N Latah Co Hwy Dist Nampa Hwy District North Hwy Dist Notus-Parma Hwy Dist **Oakley Highway District** Plummer-Gateway Hwy Dist Post Falls Hwy Dis Prairie Hwy Dist Bd Raft River Hwy Dist Richfield Hwy Dist #3 S Latah County Hwy Dist #2 Shoshone Hwy Dist #2 Twin Falls Hwy Dist Union Ind Hwy Dist Weiser Valley Hwy Dist Wendell Hwy Dist #6 West Point Hwy Dist White Bird Highway District Winona Hwy Dist Worley Hwy District

Junior Colleges and Public School Districts Aberdeen School Dist **Alturas International** Academv American Falls SD American Heritage **Charter School** Another Choice Virtual Charter School Anser of Idaho Inc Arbon School Dist Avery School Dist **Basin School District** Bear Lake School Dist **Bingham Academy** Blackfoot Charter Comm Learning Ctr Blackfoot School Dis Blaine Co School Dist Bliss School Dist Boise Ind School Dis **Bonneville School District** Boundary County SD Bruneau-Grandview SD **Buhl School District** Butte Co School Dist Caldwell School Dist Camas Co School Dist Cambridge School Dist Canyon-Owyhee SD (COSSA) Cascade School Dist Cassia Co SD Castleford SD Challis Jt SD **Chief Tahgee Elementary** Academv Clark Co School Dist Clearwater/Orofino Jt SD Coeur d'Alene Charter Academy Coeur d'Alene SD **Compass Public Charter** School Cottonwood SD Council Valley Sd Culdesac Jt SD **Dietrich School Dist Emmett School Dist** Falconridge Charter School Filer School Dist Firth School Dist Fruitland School Dist

Garden Valley SD

Gem Prep: Pocatello Inc. Genesee School Dist **Glenns Ferry Jt SD** Gooding Jt SD Grace School Dist Hagerman Jt SD Hansen School Dist Heritage Academy Heritage Community **Charter School** Highland Jt SD Homedale School Dist Horseshoe Bend SD I Succeed Virtual High School Id High Sch Activity Assn Idaho Arts Charter School Idaho College and Career Readiness Academy Idaho Distance Education Academv Idaho Falls SD Idaho Science & **Technology Charter** School Idaho Virtual Academy Idaho Virtual Education Partners. Inc. **Inspire Virtual Charter** School Jerome School Dist Kamiah Jt SD Kellogg School District Kendrick School Dist **Kimberly School Dist** Kootenai Bridge Academy Kootenai School District Kootenai Technical Education Campus Kuna Jt SD Lake Pend Oreille Sch Dist Lakeland School Dist Lapwai School Dist Legacy Public Charter School Lewiston Independ SD Liberty Charter School Inc Mackay School Dist Madison School Dist Marsh Valley Jt SD Marsing School Dist McCall Donnelly SD Meadows Valley SD

💎 Statistical Section ᡐ

Gem Prep: Nampa, Inc.

Meridian Charter High School Inc Meridian Medical Arts Charter School Meridian School Dist Middleton SD Midvale School Dist Minidoka County Sd Monticello Montessori Charter School Moscow Charter School Moscow School Dist Mountain Home SD Mountain View School District Mullan School Dist Murtaugh School Dist Nampa School Dist New Plymouth SD NezPerce Jt SD North Gem SD North Star Charter School North Valley Academy Charter School Notus School Dist **Oneida School Dist Palouse Prairie Education** Organization Parma School Dist Pathways in Education -Nampa, Inc. Payette School Dist Pleasant Valley SD Plummer-Worley Jt SD Pocatello Community Charter Sch Pocatello School Dist Post Falls Sch Dist Potlatch School Dist Prairie School Dist **Preston School Dist Richard McKenna Charter** Hi Sch **Richfield School Dist Rigby School Dist Ririe School Dist Rockland School Dist Rolling Hills Charter** School STEM Charter Academy Sage International School of Boise Salmon River Jt School Dist Salmon School Dist Sandpoint Charter School

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Melba School Dist

Shelley Jt SD Shoshone School Dist Snake River SD Soda Springs SD South Lemhi SD St Anthony SD(FremontCoSD) St Maries School Dist Sugar-Salem SD Swan Valley SD Syringa Mountain School **Taylors Crossing Public Charter School Teton School Dist** The Academy, Inc. The Village Charter School **Thomas Jefferson** Charter School Three Creek SD Troy School District Twin Falls SD Upper Carmen Charter Sch Valley School Dist Vallivue School Dist Victory Charter School Vision Charter School Wallace School Dist Weiser School Dist Wendell School Dist West Bonner Co Sch Dist West Jefferson SD West Side SD White Pine Charter School Whitepine Jt Sch Dist Wilder School Dist Xavier Charter School

Other

Aberdeen District Library Ada Co Free Library Am Falls Housing Agn Amer Falls Free Libr Assoc of Id Cities Bannock Planning Organization Bear Lake Co Library Bear Lake County Fire District Bear Lake Regional Comm Bingham Co Senior Citizen Ctr Blackfoot Fire Dept

Statistical Section

Blaine Co Rec Dist Boise City/Ada Co Housing Authority **Boise Fire Dept** Boundary Co Free Lib **Buhl Fire Dist Buhl Housing Authority Burley Fire Dept Burley Library** Caldwell Fire Dept Caldwell Housing Authority Canyon Co Mosquito Abatement District Canyon County Ambulance District Capital City Dev Corp Caribou Soil **Conservation District** Cascade Medical Ctr Cascade Rural Fire & EMS **Central Fire District** Central Orchards Sewer Dist Clearwater-Potlatch **Timber Prot Assn** Coeur d'Alene Fire Dept College of So Idaho College of Western Idaho Comm Planning Assn-SW ID Consolidated Free Library District **Coolin Sewer Dist** Cottonwood Rural FD **Council Valley Free** Library District **Deary Rural Fire District Donnelly Rural FPD** Dry Creek Cemetery Dist **Eagle Fire Protection** District **Eagle Sewer District** East Bonner County Library Dist Eastern Id Fair Dist Eastern Idaho Reg Waste Water Authority Edwards Mosquito Abatement District Ellisport Bay Sewer District Foster Grandparents of SE Idaho Franklin Co Lib Dist

Franklin County Fire Dist Fremont County Dist Lib Garden Valley Fire **Protection District** Gem Co Mosquito Abatement Dist Gem Co Recreation Gem County Fire Prot Dist 1 Gooding Cem Maint Dis **Grangeville Cemetery** Maint Dist Greater Middleton Parks & Rec District **Greater Swan Valley Fire** Prot Dist Hagerman Cemetery Dist Hagerman Fire Prot Dist Hauser Lake Fire Protection District Hayden Area Regional Sewer Bd Hillcrest Cemetery Maintenance District Homedale Rural Fire Prot Dist Housg Auth Pocatello Id Assn of Counties Id Assn of School Administrators **ID Bureau of Education** Svc for the Deaf and Blind Id Co Risk Mgmt Prog Id Crop Improvement Assoc Id Falls Fire Dept Id Public Emp Assn Idaho Digital Learning Academy Idaho Education Assn Idaho Heritage Trust Idaho School Boards Assn Idaho School District Council Iona Bonneville Sewer District Jeff Free Library Di Jerome Fire Dept Jerome Recreation District Ketchum Fire Dept Kingston-Cataldo Sewer District

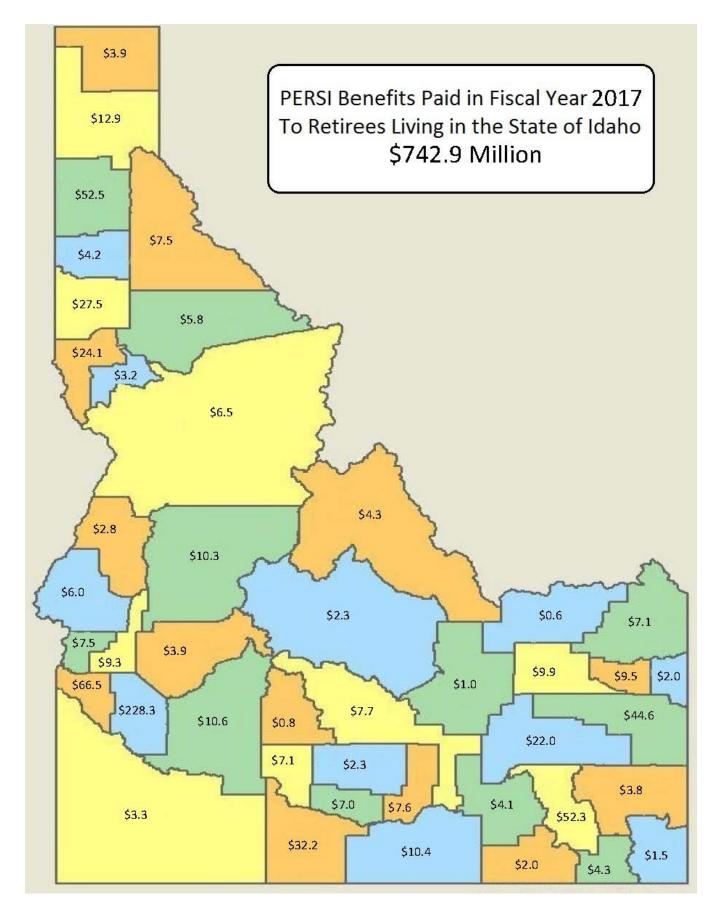
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Kootenai Co Emer MedSvc Kootenai Co Fire & Rescue F Kootenai Co Fire & Rescue P Kootenai Metropolitan Planning Organization Kuna Cemetery Maintenance District Kuna Fire District Kuna Rural Fire District Latah County Lib Dist Lemhi Co Fire Protection District Lewiston Fire Dept Lewiston-Nez Perce County Airport Authority Lincoln Co Cemetery Dist Lincoln County **Emergency Services** Lincoln County Housing Authority Local Hwy Tech Assistance Cncl Madison Co Library Dist M-A-R Cemetery Dist Marsing-Homedale **Cemetery District** McCall Fire Prot Dist Meadows Valley Rural Fire District Meadows Vly Pub Lib Dis Meridian Cemetery Maint Dist Meridian Library Dist Metro Community Services. Inc. Mica Kidd Island Fire Prot Dist Minidoka County Fire **Protection District** Minidoka Soil & Water Conservation District Moscow Cemetery Dist Moscow Fire Dept N Ada Co Fire/Rescue Dist N Bingham Co Library Dist N Fremont Cemetery Dist Nampa Fire Dept Nampa Housing Auth Nez Perce Co Fair Board No Lakes Fire Prot Dist North Idaho College North Idaho Fair

∾ Statistical Section ᡐ Northside Fire District Oneida Co Library **Orofino Cemetery District** Paradise Valley Fire District Paul Cemetery District Payette County **Recreation District** Payette Fire Dept **Plummer Gateway Fire** Prot Dist Pocatello Fire Dept Port of Lewiston Portneuf Library Dist Post Falls Urban Renewal Agency Prairie-River Lib Dist Priest Lake Public Library **Rexburg Cemetery Dis Rexburg-Madison Fire Rock Creek Fire Protection District** S Bannock Lib Dist S Id Solid Waste Dist S Id Timber Prot Assn Sagle Fire District Salmon Library District Sandpoint Fire Dept Schweitzer Fire District Selkirks-Pend Oreille Transit Authority Shelley Cemetery Dist Shoshone City & Rural Fire Protection District Shoshone Co Fd #1 Shoshone Co Fd #2 Shoshone Co FD#2 So Cent Region E911 South Boundary Fire Protection District South Fork Coeur d Alene **River Sewer District** South Fremont Fire Protection District Southern Valley County Rec Dist Spirit Lk Fire Prot Dist St Maries Fire Prot Dist Stanley Community Library Dist Star Joint Fpd **Targhee Regional Public** Transit Authority Teton Co Fire Pr Dis **Timberlake Fire Protection District**

Twin Falls Co Pest Abatement District Twin Falls County Fair Twin Falls Fire Dept Twin Falls Housing Auth Valley of Tetons Library Bd Valley Recreation District of Hazelton Valley Regional Transit Valley Soil & Water **Conservation District** W Boise Sewer Dist Weiser Ambulance District Weiser Area Rural Fire District Weiser Memorial Hospital Wendell Rural FD West Bonner Library District West End Cemetery Dist West End Fire Prot Dist Westside Fire Dist Whitney FPD Whitney Fpd Wilder Cemetery Dist Wilder Housing Auth Wilder Rural Fire Protection District Wood River Fire & Rescue Worley Fire Prot Dis South Central Region E911 South Fremont Fire Protect. Dist. So. Idaho Timber Protection Assn. Spirit Lake Fire Protect. Dist. Star Joint Fire Protect. Dist. Teton County Fire Protect. Dist. Timberlake Fire Protect. Dist. Twin Falls Fire Dept. Weiser Ambulance Dist. Weiser Area Rural Fire Dist. Wendell Rural Fire Dist. West End Fire Prot. Dist. Westside Fire Dist. Whitney Fire Protect. Dist. Wilder Rural Fire Protect. Dist. Wood River Fire & Rescue Worley Fire Protect. Dist







Several publications and reports are distributed to members and employers to keep them informed about the status of their membership accounts and PERSI in general, including:

- Comprehensive Annual Financial Report
- Member Handbook
- Annual Membership Account Statement
- Remittance Advice
- Newsletters
- Brochures
- Distributions From Pensions, Annuities, Retirement or Profit-Sharing Plans, IRAs, Insurance Contracts, etc. (Form 1099R)
- Pre-Retirement Education Materials
- Reports to Legislature
- Memorandums to Employers

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Office Location: 607 North 8th Street Boise, ID 83702 Mailing Address: P.O. Box 83720 Boise, ID 83720-0078

Coeur d'Alene

Office Location & Mailing Address: 2005 Ironwood Parkway Suite 226 Coeur d'Alene, ID 83814

Pocatello

Office Location: 1246 Yellowstone Avenue Suite A5 Pocatello, ID 83201 Mailing Address: P.O. Box 1058 Pocatello, ID 83204

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