Washington State Department of Retirement Systems

# Comprehensive Annual Financial Report

Funds of the State of Washington for the Year Ended June 30, 2020



# Comprehensive Annual Financial Report

Funds of the State of Washington for the Fiscal Year Ended June 30, 2020

Prepared by:

Washington State Department of Retirement Systems

PO Box 48380

Olympia, WA 98504-8380

www.drs.wa.gov



### Table of Contents

### INTRODUCTORY SECTION

- 3 Director's Message
- 4 Washington State Department of Retirement Systems' Organization
- 5 Pension System Roles and Responsibilities
- 8 Letter of Transmittal
- 12 Professional Award
- 13 Washington State Legislative Actions

#### FINANCIAL SECTION

- 17 Independent Auditors' Report
- 19 Management's Discussion and Analysis

### **Basic Financial Statements**

(Notes to the financial statements are an integral part of the basic financial statements)

- 24 Statement of Fiduciary Net Position Pension Trust Funds by Plan
- 28 Statement of Changes in Fiduciary Net Position Pension Trust Funds by Plan

#### Notes to the Financial Statements

- 32 Note 1: Summary of Significant Accounting Policies and Plan Asset Matters
- 36 Note 2: General Description of the Retirement Systems
- 47 Note 3: Contributions
- 51 Note 4: Net Pension Liability
- 54 Note 5: Investments

### **Required Supplementary Information**

- 71 Schedules of Changes in Net Pension Liability
- 82 Schedules of Net Pension Liability
- 88 Schedules of Employer Contributions
- 96 Schedule of Investment Returns
- 97 Notes to Pension Required Supplementary Information

### Supporting Schedules

- 98 Schedule of Administrative Expenses
- 99 Schedule of Investment Expenses Pension Trust Funds
- 100 Schedule of Payments to Consultants

### INVESTMENT SECTION

- 103 Report on Investment Activity
- 108 Summary of Investment Policies
- 110 Investment Professionals
- 112 Schedule of Investment Management Fees and Commissions
- 113 Schedule of Broker Volume and Equity Commissions Paid
- 119 Summary of Investments Owned Pension Trust Funds

### Table of Contents (cont.)

### **ACTUARIAL SECTION**

- 129 State Actuary's Certification Letter
- 133 Summary of Plan Provisions
- 135 Summary of Actuarial Assumptions and Methods

### Additional Actuarial Schedules

- 144 Schedules of Active Member Valuation Data
- 149 Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- 154 Solvency Tests
- 159 Analysis of Financial Experience
- 162 Schedules of Funding Progress
- 166 Funded Status and Funding Progress
- 168 Additional Information for the Defined Benefit Pension Plans

### STATISTICAL SECTION

- 173 Statistical Section Table of Contents
- 174 Schedules of Changes in Fiduciary Net Position
- 190 Distribution of Membership by System and Plan
- 192 Principal Participating Employers by Plan
- 198 Number of Participating Employers
- 202 Employers Covered by DRS-Administered Retirement Systems
- 218 Schedules of Benefit Recipients by Type of Benefit
- 225 Schedules of Average Benefit Payments to Service Retirees
- 238 Schedules of Benefit Expenses and Refunds by Type

### **Deferred Compensation Program**

- 246 Deferred Compensation Program Status Report
- 250 DCP Performance
- 251 DCP Net Asset Growth and Average Participant Balance by Age

This page is intentionally blank.

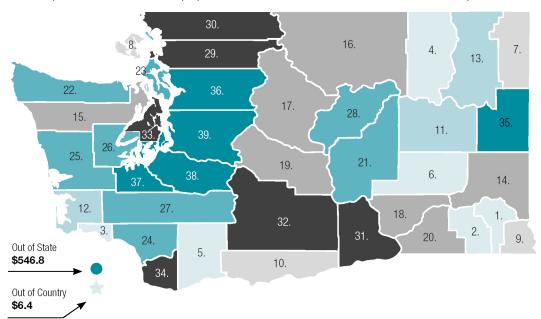
RETIREMENT SYSTEMS

PLANS

The Washington State Department of Retirement Systems (DRS) provides expertise, tools and services to active, inactive and retired members. DRS serves a diverse population of state and local government employees, including fire fighters, police officers and teachers.

### Benefit Payments by County

This map illustrates all benefit payments made to retirees and survivors in fiscal year 2020.





#### **Dollars in millions**

\$0-\$10	
<ol> <li>Garfield</li> <li>Columbia</li> <li>Wahkiakum</li> <li>Ferry</li> <li>Skamania</li> <li>Adams</li> </ol>	\$1.9 \$3.4 \$4.0 \$5.6 \$6.2 \$8.5
\$10.1-\$15	

\$1	0.	1	-\$1	5

<ol><li>Pend Orielle</li></ol>	\$10.4
8. San Juan	\$10.8
<ol><li>Asotin</li></ol>	\$12.0
<ol><li>Klickitat</li></ol>	\$14.3

### \$15.1-\$25

11. Lincoln	\$19.3
12. Pacific	\$23.3
13. Stevens	\$24.5

### \$25.1-\$50

14. Whitman	\$27.8
<ol><li>15. Jefferson</li></ol>	\$29.9
<ol><li>16. Okanogan</li></ol>	\$32.6
17. Chelan	\$34.6
18. Franklin	\$35.0
19. Kittitas	\$43.9
20 Walla Walla	\$45.8

### \$50.1-\$100

21. Grant	\$58.7
22. Clallam	\$62.3
23. Island	\$65.5
24. Cowlitz	\$66.0
25. Grays Harbor	\$66.1
26. Mason	\$66.7
27. Lewis	\$68.5
28. Douglas	\$78.2

### \$100.1-\$300

29. Skagit	\$102.0
30. Whatcom	\$119.9
31. Benton	\$125.4
32. Yakima	\$142.6
33. Kitsap	\$146.7
34. Clark	\$183.5

#### \$300.1+

35. Spokane	\$307.2
36. Snohomish	\$427.1
37. Thurston	\$444.1
38. Pierce	\$459.5
39. King	\$919.6

### Introductory Section

### Director's Message

I am pleased to present the Washington State Department of Retirement Systems' (DRS) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2020. The CAFR reflects that our commitment to accurate and transparent financial reporting is as strong as our commitment to excellence in customer service.

The last several months have been challenging. Our state had the first identified case of COVID-19 in the United States, and DRS was aware early of the need to plan, execute and constantly adjust operations due to the pandemic. Team members were already equipped with mobile computing devices from prior mitigation planning related to the on-going threat of a significant earthquake. This allowed us the ability to continue to provide uninterrupted service when team members transitioned from working onsite at the DRS building in Tumwater, to working from home.

While we are working separately and mostly in our homes, the culture of DRS continues to be an environment of diversity and inclusion, cultural competency, giving, continual learning, innovation and idea sharing. Our culture and commitment to service help our team members support each other as they transition to a very different type of work environment, and they will help in the coming months as we continue to evolve to a new normal.

In addition to continuing to provide crucial services, DRS has continued work on agency initiatives and projects. The renovation of DRS' building that began last year has been completed. The building is now more efficient, flexible and secure, and it will provide a greatly improved experience for both our customers and our team members. We have also recently completed an almost two-year process to successfully transition customers' defined contribution and deferred compensation accounts to a new record keeping partner. The change allows customers with these accounts to access additional retirement planning, perform more on-line account transactions and receive enhanced on-line support. These are just



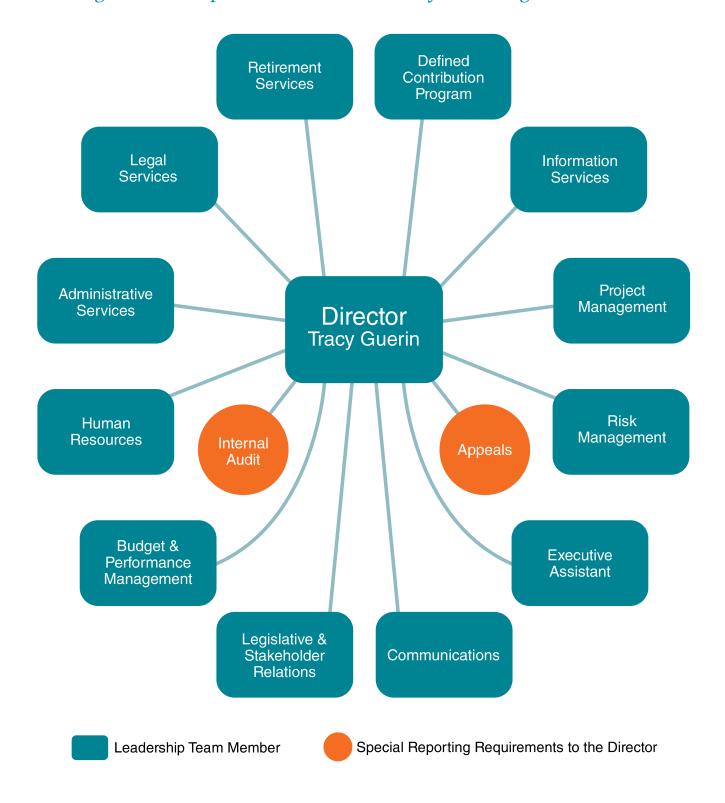
two of the projects that have been completed on schedule, even during this time of constant transition.

As we look to the coming year at DRS, I'd like again to thank our team members, partners, policymakers, stakeholders and others who collaborate on one of the best-run and well-funded public pension systems in America. Most importantly, thank you to our retirement system members and retirees. To those of you all around Washington who work to support the residents of our state, we appreciate all you do, and please stay safe!

Sincerely,

Tracy Guerin October 23, 2020

### Washington State Department of Retirement Systems' Organization



### Pension System Roles and Responsibilities

Pension System Roles and Responsibilities — Page 1 of 3			
Organization and Contact Information	Responsibility	Membership/Executive	
Department of Retirement Systems PO Box 48380 Olympia, WA 98504-8380 Phone: 360.664.7000 or 800.547.6657 Website: www.drs.wa.gov	Collects and accounts for employer and employee contributions, maintains retirement records, pays benefits, communicates pension information, provides investment education, and administers the Deferred Compensation Program	Tracy Guerin — Director (The governor appoints the director of DRS.)	
Washington State Investment Board	Invests and accounts for pension assets	The board consists of 10 voting and five nonvoting members.	
PO Box 40916 Olympia, WA 98504-0916		Voting members  Duane Davidson — State Treasurer  Rep. Timm Ormsby	
Phone: 360.956.4600 Website: www.sib.wa.gov		Sen. Mark Mullet Tracy Guerin — Director, Department of Retirement Systems Joel Sacks (vice chair) — Director, Department of Labor and Industries Yona Makowski — Retired members Greg Markley — LEOFF BJ Colvin— SERS Sara KetelsenTRS Judy Kuschel (chair) — PERS	
		Nonvoting members — investment professionals William A. Longbrake Ada Healey George Zinn David Nierenberg Mary Pugh	
Office of Financial Management PO Box 43113	Advises the governor on pension and funding policies and issues	David Schumacher — Director	
Olympia, WA 98504-3113	policies and issues	(The governor appoints the director of OFM.)	
Phone: 360.902.0555 Website: www.ofm.wa.gov			
Office of the State Actuary PO Box 40914	Acts as an adviser and consultant to the	Matt Smith — State Actuary	
Olympia, WA 98504-0914	Legislature and to the director of DRS; performs actuarial studies and reports on retirement bills; and creates factors used to	(The State Actuary Appointment Committee appoints the State Actuary.)	
Phone: 360.786.6140 Website: osa.leg.wa.gov	compute benefit payment adjustments for early retirement, Cost-of-Living Adjustments and long-term survivor benefits		

### Pension System Roles and Responsibilities (cont.)

### Pension System Roles and Responsibilities — Page 2 of 3

Organization and Contact Information	Responsibility	Membership/Executive
Law Enforcement Officers' and Fire Fighters' Plan 2 Retirement Board PO Box 40918 Olympia, WA 98504-0918	Policy-making board that studies pension issues, acts as fiduciary of LEOFF Plan 2, sets contribution rates and recommends pension policy to the Legislature for LEOFF Plan 2 members	Fire fighter representatives  Dennis Lawson (chair)  AJ Johnson  Mark Johnston  Law enforcement representatives
Phone: 360.586.2320 Website: www.leoff.wa.gov		Rep. Jeff Holy (retired) Tarina Rose-Watson Jason Granneman
		Employer representatives Ade' Ariwoola Wolf Opitz Pat McElligott
		<b>Legislators</b> Rep. Steve Bergquist Sen. Ann Rivers
Select Committee on Pension Policy Contact through the Office of the State Actuary	Studies pension issues, develops pension policies, and recommends pension legislation	Legislators Rep. Timm Ormsby Rep. Joe Fitzgibbon (chair) Rep. Drew Stokesbary Rep. Mike Volz Sen. John Braun Sen. Steve Conway Sen. Steve Hobbs Sen. Mark Schoesler
		Agency directors  David Schumacher — Office of Financial Management  Tracy Guerin — Department of Retirement Systems
		Retiree representatives Bev Hermanson — PERS Mark Soper — WSPRS
		Active member representatives Randy Davis — TRS Leanne Kunze — PERS J. Pat Thompson — PERS Anthony Murietta — PERS
		Employer representatives John Boesenberg — PERS/Higher Education Annette Creekpaum — PERS Beverly Freeman — PERS Byron Olson — PERS

### Pension System Roles and Responsibilities (cont.)

Organization and		
Contact Information	Responsibility	Membership/Executive
Contact Information  DRS Advisory Committee  Contact through DRS	Responsibility  Advises the director of DRS on pension issues	Membership/Executive  PERS  Bev Hermanson — Retired Andrea Lee — Active  SERS  Jacques Meddles — Active Cheri Ingersoll — Retired  LEOFF  Scott Bieber — Active Richard Warbrouck — Retired  TRS  Nancy Baldwin — Retired (chair) Darrell Heisler — Active  PSERS  William Copland — Active  WSPRS
		Jason Ashley — Active Rick Jensen — Retired (vice chair)  JRS Judge Julie Spector — Active  DCP David Nowotny — Participant  Defined contribution plan administration Deirdre Walker — Weyerhaeuser
<b>Pension Funding Council</b> Contact through DRS	Adopts economic assumptions for pension funding and member and employer contribution rates for LEOFF Plan 1, PERS, PSERS, SERS, TRS and WSPRS	Legislators  Rep. Drew Stokesbary — Ranking minority member, House Appropriations Committee Rep. Timm Ormsby — Chair, House Appropriations Committee Sen. Christine Rolfes — Chair, Senate Ways and Means Committee Sen. John Braun — Ranking member, Senate Ways and Means Committee  Agency directors David Schumacher (chair) — Office of Financial Management Tracy Guerin — Department of Retirement Systems
Legislative Fiscal Committees  House Appropriations Committee P0 Box 40600 Olympia, WA 98504-0600  Senate Ways and Means Committee P0 Box 40482 Olympia, WA 98504-0482  Phone: 360.786.7155 or 800.562.6000 Website: www.leg.wa.gov	Reviews and reports on retirement bills to the full Legislature	The legislative fiscal committees are the House Appropriations Committee and the Senate Ways and Means Committee.



## DEPARTMENT OF RETIREMENT SYSTEMS PO Box 48380 • Olympia, WA 98504-8380

October 23, 2020

## The Honorable Jay Inslee, Governor Members of the Sixty-Sixth Legislature Members of the Select Committee on Pension Policy

We are pleased to present our *Comprehensive Annual Financial Report* (CAFR) for the fiscal year ended June 30, 2020. This report is intended to provide complete and reliable information for use in making management decisions and evaluating responsible stewardship of the retirement systems' funds. This CAFR is also designed to comply with the requirements of RCW 41.50.050(4), RCW 41.50.055(6) and RCW 41.50.780(8).

Responsibility for the accuracy of the data and the fairness and completeness of its presentation, including all disclosures, rests with the management of the Department of Retirement Systems (DRS). To the best of our knowledge, the enclosed information is accurate in all material respects and provides a fair representation of the financial position and results of operations of the department.

CliftonLarsonAllen LLP, certified public accountants, issued an unmodified ("clean") opinion on DRS' financial statements for the year ended June 30, 2020. The independent auditors' report is located at the beginning of the Financial Section of this CAFR.

"Management's Discussion and Analysis" (MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

### Agency Description

DRS was established to administer pension plans for state employees, teachers, classified educational employees, law enforcement officers, fire fighters and other employees of participating political subdivisions. DRS was also given administrative responsibility for the state's Deferred Compensation Program.

As of June 30, 2020, 1,357 employers were covered, 153 of which were component units of the state. They participate in the eight statewide retirement systems DRS administers. Those retirement systems are composed of 15 defined benefit plans, three of which include a defined contribution component.

Additionally, DRS is responsible for the accounting, reporting and collection of contributions for the Judicial Retirement Account (JRA), a defined contribution pension plan the Washington State Administrative Office of the Courts administers.

### Departmental Initiatives

DRS' activities are highlighted in the "Director's Message" on page 3 of this Introductory Section.

Financial Reporting and Internal Control
This CAFR has been prepared to conform to the
principles of accounting and reporting established by
the Governmental Accounting Standards Board (GASB).
The basic financial statements are presented in
accordance with guidelines established by GASB
Statement No. 67, Financial Reporting for Pension
Plans, and other authoritative accounting criteria.
Specific accounting policies are detailed in the "Notes
to the Financial Statements."

### Letter of Transmittal (cont.)

DRS' management is responsible for establishing and maintaining an internal control structure designed to protect the assets of the retirement systems from loss, theft or misuse and to provide reliable accounting data to support the preparation of financial statements in conformity with generally accepted accounting principles.

The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits and the valuation of costs and benefits requires estimates and judgments.

### **Funding**

The intent of public pension funding in Washington is to provide a dependable and systematic process for financing the benefits the retirement systems provide. Measurement of funding status indicates how well that goal is being met.

There are two standard indicators of funding status: the funding ratio and the existence of an unfunded liability. Both measure the benefit obligations, or liabilities, of a plan against its assets. If the funding level is adequate, the ratio of total accumulated assets to total liabilities will be larger and more funds will be available for investment purposes. An adequate funding level also provides members with assurance on the security of their pension benefits.

The Judicial Retirement System (JRS) and Judges Retirement Fund (JRF) are funded on a pay-as-you-go basis. The solvency of these plans is guaranteed by the state, and as such, they are excluded from the actuarial valuations of the retirement systems.

The actuarial value of assets available as of the latest actuarial date, June 30, 2019, for the retirement systems, excluding JRS and JRF, is \$96.0 billion. The accrued liability is \$104.0 billion.

The accrued liability exceeds the net actuarial value of assets available for benefits by \$8,033 million. The ratio of assets to liabilities is 92%, compared to 89% last year. Current contribution rates remain in keeping with the goal of attaining a funding ratio of 100% by the amortization dates applicable to each plan, as required by Chapter 41.45 RCW.

Valuations are performed for DRS-administered retirement systems on an annual basis by the Office of the State Actuary. Additional information is included in the Actuarial Section of this CAFR.

#### Investments

In accordance with RCW 43.33A.110, the Washington State Investment Board (WSIB) manages the pension portfolio to maximize return at a prudent level of risk.

The WSIB establishes asset allocation targets that constitute the board's view of a prudent and well-reasoned approach to the management of the entrusted funds. At any given time, the asset mix might deviate from the target; deviations greater than predetermined acceptable levels require rebalancing. The goal of rebalancing is to meet the target allocation within consideration of the other remaining asset classes.

Most pension funds are invested in the Commingled Trust Fund (CTF), a diversified pool of investments. For fiscal year 2020, the CTF investments provided a 3.7% one year time-weighted rate of return. The annualized rate of return was 7.4% over the past three years and 7.6% over the past five years.

A listing of investment professionals who provide services to the WSIB is available on pages 110 and 111. The Schedule of Investment Management Fees and Commissions is available on pages 112 through 118. Additional investment information is included in the Investment Section of this CAFR.

### Letter of Transmittal (cont.)

### Professional Award

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to DRS for its CAFR for the fiscal year ended June 30, 2019.

This was the 25th consecutive year DRS earned this prestigious award. To receive a Certificate, a financial report must be easily readable, efficiently organized, and satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe our current CAFR continues to meet the Certificate of Achievement program's requirements, and we are submitting it to the GFOA to determine its eligibility.

### Acknowledgments

This report was made possible by team members of DRS. Additional information was provided by the Office of Financial Management, the Office of the State Actuary, the Office of the State Treasurer and the Washington State Investment Board. We appreciate their assistance.

Respectfully submitted,

Tracy Guerin

Director

October 23, 2020

### Letter of Transmittal (cont.)

### Significant Events in State Retirement History

### 1930s-1940s

PERS, TRS, WSPRS, JRF and many local police and fire fighters' retirement systems were created.

### 1970

Local police and fire fighters' retirement systems were consolidated into LEOFF.

### 1976

The Department of Retirement Systems was created to administer state retirement systems.

The Office of the State Actuary was created to provide pension cost estimates.

### 1977

LEOFF, PERS and TRS Plans 2 were created.

### 1981

The Washington State Investment Board was created to manage the investment of state trust funds.

### 1987

The Joint Committee on Pension Policy was established.

### 1995

TRS Plan 3 was created.

### 1996

The state Deferred Compensation Program (DCP) was transferred to DRS.

DRS assumed accounting and reporting responsibility for JRA.

### 1998

School Employees' Retirement System (SERS) Plans 2 and 3 were created.

The Pension Funding Council was created.

### 2000

PERS Plan 3 was created. It became effective March 1, 2002, for state and higher education employees and September 1, 2002, for local government employees.

### 2001

WSPRS Plan 2 was created.

### 2003

The LEOFF 2 Board was established.

The Joint Committee on Pension Policy became the Select Committee on Pension Policy.

### 2004

The Public Safety Employees' Retirement System (PSERS) was created.



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

### **Washington State Department** of Retirement Systems

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2019

Executive Director/CEO

Christopher P. Morrill

In 2020, the Washington Legislature passed 7 pension-related bills that Governor Jay Inslee signed into law. Those laws are summarized below. For a complete list of pension-related bills introduced in 2020, see the Legislation section of the DRS website.

### All Systems

#### **HB 2544**

### **Defining veteran**

This bill modifies the definition of veteran by eliminating a list of specific qualifying armed conflicts.

### SB 6417

### Allowing survivor option change after retirement

Once approved by the Internal Revenue Service (IRS), this bill provides retirees up to 90 days after receipt of their first retirement benefit payment to change their survivor option election prospectively.

### SB 6499

### Concerning confidentiality of health information

This bill exempts medical records provided to the Department of Retirement Systems from public inspection and copying.

### PERS/SERS/TRS/DCP

### SB 6383

### Concerning the asset mix of Retirement Strategy Funds

This bill allows the Washington State Investment Board to include their commingled funds in the asset mix for Retirement Strategy Fund options provided for Plan 3 and DCP investors.

### PERS/TRS

#### **HB 1390**

### Increasing PERS 1 and TRS 1 Benefits

This bill provides retirees of PERS 1 and TRS 1 who were receiving a benefit by July 1, 2019, an adjustment of three percent multiplied by their monthly benefit, not to exceed \$62.50, effective July 1, 2020.

### **PSERS**

### HB 2189

### Modifying membership eligibility

This bill modifies membership eligibility to include specified competency restoration workers at institutional and residential sites of the Department of Social and Health Services.

### **WSPRS**

### SB 6218

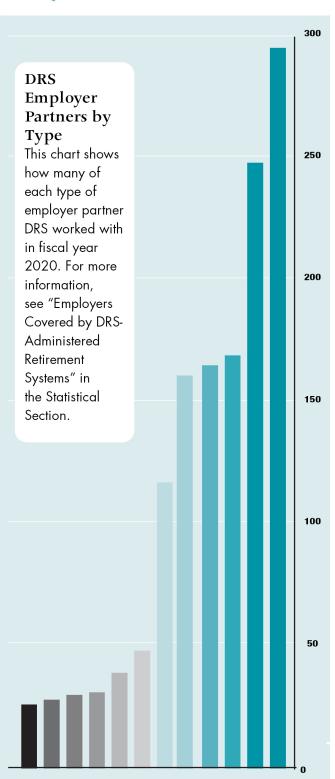
### **Defining salary**

This bill aligns the definition of salary for retirement reporting purposes for Plan 1 members commissioned from July 1, 2001 and after with other Plan 1 members in relation to lump sum payments for holiday pay and unused vacation leave.

This page is intentionally blank.

## 1,357 EMPLOYER PARTNERS

## \$3.2 EMPLOYER CONTRIBUTIONS



DRS partners with employers across the state to ensure retirement system members receive the benefits they've earned.

School Districts	295	
Cities and Towns	248	
Fire Protection Districts	169	
State	165	
Agencies	100	
State Commissions Technical and	29	
Community Colleges	30	
Universities	6	
Other Political Subdivisions	161	
Aging and Long-Term Care	e 4	
Air Quality Agencies	7	
Airporto and Airport Doord	2	

thor rounded caparilorene .	٠.
Aging and Long-Term Care	4
Air Quality Agencies	7
Airports and Airport Boards	3
Associations and Unions	2
Cemetery Districts	5
Charter Schools	9
Conservation Districts	17
Councils	12
Development	
Authorities/Districts	5
Educational Service Districts	9
Emergency Services and	
Communication Districts	20
Insurance Authorities	7
Mosquito Districts	5
Parks and Recreation	
Districts	11
Public Facility Districts	5
Public Health	16
Public Hospital Districts	8
Road Departments	2 7
Weed Control Districts	7
Other Government Entities	7

	Irrigation, Sewer and Water Districts	117
	Ports	48
	Counties	39
ı	Public Utility Districts	31
	Housing Authorities	30
	Libraries and Library Districts	28
	Transportation Authorities and Districts	26

### Financial Section

### Independent Auditors' Report



#### INDEPENDENT AUDITORS' REPORT

Ms. Tracy Guerin, Director Washington State Department of Retirement Systems Olympia, Washington

### Report on the Financial Statements

We have audited the accompanying financial statements (including the individual fund financial statements) of the Washington State Department of Retirement Systems (DRS), which comprise the statement of fiduciary net position as of June 30, 2020, 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.

### Auditors' Responsibility

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

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

#### **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, DRS' fiduciary net position as of June 30, 2020, and the changes in its fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America, Also, in our opinion, the financial statements present fairly in all material respects, the fiduciary net position of each of the individual funds of DRS as of June 30, 2020, and the changes in fiduciary net position of such funds for the year then ended, in accordance with accounting principles generally accepted in the United States of America.



### Independent Auditors' Report (cont.)

Ms. Tracy Guerin, Director Washington State Department of Retirement Systems

#### Other Matters

#### Report on Summarized Comparative Information

We have previously audited the DRS' 2019 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 18, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2019 is consistent, in all material respects, with the audited financial statements from which it has been derived.

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Schedules of Changes in Net Pension Liability, Net Pension Liability, Employer Contributions and Investment Returns and the related Notes to Pension Required Supplementary Information, as listed in the table of contents, 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 financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the DRS' basic financial statements. The Schedules of Administrative Expenses, Investment Expenses – Pension Trust Funds and Payments to Consultants (Supporting Schedules), and the Introductory, Investment, Actuarial, and Statistical Sections as listed in the table of contents, are presented for the purpose of additional analysis and are not a required part of the financial statements.

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

The Introductory, Investment, Actuarial, and Statistical Sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audit of the 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 23, 2020 on our consideration of the DRS' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the DRS' 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 DRS' internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

Baltimore, Maryland October 23, 2020

Clifton Larson Allen LLP

### Management's Discussion and Analysis

This discussion and analysis provides an overview of financial activities of the Washington State Department of Retirement Systems (DRS) for the fiscal year ended June 30, 2020. Please read it in conjunction with the "Letter of Transmittal," beginning on page 8, and the financial statements, beginning on page 24.

### Financial Highlights

- DRS' overall financial position improved during the year; the fiduciary net position of all the pension funds increased \$4,823.9 million.
- Covered payroll subject to both employee and employer pension contributions increased 6.4% over the previous year.
- Employer contributions totaled \$3,152.6 million, and member contributions (including restorations) totaled \$1,944.7 million, representing increases of 7.4% and 10.1%, respectively, over the previous year.
- Net investment earnings decreased \$4,254.1 million to \$5,191.5 million.
- Pension benefits paid to retirees and beneficiaries increased \$285.6 million, bringing the total benefit payments to \$4,912.7 million. Refunds of contributions increased 1.9% to \$978.1 million.
- Administrative expenses totaled \$48.6 million and represented a 16.5% increase over the last fiscal year.

Overview of the Financial Statements DRS' financial statements consist of the following components: basic financial statements, notes to the financial statements, required supplementary information and other supporting schedules.

Basic Financial Statements: The basic financial statements are fund financial statements and include a "Statement of Fiduciary Net Position" and a "Statement of Changes in Fiduciary Net Position." The fiduciary funds include defined benefit and defined contribution pension trust funds and the

Deferred Compensation Program trust fund.

The "Statement of Fiduciary Net Position," beginning on page 24, reports the assets, liabilities and resulting net position available for pension and other benefits as of June 30, 2020. The "Statement of Changes in Fiduciary Net Position," beginning on page 28, reports the additions to, deductions from and resulting change in fiduciary net position for the fiscal year.

Notes to the Financial Statements: The notes to the financial statements, beginning on page 32 of this report, are an integral part of the financial statements and include additional information not readily evident in the statements themselves. Note 1 summarizes significant accounting policies and plan asset matters. Note 2 describes the retirement plans, membership, and participating employers. Note 3 addresses contributions and funding policy. Note 4 details the net pension liability of the plans and actuarial assumptions. Note 5 discusses investments and related investment policies.

Required Supplementary Information Two years of financial statements alone may not provide sufficient information to properly evaluate the long-term financial position of the plans. The required supplementary information enhances that perspective and consists of four schedules built prospectively to present 10-year historical trends.

The "Schedule of Net Pension Liability" presents the liability for each pension plan. The "Schedules of Changes in Net Pension Liability" include current fiscal year and prior fiscal year information about the changes in each pension plan.

The "Schedule of Investment Returns" presents the annual money-weighted rate of return, net of investment expense, for each pension plan. The "Schedule of Contributions" presents information about the annual required contributions of employers, the contributions made in relation to that requirement,

covered payroll and the contributions as a percentage of covered payroll. The required schedules begin on page 71.

### Supporting Schedules and Other Financial Information

The supporting schedules, which begin on page 98, provide information that is useful in evaluating the condition of the plans DRS administers.

These schedules include administrative expenses, investment expenses and payments to consultants.

## Financial Analysis of DRS Funds The fiduciary net position increased by \$4,823.9 million in fiscal year 2020 and totaled \$124,940.9 million at fiscal year-end. The increase was mostly due to investment earnings.

Total trust-fund assets as of June 30, 2020, were \$129,627.3 million, representing an increase of \$4,061.7 million, or 3.2% over the previous fiscal year. This increase was primarily due to a \$4,610.9 million increase in noncurrent investment balance, caused almost entirely by current year market movements.

Total trust-fund liabilities as of June 30, 2020, were \$4,686.4 million, representing a decrease of \$762.2

million, or 14.0%, over the previous year. The decrease in liabilities is mostly attributable to the timing of payments at year-end which resulted in a decrease in short term investment trades pending payable as well as a substantial decrease in obligations under securities lending agreements at fiscal year end.

Additions to the retirement trust funds primarily consist of contributions from employers, members, and the state, and investment earnings. Additions to the deferred compensation trust fund consist of participant contributions and investment earnings.

Total trust-fund additions (excluding plan transfers) totaled \$10,763.3 million, a decrease of \$3,822.7 million from fiscal year 2019. The decrease was almost entirely due to low investment returns resulting in a 45% decrease in net investment income from the prior fiscal year. Employer contributions increased \$217.8 million, or 7.4%, and totaled \$3,152.6 million. This was the result of increased employment, salaries and employer contribution rates.

### Analysis of Fiduciary Net Position Dollars in Millions

					icrease (Decrease)	Increase (Decrease)
Fiduciary Net Position	Fiscal Year 2020		Fiscal Year 2019		Amount	Percentage
Assets						
Cash and Pooled Investments	\$ 62.5	\$	50.1	\$	12.4	24.8 %
Receivables	4,489.0		5,051.0		(562.0)	(11.1)%
Capital Assets, Net of Depreciation	0.1		0.1		_	0.0 %
Investments, Noncurrent	125,073.7		120,462.8		4,610.9	3.8 %
Other Assets	2.0		1.6		0.4	25.0 %
Total Assets	129,627.3		125,565.6		4,061.7	3.2 %
Liabilities						
Obligations Under Securities Lending Agreements	275.9		736.8		(460.9)	(62.6)%
Other Short-Term Liabilities	4,408.5		4,710.2		(301.7)	(6.4)%
Long-Term Obligations	2.0		1.6		0.4	25.0 %
Total Liabilities	4,686.4		5,448.6		(762.2)	(14.0)%
Fiduciary Net Position	\$ 124,940.9	\$	120,117.0	\$	4,823.9	4.0 %

### Analysis of Changes in Fiduciary Net Position **Dollars in Millions**

			Incr	ease (Decrease)	Increase (Decrease)
Changes in Fiduciary Net Position	Fiscal Year 2020	Fiscal Year 2019		Amount	Percentage
Additions					
Employer Contributions	\$ 3,152.6	\$ 2,934.8	\$	217.8	7.4 %
Member Contributions	1,944.7	1,766.5		178.2	10.1 %
State Contributions	84.5	81.9		2.6	3.2 %
Participant Contributions	342.3	312.8		29.5	9.4 %
Net Investment Income (Loss)	5,191.5	9,445.6		(4,254.1)	(45.0)%
Charges for Services	47.7	44.4		3.3	7.4 %
Transfers from Other Pension Plans	127.3	148.1		(20.8)	(14.0)%
Total Additions	10,890.6	14,734.1		(3,843.5)	(26.1)%
Deductions					
Benefits	4,912.7	4,627.1		285.6	6.2 %
Refunds of Contributions	978.1	960.0		18.1	1.9 %
Transfers to Other Pension Plans	127.3	148.1		(20.8)	(14.0)%
Administrative Expenses	48.6	41.7		6.9	16.5 %
Total Deductions	6,066.7	5,776.9		289.8	5.0 %
Net Increase (Decrease)	4,823.9	8,957.2		(4,133.3)	(46.1)%
Fiduciary Net Position: July 1	120,117.0	111,159.8		8,957.2	8.1 %
Fiduciary Net Position: June 30	\$ 124,940.9	\$ 120,117.0	\$	4,823.9	4.0 %

Total covered payroll was \$24,472.9 million and represented a 6.4% increase over the previous year.

Member contributions include both regular and restoration contributions as well as service credit purchases. Total member contributions increased \$178.2 million, or 10.1%, over the previous year and totaled \$1,944.7 million for fiscal year 2020.

- Regular member contributions increased \$169.1 million to \$1,880.9 million and reflected increased salaries and employee contribution rates.
- Other contributions increased \$9.2 million to \$63.8 million during the current year due to increases of purchases of additional annuities at retirement by retiring members.

State contributions increased \$2.6 million to \$84.5 million in fiscal year 2020. The increase was in state General Fund allocations for Plan 2 of the Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF), which moved from \$73.0 million to \$76.3 million. State contributions to the Judicial

Retirement System (JRS) decreased to \$7.8 million and the Judges' Retirement Fund (JRF) received \$0.4 million during the current year.

Participant contributions to the Deferred Compensation Program (DCP) increased 9.4% over the prior year and totaled \$342.3 million in fiscal year 2020. Increased contributions can be attributed to an increase in active participants. As of June 30, 2020, the number of active and contributing DCP participants was 65,227 and represented an increase of 9,658, or 17.4% over the previous year. The significant increase in DCP participation is a result of the mandatory auto-enrollment of new state employees at a 3% deferral rate that went into effect January 1, 2017.

Investment performance yielded a 3.7% timeweighted return for the retirement funds' Commingled Trust Fund (CTF), compared to the 8.4% return of the previous year.

Transfers from and to other pension plans decreased from \$148.1 million in fiscal year 2019 to \$127.3

million in fiscal year 2020.

Deductions to the retirement trust funds consist of the payment of benefits to retirees and beneficiaries, the refund of contributions to former retirement system members, and the cost of administering the retirement systems. Benefit payments to members include both pension and annuity benefits.

Deductions from the deferred compensation trust fund consist of payments to plan participants and administrative expenses.

Expenses the Washington State Investment Board (WSIB) incurred for the investment of trust funds were funded from earnings on investments.

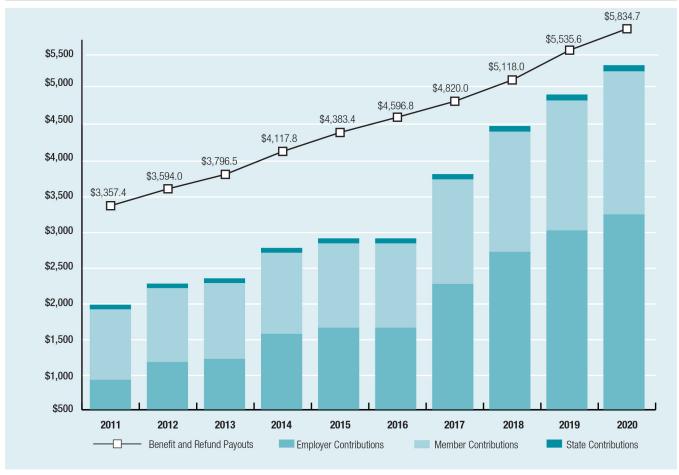
Total trust fund deductions (excluding plan transfers) for fiscal year 2020 were \$5,939.4 million, an increase of \$310.6 million, or 5.5%, over fiscal year

2019. This resulted primarily from an increase in benefits paid to retirees and beneficiaries. Benefit payments increased \$285.6 million, or 6.2%, due to an increase in the number of retirees during the year, the annual Cost-of-Living Adjustments that increased benefit payouts, and the higher salaries of those newly retired.

Total refunds for fiscal year 2020 were \$978.1 million, representing a \$18.1 million increase from the previous year. The increase in refunds is attributable to the \$33.9 million increase in distributions from DCP for mandatory and other withdrawals by program participants. Employees withdrawing their retirement plan contributions upon terminating public employment decreased by \$15.8 million from the prior fiscal year.

### **Trust Fund Contributions and Payouts**

For the Fiscal Years Ended June 30, 2011-2020 — Dollars in Millions



### Capital Assets

DRS' investment in capital assets includes furnishings, equipment and improvements other than buildings. As of June 30, 2020, total net book value was \$0.06 million. Additional information can be found in Note 1 to the financial statements.

### Other Long-Term Obligations

At year-end, DRS had \$2.0 million in outstanding general long-term obligations. These long-term obligations represent DRS' liability for employees' accumulated annual and sick leave. Additional information can be found in Note 1 to the financial statements.

Contacting DRS' Financial Management This CAFR is designed to provide a general overview of DRS' finances. If you have questions about this report or need additional financial information,

### contact:

Department of Retirement Systems' Fiscal Office PO Box 48380 Olympia, WA 98504-8380

### Statement of Fiduciary Net Position

### Pension Trust Funds by Plan

June 30, 2020, with Comparative Totals for June 30, 2019 — Page 1 of 4

				ľ	ension Trust				
					PERS Plan 3				SERS Plan 3
ollars in Thousands	PERS		PERS		Defined Contribution		SERS Plan 2/3		Defined Contribution
Assets	Plan 1		Plan 2/3		Contribution		Piali 2/3		Contribution
Cash and Pooled Investments \$	3,264	\$	9,018	\$	404	\$	3,067	\$	2,760
Receivables	3,204	Ψ	3,010	Ψ	404	Ψ	5,007	Ψ	2,700
Due from Other Governments	1,238		87,725		7,708		19,871		7,793
Member Accounts Receivable (Net of Allowance)	1,031		3,240		7,700		109		7,730
Interest and Dividends	20,513		119,229		5,228		17,324		4,160
Investment Trades Pending Receivable — Short Term	257,396		1,498,066		65,706		217,619		52,258
Due from Pension Funds	51,521		3,550		8,248		976		1,688
Due From Washington State Agencies	24		42		0,240		7		1,000
Total Receivables	331,723		1,711,852		86,890		255,906		65,899
Capital Assets, Net of Depreciation	9		17				3		00,000
Investments	J		17				3		
Equity in CTF	7,438,735		43,300,692		1,892,171		6,291,673		1,507,745
Liquidity	247,748		1,455,372		71,120		216,446		55,345
Other Noncurrent Investments	247,740		1,400,072		1,381,803		210,440		563,147
Collateral Held Under Securities Lending Agreements	18,580		108,135		4,743		15,708		3,772
Total Investments	7,705,063		44,864,199		3,349,837		6,523,827		2,130,009
Other Assets	332		589		3,543,037		97		2,130,003
Total Assets	8,040,391		46,585,675		3,437,131		6,782,900		2,198,668
Liabilities	0,040,001		40,000,070		0,407,101		0,702,300	_	2,130,000
Obligations Under Securities Lending Agreements	18,580		108,135		4,743		15,708		3,772
Accounts Payable	1,577		8,060		4,779		1,831		2,677
Investment Trades Pending Payable — Short Term	284,637		1,656,610		72,660		240,650		57,789
Due to Other Governments	5,633		5,462				1,161		-
Due to Pension funds			48,965		2,400		11,052		787
Due to Washington State Agencies	52		102				15		_
Other Short-Term Liabilities	_		10		_		3		_
Other Long-Term Obligations	332		589		_		97		_
Accrued Salaries	172		310				51		_
Unearned Revenues	21		290		_		1		_
Total Liabilities	311,004		1,828,533		84,582		270,569		65,025
Net Position Restricted for Pensions	,		,,		,		-,		22,320
Pension Plans	7,729,387		44,757,142		3,352,549		6,512,331		2,133,643
DCP									, 22,310
Total Net Position Restricted for Pensions \$	7,729,387	S	44,757,142	\$	3,352,549	\$	6,512,331	\$	2,133,643

### Statement of Fiduciary Net Position (cont.)

### Pension Trust Funds by Plan

June 30, 2020, with Comparative Totals for June 30, 2019 — Page 2 of 4

			Pension Trust		
Dollars in Thousands	PSERS Plan 2	TRS Plan 1	TRS Plan 2/3	TRS Plan 3 Defined Contribution	LEOFF Plan 1
Assets					
Cash and Pooled Investments \$	412	\$ 2,925	\$ 5,162	\$ 13,056	\$ 2,176
Receivables					
Due from Other Governments	4,367	356	51,415	33,573	_
Member Accounts Receivable (Net of Allowance)	_	353	82	_	244
Interest and Dividends	2,199	15,311	45,327	15,746	15,799
Investment Trades Pending Receivable — Short Term	27,616	192,096	569,416	197,817	198,389
Due from Pension Funds	17	41,283	2,023	8,199	339
Due From Washington State Agencies	1	20	20		12
Total Receivables	34,200	249,419	668,283	255,335	214,783
<b>Capital Assets, Net of Depreciation</b>	_	8	8	_	5
Investments					
Equity in CTF	798,099	5,551,572	16,470,756	5,702,222	5,733,425
Liquidity	34,304	188,786	569,358	218,451	189,146
Other Noncurrent Investments	_	_	_	3,744,902	_
Collateral Held Under Securities Lending Agreements	1,993	13,866	41,103	14,279	14,320
Total Investments	834,396	5,754,224	17,081,217	9,679,854	5,936,891
Other Assets	9	280	277		173
Total Assets	869,017	6,006,856	17,754,947	9,948,245	6,154,028
Liabilities					
Obligations Under Securities Lending Agreements	1,993	13,866	41,103	14,279	14,320
Accounts Payable	123	1,087	5,340	6,782	1,206
Investment Trades Pending Payable — Short Term	30,539	212,426	629,679	218,753	219,385
Due to Other Governments	14	5,788	2,531	_	28
Due to Pension funds	2,940	5	50,099	1,481	3
Due to Washington State Agencies	1	44	45	_	28
Other Short-Term Liabilities	_	_	7	_	_
Other Long-Term Obligations	9	280	277	_	173
Accrued Salaries	5	142	144	_	88
Unearned Revenues			68		
Total Liabilities	35,624	233,638	729,293	241,295	235,231
<b>Net Position Restricted for Pensions</b>					
Pension Plans	833,393	5,773,218	17,025,654	9,706,950	5,918,797
DCP					
Total Net Position Restricted for Pensions \$	833,393	\$ 5,773,218	\$ 17,025,654	\$ 9,706,950	\$ 5,918,797

### Statement of Fiduciary Net Position (cont.)

### Pension Trust Funds by Plan

June 30, 2020, with Comparative Totals for June 30, 2019 — Page 3 of 4

		Pensi	on Trust	
		WSPRS		
ars in Thousands	LEOFF Plan 2	Plan 1/2	JRS	JR
Assets				
Cash and Pooled Investments	\$ 2,713	\$ 830	\$ 8,505	\$ 1,12
Receivables				
Due from Other Governments	21,852	1,224	_	_
Member Accounts Receivable (Net of Allowance)	148	6	5	-
Interest and Dividends	39,768	3,690	10	
Investment Trades Pending Receivable — Short Term	499,680	46,334	_	_
Due from Pension Funds	367	50	_	_
Due From Washington State Agencies	14	2		
Total Receivables	561,829	51,306	15	
<b>Capital Assets, Net of Depreciation</b>	5	1	_	_
Investments				
Equity in CTF	14,440,693	1,339,054	_	-
Liquidity	479,606	45,865	_	-
Other Noncurrent Investments	_	_	_	-
Collateral Held Under Securities Lending Agreements	36,068	3,345	_	-
Total Investments	14,956,367	1,388,264	_	_
Other Assets	188	26	_	_
Total Assets	15,521,102	1,440,427	8,520	1,12
Liabilities				
Obligations Under Securities Lending Agreements	36,068	3,345	_	_
Accounts Payable	3,406	231	_	-
Investment Trades Pending Payable — Short Term	552,562	51,238	_	-
Due to Other Governments	58	250	26	
Due to Pension funds	505	24	_	-
Due to Washington State Agencies	32	16	_	-
Other Short-Term Liabilities	_	_	_	-
Other Long-Term Obligations	188	26	_	-
Accrued Salaries	113	14	_	-
Unearned Revenues	192	_	_	-
Total Liabilities	593,124	55,144	26	
<b>Net Position Restricted for Pensions</b>				
Pension Plans	14,927,978	1,385,283	8,494	1,12
DCP	_	_	_	_
<b>Total Net Position Restricted for Pensions</b>	\$ 14,927,978	\$ 1,385,283	\$ 8,494	\$ 1,127

### Statement of Fiduciary Net Position (cont.)

### Pension Trust Funds by Plan

June 30, 2020, with Comparative Totals for June 30, 2019 — Page 4 of 4

		Pensio	n Tru:	st		Totals				
Dollars in Thousands		JRA Defined Contribution	C	Deferred ompensation Program		6/30/2020		6/30/2019		
Assets										
Cash and Pooled Investments Receivables	\$	10	\$	7,045	\$	62,474	\$	50,125		
Due from Other Governments		_		34		237,156		228,469		
Member Accounts Receivable (Net of Allowance)		_		1,551		6,769		7,063		
Interest and Dividends		_		3		304,308		366,420		
Investment Trades Pending Receivable — Short Term		_		_		3,822,393		4,337,142		
Due from Pension Funds		_		_		118,261		111,976		
Due From Washington State Agencies		_		_		142		_		
Total Receivables		_		1,588		4,489,029		5,051,070		
Capital Assets, Net of Depreciation		_		_		56		88		
Investments										
Equity in CTF		_		_		110,466,837		107,789,466		
Liquidity		_		_		3,771,547		1,722,371		
Other Noncurrent Investments		8,102		4,861,477		10,559,431		10,214,140		
Collateral Held Under Securities Lending Agreements						275,912		736,785		
Total Investments		8,102		4,861,477		125,073,727		120,462,762		
Other Assets						1,971		1,577		
Total Assets		8,112		4,870,110		129,627,257		125,565,622		
Liabilities										
Obligations Under Securities Lending Agreements		_		_		275,912		736,785		
Accounts Payable		_		769		37,868		41,612		
Investment Trades Pending Payable — Short Term		_		_		4,226,928		4,542,167		
Due to Other Governments		_		_		20,952		_		
Due to Pension funds		_		_		118,261		111,976		
Due to Washington State Agencies		_		12		347		592		
Other Short-Term Liabilities		_		2,418		2,438		12,326		
Other Long-Term Obligations		_		_		1,971		1,577		
Accrued Salaries		_		65		1,104		955		
Unearned Revenues						572		651		
Total Liabilities				3,264		4,686,353		5,448,641		
Net Position Restricted for Pensions										
Pension Plans		8,112				120,074,058		115,405,614		
DCP	_		_	4,866,846	_	4,866,846	_	4,711,367		
<b>Total Net Position Restricted for Pensions</b>	\$	8,112	\$	4,866,846	\$	124,940,904	\$	120,116,981		

### Statement of Changes in Fiduciary Net Position

### Pension Trust Funds by Plan

For the Fiscal Year Ended June 30, 2020, with Comparative Totals for June 30, 2019 — Page 1 of 4

			P	ension Trust		
Dollars in Thousands	PERS Plan 1	PERS Plan 2/3		PERS Plan 3 Defined Contribution	SERS Plan 2/3	SERS Plan 3 Defined Contribution
Additions						
Retirement Contributions						
Employer \$	722,512	\$ 925,303	\$	_	\$ 216,713	\$ _
Plan Member	5,606	721,305		169,706	95,507	92,371
State	_	_		_	_	_
Plan Member Restorations	1,703	33,314		_	1,130	_
Total Retirement Contributions	729,821	1,679,922		169,706	313,350	92,371
Participant Contributions	_	_		_	_	_
Investment Income						
Net Appreciation (Depreciation) in Fair Value of Investments	213,964	1,235,167		80,448	179,314	56,345
Interest and Other Investment Income	127,524	713,296		33,816	103,212	26,428
Dividends	38,041	215,161		9,466	31,110	7,592
Less: Investment Expenses	(41,524)	(234,372)		(11,441)	(34,167)	(8,550)
Subtotal Net Investment Income (Loss)	338,005	1,929,252		112,289	279,469	81,815
Securities Lending Income						
Securities Lending Income	1,209	6,784		299	980	240
Less: Costs of Lending Securities	(713)	(3,984)		(176)	(575)	(141)
Net Securities Lending Income	496	2,800		123	405	99
Total Net Investment Income (Loss)	338,501	1,932,052		112,412	279,874	81,914
Charges for Services	2,857	16,928		853	2,513	679
Transfers from Other Pension Plans	_	37,129		3,946	17,690	2,145
Miscellaneous	1	2				
Total Additions	1,071,180	3,666,033		286,917	613,427	177,109
Deductions						
Benefits	1,189,201	1,366,899		_	201,851	_
Contribution Refunds	4,001	44,008		120,932	4,511	110,378
Annuity Payments	_	12,840		_	9,270	_
Transfers to Other Pension Plans	6	4,796		37,120	2,151	17,721
Administrative Expenses	2,902	17,144		853	 2,465	679
Total Deductions	1,196,110	1,445,687		158,905	220,248	128,778
Net Increase (Decrease) in Net Position	(124,930)	2,220,346		128,012	393,179	48,331
Net Position Restricted for Pensions						
Beginning of Year: July 1	7,854,317	 42,536,796	_	3,224,537	 6,119,152	 2,085,312
End of Year: June 30 💲	7,729,387	\$ 44,757,142	\$	3,352,549	\$ 6,512,331	\$ 2,133,643

### Statement of Changes in Fiduciary Net Position (cont.)

### Pension Trust Funds by Plan

For the Fiscal Year Ended June 30, 2020, with Comparative Totals for June 30, 2019 — Page 2 of 4

				P	ension Trust		
Dollars in Thousands	PSERS Plan 2		TRS Plan 1		TRS Plan 2/3	TRS Plan 3 Defined Contribution	LEOFF Plan 1
Additions							
Retirement Contributions							
Employer \$	44,392	\$	521,550	\$	584,424	\$ _	\$ 5
Plan Member	44,292		1,726		142,218	406,302	_
State	_		_		_	_	_
Plan Member Restorations	207		780		3,415	_	1
<b>Total Retirement Contributions</b>	88,891		524,056		730,057	406,302	6
Participant Contributions	_		_		_	_	_
Investment Income							
Net Appreciation (Depreciation) in Fair Value of Investments	22,496		159,570		469,391	263,916	164,885
Interest and Other Investment Income	12,586		95,365		269,910	99,245	98,066
Dividends	3,802		28,425		81,343	28,516	29,369
Less: Investment Expenses	(4,120)		(31,030)		(89,690)	 (33,961)	(32,044)
Subtotal Net Investment Income (Loss)	34,764		252,330		730,954	 357,716	260,276
Securities Lending Income							
Securities Lending Income	119		904		2,561	900	934
Less: Costs of Lending Securities	(69)		(533)		(1,503)	(528)	(551)
Net Securities Lending Income	50		371		1,058	372	383
Total Net Investment Income (Loss)	34,814		252,701		732,012	358,088	260,659
Charges for Services	309		2,135		7,268	2,578	2,188
<b>Transfers from Other Pension Plans</b>	48		38		63,357	2,157	_
Miscellaneous					1		
Total Additions	124,062		778,930		1,532,695	769,125	262,853
Deductions							
Benefits	3,961		882,827		406,454	_	372,287
Contribution Refunds	3,662		759		4,364	385,628	9
Annuity Payments	_		2,275		31,695	_	_
Transfers to Other Pension Plans	25		_		2,226	63,273	_
Administrative Expenses	311		2,116		7,254	2,578	2,161
Total Deductions	7,959		887,977		451,993	451,479	374,457
Net Increase (Decrease) in Net Position	116,103		(109,047)		1,080,702	317,646	(111,604)
Net Position Restricted for Pensions							
Beginning of Year: July 1	717,290		5,882,265		15,944,952	9,389,304	6,030,401
End of Year: June 30 💲	833,393	\$ 5	5,773,218	\$	17,025,654	\$ 9,706,950	\$ 5,918,797

### Statement of Changes in Fiduciary Net Position (cont.)

### Pension Trust Funds by Plan

For the Fiscal Year Ended June 30, 2020, with Comparative Totals for June 30, 2019 — Page 3 of 4

	Pension Trust										
7 11 ' ml 1	LEOFF		WSPRS								
Dollars in Thousands	Plan 2		Plan 1/2	JRS		JRF					
Additions											
Retirement Contributions			40.00=	•	•						
Employer		\$	19,897	\$ —	\$	_					
Plan Member	192,255		9,609	_							
State	76,298		_	7,800		400					
Plan Member Restorations	22,257		1,021								
Total Retirement Contributions	408,584		30,527	7,800		400					
Participant Contributions											
Investment Income											
Net Appreciation (Depreciation) in Fair Value of Investments	412,456		38,371			_					
Interest and Other Investment Income	238,312		22,506	155		18					
Dividends	71,878		6,754	_		_					
Less: Investment Expenses	(78,168)		(7,358)								
Subtotal Net Investment Income (Loss)	644,478		60,273	155		18					
Securities Lending Income											
Securities Lending Income	2,267		214	_		_					
Less: Costs of Lending Securities	(1,332)		(126)	_		_					
Net Securities Lending Income	935		88								
Total Net Investment Income (Loss)	645,413		60,361	155		18					
Charges for Services	5,518		512	_		_					
Transfers from Other Pension Plans			808	_		_					
Miscellaneous	1										
Total Additions	1,059,516		92,208	7,955		418					
Deductions											
Benefits	355,509		68,128	7,921		265					
Contribution Refunds	8,688		710	_		_					
Annuity Payments	_		_	_		_					
Transfers to Other Pension Plans	_		_	_		_					
Administrative Expenses	7,397		594								
Total Deductions	371,594		69,432	7,921		265					
Net Increase (Decrease) in Net Position	687,922		22,776	34		153					
Net Position Restricted for Pensions											
Beginning of Year: July 1	14,240,056		1,362,507	8,460	_	974					
End of Year: June 30	\$ 14,927,978	\$	1,385,283	\$ 8,494	\$	1,127					

# Statement of Changes in Fiduciary Net Position (cont.)

### Pension Trust Funds by Plan

For the Fiscal Year Ended June 30, 2020, with Comparative Totals for June 30, 2019 — Page 4 of 4

	Pension Trust			Tot	als	
Dollars in Thousands	JRA Defined Contribution	C	Deferred Compensation Program	6/30/2020		6/30/2019
Additions						
Retirement Contributions						
Employer	\$ 9	\$	_	\$ 3,152,579	\$	2,934,794
Plan Member	8		_	1,880,905		1,711,855
State	_		_	84,498		81,860
Plan Member Restorations	_		_	63,828		54,641
<b>Total Retirement Contributions</b>	17		_	5,181,810		4,783,150
Participant Contributions			342,339	342,339		312,768
Investment Income						
Net Appreciation (Depreciation) in Fair Value of Investments	95		80,758	3,377,176		7,707,710
Interest and Other Investment Income	50		22,600	1,863,089		1,847,775
Dividends	11		6,211	557,679		630,668
Less: Investment Expenses	(11)		(7,177)	(613,613)		(747,569)
Subtotal Net Investment Income (Loss)	145		102,392	5,184,331		9,438,584
Securities Lending Income						
Securities Lending Income	_		_	17,411		26,715
Less: Costs of Lending Securities	_		_	(10,231)		(19,713)
Net Securities Lending Income	_		_	7,180		7,002
Total Net Investment Income (Loss)	145		102,392	5,191,511		9,445,586
Charges for Services	_		3,345	47,683		44,374
<b>Transfers from Other Pension Plans</b>	_		_	127,318		148,146
Miscellaneous	_		5	10		38
Total Additions	162		448,081	10,890,671		14,734,062
Deductions						
Benefits	1,341		_	4,856,644		4,575,650
Contribution Refunds	_		290,429	978,079		959,933
Annuity Payments	_		_	56,080		51,453
Transfers to Other Pension Plans	_		_	127,318		148,146
Administrative Expenses			2,173	48,627		41,738
Total Deductions	1,341		292,602	6,066,748		5,776,920
Net Increase (Decrease) in Net Position	(1,179)		155,479	4,823,923		8,957,142
<b>Net Position Restricted for Pensions</b>						
Beginning of Year: July 1	9,291		4,711,367	120,116,981		111,159,839
End of Year: June 30	\$ 8,112	\$	4,866,846	\$ 124,940,904	\$	120,116,981

The accompanying notes are an integral part of this statement.

#### Notes to the Financial Statements

### Note 1: Summary of Significant Accounting Policies and Plan Asset Matters

### A. Reporting Entity

The state of Washington, through DRS, administers eight retirement systems for employees of the state and political subdivisions:

- Public Employees' Retirement System (PERS)
- School Employees' Retirement System (SERS)
- Public Safety Employees' Retirement System (PSERS)
- Teachers' Retirement System (TRS)
- Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF)
- Washington State Patrol Retirement System (WSPRS)
- Judicial Retirement System (JRS)
- Judges' Retirement Fund (JRF)

The state also offers the Deferred Compensation Program (DCP) which DRS administers.

Since DRS is part of the primary government of the state of Washington, it is considered part of the state's financial reporting entity and is included in the state's Comprehensive Annual Financial Report (CAFR).

The state's CAFR can be obtained from the Office of Financial Management's website at www.ofm.wa.gov/cafr.

#### B. Basic Financial Statements

The financial statements provided in this report are fiduciary statements. Fiduciary funds report assets held for others in a trustee or agency capacity and cannot be used to support the government's own programs. DRS' fiduciary funds are the retirement pension trust funds.

DRS' financial statements have been prepared in conformity with generally accepted accounting principles (GAAP). The statements include a "Statement of Fiduciary Net Position" (SFNP) and a "Statement of Changes in Fiduciary Net Position" (SCFNP).

The SFNP includes information about the assets, liabilities and fiduciary net position for each plan. The SCFNP includes information about the additions to, deductions from and net increase (or decrease) in fiduciary net position for each plan for the year. The statements provide a separate column for each retirement plan.

### C. Measurement Focus and Basis of Accounting

The retirement plans are accounted for in pension trust funds using the flow-of-economic-resources measurement focus and the accrual basis of accounting.

The members of the retirement plans, their employers and the state provide funding for the plans based on actuarial valuations. The Legislature establishes benefit levels and approves the actuarial assumptions used in determining contribution levels.

Plan member contributions are recognized as revenues in the period in which the contributions are earned. Employer contributions to each plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

The Deferred Compensation Program (DCP) is accounted for in a pension trust fund using the flowof-economic-resources measurement focus and the accrual basis of accounting. Participant contributions are recognized as revenues in the period in which the contributions are due. Refunds are recognized when due and payable in accordance with the terms of the plan.

DRS maintains an administrative fund to account for the revenues and operating expenditures incurred in administering DCP. Since these transactions occur in the administration of the program, they have been

reported within the program.

D. Method Used to Value Investments The pension trust funds report investments at fair value and categorize measurements within the fair value hierarchy established by GAAP.

Unrealized gains and losses are included in the SCFNP. See Note 5 for additional information.

E. Revenue Recognition - Investments Interest and dividend income is recognized when earned. Capital gains and losses are recognized on a trade-date basis. Purchases and sales of investments are also recorded on a trade-date basis. See Note 5 for additional information.

#### F. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Actual results could differ from the estimated amounts

### G. Allocations

DRS maintains an administrative fund to account for the additions and deductions incurred in administering the pension plans. These additions and deductions have been allocated to the pension plans.

DRS maintains a general capital assets fund to account for the capital assets used in administering the pension plans. These capital assets have been allocated to the pension plans based on asset balance. DRS also maintains a general long-term obligation fund to account for accumulated compensated absences incurred in administering the pension plans. These general long-term obligations have also been allocated to the pension plans based on asset balance.

#### H. Reserves

Member Reserves: Member reserves reflect the total liability for contributions members have made. Employee contributions and interest earnings increase these reserves. Contribution refunds and transfers to the benefit reserves for current-year retirees decrease these reserves. The member reserves are considered fully funded.

Because each Plan 3 defined contribution component offers two separate investment programs to members, DRS maintains two separate member reserves, the WSIB reserve and the Self-directed Reserve. The WSIB reserves account for members who participate in the WSIB's Total Allocation Portfolio (TAP). The Self-Directed reserves account for members who participate in the self-directed investment offerings.

Member reserves as of June 30, 2020 and 2019, are as follows:

Member Reserves as of June 30, 2020 and 2019
Dollars in Thousands

	06/30/2020	06/30/2019
PERS Plan 1	\$ 227,768	\$ 282,411
PERS Plan 2/3	8,196,319	7,441,187
PERS Plan 3 — WSIB	1,964,769	1,888,447
PERS Plan 3 — Self-Directed	1,387,781	1,336,090
SERS Plan 2/3	737,761	541,192
SERS Plan 3 — WSIB	1,565,779	1,539,130
SERS Plan 3 — Self-Directed	567,864	546,182
PSERS Plan 2	320,708	268,976
TRS Plan 1	76,111	90,203
TRS Plan 2/3	1,083,248	510,247
TRS Plan 3 — WSIB	5,941,123	5,735,297
TRS Plan 3 — Self-Directed	3,765,827	3,654,007
LEOFF Plan 1	3,731	5,382
LEOFF Plan 2	3,031,035	2,914,010
WSPRS Plan 1/2	113,046	103,373
JRS	_	_
JRF	_	
<b>Total Member Reserves</b>	\$ 28,982,870	\$ 26,856,134

Benefit Reserves: The benefit reserves reflect the funded liability associated with all retired members of DRS-administered systems. These reserves are increased by employer contributions, state contributions, investment earnings and employee

contributions that are attributable to current-year retirees. Employee contributions attributable to current-year retirees include contributions of plan 1 and plan 2 members, contributions from all plans for optional service at retirement and the plan 3 tap annuity purchases by plan 3 recent retirees. These reserves are decreased by the amounts of pensions actually paid in the current year, interest payments transferred to the member reserves and administrative expenses in support of the trust funds.

Benefit reserves as of June 30, 2020 and 2019, are as follows:

Benefit Reserves as of June 30, 2020 and 2019	9
Dollars in Thousands	

Donars in Thousands		
	06/30/2020	06/30/2019
PERS Plan 1	\$ 7,498,488	\$ 7,568,868
PERS Plan 2/3	36,356,714	34,924,258
PERS Plan 3 — TAP Annuity	198,559	166,383
SERS Plan 2/3	5,647,216	5,464,245
SERS Plan 3 — TAP Annuity	126,443	112,908
PSERS Plan 2	512,601	448,240
TRS Plan 1	5,694,465	5,789,490
TRS Plan 2/3	15,461,423	15,005,414
TRS Plan 3 — TAP Annuity	478,369	426,999
LEOFF Plan 1	5,913,431	6,023,455
LEOFF Plan 2	11,861,472	11,294,873
LEOFF Plan 2 — Medical	33,700	29,582
WSPRS Plan 1/2	1,271,845	1,258,780
WSPRS Plan 1/2 — Medical	149	128
JRS	1,127	8,460
JRF	8,494	974
<b>Total Benefit Reserves</b>	\$ 91,064,496	\$ 88,523,057

The funded status of each of the benefit reserves is the same as the funded status of each of the respective pension plans, which is reflected in the "Solvency Test" schedules in the Actuarial Section of this CAFR.

### I. Capital Assets

Capital assets with a unit cost (including ancillary costs) of \$5,000 or more are capitalized and reported in the accompanying financial statements. Capital leases with a net present value or fair market value, whichever is less, of \$10,000 or more are capitalized and also included in these financial statements. Purchased capital assets are valued at cost when historical records exist. Where necessary,

estimates of original cost and fair market value are derived by factoring price levels from the current period to the time of acquisition.

Capital asset costs include the purchase price or construction cost plus those costs necessary to place the asset in its intended location and condition for use. Normal maintenance and repair costs that do not materially add to the value or extend the life of the asset are not capitalized.

Depreciation is calculated using the straight-line method with estimated useful lives of five to 50 years for buildings and three to 50 years for furnishings and equipment, other improvements, and miscellaneous capital assets.

The following is a summary of changes in capital assets for fiscal year 2020:

# Changes in Capital Assets As of June 30, 2020 — Dollars in Thousands

Assets	ginning Balance	İ	uisition/ ncrease eciation	Disposal/ Decrease preciation	Ending Salance
Improvements Other Than Buildings	\$ 578	\$	_	\$ _	\$ 578
Furnishings and Equipment	768		_	_	768
Accumulated Depreciation <b>Total</b>	\$ (1,258)	\$	(32)	\$ <u> </u>	\$ (1,290) <b>56</b>

#### J. Leases

DRS leases office facilities and office equipment.

Lease terms vary. Leases are considered

noncancellable for financial reporting purposes. All

DRS leases are classified as operating leases with the
lease payments recorded as expenditures or
expenses during the life of the lease. Certain
operating leases are renewable for specified periods.

In most cases, management expects that the leases
will be renewed or replaced by other leases.

The following schedule presents future minimum payments for operating leases as of June 30, 2020:

Future Minimum Payments for Operating Leases As of June 30, 2020 — Dollars in Thousands				
Fiscal Year		<b>Payments</b>		
2021	\$	1,347		
2022		1,320		
2023		1,320		
2024		1,363		
2025 and beyond		6,640		
Total Future Minimum Payments	\$	11,990		

The total operating lease rental expenditure for fiscal year 2020 was \$1.5 million.

### K. Other Long-Term Obligations

Annual Leave: DRS employees accrue annual leave at a variable rate based on years of service. In general, accrued annual leave cannot exceed 240 hours at the employee's anniversary date. The expense and accrued liability is recognized when the annual leave is earned. DRS' liability for accumulated annual leave was \$1.5 million as of June 30, 2020.

Sick Leave: Employees accrue sick leave at the rate of eight hours per month without limitation on the amount that can be accumulated. Sick leave is not vested (that is, DRS does not pay employees for unused sick leave except in the event of the employee's death or retirement; at such time, DRS is liable for 25% of the accumulated sick leave).

In addition, the state has a sick-leave buyback program. Each January, employees who have accumulated sick leave in excess of 480 hours can redeem sick leave earned but not taken during the previous year at the rate of one hour's pay in exchange for four hours of sick leave. The expense and accrued liability is recognized when the sick leave is earned. DRS' liability for accumulated sick leave was \$0.5 million as of June 30, 2020.

The following is a summary of changes in compensated absences for the fiduciary funds for fiscal year 2020:

#### **Changes in Compensated Absences** For Fiscal Year 2020 — Dollars in Thousands

Compensated	Be	ginning				Ending
Absences		Balance	A	dditions	Deletions	Balance
Annual Leave	\$	1,109	\$	1,603	\$ (1,244)	\$ 1,468
Sick Leave		468		205	(170)	503
Total	\$	1,577	\$	1,808	\$ (1,414)	\$ 1,971

L. Other Post Employment Benefits The state, through the Health Care Authority, administers a single employer defined benefit plan for other postemployment benefits (OPEB). DRS participates in the plan, and DRS' proportionate share of the state's OPEB liability is included in the state's CAFR. The liability has not been included in these financial statements as it is insignificant to the pension trust funds. The state's CAFR can be obtained from the Office of Financial Management's website at www.ofm.wa.gov/cafr.

#### M. Transfers

Transfers from and to other pension plans, as reported in the financial statements, reflect routine transfers among the funds resulting from plan membership changes, member-directed plan selections and Plan 3 TAP annuity purchases within PERS Plan 2/3, SERS Plan 2/3 and TRS Plan 2/3. In fiscal year 2020, these transfers totaled \$127.3 million and represented a \$20.8 million decrease from the previous year.

#### N. Contingencies — Litigation

As a state agency, DRS is party to legal proceedings that normally occur in governmental operations. Pending legal actions involving DRS exist. For each pending legal action, DRS has good defenses and will continue to bring a vigorous defense.

### Note 2: Plan Description

#### A. General

As established in the Revised Code of Washington (RCW) Chapter 41.50, the Department of Retirement Systems (DRS) administers eight retirement system covering eligible employees of the state and local governments.

Administration of the retirement systems is funded by an employer rate of 0.18% of reported compensation.

The director of DRS is appointed by the governor.

The state Legislature establishes and amends laws pertaining to the creation and administration of the retirement systems, which are currently composed of 12 defined benefit pension plans and three combination defined benefit plans with defined contribution components.

In addition to the retirement systems, DRS administers the Deferred Compensation Program (DCP) offered by the state of Washington, pursuant to RCW 41.50.770.

DRS has entered into an agreement for services with the administrator of the Judicial Retirement Account (JRA). DRS is responsible for the recordkeeping, accounting and reporting of member accounts for JRA.

### Cost-Sharing, Multiple-Employer Plans

#### Public Employees' Retirement System (PERS)

Plan 1: Defined benefit Plan 2: Defined benefit

Plan 3: Defined benefit/defined contribution

#### School Employees' Retirement System (SERS)

Plan 2: Defined benefit

Plan 3: Defined benefit/defined contribution

### Public Safety Employees' Retirement System (PSERS)

Plan 2: Defined benefit

#### Teachers' Retirement System (TRS)

Plan 1: Defined benefit Plan 2: Defined benefit

Plan 3: Defined benefit/defined contribution

#### Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF)

Plan 1: Defined benefit Plan 2: Defined benefit

### **Single-Employer Plans**

#### Washington State Patrol Retirement System (WSPRS)

Plan 1: Defined benefit Plan 2: Defined benefit

#### Judicial Retirement System (JRS)

Defined benefit

#### Judges' Retirement Fund (JRF)

Defined benefit

# Supplemental Retirement Benefit

#### **Judicial Retirement Account (JRA)**

Defined Contribution

### **Multi-Employer Plan**

### **Deferred Compensation Program (DCP)**

### **Number of Participating Members**

As of June 30, 2020

Diam	Inactive Plan Members or Beneficiaries	Inactive Plan Members Entitled to But Not Yet	Active Plan	Active Plan	Tatal
Plan	Receiving Benefits	Receiving Benefits	Members Vested	Members Nonvested	Total
PERS Plan 1	44,359	310	1,078	103	45,850
PERS Plan 2	59,453	28,860	79,541	44,372	212,226
PERS Plan 3	6,438	6,509	15,686	23,230	51,863
SERS Plan 2	11,112	6,274	14,858	14,085	46,329
SERS Plan 3	11,200	9,064	18,216	18,556	57,036
PSERS Plan 2	368	720	3,575	5,314	9,977
TRS Plan 1	31,777	92	256	7	32,132
TRS Plan 2	6,201	2,808	11,795	11,185	31,989
TRS Plan 3	15,316	8,279	37,640	18,953	80,188
LEOFF Plan 1	6,791	_	15	_	6,806
LEOFF Plan 2	7,175	1,006	13,438	5,395	27,014
WSPRS Plan 1	1,196	66	373	_	1,635
WSPRS Plan 2	2	39	445	236	722
JRS	87	_	_	_	87
JRF	10	_	_	_	10
Total	201,485	64,027	196,916	141,436	603,864

# **Number of Participating Employers**

As of June 30, 2020

	<b>Component Units of the</b>			Other Political	
Plan	State of Washington	<b>Counties/Municipalities</b>	School Districts	Subdivisions	Total
PERS Plan 1	79	78	124	66	347
PERS Plan 2	153	280	35	542	1,010
PERS Plan 3	148	222	_	355	725
SERS Plan 2	_	_	309	_	309
SERS Plan 3	_	_	310	_	310
PSERS Plan 2	20	65	_	1	86
TRS Plan 1	19	_	146	_	165
TRS Plan 2	28	_	306	_	334
TRS Plan 3	39	_	312	_	351
LEOFF Plan 1	_	16	_	2	18
LEOFF Plan 2	9	203	_	178	390
WSPRS Plan 1	1	_	_	_	1
WSPRS Plan 2	1	_	_	_	1
JRS	_	_	_	_	_
JRF	_	_	_	_	_

Employers can participate in multiple systems and/or plans. The actual total number of participating employers as of June 30, 2020, is 1,357. Of that number, 153 are component units of the state. For a list of covered employers, refer to the Statistical Section of this report.

# B. Administration - Retirement Systems Public Employees' Retirement System (PERS)

PERS was established in 1947, and its retirement benefit provisions are contained in Chapters 41.34 and 41.40 RCW. PERS is a cost-sharing, multiple-employer retirement system composed of three separate pension plans for membership purposes. PERS Plan1 and Plan 2 are defined benefit plans. Plan 3 is a defined benefit plan with a defined contribution component.

PERS members include elected officials, state employees, employees of local governments and higher education employees not participating in higher education retirement plans (HERPs).

PERS is composed of and reported as three separate plans for accounting purposes: Plan 1, Plan 2/3 and Plan 3. Plan 1 accounts for the defined benefits of Plan 1 members. Plan 2/3 accounts for the defined benefits of Plan 2 members and the defined benefit portion of benefits for Plan 3 members. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

Although employees can be a member of only Plan 2 or Plan 3, the defined benefits of Plan 2 and Plan 3 are accounted for in the same pension trust fund. All assets of Plan 2/3 may legally be used to pay the defined benefits of any Plan 2 or Plan 3 members or beneficiaries. Therefore, Plan 2/3 is considered a single plan for accounting purposes.

# School Employees' Retirement System (SERS)

The Legislature created SERS in 1998, and the plan became effective in 2000. SERS retirement benefit provisions are established in Chapters 41.34 and 41.35 RCW. SERS members include classified employees of school districts and educational service districts. SERS is a cost-sharing, multiple-employer retirement system composed of two separate plans for membership purposes. SERS Plan 2 is a defined benefit plan, and SERS Plan 3 is a defined benefit plan with a defined contribution component.

Although employees can be a member of only Plan 2 or Plan 3, the defined benefit portions of Plan 2 and Plan 3 are accounted for in the same pension trust fund. All assets of Plan 2/3 defined benefit plan may legally be used to pay the defined benefits of any of the Plan 2 or Plan 3 members or beneficiaries. Therefore, Plan 2/3 is considered to be a single plan for accounting purposes. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

# Public Safety Employees' Retirement System (PSERS)

The Legislature created PSERS in 2004, and the plan became effective July 1, 2006. PSERS retirement benefit provisions are established in Chapter 41.37 RCW. PSERS is a cost-sharing, multiple-employer retirement system composed of a single defined benefit plan, PSERS Plan 2, for both accounting and membership purposes.

PSERS membership includes certain public employees whose jobs contain a high degree of physical risk to their own personal safety. In addition to meeting strict statutory work requirements, membership is further restricted to specific employers including:

- Washington state counties
- Washington state cities (except Seattle, Spokane and Tacoma)
- Entities PSERS employers form under the Interlocal Cooperation Act
- A limited number of state agencies

### Teachers' Retirement System (TRS)

TRS was established in 1938, and its retirement benefit provisions are contained in Chapters 41.32 and 41.34 RCW. TRS eligibility for membership requires service as a certificated public school employee working in an instructional, administrative or supervisory capacity. TRS is a cost-sharing, multiple-employer retirement system composed of three separate plans for membership purposes: Plans 1 and 2 are defined benefit plans, and Plan 3 is a defined benefit plan with a defined contribution component.

TRS is composed of three separate plans for accounting purposes: Plan 1, Plan 2/3 and Plan 3. Plan 1 accounts for the defined benefits of Plan 1 members. Plan 2/3 accounts for the defined benefits of Plan 2 members and the defined benefit portion of benefits for Plan 3 members. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

Although members can be a member of only Plan 2 or Plan 3, the defined benefit portions of Plan 2 and Plan 3 are accounted for in the same pension trust fund. All assets of Plan 2/3 defined benefit plan may legally be used to pay the defined benefits of any Plan 2 or Plan 3 members or beneficiaries. Therefore, Plan 2/3 is considered a single plan for accounting purposes.

### Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF)

LEOFF was established in 1970, and its retirement benefit provisions are contained in Chapter 41.26 RCW. LEOFF membership includes all of the state's full-time, fully compensated, local law enforcement commissioned officers, fire fighters and, as of July 24, 2005, emergency medical technicians.

LEOFF is a cost-sharing, multiple-employer retirement system composed of two separate pension plans for both membership and accounting purposes. Both LEOFF plans are defined benefit plans.

### Washington State Patrol Retirement System (WSPRS)

WSPRS was established by the Legislature in 1947, and its retirement benefit provisions are contained in Chapter 43.43 RCW. WSPRS is a single-employer retirement system composed of two separate pension plans, and membership includes only commissioned employees of the Washington State Patrol.

WSPRS Plan 1 and WSPRS Plan 2 are defined benefit plans. The plans are combined for financial reporting and investment purposes in the same pension fund. All assets of this combined Plan 1/2

may legally be used to pay the defined benefits of any WSPRS members or beneficiaries.

### Judicial Retirement System (JRS)

JRS was established by the Legislature in 1971, and its retirement benefit provisions are contained in Chapter 2.10 RCW. JRS is a single-employer retirement system, and membership includes judges elected or appointed to the Supreme Court, Court of Appeals and superior courts on or after August 9, 1971.

JRS is composed of and reported as one plan for accounting purposes. JRS is closed to new entrants.

### Judges' Retirement Fund (JRF)

The Judges' Retirement Fund (JRF) was established in 1937, and its retirement benefit provisions are contained in Chapter 2.12 RCW. JRF is a singleemployer retirement system composed of a single defined benefit plan. Members include judges of the Supreme Court, Court of Appeals and superior courts of Washington state. JRF has been closed to new entrants since 1971.

JRF is composed of and reported as one plan for accounting purposes.

### C. Benefits Provided - Retirement Systems PERS Plan 1

Provides retirement, disability and death benefits. Retirement benefits are calculated as 2% times the member's Average Final Compensation (AFC) times the member's years of service. AFC is the average of the member's 24 consecutive highest-paid service credit months. Members are eligible for retirement from active status at any age with at least 30 years of service, at age 55 with at least 25 years of service or at age 60 with at least five years of service.

PERS Plan 1 retirement benefits are actuarially reduced if a survivor benefit is chosen. Members retiring from inactive status before age 65 may also receive actuarially reduced benefits. Other benefits include an optional Cost-of-Living Adjustment

(COLA).

### PERS Plan 2/3

Provides retirement, disability and death benefits.
Retirement benefits for Plan 2 are calculated as 2% times the member's Average Final Compensation (AFC) times the member's years of service. Defined benefits for Plan 3 are calculated using 1% times the member's AFC times the member's years of service.

AFC is the monthly average of the member's 60 consecutive highest-paid service credit months.

Members are eligible for retirement with a full benefit at age 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. PERS Plan 2/3 members who have at least 20 years of service credit and are 55 years of age or older are eligible for early retirement with a reduced benefit. The benefit is reduced by a factor that varies according to age for each year before age 65.

PERS Plan 2/3 retirement benefits are actuarially reduced if a survivor benefit is chosen.

Other PERS Plan 2/3 benefits include a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at 3% annually.

Annuities purchased with plan 3 defined contributions that are invested within the WSIB TAP by plan 3 members are considered defined benefits. Plan 3 WSIB TAP annuities are actuarially reduced if a survivor benefit is chosen and purchased annuities include a COLA of 3% annually.

#### PERS Plan 3

Defined contribution benefits are totally dependent on employee contributions and investment earnings on those contributions.

Members are eligible to withdraw their defined contributions upon separation. Members have multiple withdrawal options, including purchase of an annuity.

### SERS Plan 2/3

Provides retirement, disability and death benefits.
Retirement benefits for Plan 2 are calculated as 2% times the member's Average Final Compensation (AFC) times the member's years of service. Defined benefits for Plan 3 are calculated using 1% times the member's AFC times the member's years of service.
AFC is the monthly average of the member's 60 consecutive highest-paid service credit months.

Members are eligible for retirement with a full benefit at age 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. SERS members who have at least 20 years of service credit and are 55 years of age or older are eligible for early retirement with a reduced benefit. The benefit is reduced by a factor that varies according to age for each year before age 65.

SERS Plan 2/3 retirement benefits are actuarially reduced if a survivor benefit is chosen.

Other SERS Plan 2/3 benefits include a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at 3% annually.

Annuities purchased with plan 3 defined contributions that are invested within the WSIB TAP by plan 3 members are considered defined benefits. Plan 3 WSIB TAP annuities are actuarially reduced if a survivor benefit is chosen and purchased annuities include a COLA of 3% annually.

#### SERS Plan 3

Defined contributions benefits are totally dependent on employee contributions and the investment earnings on those contributions.

Members are eligible to withdraw their defined contributions upon separation. Members have multiple withdrawal options, including purchase of an annuity.

#### PSERS Plan 2

Provides retirement, disability and death benefits. Retirement benefits are calculated using 2% times the member's Average Final Compensation (AFC) times the member's years of service. AFC is based on the member's 60 consecutive highest-paid months of service credit.

Members are eligible for retirement at age 65 with five years of service, at age 60 with at least 10 years of PSERS service credit or at age 53 with 20 years of service. Benefits are actuarially reduced for each year the member's age is less than 60 (with 10 or more service credit years in PSERS) or less than 65 (with fewer than 10 service credit years).

There is no cap on years of service credit. Retirement before age 60 is considered an early retirement, and PSERS members who retire before turning 60 receive reduced benefits. If retirement is at age 53 or older with at least 20 years of service, a 3% per year reduction for each year between age at retirement and age 60 applies. PSERS retirement benefits are actuarially reduced if a survivor benefit is chosen.

Other PSERS Plan 2 benefits include a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at 3% annually.

#### TRS Plan 1

Provides retirement, disability and death benefits. Retirement benefits are calculated using 2% of the member's Average Final Compensation (AFC) times the member's years of service — up to a maximum of 60%. AFC is the average of the member's two consecutive highest-paid fiscal years.

Members are eligible for retirement at any age after 30 years of service, at age 60 with five years of service or at age 55 with 25 years of service. Other benefits include temporary and permanent disability payments, and an optional Cost-of-Living Adjustment (COLA).

#### TRS Plan 2/3

Provides retirement, disability and death benefits. Retirement benefits for Plan 2 are calculated using 2% of the member's Average Final Compensation (AFC) times the member's years of service. Retirement defined benefits for Plan 3 are calculated using 1% of AFC times the member's years of service. AFC is the monthly average of the member's 60 consecutive highest-paid service credit months. TRS Plan 2/3 has no cap on years of service credit.

Members are eligible for retirement with a full benefit at age 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. TRS Plan 2/3 members who have at least 20 years of service credit and are 55 years of age or older are eligible for early retirement with a reduced benefit. The benefit is reduced by a factor that varies according to age for each year before age 65. TRS Plan 2/3 retirement benefits are actuarially reduced to reflect the choice of a survivor benefit.

Other TRS Plan 2/3 benefits include a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at 3% annually.

Annuities purchased with plan 3 defined contributions that are invested within the WSIB TAP by plan 3 members are considered defined benefits. Plan 3 WSIB TAP annuities are actuarially reduced if a survivor benefit is chosen and purchased annuities include a COLA of 3% annually.

#### TRS Plan 3

Defined contribution benefits are totally dependent on employee contributions and investment earnings on those contributions.

Members are eligible to withdraw their defined contributions upon separation. Members have multiple withdrawal options, including purchase of an annuity.

#### LEOFF Plan 1

Provides retirement, disability and death benefits. Retirement benefits are determined per year of service and are calculated as a percent of Final Average Salary (FAS) as follows:

LEOFF Plan 1	
Years of Service	% of FAS
20+	2.0 %
10-19	1.5 %
5-9	1.0 %

FAS is the basic monthly salary received at the time of retirement, provided a member has held the same position or rank for 12 months preceding the date of retirement. Otherwise, it is the average of the consecutive highest-paid 24 months' salary within the last 10 years of service. Members are eligible for retirement at age 50 with five years of service.

Other benefits include a Cost-of-Living Adjustment (COLA).

### IFOFF Plan 2

Provides retirement, disability and death benefits. Retirement benefits are calculated using 2% of the member's Final Average Salary (FAS) times the member's years of service. FAS is the monthly average of the member's 60 consecutive highest-paid service credit months. Members are eligible for retirement with a full benefit at age 53 with at least five years of service credit. Members who retire before age 53 receive reduced benefits. If the member has at least 20 years of service and is age 50 to 52, the reduction is 3% for each year before age 53. Otherwise, the benefits are actuarially reduced for each year before age 53. LEOFF Plan 2 retirement benefits are actuarially reduced to reflect the choice of a survivor benefit.

Other LEOFF Plan 2 benefits include a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at 3% annually.

### WSPRS Plans 1 and 2

Provides retirement, disability and death benefits. Retirement benefits are calculated using 2% of the member's Average Final Salary (AFS) times the member's years of service, capped at 75%. For Plan 1 members, AFS is based on the average of the member's 24 consecutive highest-paid service credit months. For Plan 2 members, AFS is based on the average of the member's 60 consecutive highest-paid service credit months.

Active members are eligible for retirement at age 55 with no minimum required service credit or at any age with 25 years of service credit. Members must retire no later than the first of the month following the month they reach age 65, unless the member is chief of the Washington State Patrol. WSPRS retirement benefits are actuarially reduced to reflect the choice of a survivor benefit.

Other benefits include a Cost-of-Living Adjustment (COLA), death benefits and a one-time, duty-related death benefit, if the Washington State Department of Labor & Industries finds the member eligible.

#### **IRS**

Provides retirement, disability and death benefits. Retirement benefits are calculated using 3.5% of the member's Final Average Salary (FAS) for members with 15 years of service and 3% of FAS for members with 10 to 14 years of service.

JRS members are eligible for retirement at age 60 with 15 years of service or with 12 years of service (if the member left office involuntarily and at least 15 years have passed from the beginning of judicial service).

#### **JRF**

Provides disability and retirement benefits.

### D. Vesting - Retirement Systems

As of June 30, 2020 the retirement systems had the following vesting requirements by system/plan:

### **Vesting Requirements for Retirement Systems**

As of June 30, 2020

System/Plan	Vesting Requirements
PERS Plan 1	PERS Plan 1 members became vested after the completion of five years of eligible service.
PERS Plan 2	PERS Plan 2 members are vested after completing five years of eligible service.
PERS Plan 3	PERS Plan 3 members are vested in the defined benefit portion of their plan after 10 years of service or after five years of service if 12 months of that service was earned after age 44.
SERS Plan 2	SERS Plan 2 members are vested after completing five years of eligible service.
SERS Plan 3	SERS Plan 3 members are vested in the defined benefit portion of their plan after 10 years of service or after five years of service if 12 months of that service was earned after age 44.
PSERS Plan 2	PSERS members are vested after completing five years of eligible service.
TRS Plan 1	TRS Plan 1 members became vested after the completion of five years of eliqible service.
TRS Plan 2	TRS Plan 2 members are vested after completing five years of eliqible service.
TRS Plan 3	TRS Plan 3 members are vested in the defined benefit portion of their plan after 10 years of service or after five years of service if 12 months of that service are earned after age 44.
LEOFF Plan 1	LEOFF Plan 1 members became vested after the completion of five years of eligible service.
LEOFF Plan 2	LEOFF Plan 2 members are vested after the completion of five years of eligible service.
WSPRS Plan 1/2	Active WSPRS Plan 1 and Plan 2 members do not have to meet a vesting requirement. Inactive WSPRS members are vested after the completion of five years of eligible service.
JRS	JRS members became vested after the completion of 15 years of service or 12 years if the member left office involuntarily.
JRF	JRF members became vested after the completion of 18 years of service at any age or 10 years of service at age 70.

E. Participating Employers and Nonemployer Contributing Entities -Retirement Systems

As of June 30, 2020 the following number of participating employers and nonemployer contributing entities contributed to the retirement systems:

# Participating Employers and Nonemployer Contributing Entities

As of June 30, 2020

System/Plan	Employer	Nonemployer
PERS Plan 1 <sup>1</sup>	269	831
PERS Plan 2	858	n/a
PERS Plan 3	578	n/a
SERS Plan 2	309	n/a
SERS Plan 3	310	n/a
PSERS Plan 2	67	n/a
TRS Plan 1 <sup>2</sup>	147	60
TRS Plan 2	307	n/a
TRS Plan 3	313	n/a
LEOFF Plan 1	18	n/a
LEOFF Plan 2 <sup>3</sup>	382	n/a
WSPRS Plan 1	1	n/a
WSPRS Plan 2	1	n/a
JRS <sup>4</sup>	n/a	n/a
JRF <sup>4</sup>	n/a	n/a

<sup>&</sup>lt;sup>1</sup> Nonemployer contributing entities for PERS plan 1 consist of PERS plan 2/3, SERS plan 2/3 and PSERS plan 2 employers that have no active members in PERS plan 1. These employers are contributing to the Plan 1 UAAL of PERS plan 1 based on their plan 2/3 employer contributions.

F. Membership - Retirement Systems Inactive and active membership within the retirement systems consisted of the following as of June 30, 2020:

### **Inactive and Active Membership**

As of June 30, 2020

System/Plan	Inactive Plan Members or Beneficiaries Currently Receiving Benefits	Inactive Plan Members Entitled to But Not Yet Receiving Benefits	Active Plan Members
PERS Plan 1 <sup>1</sup>	44,359	310	1,181
PERS Plan 2	59,453	28,860	123,913
PERS Plan 3	6,438	6,509	38,916
SERS Plan 2	11,112	6,274	28,943
SERS Plan 3	11,200	9,064	36,772
PSERS Plan 2	368	720	8,889
TRS Plan 1 <sup>1</sup>	31,777	92	263
TRS Plan 2	6,201	2,808	22,980
TRS Plan 3	15,316	8,279	56,593
LEOFF Plan 1 <sup>1</sup>	6,791	_	15
LEOFF Plan 2	7,175	1,006	18,833
WSPRS Plan 11	1,196	66	373
WSPRS Plan 2	2	39	681
JRS <sup>1</sup>	87	_	_
JRF <sup>1</sup>	10	_	_
Total Membership	201,485	64,027	338,352

 $<sup>^{\</sup>rm 1}$  PERS plan 1, TRS plan 1, LEOFF plan 1, WSPRS Plan 1, JRS and JRF are closed to new entrants.

Nonemployer contributing entities for TRS plan 1 consist of TRS plan 2/3 employers that have no active members in TRS plan 1. These employers are contributing to the Plan 1 UAAL of TRS plan 1 based on their plan 2/3 employer contributions.

<sup>&</sup>lt;sup>3</sup> The state of Washington is included as a participating employer for LEOFF Plan 2. The state also contributes to LEOFF plan 2 under a special funding situation pursuant to RCW 41.26.725

<sup>&</sup>lt;sup>4</sup> JRS and JRF have no active members. Therefore no employer or employee contributions are required. JRS and JRF retirement benefits are financed on a pay-as-you-go basis from a combination of investment earnings and funding from the state.

#### G. Judicial Retirement Account

The Judicial Retirement Account (JRA) was established by the Legislature in 1988 to provide supplemental retirement benefits. It is a defined contribution plan the state of Washington Administrative Office of the Courts administers under the direction of the Board for Judicial Administration. Membership includes judges elected or appointed to the Supreme Court, Court of Appeals and superior courts who are members of PERS for their services as a judge. Vesting is full and immediate.

Since January 1, 2007, any newly elected or appointed Supreme Court justice, Court of Appeals judge or superior court judge can no longer participate in JRA. As of June 30, 2020, 1 active member and 102 inactive members were in JRA. The state is the sole participating employer in JRA.

JRA plan members are required to contribute 2.5% of covered salary. The state, as employer, contributes an equal amount on a monthly basis. The employer and employee obligations to contribute are established in Chapter 2.14 RCW. Plan provisions and contribution requirements are established in state statute, and can only be amended by the state Legislature.

A JRA member who separates from service for any reason is entitled to receive a lump sum distribution of accumulated contributions. At death, the amount of accumulated contributions standing to the member's credit is paid to the member's estate or designated beneficiary.

The administrator of JRA has entered into an agreement for services with DRS and the Washington State Investment Board (WSIB). Under this agreement, DRS is responsible for all recordkeeping, accounting and reporting of member accounts. WSIB is granted the full power to establish investment policy, develop participant investment options and manage the investment funds for the JRA plan, consistent with the provisions of RCW 2.14.080 and 43.84.150.

H. Deferred Compensation Program The state of Washington offers participation to its employees and employees of those political subdivisions that elect to participate in the Deferred Compensation Program (DCP), pursuant to RCW 41.50.770, in accordance with Internal Revenue Code Section 457. The deferred compensation is not available to employees until termination, retirement, disability, death or unforeseeable financial emergency. DRS administers DCP.

The intent of the program is to provide additional income upon retirement. By deferring part of their income, participants can reduce their taxable income. Investments remain tax-free until they are withdrawn. The program provides participants with a means to easily save money and help supplement their other retirement income.

Employers of active participants can contribute to the participant's DCP account, but the participant and employer combined contributions cannot exceed the annual contribution limit set within Internal Revenue Code Section 457.

The state's DCP does not allow for loans to participants from their DCP accounts. However, as of June 30, 2020, DCP assets included a small receivable balance for loan payments because of new employers joining DCP and transferring their former plan's assets to the state's program.

Employees participating in DCP self-direct their investments through options the WSIB provides. The WSIB has the full power to invest DCP monies in accordance with RCW 43.84.150, 43.33A.140 and 41.50.770.

DCP participants can adjust or suspend their participation in the program at any time. When leaving employment, DCP participants can withdraw some or all of the balances in their accounts or leave their investments in place to continue to be influenced by market fluctuations.

The IRS requires a DCP participant to begin receiving account distributions at retirement or by April of the year after the participant turns  $70\frac{1}{2}$ , whichever comes later.

The WSIB holds in trust all amounts of compensation deferred through the program, all property and rights purchased with those amounts, and all income attributable to those amounts, as set forth under RCW 43.33A.030, for the exclusive benefit of DCP participants and their beneficiaries. Neither a participant nor the participant's beneficiaries, nor any other designee, has any right to commute, sell, assign, transfer or otherwise convey the right to receive any payments from the program. These payments and rights are nonassignable and nontransferable.

### Note 3: Contributions

### A. Contributions Requirements - Retirement Systems

The following contribution requirements were in effect as of June 30, 2020 for the retirement systems:

### **Contribution Requirements for Retirement Systems**

As of June 30, 2020

System/Plan	Contribution Requirements
PERS Plan 1	The PERS Plan 1 member contribution rate is established in statute at 6%. The employer contribution rate is developed by the Office of the State Actuary (OSA), adopted by the Pension Funding Council, and is subject to change by the Legislature.
PERS Plan 2/3 DB	The PERS Plan 2/3 employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2 and the defined benefit portion of Plan 3. The rates are adopted by the Pension Funding Council, and are subject to change by the Legislature. The employer rate includes a component to address the PERS Plan 1 Unfunded Actuarial Accrued Liability.
PERS Plan 3 DC	As established by Chapter 41.34 RCW, Plan 3 defined contribution rates are set at a minimum of 5% and a maximum of 15%. PERS Plan 3 members choose their contribution rate from six options when joining membership and can change rates only when changing employers. Employers do not contribute to the defined contribution benefits.
SERS Plan 2/3 DB	The SERS Plan 2/3 employer and employee contribution rates are developed by OSA to fully fund the defined benefits of Plan 2/3. The rates are adopted by the Pension Funding Council, and are subject to change by the Legislature. The employer rate includes a component to address the PERS Plan 1 Unfunded Actuarial Accrued Liability.
SERS Plan 3 DC	As established by Chapter 41.34 RCW, Plan 3 defined contribution rates are set at a minimum of 5% and a maximum of 15%. SERS Plan 3 members choose their contribution rate from six options when joining membership and can change rates only when changing employers. Employers do not contribute to the defined contribution benefits.
PSERS Plan 2	The PSERS Plan 2 employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2. The rates are adopted by the Pension Funding Council, and are subject to change by the Legislature. The employer rate includes a component to address the PERS Plan 1 Unfunded Actuarial Accrued Liability.
TRS Plan 1	The TRS Plan 1 member contribution rate is set in statute at 6%. The employer contribution rate is developed by the Office of the State Actuary (OSA), adopted by the Pension Funding Council, and is subject to change by the Legislature.
TRS Plan 2/3 DB	The TRS Plan 2/3 member and employer contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2 and the defined benefit portion of Plan 3. The rates are adopted by the Pension Funding Council, and are subject to change by the Legislature. The Plan 2/3 employer rate includes a component to address the TRS Plan 1 Unfunded Actuarial Accrued Liability.
TRS Plan 3 DC	As established by Chapter 41.34 RCW, the Plan 3 defined contribution rates are set at a minimum of 5% and a maximum of 15%. TRS Plan 3 members choose their contribution rate from six options when joining membership and can change rates only when changing employers. Employers do not contribute to the defined contribution benefits.
LEOFF Plan 1	LEOFF Plan 1 had no required employer or employee contributions for the fiscal year. Employers paid only the DRS administrative expense based on covered payroll.
LEOFF Plan 2	The LEOFF Plan 2 employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2. The rates are adopted by the LEOFF Plan 2 Retirement Board and are subject to change by the Legislature.
WSPRS Plan 1/2	The WSPRS Plans 1 and 2 employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund WSPRS. The rates are adopted by the Pension Funding Council, and are subject to change by the Legislature.
JRS	JRS had no active plan members during the fiscal year. Therefore, no employer or employee contributions were required. JRS retirement benefits are financed on a pay-as-you-go basis from a combination of investment earnings and funding from the state.
JRF	No active plan members were in JRF during the fiscal year. Therefore, no employer or employee contributions were required. JRF retirement benefits are financed on a pay-as-you-go basis from a combination of investment earnings and funding from the state.

### B. Contribution Rates - Retirement Systems

The Retirement Systems contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2020 were as follows:

# **Required Contribution Rates**

Expressed as a Percentage of Current-Year Covered Payroll at the Close of Fiscal Year 2020

	Employer Act	ual Contribution R	ates <sup>1</sup>	<b>Employee Actual Contribution Rates</b>				
	Plan 1	Plan 2	Plan 3 <sup>2</sup>	Plan 1	Plan 2	Plan 3		
PERS <sup>3</sup>								
Members Not Participating in JBM								
State Agencies	12.86 %	12.86 %	12.86 %	6.00 %	7.90 %	varies4		
Local Governmental Units	12.86 %	12.86 %	12.86 %	6.00 %	7.90 %	varies4		
State Government Elected Officials	19.20 %	12.86 %	12.86 %	7.50 %	7.90 %	varies4		
Members Participating in JBM								
State Agencies	15.36 %	15.36 %	15.36 %	9.76 %	17.25 %	7.50%5		
Local Governmental Units	12.86 %	12.86 %	12.86 %	12.26 %	19.75 %	7.50%5		
SERS <sup>3</sup>								
Local Governmental Units	n/a	13.19 %	13.19 %	n/a	8.25 %	varies4		
PSERS <sup>3</sup>								
State Agencies	n/a	12.14 %	n/a	n/a	7.20 %	n/a		
Local Governmental Units	n/a	12.14 %	n/a	n/a	7.20 %	n/a		
TRS <sup>6</sup>								
Members Not Participating in JBM								
State Agencies	15.51 %	15.51 %	15.51 %	6.00 %	7.77 %	varies4		
Local Governmental Units	15.51 %	15.51 %	15.51 %	6.00 %	7.77 %	varies4		
State Government Elected Officials	15.51 %	15.51 %	15.51 %	7.50 %	7.77 %	varies4		
Members Participating in JBM								
State Agencies	15.51 %	n/a	n/a	9.76 %	n/a	n/a		
LEOFF								
Local Governmental Units	0.18 %	5.33 %	n/a	n/a	8.59 %	n/a		
Ports and Universities	0.18 %	8.77 %	n/a	n/a	8.59 %	n/a		
State of Washington	n/a	3.44 %	n/a	n/a	n/a	n/a		
WSPRS								
State Agencies	17.68 %	17.68 %	n/a	8.45 %	8.45 %	n/a		

<sup>&</sup>lt;sup>1</sup> Employer rates include an administrative expense rate of 0.18%.

 $<sup>^{2}</sup>$  Plan 3 defined benefit portion only

 $<sup>^{\</sup>rm 3}$  Employer rates include the rate to fund the Unfunded Actuarial Accrued Liability (UAAL) of PERS Plan 1.

 $<sup>^{\</sup>rm 4}$  Variable from 5% to 15% based on rate the member selects

<sup>&</sup>lt;sup>5</sup> Minimum rate

 $<sup>^{\</sup>rm 6}$  Employer rates include the rate to fund the UAAL of TRS Plan 1.

### C. Funding Policy

All employers are required to contribute at the level the Legislature established. Plan-specific tables presented in Note 3 (B), Contributions, provide the required contribution rates for each plan at the close of fiscal year 2020.

PERS: Each biennium, the Pension Funding Council adopts Plan 1 employer contribution rates, Plan 2 employer and employee contribution rates, and Plan 3 employer contribution rates. Employee contribution rates for Plan 1 are established by statute at 6%. The contribution rates for Plan 2 and the employer contribution rate for Plan 3 are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. Under Plan 3, employer contributions finance the defined benefit portion of the plan, and member contributions finance the defined contribution portion. The Plan 3 employee contribution rates range between 5% and 15%.

The methods used to determine PERS contribution requirements are established under state statute in accordance with Chapters 41.40 and 41.45 RCW.

SERS: Each biennium, the Pension Funding Council adopts Plan 2 employer and employee contribution rates and Plan 3 employer contribution rates. The contribution rates for Plan 2 and the employer contribution rate for Plan 3 are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. Under Plan 3, employer contributions finance the defined benefit portion of the plan, and member contributions finance the defined contribution portion. The Plan 3 employee contribution rates range between 5% and 15%.

The methods used to determine SERS contribution requirements are established under state statute in accordance with Chapters 41.35 and 41.45 RCW.

PSERS: Each biennium, the Pension Funding Council adopts Plan 2 employer and employee contribution rates. The rates are developed by the Office of the

State Actuary to fully fund Plan 2.

The methods used to determine PSERS contribution requirements are established under state statute in accordance with Chapters 41.37 and 41.45 RCW.

TRS: Each biennium, the Pension Funding Council adopts Plan 1 employer contribution rates, Plan 2 employer and employee contribution rates, and Plan 3 employer contribution rates. Employee contribution rates for Plan 1 are established by statute at 6%. The contribution rates for Plan 2 and the employer contribution rate for Plan 3 are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. Under Plan 3, employer contributions finance the defined benefit portion of the plan and member contributions finance the defined contribution portion. The Plan 3 employee contribution rates range between 5% and 15%.

The methods used to determine the TRS contribution requirements are established under state statute in accordance with Chapters 41.32 and 41.45 RCW.

**LEOFF:** Employer and employee contribution rates are developed by the Office of the State Actuary to fully fund the plans. Since July 1, 2000, Plan 1 employers and employees contribute 0%, as long as the plan remains fully funded. Plan 2 employers and employees pay at the rate the LEOFF Plan 2 Retirement Board adopts.

The Legislature, by means of a special funding arrangement, appropriates money from the state General Fund to supplement the current service liability of Plan 2 in accordance with the recommendations of the Office of the State Actuary and the LEOFF Plan 2 Retirement Board.

This special funding situation is not mandated by the state Constitution and could be changed by statute. For fiscal year 2020, the state contributed \$76.2 million to LEOFF Plan 2.

The methods used to determine the contribution requirements are established under state statute in accordance with Chapters 41.26 and 41.45 RCW.

**WSPRS:** Each biennium, the state Pension Funding Council adopts the employee and state contribution rates, subject to revision by the Legislature. The rates are developed by the Office of the State Actuary to fully fund the plans.

The methods used to determine the contribution requirements are established under state statute in accordance with Chapters 43.43 and 41.45 RCW.

JRS: The Judicial Retirement System has no active members. The state guarantees the solvency of JRS on a pay-as-you-go basis. Each biennium, the Legislature, through appropriations from the state General Fund, contributes amounts sufficient to meet benefit payment requirements. For fiscal year 2020, the state contributed \$7.8 million.

JRF: The Judges' Retirement Fund has no active members. The state guarantees the solvency of JRF on a pay-as-you-go basis. Each biennium, the Legislature, through appropriations from the state General Fund, contributes amounts sufficient to meet benefit payment requirements. For fiscal year 2020, the state contributed \$0.4 million

### Note 4: Net Pension Liability

PERS Plan 1, PERS Plan 2/3, SERS Plan 2/3, TRS Plan 1, TRS Plan 2/3, LEOFF Plan 1, LEOFF Plan 2, WSPRS Plan 1

The components of the net pension liability of the Retirement Systems by System and Plan as of June 30, 2020, were as follows:

### **Net Pension Liability**

As of June 30, 2020 — Dollars in Thousands

				Fiduciary Net tion	Emp	icipating loyers' Net sion Liability	Plan Fiduciary Net Position as a Percentage of Total Pension Liability		
PERS Plan 1	\$	11,256,796	\$	7,726,256	\$	3,530,540	68.64%		
PERS Plan 2/3	\$	46,030,536	\$	44,751,593	\$	1,278,943	97.22%		
SERS Plan 2/3	\$	7,043,384	\$	6,511,420	\$	531,964	92.45%		
PSERS Plan 2	\$	819,549	\$	833,309	\$	(13,760)	101.68%		
TRS Plan 1	\$	8,179,362	\$	5,770,576	\$	2,408,786	70.55%		
TRS Plan 2/3	\$	18,559,021	\$	17,023,040	\$	1,535,981	91.72%		
LEOFF Plan 1	\$	4,028,653	\$	5,917,162	\$	(1,888,509)	146.88%		
LEOFF Plan 2	\$	12,886,353	\$	14,926,207	\$	(2,039,854)	115.83%		
WSPRS Plan 1/2	\$	1,443,948	\$	1,385,040	\$	58,908	95.92%		

Actuarial Assumptions: The total pension liability was determined by an actuarial valuation as of June 30, 2019, with the results rolled forward to June 30, 2020, using the following actuarial assumptions, applied to all prior periods included in the measurement:

#### **Actuarial Assumptions**

Inflation 2.75% total economic inflation, 3.50% salary inflation Salary In addition to the base 3.50% salary inflation assumption, Increases salaries are also expected to grow by promotions and longevity

Investment

Rate of Return 7.40%

Mortality rates were developed using the Society of Actuaries' Pub.H-2010 Mortality rates, which vary by member status (that is...active, retiree, or survivor), as our base table. OSA applied age offsets for each system, as appropriate, to better tailor the mortality rates to the demographics of each plan. OSA applied the long-term MP-2017 generational improvement scale, also developed by the Society of Actuaries, to project mortality rates for every year after the 2010 base table. Under "generational" mortality, a

member is assumed to receive additional mortality improvements in each future year throughout their lifetime.

The actuarial assumptions used in the June 30, 2019, valuation were based on the results of the 2013-2018 Demographic Experience Study Report and the 2019 Economic Experience Study. Additional assumptions for subsequent events and law changes are current as of the 2019 actuarial valuation report.

OSA selected a 7.40% long-term expected rate of return on pension plan investments using a buildingblock method. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered Capital Market Assumptions (CMAs) and simulated expected investment returns the WSIB provided.

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The expected future rates of return (expected returns, net of pension plan investment expense, including inflation) are developed by the WSIB for each major asset class.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2020, are summarized in the following table:

<b>Estimated Rates of Return</b>									
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return							
Fixed Income	20.00 %	2.20 %							
Tangible Assets	7.00 %	5.10 %							
Real Estate	18.00 %	5.80 %							
Global Equity	32.00 %	6.30 %							
Private Equity	23.00 %	9.30 %							

The inflation component used to create the table above was 2.20% and represents the WSIB's most recent long-term estimate of broad economic inflation.

For additional information and background on OSA's development of the long-term rate of return assumption, please see the 2017 Report on Financial Condition and Economic Study located on the OSA website. The selection of this assumption and economic experience studies are further detailed in the Actuarial Certification Letter.

Discount Rate: The discount rate used to measure the total pension liability was 7.40%. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members.

Based on the assumptions described in our Certification Letter, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.40% on pension plan investments was applied to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate: The following table presents the net pension liability of the employers calculated using the current discount rate as well as what the employers' net pension liability 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.

# **Discount Rate Sensitivity**

For the Year Ended June 30, 2020 — Dollars in **Thousands** 

Pension	19	% Decrease	Dis	Current scount Rate	1% Increase			
Trust		(6.40%)		(7.40%)		(8.40%)		
PERS Plan 1	\$	4,422,202	\$	3,530,540	\$	2,752,919		
PERS Plan 2/3	\$	7,957,926	\$	1,278,943	\$	(4,221,203)		
SERS Plan 2/3	\$	1,517,879	\$	531,964	\$	(283,583)		
PSERS Plan 2	\$	149,797	\$	(13,760)	\$	(143,207)		
TRS Plan 1	\$	3,051,911	\$	2,408,786	\$	1,847,550		
TRS Plan 2/3	\$	4,526,645	\$	1,535,981	\$	(903,643)		
LEOFF Plan 1	\$	(1,537,150)	\$	(1,888,509)	\$	(2,192,494)		
LEOFF Plan 2	\$	(40,383)	\$	(2,039,854)	\$	(3,677,022)		
WSPRS Plan 1/2	\$	260,955	\$	58,908	\$	(105,534)		

### Judicial Retirement System and Judges Retirement Fund

The components of the net pension liability of the Retirement Systems by System and Plan as of June 30, 2020, were as follows:

JRF

\$

Net Pension Liability										
As of June 30, 2020 — Dollars in Thousands										
	Total P	ension Liability	Plan Fidu Position	uciary Net		pating ers' Net n Liability	Plan Fiduciary Net Position as a Percentage of Total Pension Liability			
JRS	\$	77,119	\$	8,494	\$	68,625	11.01%			
JRF	\$	1,939	\$	1,127	\$	812	58.12%			

Actuarial Assumptions and Discount Rate: JRS and JRF are excluded from the actuarial valuations performed by OSA due to their small, closed populations and the plans have no remaining active members.

Mortality rates for JRS and JRF are consistent with those used for members of PERS. Members of JRS are assumed to receive a 2.75% annual COLA.

The plans are operated on a pay-as-you-go basis and the state guarantees the solvency of the plans. Each biennium, the Legislature, through appropriations from the state General Fund, contributes amounts sufficient to meet benefit payment requirements. OST manages all pension assets for the JRS and Judges Retirement Systems. Because these plans are funded on a pay-as-you go basis, a long-term expected rate of return on investments is not applicable.

Since this plan is essentially operated on a pay-asyou-go basis, the discount rate used to measure the Total Pension Liability was set equal to the Bond Buyer General Obligation 20-Bond Municipal Bond Index, or 2.21% for the June 30, 2020 measurement date.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate: The following table presents the net pension liability of the employers calculated using the current discount rate as well as what the employers' net pension liability 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.

#### **Discount Rate Sensitivity** For the Year Ended June 30, 2020 — Dollars in **Thousands** Current 1% Decrease **Discount Rate** 1% Increase Pension (1.21%) **Trust** (2.21%)(3.21%)**JRS** \$ 75.272 68,625 62.864

879 \$ 812 \$ 749

#### Note 5: Cash and Investments

A. Investment Policy and Authority The WSIB has been authorized by statute (43.33A RCW) as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk. The WSIB can invest as provided by statute in the following:

- U.S. treasury bills
- Discount notes
- Repurchase agreements
- Reverse repurchase agreements
- Bankers' acceptances
- Commercial paper
- Guaranteed investment contracts
- U.S. government and agency (governmentsponsored corporations eligible for collateral purposes at the Federal Reserve) securities
- Non-U.S. dollar bonds
- Investment-grade corporate bonds
- Noninvestment-grade corporate bonds
- Publicly traded mortgage-backed securities
- Privately placed mortgages
- Private placements of corporate debt
- U.S. and foreign common stock
- U.S. preferred stock
- Convertible securities
- Private equity, including but not limited to investment corporations, partnerships and limited liability companies for venture capital; leveraged buyouts; real estate and other tangible assets; and other forms of private equity
- Asset-backed securities
- Derivative securities, including futures, options, options on futures, forward contracts and swap transactions

No violations of these investment restrictions occurred during fiscal year 2020.

Retirement funds, except the Judicial Retirement System (JRS) and the Judges Retirement Fund (JRF), are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that consist of fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

The JRS and JRF are operated on a pay-as-you-go basis and the Office of the State Treasurer (OST) manages all pension assets for JRS and JRF.

The primary objective of the OST investment portfolio is safety and liquidity, with return on investment a secondary objective.

Investments shall be undertaken in a manner that seeks preservation of capital in the overall portfolio. Because the investment portfolio must remain liquid to enable the State Treasurer to meet all cash requirements than can reasonably be anticipated, investments will be managed to maintain cash balances needed to meet daily obligations of the state. After assuring needed levels of safety and liquidity, the investment portfolio will be structured to attain a market rate of return.

Eligible investments are only those securities and deposits authorized by statute (Chapters 39.58, 39.59, 43.250 and 43.84 RCW) and include:

- Obligations of the U.S. government
- Obligations of U.S. government agencies or corporations wholly owned by the U.S. government
- Obligations of government-sponsored enterprises that are or might become eligible as collateral for advances to member banks as determined by the board of governors of the Federal Reserve
- U.S. dollar-denominated obligations of supranational institutions, provided that at the time of investment the institution has the United States.

- Commercial paper, as long as the OST adheres to policies and procedures of the WSIB regarding commercial paper [RCW 43.84.080(5)]
- Corporate notes, provided that the OST adheres to the policies and procedures adopted by the State Investment Board (RCW 43.84.080(7)).
- Investment deposits with financial institutions qualified by the Washington Public Deposit Protection Commission (RCW 39.58.010(9)) and deposits made pursuant to RCW 39.58.080.
- The Local Government Investment Pool
- Obligations of Washington state or its political subdivisions

#### B. Asset Allocation

Investment performance is a result of two primary factors: individual asset selection and the allocation of the portfolio among asset classes (for example, stocks, fixed income and real estate). Studies suggest that more than 90% of investment performance can be explained by asset allocation decisions.

Accordingly, the WSIB sets a specific, long-term target asset mix and adopts tight ranges around those targets to control the overall risk and return of the CTF. On a daily basis, the WSIB reviews the asset allocation in relation to the established ranges. Its staff shifts assets whenever the allocation range for an asset exceeds the approved range or when cash is needed elsewhere.

The WSIB reviews changes to the overall asset mix every three to four years.

The following chart shows the CTF's asset allocation as of June 30, 2020, as well as the long-term target allocations.

Current Asset Allocation and Long-Term											
Target Allocations — As of June 30, 2020											
Asset Type	<b>Target Allocation</b>	<b>Actual Allocation</b>									
Fixed Income	20.00 %	21.29 %									
Tangible Assets	7.00 %	5.36 %									
Real Estate	18.00 %	18.43 %									
Public Equity	32.00 %	33.56 %									
Private Equity	23.00 %	21.03 %									
Innovation	0.00 %	0.24 %									
Cash	0.00 %	0.09 %									
Total	100.00 %	100.00 %									

C. Annual Money-Weighted Rates of Return The money-weighted rates of return are provided by the Washington State Investment Board. The moneyweighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows. For the fiscal year ended June 30, 2020, the annual money-weighted rate of return net of pension plan investment expense is displayed in the following table:

Annual Money-Weighted Rates of Return									
As of June 30, 202	20								
Plan									
PERS Plan 1	4.49%								
PERS Plan 2/3	4.55%								
SERS Plan 2/3	4.56%								
PSERS Plan 2	4.63%								
TRS Plan 1	4.48%								
TRS Plan 2/3	4.57%								
LEOFF Plan 1	4.48%								
LEOFF Plan 2	4.55%								
WSPRS Plan 1/2	4.51%								
JRS	1.66%								
JRF	1.66%								

A ten year schedule of Annual Money-Weighted Rates of Return, built prospectively from fiscal year 2014, is available in the Required Supplementary Information within the Financial Section of this publication.

### D. Valuation of Investments

Investments are reported at fair value. Fair value measurements are categorized within the fair value hierarchy established by generally accepted accounting principles. Unrealized gains and losses are included as investment income in the Statement of Changes in Fiduciary Net Position.

Cash and Cash Equivalents: Cash and cash equivalents are highly liquid investments, which include foreign currencies and short-term investment funds. The short-term investment funds are valued at cost. Accordingly, these investments are excluded from the fair value schedule. Cash and cash equivalents of \$3.8 billion are reported as liquidity in the Statement of Fiduciary Net Position.

**Investments Classified as Level 1:** Investments classified as Level 1 are exchange-traded equity securities whose values are based on published market prices and quotations from national security exchanges as of the appropriate market close at the end of the reporting period.

**Investments Classified as Level 2:** Investments classified as Level 2 are primarily composed of publicly traded debt securities and exchange-traded stocks traded in inactive markets. Values for publicly traded debt securities are sourced from reputable pricing vendors using models that are market-based measurements representing their good faith opinion on the exit value of a security in an orderly transaction under current market conditions. Such models take into account quoted prices, nominal yield spreads, benchmark yield curves, prepayment speeds and other market-corroborated inputs.

Investments Classified as Level 3: Investments classified as Level 3 were publicly traded equity securities that have noncurrent, or "stale," values and are included in the table at the most recently traded price. The stale pricing occurred due to trading suspensions, delisting from an active exchange or lack of investor demand. The current fair values of these securities are unknown.

#### Investments Measured at Net Asset Value (NAV) -

Alternative Assets: The fair value of investments that are organized as limited partnerships and have no readily ascertainable fair value is determined by using the NAV per share (or its equivalent) of the pension trust fund's ownership interest in partners' capital. These values are based on the individual investor's capital account balance reported at fair value by the general partner for the most recent available reporting period, adjusted by subsequent contributions, distributions, management fees, and changes in values of foreign currency and published market prices for certain securities.

The limited partnerships' annual financial statements are audited by independent auditors. These investments make up approximately 46% of total investments as of June 30, 2020.

However, due to the inherent uncertainties in estimating fair values, it is reasonably possible that the estimates could change in the near term or that the subsequent sale price of assets would be different from the reported NAV.

Investments Measured at Net Asset Value (NAV) -Collective Investment Trust Funds: The retirement fund invests in three separate Collective Investment Trust Funds. Each Fund determines a fair value by obtaining fair values of the underlying holdings, using reputable pricing sources and computing an overall net asset value per share. The holdings within each fund are publicly traded equity securities.

Two funds are passively managed to approximate the capitalization weighted total rates of return of the Morgan Stanley Capital International (MSCI) U.S. Investable Market Index and the MSCI Emerging Markets Index. Each fund has daily openings and contributions. Withdrawals can be made on any business day. The Fund manager, at its discretion, may require withdrawal proceeds to be made partially or wholly in kind. Under certain circumstances, the fund manager may choose to

suspend valuation and/or the right to make contributions and withdrawals from the fund. Such circumstances include actual or anticipated closure, restriction, or suspension of trading activity in any markets or exchanges where the fund investments are traded, where the purchase, sale or pricing of the fund's investments would not be reasonably practicable or advisable, or where suspending contributions or withdrawals would be in the best interest of the fund or participants.

One fund seeks to achieve long-term capital

appreciation through active investment management in emerging market countries. The index against which the fund compares its performance is the MSCI Emerging Market Index. The retirement fund may redeem some or all of their holdings on each monthly valuation date. The fund manager may delay redemption proceeds if it determines that it is reasonably necessary to prevent a material adverse impact on the fund or other investors. The fund manager, at its discretion, may require withdrawal proceeds to be made partially or wholly in kind.

The following tables present fair value measurements as of June 30, 2020:

Investments Measured at Fair Value	: —	Commingle	ed T	rust Fund (	CT	F)	
As of June 30, 2020 — Dollars in Thousand	s				•		
Investment Type		Fair Value		Level 1 Inputs		Level 2 Inputs	Level 3 Inputs
Debt Securities							
Mortgage- and Other Asset-Backed Securities	\$	1,733,693	\$	_	\$	1,733,693	\$ _
Corporate Bonds		13,349,005		_		13,349,005	_
U.S. and Foreign Government and Agency Securities		7,610,069		_		7,610,069	_
Total Debt Securities		22,692,767		_		22,692,767	_
Equity Securities							
Common and Preferred Stock		20,588,821		20,529,113		53,909	5,799
Depository Receipts and Other Miscellaneous		1,160,371		1,101,023		59,308	40
Mutual Funds and Exchange-Traded Funds		6,688		6,688		_	_
Real Estate Investment Trusts		396,376		396,376		_	_
Private Equity and Tangible Asset Funds		152,769		152,769		_	_
Total Equity Securities		22,305,025		22,185,969		113,217	5,839
Total Investments by Fair Value Level		44,997,792		22,185,969		22,805,984	5,839
Investments Measured at Net Asset Value							
Collective Investment Trust Funds (Equity Securities)		12,782,189					
Private Equity		26,127,183					
Real Estate		20,721,203					
Tangible Assets		5,838,470					
Total Investments at Net Asset Value		65,469,045					
Total Investments Measured at Fair Value	\$	110,466,837					
Other Assets at Fair Value							
Collateral Held Under Securities Lending Agreements		275,912		_		275,912	
Net Foreign Exchange Contracts Receivable — Forward and Spot		7,187		_		7,187	
Margin Variation Receivable — Futures Contracts		21,855		21,855		_	
Obligations Under Securities Lending Agreements		(275,912)		_		(275,912)	
Total Other Assets Measured at Fair Value	\$	29,042	\$	21,855	\$	7,187	

### Investments Measured at Net Asset Value (NAV)

As of June 30, 2020 — Dollars in Millions

			Liqu				
	Fair Value	Less Than 3 Years		3 to 9 Years	10 or More Years	Redemption Notice Period and Frequency	Unfunded Commitments
Collective Investment Trust Funds							
(Equity Securities) <sup>1</sup>	12,782.1	\$ 12,782.1	\$	_	\$ _	variable <sup>1</sup>	\$ _
Private Equity	26,127.2	74.6		3,286.6	22,766.0	n/a²	19,037.0
Real Estate	20,721.2	7.7		1,891.2	18,822.3	n/a²	8,678.1
Tangible Assets	5,838.5	0.7		625.7	5,212.1	n/a²	4,854.0
Total Investments Measured at NAV	\$ 65,649.0	\$ 12,865.1	\$	5,803.5	\$ 46,800.4		\$ 32,569.1

<sup>1</sup> The retirement funds invest in three separate collective investment trust funds. Two passively managed funds allow for withdrawals on any business day at the discretion of the fund manager. The third fund seeks to achieve long-term capital appreciation through active investment management in emerging market countries and might redeem some or all of its holdings on each monthly valuation date.

Private Equity Limited Partnerships: This includes 295 private equity limited liability partnerships that invest primarily in the United States, Europe and Asia in leveraged buyouts, venture capital, distressed debt and growth equity.

The fair value of individual capital account balances is based on the valuations private equity partnerships reported using the following methodologies to value the underlying portfolio companies:

- Valuations of publicly traded portfolio companies are based on active exchanges using quoted market prices as of the close of trading for each month end.
- When a portfolio company investment does not have a readily available market price but has a return that is determined by reference to an asset for which a market price is readily available, valuations are based on the closing market price of the reference asset on the valuation date, adjusted for factors that affect the fair value of the investment held.
- When the portfolio company's investments are private holdings and are not traded on active security exchanges, valuation methodologies consist primarily of income and market approaches. The income

approach involves a discounted cash-flow analysis based on the portfolio company's projections. The market approach involves valuing a company at a multiple of a specified financial measure, generally earnings before interest, taxes, depreciation and amortization (EBITDA) based on multiples at which comparable companies trade.

**Real Estate:** This includes 32 real estate investments. Targeted investment structures within the real estate portfolio include real estate operating companies, limited liability companies, joint ventures, commingled funds and co-investments. Real estate partnerships provide quarterly valuations based on the most recent capital account balances. The partnerships value individual properties at least annually and adjust them as frequently as quarterly if material market or operational changes have occurred. Properties are generally externally appraised every one to five years, depending on the investment. Structured finance investments receive quarterly value adjustments; the partners generally apply the assumption that all such positions will be held to maturity. Annual audits of most partnerships include a review of compliance with the partnerships' valuation policies.

<sup>&</sup>lt;sup>2</sup> These investments can never be redeemed. Instead, the nature of these investments provides for distributions from the sale/liquidation of the underlying assets of the fund and from net operating cash flows. It is anticipated that the various investments within each asset class will be liquidated in the liquidation periods listed within the above schedule.

Tangible Assets: This includes 56 limited liability structures and funds. The primary goals of the tangible asset portfolio are to generate a long-term sustainable and stable income stream as well as generate appreciation at least commensurate with inflation. Valuation practices of general partners and asset managers are consistent with private equity limited partnerships.

#### Other Assets and Liabilities Measured at Fair Value:

Forward exchange contracts are valued by interpolating a value using the spot foreign exchange rate and forward points (based on the spot rate and currency interest rate differentials), which are all inputs that are observable in active markets (Level 2).

Cash collateral held and the offsetting obligations under securities lending agreements are valued by the lending agency. They are sourced from reputable pricing vendors using models that are market-based measurements representing their good faith opinion on the exit value of a security in an orderly transaction under current market conditions. Such models take into account quoted prices, nominal yield spreads, benchmark yield curves, prepayment speeds and other market-corroborated inputs.

Gains and losses on futures contracts are settled daily, based on the underlying principal value, and do not involve an actual transfer of the specific instrument. The margin variation represents the current gain or loss remaining to be settled from the prior day. The custodial bank provides quoted prices for these securities from a reputable pricing vendor.

E. Valuation of Investments - DCP, JRA and Plan 3 Self-Directed Investments: DCP, JRA and Plan 3 defined contribution Self-

directed investments are daily valued funds, have no unfunded commitments and can be redeemed daily with no notice period. Funds are managed by the WSIB (Bond Fund), Alliance Bernstein (Target Date

Funds), Walden Asset Management (Balanced Fund) and BlackRock Institutional Trust Co. (Equity Index Funds and Short-Term Investment Funds). All DCP, JRA and Plan 3 Self-Directed funds that are measured at fair value are measured at the NAV. The guaranteed investment contracts the WSIB manages for DCP and JRA are reported at contract value.

Trading restrictions have been established to safeguard participants against the effects of excessive trading. If a participant transfers more than \$1,000 out of a fund, he or she will be required to wait 30 calendar days before transferring money back into that fund. The 30-day window is based on the last time the participant made a transfer out of the fund.

#### DCP. JRA and Plan 3 Self-Directed Investments As of June 30, 2020 — Dollars in Thousands

	<b>Fair Value</b>		
Investments Measures at Net Asset Value			
Target Date Funds (Retirement Strategy Funds)	\$ 5,378,170		
Equity Index Funds	2,535,309		
Bond Funds	779,432		
Short-Term Investment Funds	570,225		
Balanced Fund	325,327		
Subtotal	9,588,463		
Investments Measured at Contract Value			
Guaranteed Investment Contracts	970,968		
<b>Total Other Noncurrent Investments</b>	\$ \$ 10,559,431		

**Bond Fund:** The WSIB manages the Washington State Bond Fund. Investments in this fund are not available to the general public. The fund employs an active strategy that seeks to add incremental value over the index. The fund normally invests in a diversified portfolio of investment-grade corporate securities. The portfolio intends to earn additional returns through security selection, but will be allowed to deviate from the index's duration by plus or minus 15 percent. WSIB determines a NAV per share by obtaining fair values of the underlying holdings, using reputable pricing sources on a daily basis. The funds performance objective is to match or exceed the return of the Bloomberg Barclays Intermediate Credit Index. The fund can redeem some or all holdings daily without restriction.

**Balanced Fund:** Boston Trust Walden Company actively manages the Walden Socially Responsible Investment Balanced Fund. The fund is a welldiversified portfolio of stocks, bonds and money market instruments. At least 30% of the fund's assets are invested in fixed-income securities and, at most, 70% of the fund's assets are invested in foreign and domestic equity securities. The fund's asset allocation will vary based on Boston Trust Walden's assessment of global economic conditions and current valuations within capital markets, balancing risk and reward, and the relative attractiveness of stocks versus bonds. Equity investments will focus on an opportunity set of domestic and international companies Boston Trust Walden judges to be of higher quality than peers. Fixed-income investments are restricted to investmentgrade securities. No restrictions on redemptions exist.

Equity Index Funds: BlackRock manages the Equity Index funds, which include the U.S. Large Cap, Global, U.S. Small Cap Value and Emerging Market Equity Index Funds. BlackRock uses a passive, or indexing, approach to achieve each fund's investment objectives. It does not seek to outperform the index; rather, it seeks to track the index and does not seek temporary defensive positions when markets decline or appear overvalued.

The funds' investments are valued at fair value each day the fund is open for contributions and redemptions and, as of the report date, if the financial reporting period ends on a day the fund is not open. Various inputs are used in determining the fair value of financial instruments and could be based on independent market data or be internally developed.

The U.S. Large Cap Equity Index Fund invests exclusively in the Equity Index Fund, which seeks investment results that correspond generally to the price and yield performance of a particular index. The fund is invested in a portfolio of equity securities. Its objective is to approximate the capitalization-weighted total rate of return of the segment of the

U.S. market for publicly traded equity securities the larger capitalized companies represent. The criterion for selection of investments is the S&P 500 Index.

The Global Equity Index Fund seeks investment results that correspond generally to the price and yield performance of a particular index. The fund is invested and reinvested primarily in equity securities. Its objective is to approximate the capitalization-weighted total rate of return of the entire global market for publicly traded equity securities as captured by the MSCI ACWI IMI US \$ Net Dividend Index. The fund invests in the Russell 3000 Index Fund E and the BlackRock MSCI ACWI ex-U.S. IMI Index Fund E in target weights, subject to periodic rebalancing. Each fund is an index fund that seeks investment results that correspond generally to the price and yield performance of a particular index.

The U.S. Small Cap Equity Index Fund invests exclusively in Russell 2000 Value Fund F, which is an index fund that seeks investment results that correspond generally to the price and yield performance of a particular index. The fund is invested and reinvested in a portfolio of equity securities. Its objective is to approximate the capitalization-weighted total rate of return of the segment of the U.S. market for publicly traded equity securities the Russell 3000 Index represents, excluding the equity securities of the 1,000 largest capitalized companies. Of those 2,000 companies, the Russell 2000 Value Index represents those with a less-than-median orientation toward growth. Companies in this index generally have low price-tobook and price-to-earnings ratios, higher dividend yields, and lower forecasted growth values than more growth-oriented securities.

The Emerging Market Equity Index Fund is invested and reinvested in a portfolio of international equity securities, depository receipts, registered investment companies and derivatives. Its objective is to provide returns that approximate the capitalization-weighted total rates of return of the markets in certain countries

for equity securities traded outside the United States.

Target Date Funds: Target Date Funds (Retirement Strategy Funds) are diversified asset allocation portfolios of equities and bonds. The asset mix of each fund is adjusted over time to the allocation deemed appropriate for the target retirement date and becomes progressively more conservative as the fund approaches and passes through its target date for retirement.

The assets of these funds are aggregated, and fair value is measured at the NAV. Alliance Bernstein is the fund manager of the Target Date Funds. The funds include underlying funds managed by the WSIB and BlackRock, whose valuation methods are described within the Bond Fund (WSIB) and Equity Index Funds (BlackRock).

The fair value of debt instruments, such as bonds, and over-the-counter derivatives is generally based on market price quotations, recently executed market transactions, when observable, or industry-recognized modeling techniques.

When readily available market prices or relevant bid prices are not available for certain equity investments, such investments could be valued based on similar publicly traded investments, movements in relevant indices since last available prices, or underlying company fundamentals and comparable company data, such as multiples to earnings or other multiples to equity.

Options are valued using market-based inputs to models, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency, when such inputs and models are available. Alternatively, the values might be obtained through unobservable management-determined inputs and/or management's proprietary models. When models are used, the selection of a particular model to value an option depends on the contractual terms of, and specific risks inherent in, the option as well as

the availability of pricing information in the market. Valuation models require a variety of inputs, including contractual terms, market prices, measures of volatility and correlations of such inputs.

Bank loan prices are provided by third-party pricing services and consist of a composite of the quotes the vendor receives, which creates a consensus price.

Pricing vendors' valuations of mortgage-backed or other asset-backed securities are based on both proprietary and industry-recognized models and discounted cash-flow techniques. Significant inputs to the valuation of these instruments include value of the collateral, the rates and timing of delinquencies, the rates and timing of prepayments, and default and loss expectations, which are driven in part by housing prices for residential mortgages. Significant inputs are determined based on relative value analyses, which incorporate comparisons to instruments with similar collateral and risk profiles, including relevant indices.

Other fixed-income investments, including non-U.S. government and corporate debt, are generally valued using quoted market prices, if available, which are typically impacted by current interest rates, maturity dates and any perceived credit risk of the issuer. Additionally, in the absence of quoted market prices, pricing vendors use these inputs to derive valuations based on industry or proprietary models that incorporate issuer-specific data with relevant yield/ spread comparisons with more widely quoted bonds that have similar key characteristics.

#### F. Unfunded Commitments:

The WSIB has entered into agreements that commit the pension funds to make additional investment purchases up to a predetermined amount. As of June 30, 2020, the retirement funds had the following unfunded commitments:

Unfunded Commitments As of June 30, 2020 — Dollars in Million	s	
Private Equity		19,037.0
Real Estate		8,678.1
Tangible Assets		4,854.0
Total	\$	32,569.1

### G. Securities Lending and Repurchase Agreements

Management responsibilities for securities lending and repurchase agreements are as follows:

WSIB: Washington state law and WSIB policy permit the WSIB to participate in securities lending transactions to augment the investment income of the retirement funds. The WSIB has entered into an agreement with State Street Corporation (SSC) to act as agent for the WSIB in securities lending transactions. Because SSC is the custodian bank for the WSIB, it is a counterparty to these transactions.

The fair value of the securities on loan as of June 30, 2020, was approximately \$422.2 million. The securities on loan remain in the SFNP in their respective categories. Cash collateral received totaling \$275.9 million is reported as a securities lending obligation, and the fair value of the reinvested cash collateral totaling \$275.9 million is reported as securities lending collateral in the SFNP.

Securities received as collateral that the WSIB does not have the ability to pledge or sell unless the borrower defaults are not reported as assets and liabilities. Securities received as collateral as of June 30, 2020, totaled \$157.7 million.

The WSIB's agent loaned and collateralized debt and equity securities with cash and U.S. government or U.S. agency securities, including U.S. agency

mortgage-backed securities (excluding letters of credit). When the loaned securities had collateral denominated in the same currency, the collateral requirement was 102% of the fair value, including accrued interest of the securities loaned. All other securities were required to be collateralized at 105% of the fair value, including accrued interest on the loaned securities.

The following table summarizes the securities held from reinvestment of cash collateral and securities received as collateral as of June 30, 2020:

Cash Noncash	
s of June 30, 2020 — Dollars in Millions	
ash and Securities Held as Collateral	

	Cash Collateral	Noncash Collateral	Total
Mortgage-Backed Securities	\$ _	\$ 24.7	\$ 24.7
Repurchase Agreements	105.3		105.3
Yankee CD	76.5		76.5
Commercial Paper	70.9	_	70.9
U.S. Treasuries	_	133.0	133.0
Cash Equivalents and Other	23.2	_	23.2
Total Collateral Held	\$ 275.9	\$ 157.7	\$ 433.6

During fiscal year 2020, securities lending transactions could be terminated on demand by either the WSIB or the borrower.

As of June 30, 2020, the collateral held had an average duration of 10.28 days and an average weighted final maturity of 33.11 days. Because the securities lending agreements were terminable at will, their duration did not generally match the duration of the investments made with the cash collateral. Noncash collateral could not be pledged or sold, absent borrower default. A specific borrower could hold no more than 20% of the total-on-loan value. Collateral investment guidelines specifically prohibit European domiciled holdings. There were no restrictions on the amount of securities that could be lent.

Securities were lent with the agreement that they would be returned in the future for exchange of the collateral. SSC indemnified the WSIB by agreeing to

purchase replacement securities or return the cash collateral in the event a borrower failed to return the loaned securities or pay distributions on them. SSC's responsibilities included performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral, and complying with applicable federal regulations.

During fiscal year 2020, there were no significant violations of legal or contractual provisions or failures by any borrowers to return loaned securities or to pay distributions on them. Further, the retirement funds incurred no losses during the fiscal year resulting from a default by either borrowers or securities lending agents.

The WSIB mitigates credit risk in securities lending with a policy that strictly limits the types of collateral that can be used to secure these transactions.

Office of the State Treasurer (OST): State statutes permit the OST to lend its securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The OST has contracted with Northern Trust Company as a lending agent and receives a share of income earned from this activity. The lending agent lends U.S. government and supranational securities and receives collateral, which can be in the form of cash or other securities. The collateral, which must be valued at 102 percent of the fair value of the loaned securities, is priced daily and, if necessary, action is taken to maintain the collateralization level at 102 percent.

The cash is invested by the lending agent in repurchase agreements, deposit accounts, or money market instruments, in accordance with investment guidelines approved by the OST. The securities held as collateral and the securities underlying the cash collateral are held by the custodian. During fiscal year 2020, there was no cash collateral from securities lending.

Contracts require the lending agent to indemnify the

OST if the borrowers fail to return securities and if the collateral is inadequate to replace the securities lent, or if the borrower fails to pay the OST for income distribution by the securities' issuers while the securities are on loan. The OST cannot pledge or sell collateral securities received unless the borrower defaults. At June 30, 2020, the fair value of securities on loan totaled \$2.4 million.

The OST investment policy requires that any securities on loan be made available by the lending agent for next day liquidity at the option of the OST. During fiscal year 2020, the OST had no credit risk exposure to borrowers because the amounts owed to the borrowers exceeded the amounts the borrowers owed the OST.

There were no violations of legal or contractual provisions, and there were no losses resulting from a default of a borrower or lending agent during the fiscal year.

### H. Deposit and Investment Risk Disclosures -WSIB

Interest Rate Risk: Interest rate risk is the risk that changes in interest rates over time will adversely affect the fair value of an investment. This risk is managed within the portfolios using effective duration, which is the measure of a debt investment's exposure to fair value changes arising from changes in interest rates. Increases in prevailing interest rates generally translate into decreases in fair values of fixed income investments. The Retirement Funds' fixed income investments are to be actively managed to meet or exceed the return of the Bloomberg Barclays U.S. Universal Index, with volatility similar to or less than the index. The fixed income portfolio's duration is to be targeted within plus or minus 20 percent of the duration of the portfolio's performance benchmark. As of June 30, 2020, the Retirement Funds' duration was within the duration target of this index.

The schedules display various asset classes held by

maturity in years, effective durations, and credit ratings. All debt securities are reported using the average life within the portfolio. The average life is a calculated estimate of the average time (in years) until maturity for these securities, accounting for possible prepayments of principal amounts.

The schedule provides information about the interest rate risks associated with the Retirement Funds' investments as of June 30, 2020. The schedule displays asset classes held by maturity in years and effective durations.

#### **Investment Maturities**

As of June 30, 2020 — Dollars in Thousands

				Mat	urity	1		
		Total Fair	Less Than				More Than	Effective
Investment Type		Value	One Year	1-5 Years		6-10 Years	10 Years	Duration
Mortgage- and Other Asset-Backed Securities	\$	1,483,023	\$ 15,510	\$ 1,422,634	\$	44,879	\$ 	1.7
Corporate Bonds	1	3,349,005	869,262	5,348,839		4,734,601	2,396,303	6.7
U.S. Government and Agency Securities		5,784,936	_	2,437,708		1,700,213	1,647,015	9.4
Foreign Government and Agency Securities		1,825,133	342,807	1,094,845		302,412	85,069	3.7
Totally Internally Managed Fixed Income	2	2,442,097	1,227,579	10,304,026		6,782,105	4,128,387	6.8
Mortgage-Backed TBA Forwards		250,670	250,670	_		_	_	_
Total CTF Investment Categorized	\$ 22	2,692,767	\$ 1,478,249	\$ 10,304,026	\$	6,782,105	\$ 4,128,387	6.7
<b>Investments Not Required to Be Categorized</b>								
Cash and Cash Equivalents		3,771,547						
Equity Securities	3	4,934,445						
Alternative Investments	5	2,839,625						
Total CTF Investments Not Categorized	\$ 91	,545,617						
DCP, JRA and Defined Contribution								
Self-Directed Investments								
Retirement Strategy Funds (Target Date Funds)		5,378,170						
Equity Index Funds		2,535,309						
Guaranteed Investment Contracts		970,968						
Bond Funds		779,432						
Short-Term Investment Funds		570,225						
Balanced Fund		325,327						
Total DCP, JRA and Defined Contribution								
Self-Directed Investments	\$ 10	),559,431						
Securities Under Lending Agreements		275,912						
Total Investments as of June 30, 2020	\$125	5,073,727						

Credit ratings for the retirement funds' rated debt investments as of June 30, 2020, are presented in the following schedule:

### **Investment Credit Ratings**

As of June 30, 2020 — Dollars in Thousands

Moody's Equivalent Rating	Total Fair Value	Мо	rtgage- and Other Asset-Backed Securities	Corporate Bonds	U	.S. Government and Agency Securities	oreign Government d Agency Securities
Aaa	\$ 8,183,554	\$	1,733,307	\$ 507,378	\$	5,784,936	\$ 157,933
Aa1	356,088		_	104,749		_	251,339
Aa2	330,188		_	296,983		_	33,205
Aa3	742,241		_	547,922		_	194,319
A1	1,306,544		_	896,249		_	410,295
A2	1,725,423		_	1,725,423		_	_
A3	1,863,470		_	1,863,470		_	_
Baa1	1,621,921		_	1,574,131		_	47,790
Baa2	2,550,412		386	2,295,848		_	254,178
Baa3	1,914,473		_	1,780,765		_	133,708
Ba1 or Lower	2,098,453		_	1,756,087		_	342,366
Total	\$ 22,692,767	\$	1,733,693	\$ 13,349,005	\$	5,784,936	\$ 1,825,133

Credit Risk: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Retirement Funds' investment policies limit the fixed income securities to investment grade or higher at the time of purchase. Investment grade securities are those fixed income securities with a Moody's rating of Aaa to Baa or a Standard and Poor's rating of AAA to BBB. The Retirement Funds' rated debt investments as of June 30, 2020, were rated by Moody's and/or an equivalent national rating organization.

Concentration of Credit Risk: Concentration of credit risk is the risk of loss attributed to the magnitude of an investment in a single issuer. The Retirement Funds' policy states that no corporate fixed income issue shall exceed 3 percent of cost at the time of purchase or 6 percent of fair value thereafter of the fund. Additionally, no high yield issues shall exceed 1 percent of cost or 2 percent of fair value of the fund. As of June 30, 2020, there was no concentration of credit risk exceeding these policy guidelines. The WSIB has no investments with a concentration of greater than 5% of total investments.

**Custodial Credit Risk:** Custodial credit risk is the risk that, in the event a depository institution or counterparty fails, the Retirement Funds will not be able to recover the value of its deposits, investments,

or collateral securities. As of June 30, 2020, investment securities (excluding cash, cash equivalents, and repurchase agreements held as securities lending collateral) are registered and held in the name of the WSIB, for the benefit of the Retirement Funds, and are not exposed to custodial credit risk. There are no general policies relating to custodial credit risk.

Foreign Currency Risk: Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The WSIB does not have a formal policy to limit the retirement funds' foreign currency risk.

The WSIB manages exposure to fair value loss by requiring its international securities investment managers to maintain diversified portfolios by sector and by issuer to limit foreign currency and security risk.

The retirement funds' exposure to foreign currency risk as of June 30, 2020, is presented in the following schedule. The schedule, stated in U.S. dollars, provides information on deposits and investments held in various foreign currencies. Private equity and real estate are presented according to the financial reporting currency of the individual funds.

### Foreign Currency Exposure by Country

As of June 30, 2020 — Dollars in Thousands Investment Type in U.S. Dollar Equivalent

Foreign Currency Denomination	Cash and Cash Equivalents	Debt Securities	S	Equity ecurities	Alternative Assets	Open Foreign Exchange Contracts-Net	Total	% of Total Investment Balances
Australian Dollar	\$ 2,685	\$ 73,049	\$	468,319	\$ 180,122	\$ 47	\$ 724,222	0.6 %
Brazilian Real	230	51,153		207,700	_	(2)	259,081	0.2 %
Canadian Dollar	8,973	_		674,073	_	83	683,129	0.6 %
Chilean Peso	212	49,930		13,021	_	_	63,163	0.1 %
Chinese Renminbi	83	_		_	_	220	303	— %
Colombian Peso	189	59,820		5,665	_	_	65,674	0.1 %
Danish Krone	45	_		264,343	_	117	264,505	0.2 %
Euro	6,412	_	2	2,760,104	3,582,401	1,752	6,350,669	5.5 %
Hong Kong Dollar	10,728	_	1	,187,752	_	_	1,198,480	1.0 %
Indian Rupee	_	37,538		90,326	_	_	127,864	0.1 %
Indonesian Rupiah	70	21,998		58,439	_	_	80,507	0.1 %
Japanese Yen	16,002	_	2	2,252,958	_	2,613	2,271,573	2.0 %
Mexican Peso	111	33,442		68,055	_	271	101,879	0.1 %
New Taiwan Dollar	132	_		288,755	_	_	288,887	0.3 %
New Zealand Dollar	164	_		29,763	_	1,183	31,110	— %
Norwegian Krone	299	_		46,200	_	154	46,653	— %
Pound Sterling	6,073	_	1	,585,677	_	1,572	1,593,322	1.4 %
Singapore Dollar	2,524	_		144,253	_	213	146,990	0.1 %
South Korean Won	4,138	_		93,161	27,502	609	125,410	0.1 %
South Korean Won	_	_		440,150	_	(9)	440,141	0.4 %
Swedish Krona	776	_		294,473	_	(434)	294,815	0.3 %
Swiss Franc	1,547	_		954,210	_	(1,048)	954,709	0.8 %
Thai Baht	94	_		55,587	_	_	55,681	— %
Turkish Lira	111	_		66,681	_	(1,049)	65,743	0.1 %
Uruguyan Peso	_	44,407		_	_	_	44,407	— %
Yuan Renminbi	1,424	27,524		288,870	_	56	317,874	0.3 %
Other	782	8,084		98,762		839	108,467	0.1 %
Total Foreign Currency Exposure	\$ 63,804	\$ 406,945	\$ 12,	,437,297	\$ 3,790,025	\$ 7,187	\$ 16,705,258	14.6 %

I. Deposit and Investment Disclosures - OST The Office of the State Treasurer (OST) manages DRS' deposits. These consist of securities that AAA-rated issuers issue or deposits in financial institutions the Federal Deposit Insurance Corp. (FDIC) partially insures or the Washington Public Deposit Protection Commission (PDPC) collateralizes up to legal limitations. The PDPC constitutes a multiple financial institution collateral pool. The PDPC's agent holds pledged securities under the pool in the name of the collateral pool.

State law (RCW 43.84.080) specifies that whenever a fund or cash balance in the state treasury is more than sufficient to meet the current expenditures properly payable from it, the OST can invest or reinvest such portion of the funds or balances as the OST deems expedient. The statute authorizes the OST to buy and sell the following types of instruments: U.S. government and agency securities, bankers' acceptances, commercial paper, and deposits with qualified public depositories.

Securities underlying repurchase and reverse repurchase agreements are limited to those same instruments. DRS receives its proportionate share of

investment earnings from surplus balances in the state treasury based on its daily balance for the period. DRS' proportionate share of investment earnings from surplus balances are insignificant to the pension trust fund balances and are excluded from the SFNP. DRS' deposits are separately displayed on the SFNP as cash and pooled investments.

Custodial Credit Risk - OST: Custodial credit risk is the risk that deposits might not be returned in the event of the failure of a financial institution. Statutes minimize custodial credit risk by restricting the OST to deposit funds in financial institutions that are physically located in Washington state unless otherwise expressly permitted by statute and authorized by the PDPC. As of June 30, 2020, the carrying amount of DRS' cash and pooled investment deposits is \$62.5 million, all of which is insured or collateralized.

Interest Rate Risk- OST: Interest rate risk is the risk that changes in interest rates of debt instruments will adversely affect the fair value of an investment. The Treasury/Trust investments are separated into portfolios with objectives based primarily on liquidity needs.

The OST's investment policy limits the weighted average maturity of its investments based on cash flow expectations. Policy also directs due diligence to be exercised with timely reporting of material deviation from expectations and actions taken to control adverse developments as may be possible.

Credit Risk - OST: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The OST limits credit risk by adhering to the OST investment policy which restricts the types of investments the OST can participate in to U.S. government and agency securities, U.S. dollar denominated obligations of supranational institutions, commercial paper, corporate notes, and deposits with qualified public depositories. Investments in nongovernment securities may not exceed set percentages of the total daily portfolio size.

Concentration of Credit Risk - OST: Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. For non-governmental securities, the OST adheres to the WSIB policy on commercial paper and corporate notes investments which limits its exposure to concentration of credit risk by restricting the amount of investments to no more than 3 percent of the portfolio to any single issuer.

#### J. Derivatives

Derivative management responsibilities are described in the following paragraphs.

WSIB: The WSIB is authorized to use various derivative financial instruments, including financial futures, forward contracts, interest rate swaps, credit default swaps, equity swaps and options. Derivative transactions involve, to varying degrees, market and credit risk. As of June 30, 2020, the retirement funds held investments in financial futures, forward currency contracts, and total return swap contracts that are recorded at fair value with changes in value recognized in investment income in the SCFNP in the period of change. For accounting and reporting purposes, the derivative instruments are considered investment derivatives, not hedging derivatives.

Derivatives are generally used to achieve the desired market exposure of a security, index or currency; adjust portfolio duration; or rebalance the total portfolio to the target asset allocation. Derivative contracts are instruments that derive their value from underlying assets, indices, reference interest rates or a combination of these factors. A derivative instrument could be a contract negotiated on behalf of the retirement funds and a specific counterparty. This would typically be referred to as an "over-the-counter (OTC) contract," such as forward contracts. Alternatively, derivative instruments, such as futures, could be listed and traded on an exchange and referred to as "exchange traded."

Derivatives that are exchange traded are not subject to credit risk.

Inherent in the use of OTC derivatives, the retirement funds are exposed to counterparty credit risk on all open OTC positions. "Counterparty credit risk" is the risk that a derivative counterparty might fail to meet its payment obligation under the derivative contract. As of June 30, 2020, the retirement funds' counterparty risk was approximately \$24.6 million.

Futures contracts are standardized, exchange-traded contracts to purchase or sell a specific financial instrument at a predetermined price. Gains and losses on futures contracts are settled daily based on an underlying principal value and do not involve an actual transfer of the specific instrument. The exchange assumes the risk that the counterparty will not pay and generally requires margin payments to minimize such risk. Futures are generally used to achieve the desired market exposure of a security or index or to rebalance the total portfolio.

Forward currency contracts are agreements to exchange the currency of one country for the currency of another country at an agreed-upon price and settlement date. These forward commitments are not standardized and carry credit risk due to the possible nonperformance of one of the counterparties. The maximum potential loss is the aggregate face value in U.S. dollars at the time the contract was opened; however, the likelihood of such a loss is remote.

As of June 30, 2020, the retirement funds had outstanding forward currency contracts with a net unrealized gain of \$7.2 million, which is included in the accompanying SCFNP. At June 30, 2020, foreign exchange contracts receivable and payable consisted primarily of forward currency contracts. The contracts have varying settlement dates, ranging from July 2, 2020, to June 16, 2021.

Total return swap contracts are agreements where one party makes payments based on a set rate, either

fixed or variable, while the other party makes payments based on the return of the underlying or reference asset. Total return swaps allow the party receiving the total return to gain exposure and benefit from a reference asset without physically owning the security. The Retirement Fund swaps total bond market index returns for total equity index returns as the reference asset in emerging markets. The values of these contracts are highly sensitive to interest rate changes. As of June 30, 2020, the Retirement Funds held no total return swap contracts.

As of June 30, 2020, the counterparties' credit ratings for forward currency contracts that are subject to credit risk had a credit rating of no less than Baa2 using Moody's rating scale.

As of June 30, 2020, the retirement funds' fixed income portfolio held derivative securities consisting of collateralized mortgage obligations of \$157.9 million. Domestic and foreign passive equity index fund managers can also use various derivative securities to manage exposure to risk and increase portfolio returns. Information on passive equity index fund managers' use and holdings of derivative securities is unavailable.

**OST:** The OST did not engage in derivative transactions during fiscal year 2020.

The schedule below presents the significant terms for derivatives the WSIB holds as investments.

#### **Derivatives Schedule**

Significant Terms for Derivatives Held as Investments by the WSIB — Dollars in Thousands

	Classification	Changes in Fair Value — Included in Investment Income	Fair Value as of June 30, 2020 — Investment Derivative	
		Amount	Amount	Notional
Futures Contracts				
Bond Index Futures	investment	\$ 77,453	\$ 262	\$ 552,212
Equity Index Futures	investment	(27,332)	21,593	15,081
		50,121	21,855	567,294
Forward Currency Contracts	investment	40,402	7,220	3,744,645
<b>Total Return Swap Contracts</b>				
Total Return Swap Bond	investment	(2,015)	_	_
Total Return Swap Equity	investment	3,217	_	_
		\$ 1,202	\$ <b>–</b>	\$ -

Source: Washington State Investment Board

#### K. Management Fees

The fees the WSIB paid are accounted for as a reduction of investment income or are netted directly from the asset value of the retirement funds' investments. These fees include investment management fees and commissions, investment consultant fees, and legal fees.

As of June 30, 2020, total investment management fee expenses were \$623.8 million and total netted fees were \$207.0 million. For a detailed disclosure, refer to the "Schedule of Investment Expenses" in the "Supporting Schedules" of the Financial Section of this report.

L. DCP, JRA Investments and Defined Contribution — Self-Directed Investments The assets within DCP, JRA and Self-Directed defined contribution investments total \$10.6 billion and represent less than 9% of the total investments DRS administers. Participation and membership in these options are voluntary. Although withdrawals are restricted to those who have left employment (except in the case of hardship withdrawals from DCP), the participants and members own these assets, have full control over their investment choices and assume the responsibility for the results of those choices.

The composition of these investments is as follows:

- 51% Retirement Strategy Funds (Target Date Funds): These funds are customized asset allocation portfolios that WSIB-contracted investment professionals manage. They offer investors a diversified mix of equities, bonds and global Real Estate Investment Trusts. Each of these funds has both actively and passively managed investments. The investment mix becomes progressively more conservative over time as the fund approaches and passes through its target date for retirement. These funds are not publicly traded and, thus, have no ratings. Foreign credit risk and fixed income exposure are deemed immaterial for these funds as of June 30, 2020.
- 24% Equity Index Funds: Four funds are in this category. All are passively managed, and all seek to meet or surpass the returns of established benchmarks.
- 9% Guaranteed Investment Contracts (GICs): GICs are valued at contract value as the respective insurance companies or investment managers estimate. GICs provide a guaranteed return on the principal invested

over a specified time period. The GIC pool has no credit rating because it is not a publicly traded fund. The pool has no duration since GICs are priced at par. The GIC pool contained no foreign currency exposure as of June 30, 2020.

- 6% Short-Term Investment Fund: This fund is not publicly traded.
- 3% U.S. Socially Responsible Fund: This is a balanced fund containing both equities and fixed-income components.
- 7% Bond Fund: The Washington State Bond Fund has no rating because it is not publicly traded. Refer to the tables for the maturities, effective duration and credit ratings of its underlying securities.

#### Credit Rating (Moody's Equivalent) DCP, JRA and Plan 3 DC Self-Directed Investments — Bond Fund

As of June 30, 2020 — Dollars in Thousands

Investment Type	Corporate Bonds	 Foreign overnment nd Agency Securities	Total
Aaa	\$ 27,287	\$ 11,797	\$ 39,084
Aa1	7,337	8,807	16,144
Aa2	10,982	1,996	12,978
Aa3	32,851	15,215	48,066
A1	82,067	28,088	110,155
A2	109,599	_	109,599
A3	111,224	_	111,224
Baa1	104,163	_	104,163
Baa2	124,166	9,272	133,438
Baa3	76,108	10,563	86,671
Ba1 or Lower	7,910	_	7,910
Total	693,694	85,738	779,432

#### Investment Maturities — DCP, JRA and Plan 3 DC Self-Directed Investments — Bond Fund As of June 30, 2020 — Dollars in Thousands

	Maturity											
	Total Fair		Less Than						More Than	Effective		
Investment Type	Value		1 Year		1-5 Years		6-10 Years		10 Years	Duration		
Corporate Bonds	\$ 693,694	\$	32,359	\$	373,658	\$	280,525	\$	7,152	6.7		
Foreign Government and Agency Securities	85,738		7,072		46,586		32,080		_	3.7		
Total	\$ 779,432	\$	39,431	\$	420,244	\$	312,605	\$	7,152			

## Required Supplementary Information

#### PERS Plan 1: Schedule of Changes in Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability							
Service Cost	\$ 13,013	\$ 16,303	\$ 19,848	\$ 24,727	\$ 28,936	\$ 28,685	\$ 37,503
Interest	823,153	856,110	875,702	896,682	914,606	933,977	945,296
Changes of Benefit Terms	129,900	50	104,600	_	_	_	_
Differences Between Expected and Actual Experience	94,542	(122,600)	(2,687)	22,964	3,713	27,130	
Changes in Assumptions	(307,244)	6,157	97,162	(28)	(36,416)	23,339	
Benefit Payments, Including Refunds of Member Contributions	(1,193,202)	(1,202,798)	(1,193,211)	(1,199,219)	(1,203,209)	(1,202,994)	(1,193,715)
Net Change in Total Pension Liability	(439,838)	(446,778)	(98,586)	(254,874)	(292,370)	(189,863)	(210,916)
Total Pension Liability — Beginning	11,696,634	12,143,412	12,241,998	12,496,872	12,789,242	12,979,104	13,190,019
Total Pension Liability — Ending (a)	\$ 11,256,796	\$ 11,696,634	\$ 12,143,412	\$ 12,241,998	\$ 12,496,872	\$ 12,789,241	\$ 12,979,103
Plan Fiduciary Net Position <sup>1</sup>							
Contributions — Employer	\$ 722,512	\$ 726,385	\$ 674,784	\$ 609,287	\$ 595,982	\$ 462,100	\$ 448,895
Contributions — Member	7,309	9,827	12,789	15,430	18,457	21,617	28,087
Net Investment Income	338,485	640,736	686,502	945,300	157,070	336,310	1,311,995
Benefit Payments, Including Refunds of Member Contributions	(1,193,202)	(1,202,798)	(1,193,211)	(1,199,219)	(1,203,209)	(1,202,994)	(1,193,715)
Administrative Expense	(121)	(253)	(257)	(258)	(301)	(269)	(506)
Other	(6)	4	(149)	(21)	90	(9)	36
Net Change in Plan Fiduciary Net Position	(125,023)	173,901	180,458	370,519	(431,911)	(383,245)	594,792
Plan Fiduciary Net Position — Beginning	7,851,279	7,677,378	7,496,920	7,126,401	7,558,312	7,941,557	7,346,765
Plan Fiduciary Net Position — Ending (b)	\$ 7,726,256	\$ 7,851,279	\$ 7,677,378	\$ 7,496,920	\$ 7,126,401	\$ 7,558,312	\$ 7,941,557
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ 3,530,540	\$ 3,845,355	\$ 4,466,034	\$ 4,745,078	\$ 5,370,471	\$ 5,230,929	\$ 5,037,546

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

#### PERS Plan 2/3: Schedule of Changes in Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability							
Service Cost	\$ 1,064,955	\$ 1,016,588	\$ 942,453	\$ 944,842	\$ 893,404	\$ 864,319	\$ 934,401
Interest	3,246,303	3,028,150	2,916,713	2,717,410	2,506,824	2,302,453	2,057,556
Changes of Benefit Terms	_	_	(26,700)	(1,379)	_	_	_
Differences Between Expected and Actual Experience	272,133	168,478	(274,769)	226,712	(218,153)	491,528	_
Changes in Assumptions	(632,276)	24,227	(564,289)	1,798	62,968	7,450	_
Benefit Payments, Including Refunds of Member Contributions	(1,423,747)	(1,254,875)	(1,076,005)	(931,603)	(812,514)	(700,905)	(600,862)
Net Change in Total Pension Liability	2,527,368	2,982,568	1,917,403	2,957,780	2,432,529	2,964,845	2,391,095
Total Pension Liability — Beginning <sup>1</sup>	43,503,168	40,520,600	38,475,325	35,517,545	33,085,016	30,120,170	27,729,076
Total Pension Liability — Ending (a)	\$ 46,030,536	\$ 43,503,168	\$ 40,392,728	\$ 38,475,325	\$ 35,517,545	\$ 33,085,015	\$ 30,120,171
Plan Fiduciary Net Position <sup>2</sup>							
Contributions — Employer	\$ 925,303	\$ 820,188	\$ 778,525	\$ 621,927	\$ 563,328	\$ 446,127	\$ 430,345
Contributions — Member	754,619	668,736	636,407	518,566	497,274	374,825	368,251
Net Investment Income	1,931,951	3,453,045	3,350,127	4,312,919	725,439	1,295,301	4,444,930
Benefit Payments, Including Refunds of Member Contributions	(1,423,747)	(1,254,875)	(1,076,005)	(931,603)	(812,514)	(700,905)	(600,862)
Administrative Expense	(694)	(651)	(679)	(491)	(759)	(581)	(617)
Other	32,333	28,338	(3,861)	(3,139)	(2,103)	(1,617)	(2,299)
Net Change in Plan Fiduciary Net Position	2,219,765	3,714,781	3,684,514	4,518,179	970,665	1,413,150	4,639,748
Plan Fiduciary Net Position — Beginning <sup>3</sup>	42,531,828	38,817,047	35,000,803	30,482,624	29,511,959	28,098,809	23,459,061
Plan Fiduciary Net Position — Ending (b)	\$ 44,751,593	\$ 42,531,828	\$ 38,685,317	\$ 35,000,803	\$ 30,482,624	\$ 29,511,959	\$ 28,098,809
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ 1,278,943	\$ 971,340	\$ 1,707,411	\$ 3,474,522	\$ 5,034,921	\$ 3,573,056	\$ 2,021,362

<sup>1</sup> The June 30, 2019 Total Pension Liability - Beginning includes the liability from the PERS Plan 3 Washington State Investment Board (WSIB) Total Allocation Portfolio (TAP) Annuity. OSA received PERS Plan 3 WSIB TAP Annuity data from DRS and processed the liability consistent with calculations for the 2018 Actuarial Valuation Report. OSA adjusted these calculations to account for PERS Plan 3 WSIB TAP Annuity provisions, such as differences in COLA growth and payment

<sup>&</sup>lt;sup>2</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

<sup>&</sup>lt;sup>3</sup> June 30, 2019 Plan Fiduciary Net Position - Beginning has been restated to include the PERS Plan 3 WSIB TAP Annuity balance. See Note 1, Section R, within the Financial Section of the June 30, 2019 DRS CAFR.

#### SERS Plan 2/3: Schedule of Changes in Net Pension Liability **Dollars in Thousands**

	6/30	0/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability								
Service Cost	\$ 2	02,497	\$ 178,538	\$ 160,165	\$ 154,925	\$ 139,744	\$ 128,806	\$ 138,228
Interest	4	77,259	436,618	408,075	378,480	343,917	311,044	277,012
Changes of Benefit Terms		_	_	_	_	_	_	_
Differences Between Expected and Actual Experience	2	39,122	103,102	22,493	86,086	18,707	66,049	_
Changes in Assumptions	(	(12,705)	8,555	(72,971)	4	10,258	600	_
Benefit Payments, Including Refunds of Member Contributions	(2	15,632)	(187,998)	(155,197)	(133,266)	(115,248)	(99,075)	(83,948)
Net Change in Total Pension Liability	6	90,541	538,815	362,565	486,229	397,378	407,424	331,292
Total Pension Liability — Beginning <sup>1</sup>	6,3	52,843	5,814,028	5,357,035	4,870,806	4,473,428	4,066,004	3,734,712
Total Pension Liability — Ending (a)	\$ 7,04	43,384	\$ 6,352,843	\$ 5,719,600	\$ 5,357,035	\$ 4,870,806	\$ 4,473,428	\$ 4,066,004
Plan Fiduciary Net Position <sup>2</sup>								
Contributions — Employer	\$ 2	16,713	\$ 200,604	\$ 176,539	\$ 134,727	\$ 115,480	\$ 97,386	\$ 88,783
Contributions — Member		96,637	80,637	70,761	52,401	47,155	35,445	31,856
Net Investment Income	2	79,856	495,094	466,360	597,913	100,201	178,038	607,982
Benefit Payments, Including Refunds of Member Contributions	(2	15,632)	(187,998)	(155,197)	(133,266)	(115,248)	(99,075)	(83,948)
Administrative Expense		(38)	(26)	(30)	(21)	(21)	(20)	(30)
Other		15,539	19,268	(1,455)	(2,233)	(806)	(580)	(462)
Net Change in Plan Fiduciary Net Position	3	93,075	607,579	556,978	649,521	146,762	211,194	644,181
Plan Fiduciary Net Position — Beginning <sup>3</sup>	6,1	18,345	5,510,766	4,863,560	4,214,039	4,067,277	3,856,083	3,211,902
Plan Fiduciary Net Position — Ending (b)	\$ 6,5	11,420	\$ 6,118,345	\$ 5,420,538	\$ 4,863,560	\$ 4,214,039	\$ 4,067,277	\$ 3,856,083
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ 53	31,964	\$ 234,498	\$ 299,062	\$ 493,475	\$ 656,767	\$ 406,151	\$ 209,921

<sup>1</sup> The June 30, 2019 Total Pension Liability - Beginning includes the liability from the SERS Plan 3 Washington State Investment Board (WSIB) Total Allocation Portfolio (TAP) Annuity. OSA received SERS Plan 3 WSIB TAP Annuity data from DRS and processed the liability consistent with calculations for the 2018 Actuarial Valuation Report. OSA adjusted these calculations to account for SERS Plan 3 WSIB TAP Annuity provisions, such as differences in COLA growth and payment

<sup>&</sup>lt;sup>2</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

<sup>&</sup>lt;sup>3</sup> June 30, 2019 Plan Fiduciary Net Position - Beginning has been restated to include the SERS Plan 3 WSIB TAP Annuity balance. See Note 1, Section R, within the Financial Section of the June 30, 2019 DRS CAFR.

PSERS Plan 2: Schedule of Changes in Net Pension Liability **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016		6/30/2015	6/30/2014
Total Pension Liability								
Service Cost	\$ 74,796	\$ 54,915	\$ 49,127	\$ 47,292	\$ 44,090	\$	40,546	\$ 42,679
Interest	57,370	48,400	42,749	36,641	31,038		24,554	17,264
Changes of Benefit Terms	_	_	_	1,379	_		_	_
Differences Between Expected and Actual Experience	12,336	5,150	534	(1,513)	266		19,950	_
Changes in Assumptions	(21,542)	7	(8,346)	35	84		131	_
Benefit Payments, Including Refunds of Member Contributions	(7,623)	(6,674)	(4,920)	(3,778)	(3,277)		(3,056)	(2,450)
Net Change in Total Pension Liability	115,337	101,798	79,144	80,056	72,201		82,125	57,493
Total Pension Liability — Beginning	704,212	602,414	523,270	443,214	371,013		288,888	231,395
Total Pension Liability — Ending (a)	\$ 819,549	\$ 704,212	\$ 602,414	\$ 523,270	\$ 443,214	\$	371,013	\$ 288,888
Plan Fiduciary Net Position <sup>1</sup>						0		
Contributions — Employer	\$ 44,392	\$ 32,468	\$ 26,033	\$ 23,238	\$ 20,058	\$	18,704	\$ 17,124
Contributions — Member	44,499	33,198	26,514	23,698	21,148		18,664	17,446
Net Investment Income	34,812	57,064	49,840	59,852	10,096		15,081	45,143
Benefit Payments, Including Refunds of Member Contributions	(7,623)	(6,674)	(4,920)	(3,778)	(3,277)		(3,056)	(2,450)
Administrative Expense	(10)	(15)	(18)	(5)	(9)		(2)	(8)
Other	23	_	49	(44)	(61)		1	5
Net Change in Plan Fiduciary Net Position	116,093	116,041	97,498	102,961	47,955		49,392	77,260
Plan Fiduciary Net Position — Beginning	717,216	601,175	503,677	400,716	352,761		303,369	226,109
Plan Fiduciary Net Position — Ending (b)	\$ 833,309	\$ 717,216	\$ 601,175	\$ 503,677	\$ 400,716	\$	352,761	\$ 303,369
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ (13,760)	\$ (13,004)	\$ 1,239	\$ 19,593	\$ 42,498	\$	18,252	\$ (14,481)

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

TRS Plan 1: Schedule of Changes in Net Pension Liability **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	0/30/2020	0/30/2013	0/30/2010	0/30/2017	0/30/2010	0/30/2013	0/30/2014
•	Φ 4045	Φ 5004	Φ 0.700	Φ 0.070	Φ 40.000	Φ 45.000	Φ 04 000
Service Cost	\$ 4,045	\$ 5,361	\$ 6,792	\$ 9,370	\$ 12,608	\$ 15,630	\$ 21,933
Interest	586,414	612,930	625,902	645,151	660,865	676,915	690,297
Changes of Benefit Terms	132,000	_	96,500	_	_	_	_
Differences Between Expected and Actual Experience	119,402	(90,666)	36,644	39,299	25,314	23,516	_
Changes in Assumptions	(132,134)	11,521	78,582	(2)	(9,700)	6,552	_
Benefit Payments, Including Refunds of Member Contributions	(885,861)	(906,089)	(904,742)	(912,314)	(925,560)	(928,571)	(928,237)
Net Change in Total Pension Liability	(176,134)	(366,943)	(60,322)	(218,496)	(236,473)	(205,958)	(216,007)
Total Pension Liability — Beginning	8,355,496	8,722,439	8,782,761	9,001,257	9,237,730	9,443,688	9,659,695
Total Pension Liability — Ending (a)	\$ 8,179,362	\$ 8,355,496	\$ 8,722,439	\$ 8,782,761	\$ 9,001,257	\$ 9,237,730	\$ 9,443,688
Plan Fiduciary Net Position <sup>1</sup>							
Contributions — Employer	\$ 521,550	\$ 500,822	\$ 420,540	\$ 348,968	\$ 315,934	\$ 223,886	\$ 200,674
Contributions — Member	2,506	2,856	4,287	6,907	8,802	10,324	14,626
Net Investment Income	252,689	480,313	522,377	728,988	118,296	269,742	1,079,804
Benefit Payments, Including Refunds of Member Contributions	(885,861)	(906,089)	(904,742)	(912,314)	(925,560)	(928,571)	(928,237)
Administrative Expense	(39)	(76)	(108)	(76)	(41)	(28)	(143)
Other	38	20	_	_	_	1	51
Net Change in Plan Fiduciary Net Position	(109,117)	77,846	42,354	172,473	(482,568)	(424,646)	366,775
Plan Fiduciary Net Position — Beginning	5,879,693	5,801,847	5,759,493	5,587,020	6,069,588	6,494,234	6,127,459
Plan Fiduciary Net Position — Ending (b)	\$ 5,770,576	\$ 5,879,693	\$ 5,801,847	\$ 5,759,493	\$ 5,587,020	\$ 6,069,588	\$ 6,494,234
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ 2,408,786	\$ 2,475,803	\$ 2,920,592	\$ 3,023,268	\$ 3,414,237	\$ 3,168,142	\$ 2,949,454

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

TRS Plan 2/3: Schedule of Changes in Net Pension Liability **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability							
Service Cost	\$ 555,700	\$ 498,667	\$ 419,931	\$ 410,975	\$ 373,617	\$ 352,316	\$ 374,258
Interest	1,249,385	1,116,550	1,028,827	947,283	857,073	776,944	684,861
Changes of Benefit Terms	_	_	_	_	_	_	_
Differences Between Expected and Actual Experience	683,373	288,157	32,080	173,667	(74,782)	163,251	_
Changes in Assumptions	(32,118)	248,622	(201,676)	115	16,463	896	_
Benefit Payments, Including Refunds of Member Contributions	(442,513)	(386,410)	(303,008)	(257,731)	(220,982)	(186,052)	(151,510)
Net Change in Total Pension Liability	2,013,827	1,765,586	976,154	1,274,309	951,389	1,107,355	907,609
Total Pension Liability — Beginning <sup>1</sup>	16,545,194	14,779,608	13,446,531	12,172,222	11,220,833	10,113,479	9,205,870
Total Pension Liability — Ending (a)	\$ 18,559,021	\$ 16,545,194	\$ 14,422,685	\$ 13,446,531	\$ 12,172,222	\$ 11,220,834	\$ 10,113,479
Plan Fiduciary Net Position <sup>2</sup>							
Contributions — Employer	\$ 584,424	\$ 523,733	\$ 446,275	\$ 364,106	\$ 316,022	\$ 267,038	\$ 249,342
Contributions — Member	145,633	124,672	103,172	81,378	68,587	52,713	44,012
Net Investment Income	731,956	1,290,598	1,203,551	1,539,461	258,942	453,524	1,539,895
Benefit Payments, Including Refunds of Member Contributions	(442,513)	(386,410)	(303,008)	(257,731)	(220,982)	(186,052)	(151,510)
Administrative Expense	(251)	(196)	(88)	(93)	(67)	(64)	(76)
Other	61,131	82,285	(919)	(2,458)	(608)	(618)	(401)
Net Change in Plan Fiduciary Net Position	1,080,380	1,634,682	1,448,983	1,724,663	421,894	586,541	1,681,262
Plan Fiduciary Net Position — Beginning <sup>3</sup>	15,942,660	14,307,978	12,523,588	10,798,925	10,377,031	9,790,490	8,109,228
Plan Fiduciary Net Position — Ending (b)	\$ 17,023,040	\$ 15,942,660	\$ 13,972,571	\$ 12,523,588	\$ 10,798,925	\$ 10,377,031	\$ 9,790,490
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ 1,535,981	\$ 602,534	\$ 450,114	\$ 922,943	\$ 1,373,297	\$ 843,803	\$ 322,989

<sup>1</sup> The June 30, 2019 Total Pension Liability - Beginning includes the liability from the TRS Plan 3 Washington State Investment Board (WSIB) Total Allocation Portfolio (TAP) Annuity. OSA received TRS Plan 3 WSIB TAP Annuity data from DRS and processed the liability consistent with calculations for the 2018 Actuarial Valuation Report. OSA adjusted these calculations to account for TRS Plan 3 WSIB TAP Annuity provisions, such as differences in COLA growth and payment timing.

<sup>&</sup>lt;sup>2</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

<sup>&</sup>lt;sup>3</sup> June 30, 2019 Plan Fiduciary Net Position - Beginning has been restated to include the TRS Plan 3 WSIB TAP Annuity balance. See Note 1, Section R, within the Financial Section of the June 30, 2019 DRS CAFR.

#### LEOFF Plan 1: Schedule of Changes in Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability							
Service Cost	\$ 358	\$ 509	\$ 953	\$ 1,600	\$ 2,238	\$ 3,269	\$ 4,279
Interest	286,362	289,081	303,112	307,156	315,653	319,945	326,717
Changes of Benefit Terms	_	_	_	_	_	_	_
Differences Between Expected and Actual Experience	43,219	44,475	(14,235)	(69,993)	(21,215)	(65,557)	_
Changes in Assumptions	18,784	_	(57,835)	_	_	_	_
Benefit Payments, Including Refunds of Member Contributions	(372,296)	(369,070)	(364,041)	(360,068)	(361,022)	(358,745)	(355,988)
Net Change in Total Pension Liability	(23,573)	(35,005)	(132,046)	(121,305)	(64,346)	(101,088)	(24,992)
Total Pension Liability — Beginning	4,052,226	4,087,231	4,219,277	4,340,582	4,404,928	4,506,015	4,531,007
Total Pension Liability — Ending (a)	\$ 4,028,653	\$ 4,052,226	\$ 4,087,231	\$ 4,219,277	\$ 4,340,582	\$ 4,404,927	\$ 4,506,015
Plan Fiduciary Net Position <sup>1</sup>							
Contributions — Employer	\$ 5	\$ 3	\$ 1	\$ _	\$ _	\$ 60	\$ 98
Contributions — Member	1	146	426	1,908	837	1,016	844
Net Investment Income	260,647	495,120	529,895	723,820	120,945	248,793	934,123
Benefit Payments, Including Refunds of Member Contributions	(372,296)	(369,070)	(364,041)	(360,068)	(361,022)	(358,745)	(355,988)
Administrative Expense	(32)	(94)	(45)	(31)	(41)	(18)	(44)
Other	_	(1)	_	_	_	237	_
Net Change in Plan Fiduciary Net Position	(111,675)	126,104	166,236	365,629	(239,281)	(108,657)	579,033
Plan Fiduciary Net Position — Beginning	6,028,837	5,902,733	5,736,497	5,370,868	5,610,149	5,718,806	5,139,773
Plan Fiduciary Net Position — Ending (b)	\$ 5,917,162	\$ 6,028,837	\$ 5,902,733	\$ 5,736,497	\$ 5,370,868	\$ 5,610,149	\$ 5,718,806
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ (1,888,509)	\$ (1,976,611)	\$ (1,815,502)	\$ (1,517,220)	\$ (1,030,286)	\$ (1,205,222)	\$ (1,212,791)

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

LEOFF Plan 2: Schedule of Changes in Net Pension Liability **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability							
Service Cost	\$ 361,623	\$ 337,416	\$ 310,377	\$ 311,736	\$ 302,652	\$ 286,031	\$ 301,625
Interest	895,736	825,734	792,538	732,837	678,563	609,818	536,534
Changes of Benefit Terms	400	1,160	700	_	25,205	34,746	_
Differences Between Expected and Actual Experience	165,788	92,558	73,470	(58,105)	8,409	107,309	_
Changes in Assumptions	(94,769)	3,529	(322,043)	_	4	3,232	_
Benefit Payments, Including Refunds of Member Contributions	(364,197)	(313,959)	(268,159)	(227,007)	(190,712)	(160,027)	(133,949)
Net Change in Total Pension Liability	964,581	946,438	586,883	759,461	824,121	881,109	704,210
Total Pension Liability — Beginning	11,921,772	10,975,334	10,388,451	9,628,990	8,804,869	7,923,759	7,219,549
Total Pension Liability — Ending (a)	\$ 12,886,353	\$ 11,921,772	\$ 10,975,334	\$ 10,388,451	\$ 9,628,990	\$ 8,804,868	\$ 7,923,759
Plan Fiduciary Net Position <sup>1</sup>							
Contributions — Employer	\$ 117,774	\$ 115,882	\$ 106,424	\$ 95,920	\$ 92,049	\$ 89,122	\$ 85,532
Contributions — State	76,298	72,960	68,152	62,155	60,375	58,339	55,551
Contributions — Member	214,512	204,384	197,230	187,978	173,871	165,772	151,041
Net Investment Income	645,382	1,155,521	1,127,022	1,448,376	244,028	430,403	1,456,267
Benefit Payments, Including Refunds of Member Contributions	(364,197)	(313,959)	(268,159)	(227,007)	(190,712)	(160,027)	(133,949)
Administrative Expense	(2,027)	(2,078)	(1,861)	(1,920)	(1,683)	(1,504)	(1,268)
Other	_	203	617	5	23	(238)	241
Net Change in Plan Fiduciary Net Position	687,742	1,232,913	1,229,425	1,565,507	377,951	581,867	1,613,415
Plan Fiduciary Net Position — Beginning	14,238,465	13,005,552	11,776,127	10,210,620	9,832,669	9,250,802	7,637,387
Plan Fiduciary Net Position — Ending (b)	\$ 14,926,207	\$ 14,238,465	\$ 13,005,552	\$ 11,776,127	\$ 10,210,620	\$ 9,832,669	\$ 9,250,802
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ (2,039,854)	\$ (2,316,693)	\$ (2,030,218)	\$ (1,387,676)	\$ (581,630)	\$ (1,027,801)	\$ (1,327,043)

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

#### WSPRS Plan 1/2: Schedule of Changes in Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability							
Service Cost	\$ 23,091	\$ 22,671	\$ 21,083	\$ 18,474	\$ 16,534	\$ 16,633	\$ 18,041
Interest	100,877	96,629	94,569	90,560	83,373	80,037	75,249
Changes of Benefit Terms	2,400	_	_	4,830	1,947	2,258	_
Differences Between Expected and Actual Experience	11,919	4,254	13,974	23,702	(10,430)	8,883	_
Changes in Assumptions	581	_	(24,367)	20,921	2	17	_
Benefit Payments, Including Refunds of Member Contributions	(68,838)	(64,370)	(59,634)	(56,821)	(54,160)	(50,075)	(47,510)
Net Change in Total Pension Liability	70,030	59,184	45,625	101,666	37,266	57,753	45,780
Total Pension Liability — Beginning	1,373,918	1,314,734	1,269,109	1,167,443	1,130,177	1,072,424	1,026,644
Total Pension Liability — Ending (a)	\$ 1,443,948	\$ 1,373,918	\$ 1,314,734	\$ 1,269,109	\$ 1,167,443	\$ 1,130,177	\$ 1,072,424
Plan Fiduciary Net Position <sup>1</sup>							
Contributions — Employer	\$ 19,897	\$ 14,700	\$ 14,203	\$ 7,587	\$ 7,044	\$ 6,679	\$ 6,587
Contributions — Member	10,630	10,744	9,922	10,454	8,895	6,323	6,555
Net Investment Income	60,358	111,123	113,597	151,021	25,352	49,046	176,856
Benefit Payments, Including Refunds of Member Contributions	(68,838)	(64,370)	(59,634)	(56,821)	(54,160)	(50,075)	(47,510)
Administrative Expense	(96)	(131)	(131)	(53)	(60)	(67)	(84)
Other	808	769	650	524	429	293	509
Net Change in Plan Fiduciary Net Position	22,759	72,835	78,607	112,712	(12,499)	12,199	142,913
Plan Fiduciary Net Position — Beginning	1,362,281	1,289,446	1,210,839	1,098,127	1,110,626	1,098,427	955,514
Plan Fiduciary Net Position — Ending (b)	\$ 1,385,040	\$ 1,362,281	\$ 1,289,446	\$ 1,210,839	\$ 1,098,127	\$ 1,110,626	\$ 1,098,427
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$ 58,908	\$ 11,637	\$ 25,288	\$ 58,270	\$ 69,316	\$ 19,551	\$ (26,003)

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

#### JRS: Schedule of Changes in Net Pension Liability **Dollars in Thousands**

	6	/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability								
Service Cost	\$	_	\$ _	\$ _	\$ _	\$ _	\$ _	\$ _
Interest		2,634	3,078	3,200	2,874	3,704	4,382	4,319
Changes of Benefit Terms		_	_	_	_	_	_	_
Differences Between Expected and Actual Experience		(447)	(1,793)	(2,844)	1,047	20	1,590	_
Changes in Assumptions		3,675	2,372	(2,063)	(6,329)	8,737	4,334	_
Benefit Payments, Including Refunds of Member Contributions		(7,921)	(7,958)	(8,325)	(8,723)	(9,131)	(9,336)	(9,480)
Net Change in Total Pension Liability		(2,059)	(4,301)	(10,032)	(11,131)	3,330	970	(5,161)
Total Pension Liability — Beginning		79,178	83,479	93,511	104,642	101,312	100,341	105,502
Total Pension Liability — Ending (a)	\$	77,119	\$ 79,178	\$ 83,479	\$ 93,511	\$ 104,642	\$ 101,311	\$ 100,341
Plan Fiduciary Net Position <sup>1</sup>								
Contributions — Employer	\$	_	\$ _	\$ _	\$ _	\$ _	\$ _	\$ _
Contributions — State		7,800	8,400	8,700	9,300	9,500	10,600	10,600
Contributions — Member		_	_	_	_	_	_	_
Net Investment Income		155	166	80	45	74	38	25
Benefit Payments, Including Refunds of Member Contributions		(7,921)	(7,958)	(8,325)	(8,723)	(9,131)	(9,336)	(9,480)
Administrative Expense		_	_	_	_	(1)	_	_
Other		_	_	_	_	_	_	_
Net Change in Plan Fiduciary Net Position		34	608	455	622	442	1,302	1,145
Plan Fiduciary Net Position — Beginning		8,460	7,852	7,397	6,775	6,333	5,031	3,886
Plan Fiduciary Net Position — Ending (b)	\$	8,494	\$ 8,460	\$ 7,852	\$ 7,397	\$ 6,775	\$ 6,333	\$ 5,031
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$	68,625	\$ 70,718	\$ 75,627	\$ 86,114	\$ 97,867	\$ 94,978	\$ 95,310

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

#### JRF: Schedule of Changes in Net Pension Liability **Dollars in Thousands**

	6	/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016		6/30/2015	6/30/2014
Total Pension Liability									
Service Cost	\$	_	\$ _	\$ _	\$ _	\$ _	\$	_	\$ _
Interest		80	89	95	88	116		138	137
Changes of Benefit Terms		_	_	_	_	_		_	_
Differences Between Expected and Actual Experience		(315)	161	(39)	194	123		182	_
Changes in Assumptions		12	50	(43)	(129)	181		95	_
Benefit Payments, Including Refunds of Member Contributions		(265)	(338)	(396)	(402)	(440)		(444)	(444)
Net Change in Total Pension Liability		(488)	(38)	(383)	(249)	(20)		(29)	(307)
Total Pension Liability — Beginning		2,427	2,465	2,848	3,097	3,117		3,146	3,453
Total Pension Liability — Ending (a)	\$	1,939	\$ 2,427	\$ 2,465	\$ 2,848	\$ 3,097	\$	3,117	\$ 3,146
Plan Fiduciary Net Position <sup>1</sup>							0		
Contributions — Employer	\$	_	\$ _	\$ _	\$ _	\$ _	\$	_	\$ _
Contributions — State		400	500	500	499	501		_	_
Contributions — Member		_	_	_	_	_		_	_
Net Investment Income		18	17	8	4	6		4	7
Benefit Payments, Including Refunds of Member Contributions		(265)	(338)	(396)	(402)	(440)		(444)	(444)
Administrative Expense		_	_	_	_	_		_	_
Other		_	_	_	_	_		_	_
Net Change in Plan Fiduciary Net Position		153	179	112	101	67		(440)	(437)
Plan Fiduciary Net Position — Beginning		974	795	683	582	515		955	1,392
Plan Fiduciary Net Position — Ending (b)	\$	1,127	\$ 974	\$ 795	\$ 683	\$ 582	\$	515	\$ 955
Plan's Net Pension Liability (Asset) — Ending (a) – (b)	\$	812	\$ 1,453	\$ 1,670	\$ 2,165	\$ 2,515	\$	2,602	\$ 2,191

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

PERS Plan 1: Schedule of Net Pension Liability
Dollars in Thousands

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 11,256,796	\$ 11,696,634	\$ 12,143,412	\$ 12,241,998	\$ 12,496,872	\$ 12,789,241	\$ 12,979,103
Plan Fiduciary Net Position <sup>1</sup>	7,726,256	7,851,279	7,677,378	7,496,920	7,126,401	7,558,312	7,941,557
Plan Net Pension Liability (Asset)	\$ 3,530,540	\$ 3,845,355	\$ 4,466,034	\$ 4,745,078	\$ 5,370,471	\$ 5,230,929	\$ 5,037,546
Plan Fiduciary Net Position as a Percentage of Total Pension							
Liability	68.64%	67.12%	63.22%	61.24%	57.03%	59.10%	61.19%
Covered Payroll	\$ 14,929,580	\$ 13,984,498	\$ 13,176,225	\$ 12,435,701	\$ 11,744,250	\$ 11,151,288	\$ 10,803,971
Plan Net Pension Liability (Asset) as a Percentage							
of Covered Payroll	23.65%	27.50%	33.89%	38.16%	45.73%	46.91%	46.63%

### PERS Plan 2/3: Schedule of Net Pension Liability

#### **Dollars in Thousands**

	6/30/202	D	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 46,030,53	3	\$ 43,503,168	\$ 40,392,728	\$ 38,475,325	\$ 35,517,545	\$ 33,085,015	\$ 30,120,171
Plan Fiduciary Net Position <sup>1</sup>	44,751,59	3	42,531,828	38,685,317	35,000,803	30,482,624	29,511,959	28,098,809
Plan Net Pension Liability (Asset)	\$ 1,278,94	3	\$ 971,340	\$ 1,707,411	\$ 3,474,522	\$ 5,034,921	\$ 3,573,056	\$ 2,021,362
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	97.22	%	97.77%	95.77%	90.97%	85.82%	89.20%	93.29%
Covered Payroll	\$ 11,610,35	3	\$ 10,960,712	\$ 10,419,078	\$ 9,856,106	\$ 9,323,463	\$ 8,876,898	\$ 8,607,757
Plan Net Pension Liability (Asset) as a Percentage of Covered Payroll	11.02	%	8.86%	16.39%	35.25%	54.00%	40.25%	23.48%

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

#### SERS Plan 2/3: Schedule of Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 7,043,384	\$ 6,352,843	\$ 5,719,600	\$ 5,357,035	\$ 4,870,806	\$ 4,473,428	\$ 4,066,004
Plan Fiduciary Net Position <sup>1</sup>	6,511,420	6,118,345	5,420,538	4,863,560	4,214,039	4,067,277	3,856,083
Plan Net Pension Liability (Asset)	\$ 531,964	\$ 234,498	\$ 299,062	\$ 493,475	\$ 656,767	\$ 406,151	\$ 209,921
Plan Fiduciary Net Position as a Percentage of Total Pension							
Liability	92.45%	96.31%	94.77%	90.79%	86.52%	90.92%	94.84%
Covered Payroll	\$ 2,612,142	\$ 2,435,061	\$ 2,213,471	\$ 2,040,005	\$ 1,877,908	\$ 1,720,489	\$ 1,616,447
Plan Net Pension Liability (Asset) as a Percentage							

9.63%

13.51%

24.19%

34.97%

23.61%

12.99%

#### PSERS Plan 2: Schedule of Net Pension Liability

#### **Dollars in Thousands**

of Covered Payroll

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 819,549	\$ 704,212	\$ 602,414	\$ 523,270	\$ 443,214	\$ 371,013	\$ 288,888
Plan Fiduciary Net Position <sup>1</sup>	833,309	717,216	601,175	503,677	400,716	352,761	303,369
Plan Net Pension Liability (Asset)	\$ (13,760)	\$ (13,004)	\$ 1,239	\$ 19,593	\$ 42,498	\$ 18,252	\$ (14,481)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	101.68%	101.85%	99.79%	96.26%	90.41%	95.08%	105.01%
Covered Payroll	\$ 614,165	\$ 469,267	\$ 392,849	\$ 357,285	\$ 324,850	\$ 293,007	\$ 270,102
Plan Net Pension Liability (Asset) as a Percentage of Covered Payroll	(2.24)%	(2.77)%	.32%	5.48%	13.08%	6.23%	(5.36)%

<sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

20.37%

#### TRS Plan 1: Schedule of Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 8,179,362	\$ 8,355,496	\$ 8,722,439	\$ 8,782,761	\$ 9,001,257	\$ 9,237,730	\$ 9,443,688
Plan Fiduciary Net Position <sup>1</sup>	5,770,576	5,879,693	5,801,847	5,759,493	5,587,020	6,069,588	6,494,234
Plan Net Pension Liability (Asset)	\$ 2,408,786	\$ 2,475,803	\$ 2,920,592	\$ 3,023,268	\$ 3,414,237	\$ 3,168,142	\$ 2,949,454
Plan Fiduciary Net Position as a Percentage of Total Pension							
Liability	70.55%	70.37%	66.52%	65.58%	62.07%	65.70%	68.77%
Covered Payroll	\$ 7,189,878	\$ 6,758,331	\$ 5,939,270	\$ 5,530,315	\$ 5,138,262	\$ 4,794,824	\$ 4,585,022
Plan Net Pension Liability (Asset) as a Percentage							
of Covered Payroll	33.50%	36.63%	49.17%	54.67%	66.45%	66.07%	64.33%

### TRS Plan 2/3: Schedule of Net Pension Liability

#### **Dollars** in Thousands

Donars in Thousands								
	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016		6/30/2015	6/30/2014
Total Pension Liability	\$ 18,559,021	\$ 16,545,194	\$ 14,422,685	\$ 13,446,531	\$ 12,172,222	\$	11,220,834	\$ 10,113,479
Plan Fiduciary Net Position <sup>1</sup>	17,023,040	15,942,660	13,972,571	12,523,588	10,798,925		10,377,031	9,790,490
Plan Net Pension Liability (Asset)	\$ 1,535,981	\$ 602,534	\$ 450,114	\$ 922,943	\$ 1,373,297	\$	843,803	\$ 322,989
Plan Fiduciary Net Position as a Percentage of Total Pension						_		
Liability	91.72%	96.36%	96.88%	93.14%	88.72%		92.48%	96.81%
Covered Payroll	\$ 7,161,329	\$ 6,721,600	\$ 5,891,871	\$ 5,466,408	\$ 5,054,070	\$	4,681,511	\$ 4,436,592
Plan Net Pension Liability (Asset) as a Percentage								
of Covered Payroll	21.45%	8.96%	7.64%	16.88%	27.17%		18.02%	7.28%

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

#### LEOFF Plan 1: Schedule of Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 4,028,653	\$ 4,052,226	\$ 4,087,231	\$ 4,219,277	\$ 4,340,582	\$ 4,404,927	\$ 4,506,015
Plan Fiduciary Net Position <sup>1</sup>	5,917,162	6,028,837	5,902,733	5,736,497	5,370,868	5,610,149	5,718,806
Plan Net Pension Liability (Asset)	\$ (1,888,509)	\$ (1,976,611)	\$ (1,815,502)	\$ (1,517,220)	\$ (1,030,286)	\$ (1,205,222)	\$ (1,212,791)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	146.88%	148.78%	144.42%	135.96%	123.74%	127.36%	126.91%
Covered Payroll	\$ 2,148	\$ 2,487	\$ 3,536	\$ 5,438	\$ 7,932	\$ 10,583	\$ 13,888
Plan Net Pension Liability (Asset) as a Percentage of Covered Payroll	(87,919.41)%	(79,477.72)%	(51,343.38)%	(27,900.33)%	(12,988.98)%	(11,388.27)%	(8,732.65)%

### LEOFF Plan 2: Schedule of Net Pension Liability

#### **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 12,886,353	\$ 11,921,772	\$ 10,975,334	\$ 10,388,451	\$ 9,628,990	\$ 8,804,868	\$ 7,923,759
Plan Fiduciary Net Position <sup>1</sup>	14,926,207	14,238,465	13,005,552	11,776,127	10,210,620	9,832,669	9,250,802
Plan Net Pension Liability (Asset)	\$ (2,039,854)	\$ (2,316,693)	\$ (2,030,218)	\$ (1,387,676)	\$ (581,630)	\$ (1,027,801)	\$ (1,327,043)
Plan Fiduciary Net Position as a Percentage of Total Pension							
Liability	115.83%	119.43%	118.50%	113.36%	106.04%	111.67%	116.75%
Covered Payroll	\$ 2,237,553	\$ 2,150,705	\$ 1,989,096	\$ 1,882,667	\$ 1,804,024	\$ 1,744,180	\$ 1,674,432
Plan Net Pension Liability (Asset) as a Percentage							
of Covered Payroll	(91.16)%	(107.72)%	(102.07)%	(73.71)%	(32.24)%	(58.93)%	(79.25)%

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

#### WSPRS Plan 1/2: Schedule of Net Pension Liability **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 1,443,948	\$ 1,373,918	\$ 1,314,734	\$ 1,269,109	\$ 1,167,443	\$ 1,130,177	\$ 1,072,424
Plan Fiduciary Net Position <sup>1</sup>	1,385,040	1,362,281	1,289,446	1,210,839	1,098,127	1,110,626	1,098,427
Plan Net Pension Liability (Asset)	\$ 58,908	\$ 11,637	\$ 25,288	\$ 58,270	\$ 69,316	\$ 19,551	\$ (26,003)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	95.92%	99.15%	98.08%	95.41%	94.06%	98.27%	102.42%
Covered Payroll	\$ 113,725	\$ 111,612	\$ 109,242	\$ 93,053	\$ 86,669	\$ 84,379	\$ 83,282
Plan Net Pension Liability (Asset) as a Percentage of Covered Payroll	51.80%	10.43%	23.15%	62.62%	79.98%	23.17%	(31.22)%

### JRS: Schedule of Net Pension Liability

#### **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$ 77,119	\$ 79,178	\$ 83,479	\$ 93,511	\$ 104,642	\$ 101,311	\$ 100,341
Plan Fiduciary Net Position <sup>1</sup>	8,494	8,460	7,852	7,397	6,775	6,333	5,031
Plan Net Pension Liability (Asset)	\$ 68,625	\$ 70,718	\$ 75,627	\$ 86,114	\$ 97,867	\$ 94,978	\$ 95,310
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	11.01%	10.68%	9.41%	7.91%	6.47%	6.25%	5.01%
Covered Payroll	\$ _	\$ _	\$ _	\$ _	\$ _	\$ _	\$ _
Plan Net Pension Liability (Asset) as a Percentage of Covered Payroll	n/a	n/a	n/a	n/a	n/a	n/a	n/a

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

### JRF: Schedule of Net Pension Liability **Dollars in Thousands**

	(	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total Pension Liability	\$	1,939	\$ 2,427	\$ 2,465	\$ 2,848	\$ 3,097	\$ 3,117	\$ 3,146
Plan Fiduciary Net Position <sup>1</sup>		1,127	974	795	683	582	515	955
Plan Net Pension Liability (Asset)	\$	812	\$ 1,453	\$ 1,670	\$ 2,165	\$ 2,515	\$ 2,602	\$ 2,191
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		58.12%	40.13%	32.25%	23.98%	18.79%	16.52%	30.36%
Covered Payroll	\$	_	\$ _	\$ _	\$ _	\$ _	\$ _	\$ _
Plan Net Pension Liability (Asset) as a Percentage of Covered Payroll		n/a	n/a	n/a	n/a	n/a	n/a	n/a

<sup>&</sup>lt;sup>1</sup> Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.

PERS Plan 1: Schedule of Employer Contributions

**Dollars in Thousands** 

	6/30/2020		6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required											
Contributions (CRC)	\$ 718,007	\$	726,388	\$ 674,061	\$ 604,541	\$ 573,784	\$ 454,010	\$ 439,067	\$ 534,200	\$ 508,000	\$ 439,300
Actuarially Determined											
Contributions (ADC) <sup>1</sup>	718,007		753,414	699,732	656,655	623,404	454,010	439,067	534,200	508,000	439,300
Employer Contributions											
PERS Plan 1	14,456		23,683	24,402	27,300	33,777	26,173	33,864	31,884	31,833	30,827
Employer Plan 1 UAAL											
Contributions <sup>2</sup>											
PERS Plan 2/3	552,842		555,506	520,964	467,648	461,048	355,512	343,790	194,740	185,185	93,015
SERS Plan 2/3	125,961		123,680	109,736	97,441	85,835	68,719	60,431	33,726	34,810	19,092
PSERS Plan 2	29,253		23,515	19,682	16,898	15,322	11,696	10,810	5,920	5,369	2,651
Contributions in											
Relation to ADC	722,512		726,384	674,784	609,287	595,982	462,100	448,895	266,270	257,197	145,585
Contribution Deficiency											
(Excess)	\$ (4,505	) \$	27,030	\$ 24,948	\$ 47,368	\$ 27,422	\$ (8,090)	\$ (9,828)	\$ 267,930	\$ 250,803	\$ 293,715
<b>Covered Payroll</b>											
PERS Plan 1	\$ 92,920	\$	119,458	\$ 150,827	\$ 182,305	\$ 218,029	\$ 260,894	\$ 309,665	\$ 352,909	\$ 399,564	\$ 493,559
PERS Plan 2/3	11,610,353		10,960,712	10,419,078	9,856,106	9,323,463	8,876,898	8,607,757	8,265,361	8,125,656	8,139,901
SERS Plan 2/3	2,612,142		2,435,061	2,213,471	2,040,005	1,877,908	1,720,489	1,616,447	1,549,224	1,638,675	1,650,375
PSERS Plan 2	614,165		469,267	392,849	357,285	324,850	293,007	270,102	249,022	236,495	232,044
Covered Payroll <sup>4</sup>	\$ 14,929,580	\$	13,984,498	\$ 13,176,225	\$ 12,435,701	\$ 11,744,250	\$ 11,151,288	\$ 10,803,971	\$ 10,416,516	\$ 10,400,390	\$ 10,515,879
Contributions as a											
Percentage of Covered											
Payroll	4.849	o	5.19%	5.12%	4.90%	5.07%	4.14%	4.15%	2.56%	2.47%	1.38%

Portions of the above contributions were assessed on the covered payrolls of PERS Plan 2/3, SERS Plan 2/3 and PSERS Plan 2.

<sup>&</sup>lt;sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.

<sup>&</sup>lt;sup>3</sup> DRS collects portions of the employer retirement contributions of PERS Plan 2/3, SERS Plan 2/3 and PSERS Plan 2 and applies them toward the Unfunded Actuarial Accrued Liability of PERS Plan 1.

<sup>4 &</sup>quot;Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

## PERS Plan 2/3: Schedule of Employer Contributions

**Dollars in Thousands** 

	6/30/202	6/30/201	9 6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$ 919,54	\$ 824,24	6 \$ 780,389	\$ 614,035	\$ 580,852	\$ 462,098	\$ 441,677	\$ 408,300	\$ 407,700	\$ 408,600
Actuarially Determined Contributions (ADC) <sup>2</sup>	919,54	883,43	3 836,652	700,769	662,898	462,098	441,677	408,300	407,700	408,600
Contributions in Relation to ADC	925,30	820,18	8 778,525	621,927	563,328	446,127	430,345	389,020	385,253	328,258
Contribution Deficiency (Excess)	\$ (5,76	\$ 63,24	5 \$ 58,127	\$ 78,842	\$ 99,570	\$ 15,971	\$ 11,332	\$ 19,280	\$ 22,447	\$ 80,342
Covered Payroll <sup>3</sup>	\$ 11,610,35	\$ 10,960,71	2 \$ 10,419,078	\$ 9,856,106	\$ 9,323,463	\$ 8,876,898	\$ 8,607,757	\$ 8,265,361	\$ 8,125,656	\$ 8,139,901
Contributions as a Percentage of Covered										
Payroll	7.97	7.48	% 7.47%	6.31%	6.04%	5.03%	5.00%	4.71%	4.74%	4.03%

#### SERS Plan 2/3: Schedule of Employer Contributions

**Dollars in Thousands** 

	6/30/2020		6/30/2019	6/30/2018		6/30/2017	6/30/2016		6/30/2015	6/30/2014		6/30/2013	6/30/2012		6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$ 215,502	\$	201,380	\$ 183,054	\$	135,252	\$ 124,505	\$	94,736,000	\$ 90,064,000	\$	86,600,000	\$ 85,200,000	\$	88,600,000
Actuarially Determined Contributions (ADC) <sup>2</sup>	215,502		214,285	194,785		157,080	144,599		94,736	90,064		86,600	85,200		88,600
Contributions in Relation to ADC	216,713		200,604	176,539		134,727	115,480		97,386	88,783		78,400	74,640		62,316
Contribution Deficiency (Excess)	\$ (1,211)	\$	13,681	\$ 18,246	\$	22,353	\$ 29,119	\$	(2,650)	\$ 1,281	\$	8,200	\$ 10,560	\$	26,284
Covered Payroll <sup>3</sup>	\$ 2,612,142	\$	2,435,061	\$ 2,213,471	\$	2,040,005	\$ 1,877,908	\$	1,720,489	\$ 1,616,447	\$	1,549,224	\$ 1,638,675	\$	1,650,375
Contributions as a	, ,	·	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,	·	, ,,,,,,,,	, , , , , , , ,	·	, ,,	, ,	•	, ,	, ,	•	, ,-
Percentage of Covered Payroll	8.30%		8.24%	7.98%		6.60%	6.15%		5.66%	5.49%		5.06%	4.55%		3.78%

<sup>&</sup>lt;sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.

<sup>&</sup>lt;sup>3</sup> "Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

## PSERS Plan 2: Schedule of Employer Contributions

**Dollars in Thousands** 

	(	6/30/2020	(	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	(	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$	44,220	\$	33,177	\$ 26,439	\$ 23,545	\$ 21,408	\$ 18,545	\$	17,053	\$ 15,100	\$ 14,700	\$ 14,700
Actuarially Determined Contributions (ADC) <sup>2</sup>		44,220		34,331	27,444	24,617	22,382	18,545		17,053	15,100	14,700	14,700
Contributions in Relation to ADC		44,392		32,468	26,033	23,238	20,058	18,704		17,124	15,650	15,285	15,591
Contribution Deficiency (Excess)	\$	(172)	\$	1,863	\$ 1,411	\$ 1,379	\$ 2,324	\$ (159)	\$	(71)	\$ (550)	\$ (585)	\$ (891)
Covered Payroll <sup>3</sup>	\$	614,165	\$	469,267	\$ 392,849	\$ 357,285	\$ 324,850	\$ 293,007	\$	270,102	\$ 249,022	\$ 236,495	\$ 232,044
Contributions as a Percentage of Covered													
Payroll		7.23%		6.92%	6.63%	6.50%	6.17%	6.38%		6.34%	6.28%	6.46%	6.72%

<sup>&</sup>lt;sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.

<sup>&</sup>lt;sup>3</sup> "Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

TRS Plan 1: Schedule of Employer Contributions **Dollars in Thousands** 

		6/30/2020		6/30/2019		6/30/2018		6/30/2017		6/30/2016		6/30/2015		6/30/2014		6/30/2013		6/30/2012		6/30/201
Contractually Required Contributions (CRC) <sup>1</sup>	\$	518,560	\$	502,993	\$	430,745	\$	348,833	\$	325,771	\$	218,542	\$	208,119	\$	275,400	\$	254,000	\$	205,90
, ,	Φ	310,300	Φ	302,993	Φ	430,743	Φ	340,033	Φ	323,771	Φ	210,042	Φ	200,119	Φ	273,400	Φ	204,000	Φ	200,90
Actuarially Determined Contributions (ADC) <sup>2</sup>		518,560		531,110		455,518		387,043		361,481		218,542		208,119		275,400		254,000		205,900
Employer Contributions TRS Plan 1		4,519		9,819		11,597		7,444		22,417		11,864		17,306		17,518		16,706		18,470
Employer Plan 1 UAAL Contributions <sup>3</sup>																				
TRS Plan 2/3		517,031		491,003		408,943		341,524		293,517		212,022		183,368		101,051		95,231		78,333
Contributions in Relation to ADC		521,550		500,822		420,540		348,968		315,934		223,886		200,674		118,569		111,937		96,803
Contribution Deficiency	_						_				_				_					
(Excess)	\$	(2,990)	\$	30,288	\$	34,978	\$	38,075	\$	45,547	\$	(5,344)	\$	7,445	\$	156,831	\$	142,063	\$	109,097
Covered Payroll																				
TRS Plan 1	\$	28,549	\$	36,731	\$	47,399	\$	63,907	\$	84,192	\$	113,313	\$	148,430	\$	192,532	\$	280,366	\$	349,660
TRS Plan 2/3		7,161,329		6,721,600		5,891,871		5,466,408		5,054,070		4,681,511		4,436,592		4,203,893		4,162,779		4,171,447
Covered Payroll⁴	\$	7,189,878	\$	6,758,331	\$	5,939,270	\$	5,530,315	\$	5,138,262	\$	4,794,824	\$	4,585,022	\$	4,396,425	\$	4,443,145	\$	4,521,107
Contributions as a Percentage of Covered																				
Payroll		7.25%		7.41%		7.08%		6.31%		6.15%		4.67%		4.38%		2.70%		2.52%		2.14

Portions of the above contributions were assessed on the covered payrolls of TRS Plan 2/3.

<sup>&</sup>lt;sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.

<sup>&</sup>lt;sup>3</sup> DRS collects a portion of the employer retirement contributions of TRS Plan 2/3 and applies it toward the Unfunded Actuarial Accrued Liability of TRS Plan 1.

<sup>4 &</sup>quot;Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

TRS Plan 2/3: Schedule of Employer Contributions **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$ 583,648	\$ 526,301	\$ 461,334	\$ 367,343	\$ 339,634	\$ 269,160	\$ 255,277	\$ 231,600	\$ 232,200	\$ 232,300
Actuarially Determined Contributions (ADC) <sup>2</sup>	583,648	554,532	486,079	413,260	382,088	269,160	255,277	231,600	232,200	232,300
Contributions in Relation to ADC	584,424	523,733	446,275	364,106	316,022	267,038	249,341	228,974	213,852	168,264
Contribution Deficiency (Excess)	\$ (776)	\$ 30,799	\$ 39,804	\$ 49,154	\$ 66,066	\$ 2,122	\$ 5,936	\$ 2,626	\$ 18,348	\$ 64,036
Covered Payroll <sup>3</sup>	\$ 7,161,329	\$ 6,721,600	\$ 5,891,871	\$ 5,466,408	\$ 5,054,070	\$ 4,681,511	\$ 4,436,592	\$ 4,203,893	\$ 4,162,779	\$ 4,171,447
Contributions as a Percentage of Covered										
Payroll	8.16%	7.79%	7.57%	6.66%	6.25%	5.70%	5.62%	5.45%	5.14%	4.03%

#### **LEOFF Plan 1: Schedule of Employer Contributions**

#### **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Actuarially Determined Contributions (ADC) <sup>2</sup>	_	_	_	_	_	_	_	_	_	_
Contributions in Relation to ADC	5	3	1			60	98	555	2	3
Contribution Deficiency (Excess)	\$ (5)	\$ (3)	\$ (1)	<b>s</b> –	<b>s</b> –	\$ (60)	\$ (98)	\$ (555)	\$ (2)	\$ (3)
Covered Payroll <sup>3</sup>	\$ 2,148	\$ 2,487	\$ 3,536	\$ 5,438	\$ 7,932	\$ 10,583	\$ 13,888	\$ 16,521	\$ 21,456	\$ 27,171
Contributions as a Percentage of Covered Payroll	0.23%	0.12%	0.03%	0.00%	0.00%	0.57%	0.71%	3.36%	0.01%	0.01%
rayivii	0.23%	0.12%	0.03%	0.00%	0.00%	0.37%	0.71%	3.30%	0.01%	0.01%

<sup>&</sup>lt;sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.

<sup>&</sup>lt;sup>3</sup> "Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

#### **LEOFF Plan 2: Schedule of Employer Contributions Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$ 192,206	\$ 188,187	\$ 174,046	\$ 158,332	\$ 151,718	\$ 147,438	\$ 141,696	\$ 94,700	\$ 97,300	\$ 84,000
Actuarially Determined Contributions (ADC) <sup>2</sup>	192,206	170,551	156,741	150,049	151,718	147,438	141,696	94,700	97,300	84,000
Contributions in Relation to ADC <sup>3</sup>	194,072	188,841	174,576	158,075	152,424	147,461	141,082	136,643	133,250	131,757
Contribution Deficiency (Excess)	\$ (1,866)	\$ (18,290)	\$ (17,835)	\$ (8,026)	\$ (706)	\$ (23)	\$ 614	\$ (41,943)	\$ (35,950)	\$ (47,757)
Covered Payroll <sup>4</sup>	\$ 2,237,553	\$ 2,150,705	\$ 1,989,096	\$ 1,882,667	\$ 1,804,024	\$ 1,744,180	\$ 1,674,432	\$ 1,605,364	\$ 1,569,051	\$ 1,542,269
Contributions as a Percentage of Covered										
Payroll	8.67%	8.78%	8.78%	8.40%	8.45%	8.45%	8.43%	8.51%	8.49%	8.54%

<sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated. OSA modified the methodology for calculating the LEOFF 2 CRC starting in FY 2017 to reflect the actual contribution rates adopted by the Leoff Plan 2 Retirement Board.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.

<sup>&</sup>lt;sup>3</sup> Contributions in Relation to the Actuarially Determined Contributions include Employer Contributions and State Contributions.

<sup>4 &</sup>quot;Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

#### WSPRS Plan 1/2: Schedule of Employer Contributions **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$ 25,167	\$ 17,020	\$ 16,648	\$ 8,179	\$ 7,618	\$ 6,810	\$ 6,677	\$ 2,500	\$ 2,900	\$ 2,300
Actuarially Determined Contributions (ADC) <sup>2</sup>	25,167	17,020	16,648	8,179	7,618	6,810	6,677	2,500	2,900	2,300
Contributions in Relation to ADC	19,897	 14,700	14,203	 7,587	7,044	 6,679	6,587	6,478	6,454	 5,251
Contribution Deficiency (Excess)	\$ 5,270	\$ 2,320	\$ 2,445	\$ 592	\$ 574	\$ 131	\$ 90	\$ (3,978)	\$ (3,554)	\$ (2,951)
Covered Payroll <sup>3</sup>	\$ 113,725	\$ 111,612	\$ 109,242	\$ 93,053	\$ 86,669	\$ 84,379	\$ 83,282	\$ 81,895	\$ 81,578	\$ 81,882
Contributions as a Percentage of Covered										
Payroll	17.50%	13.17%	13.00%	8.15%	8.13%	7.92%	7.91%	7.91%	7.91%	6.41%

#### JRS: Schedule of Employer Contributions

#### **Dollars in Thousands**

	6/	/30/2020	6/	30/2019	6	/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$	7,643	\$	7,914	\$	8,317,000	\$ 8,761,000	\$ 8,999,000	\$ 9,132,000	\$ 9,205,000	\$ 21,700,000	\$ 22,600,000	\$ 18,600,000
Actuarially Determined Contributions (ADC) <sup>2</sup>		7,643		7,914		8,317	8,761	8,999	9,132	9,205	21,700	22,600	18,600
Contributions in Relation to ADC		7,800		8,400		8,700	 9,300	9,500	10,600	10,600	10,112	8,131	 10,906
Contribution Deficiency (Excess)	\$	(157)	\$	(486)	\$	(383)	\$ (539)	\$ (501)	\$ (1,468)	\$ (1,395)	\$ 11,588	\$ 14,469	\$ 7,694
Covered Payroll <sup>3</sup>		_		_		_	_	_	\$ _	\$ _	\$ 160	\$ 407	\$ 611
Contributions as a Percentage of Covered													
Payroll		n/a		n/a		n/a	n/a	n/a	n/a	n/a	6,320.00%	1,997.79%	1,784.94%

<sup>&</sup>lt;sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses. The employer contribution rate used to determine the WSPRS ADC (for Fiscal Years 2020 through 2025) does not reflect the temporary rate.

<sup>&</sup>lt;sup>3</sup> "Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

### JRF: Schedule of Employer Contributions

#### **Dollars** in Thousands

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Contractually Required Contributions (CRC) <sup>1</sup>	\$ 328	\$ 395	\$ 395	\$ 439	\$ 444	\$ 539	\$ 425	\$ 400	\$ 300	\$ 100
Actuarially Determined Contributions (ADC) <sup>2</sup>	328	395	395	439	444	539	425	400	300	100
Contributions in Relation to ADC	400	500	500	499	501	_	_	_	_	_
Contribution Deficiency (Excess)	\$ (72)	\$ (105)	\$ (105)	\$ (60)	\$ (57)	\$ 539	\$ 425	\$ 400	\$ 300	\$ 100
Covered Payroli <sup>3</sup>	_		_	_	_	_	_	_	_	_
Contributions as a Percentage of Covered										
Payroll	n/a									

<sup>&</sup>lt;sup>1</sup> See the "Notes to Required Supplementary Information" on page 97 for an explanation of how the CRC and ADC were calculated.

<sup>&</sup>lt;sup>2</sup> Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.

<sup>&</sup>lt;sup>3</sup> "Covered payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

#### **Schedule of Investment Returns** Annual Money-Weighted Rates of Return Net of Investment Expenses Plan 6/30/2020 6/30/2019 6/30/2018 6/30/2017 6/30/2016 6/30/2015 6/30/2014 PERS Plan 1 4.49 % 8.68 % 9.55 % 13.84 % 2.19 % 4.45 % 18.76 % 9.56 % 9.57 % PERS Plan 2/3 4.55 % 8.89 % 14.11 % 2.47 % 4.63 % 18.94 % SERS Plan 2/3 4.56 % 8.93 % 14.13 % 2.49 % 4.64 % 18.96 % PSERS Plan 2 4.63 % 9.12 % 9.51 % 14.14 % 2.75 % 4.76 % 18.91 % TRS Plan 1 4.48 % 8.65 % 9.54 % 14.45 % 2.09 % 4.41 % 18.73 % 2.51 % 8.93 % TRS Plan 2/3 4.57 % 9.57 % 14.10 % 4.65 % 18.96 % 9.56 % LEOFF Plan 1 4.48 % 8.67 % 13.95 % 2.25 % 4.51 % 18.82 % LEOFF Plan 21 4.55 % 8.89 % 9.56 % 14.14 % 2.48 % 4.64 % 18.93 % WSPRS Plan 1/2 4.51 % 8.78 % 9.55 % 14.03 % 2.34 % 4.56 % 18.87 % JRS 1.66 % 1.78 % 1.11 % 0.71 % 0.62 % 0.40 % 0.16 % **JRF** 1.66 % 1.11 % 0.71 % 0.62 % 0.40 % 0.16 % 1.78 %

<sup>&</sup>lt;sup>1</sup> Rate of return also reflects returns on LEOFF 2 Benefit Improvement Account beginning 6/30/2020.

### Notes to Pension Required Supplementary Information

Methods and Assumptions Used in Calculations of Actuarially Determined Contributions for PERS, PSERS, SERS, TRS, LEOFF and WSPRS: The Office of the State Actuary (OSA) calculates the actuarially determined contributions (ADC) based on the results of an actuarial valuation consistent with the state's funding policy defined in Chapter 41.45 RCW.

Consistent with the state's contribution-rate adoption process, the results of an actuarial valuation with an odd-numbered year valuation date determine the ADC for the biennium that ensues two years later. The actuarial valuation with a June 30, 2017 valuation date, completed in the Fall of 2018, plus any supplemental contribution rates from the preceding legislative session, determines the ADC for the period beginning July 1, 2019 and ending June 30, 2021.

Methods and Assumptions Used in Calculations of **Actuarially Determined Contributions for JRS and JRF:** 

OSA calculates the actuarially determined contributions (ADC) based on the results of an actuarial valuation and sets it equal to the expected benefit payments from the plan. Consistent with the state's funding policy defined in Chapters 2.10.90 and 2.12.60 RCW, the Legislature makes biennial appropriations to ensure the fund is solvent so it can make the necessary benefit payments.

Additional Considerations on ADC for All Plans: OSA calculates the ADC consistent with the methods described above. Adopted contribution rates could be different pending the actions of the governing bodies.

CRC for All Cost-Sharing Plans (All Plans Other Than WSPRS 1/2, JRS and JRF): For cost-sharing plans, OSA calculates the contractually required contributions (CRC) using the same assumptions and methods as the ADC, except the CRC reflect the adopted contribution rates for the time period shown, which might differ from the contribution rates produced for the ADC.

Additional plan-specific actuarial method and assumption information is located in Note 4 of the Financial Section.

## **Supporting Schedules**

#### **Schedule of Administrative Expenses**

For the Year Ended June 30, 2020 — Dollars in Thousands

	Retirement Pension Trust Funds	Deferred Compensation Pension Trust Fund	Total Administrative Expenses
Current Personnel			
Salaries and Wages	\$ 16,397	\$ 1,252	\$ 17,649
Employee Benefits	6,017	469	6,486
Personal Service Contracts	9,194	65	9,259
<b>Total Personnel Expenses</b>	31,608	1,786	33,394
Goods and Services			
Actuary Services	2,502	_	2,502
Archives and Records Management	36	3	39
Attorney General Services	207	21	228
Audit Services	287	_	287
Collections	157	_	157
Communications	511	17	528
Data Processing Services	2,265	102	2,367
Employee Professional Development and Training	250	9	259
Facilities and Services	368	5	373
Insurance	7	1	8
Legal Fees <sup>1</sup>	1,515	2	1,517
LEOFF 2 Board Governance	1,404	_	1,404
Medical Consultant Services	321	_	321
Other Contractual Services	144	30	174
Other Goods and Services	86	4	90
Printing and Reproduction	141	2	143
Rental and Leases	1,378	102	1,480
Repairs and Alterations	148	2	150
Supplies and Materials	49	3	52
Utilities	104	7	111
Total Goods and Services	11,880	310	12,190
Miscellaneous Expenses			
Noncapitalized Equipment	2,835	53	2,888
Travel	99	24	123
Total Miscellaneous Expenses	2,934	77	3,011
<b>Total Current Expenses</b>	46,422	2,173	48,595
Depreciation and Loss — Capital Assets	32	_	32
Total Administrative Expenses	\$ 46,454	\$ 2,173	\$ 48,627

<sup>&</sup>lt;sup>1</sup> Includes specific salaries and related expenses as well as Legal costs from the Schedule of Payments to Consultants on page 100.

## Supporting Schedules (cont.)

#### Schedule of Investment Expenses — Pension Trust Funds For the Year Ended June 30, 2020 — Dollars in Thousands

	Fees Paid	Netted Fees <sup>1</sup>	Total Fees and Expenses
Equity Securities			-
Public Equity Active Management	\$ 59,691	\$ —	\$ 59,691
Public Equity Passive Management	2,756	798	3,554
Alternative Investments			
Private Equity	376,793	158,834	535,627
Real Estate	49,938	30,729	80,667
Tangible Assets	79,396	16,662	96,058
Cash Management	3,049	_	3,049
Debt Securities	_	_	-
Other Fees			
Consultants and Accounting	995	_	995
Legal Fees	1,443	_	1,443
Research Services	2,512	_	2,512
Securities Lending Rebates and Fees	10,230	_	10,230
Miscellaneous Fees	1,360	_	1,360
DCP Management Fees	7,177	_	7,177
JRA Management Fees	11	_	11
PERS Plan 3 Management Fees	1,561	_	1,561
SERS Plan 3 Management Fees	632	_	632
TRS Plan 3 Management Fees	4,214	_	4,214
WSIB Operating Costs	22,086	_	22,086
Total Investment Expenses	\$ 623,844	\$ 207,023	\$ 830,867

<sup>&</sup>lt;sup>1</sup> Netted fees are included in unrealized gains (losses) in the accompanying Statement of Changes in Fiduciary Net Position

### **Schedule of Payments to Consultants**

#### For the Year Ended June 30, 2020 — Dollars in Thousands

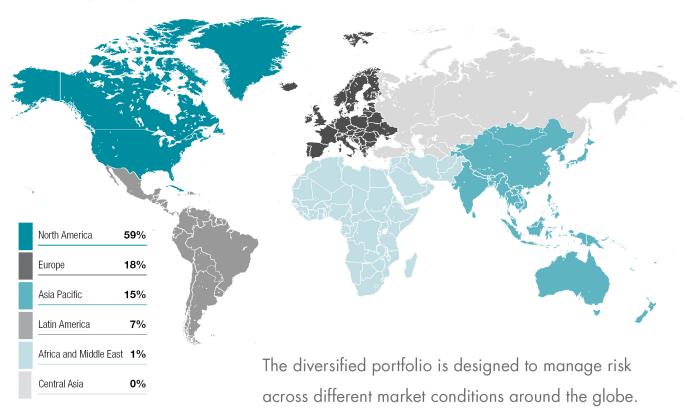
	Commission/Fee
Computer/Technology	
Integrated Solutions Group LLC	44
Martin Analysis & Programming Inc.	404
Total Computer/Technology	448
Legal	
Freimund Jackson Tardif & Benedict Garratt PLLC	38
Gallitano & O'Connor LLP	1
Ice Miller LLP	86
K&L Gates LLP	80
Total Legal	205
Management	
CEM Benchmarking Inc.	50
Charles W. Cammack Associates Inc.	242
CliftonLarsonAllen LLP	210
Milliman Inc.	156
Segal Company	28
Total Management	686
Recordkeeping	
Great-West Life & Annuity (Empower Retirement)	4,110
Total Recordkeeping	4,110
Total Payments to Consultants	\$ 5,449

Payments to Consultants are included within the Personal Service Contracts, Actuary Services, Audit Services and Legal Fees within the Schedule of Administrative Expenses located on page 98. For fees paid to investment professionals, refer to the Investment Section of this report.

#### INVESTMENTS by the Numbers

#### Commingled Trust Fund (CTF) Diversification

This chart illustrates where the Washington State Investment Board (WSIB) invests monies pooled in the CTF. As of June 30, 2020, DRS' investment in the CTF was valued at \$114.2 billion.





3 // CTF RETURN
IN FISCAL YEAR 2020

99.7% OF CTF COMPOSED OF RETIREMENT FUNDS FROM DRS SYSTEMS

# Current CTF Asset Allocation As of June 30, 2020

18.4%

21.3%

Public Equity 33.6%

Fixed Income 21.3%

Real Estate 18.4%

Tangibles 5.4%

Private Equity 21.0%

Cash and Innovation 0.3% combined

## **Investment Section**

## Report on Investment Activity

#### Prepared by the Washington State Investment Board

#### Overview

The Washington State Investment Board (WSIB) manages retirement fund assets to maximize return at a prudent level of risk (RCW 43.33A.110). Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of written WSIB-adopted investment policies for the various asset classes in which the WSIB invests.

The retirement funds, collectively called the Commingled Trust Fund (CTF), increased in value by \$4.5 billion to \$114.5 billion during fiscal year 2020. The DRS retirement funds make up 99.7% of the CTF, \$114.2 billion. The CTF return was 3.71% for the fiscal year.

Established on July 1, 1992, the CTF is a diversified pool of investments that is invested in fixed income, public equity, private equity, real estate and tangible assets. Additional general information about the CTF includes:

- Participant Concentration: The DRS retirement funds make up 99.7% of the CTF. Their respective concentrations are:
  - PERS 1 (6.7%)
  - PERS 2/3 defined benefit (DB) and defined contribution (DC) plans
  - SERS 2/3 DB and DC plans (7.0%)
  - PSERS 2 (0.7%)
  - TRS 1 (5.0%)
  - TRS 2/3 DB and DC plans (20.0%)
  - WSPRS 1/2 (1.2%)
  - LEOFF 1 (5.2%)
  - LEOFF 2 (13.0%)
- External Managers: The WSIB engages approximately 133 partnerships and external managers to assist in the management of the CTF's investments.
- Risk: The various risks of the CTF portfolio include interest rate risk, credit risk, concentration risk and foreign currency risk,

as described in Note 1 of the Financial Section of this report.

- Leverage: The WSIB does not leverage the CTF portfolio as a whole. However, some individual investment managers or securities within the CTF may employ varying degrees of leverage.
- Earnings: The CTF does not distribute earnings directly to the owner funds. The retirement fund plans are allowed to purchase or sell units in the pool, based on the fair value of the underlying assets, on the first business day of each month. The net asset value includes interest and dividend income, which is recognized on a trade-date basis, and purchases and sales of investments, which are recorded on a tradedate basis.
- **Expense:** The CTF's expense ratio for the year ended June 30, 2020, was 0.69625%.
- Yield: The CTF's fixed income portfolio has a yield of 3.17%.
- Weighted Average Maturity: The CTF fixed income portfolio has a weighted average maturity of 8.73 years. Additional maturity information is available in Note 1 of the Financial Section of this report.

Basis of Presentation of Investment Data Investments are reported at fair value. Unrealized gains and losses are included as investment income.

The net investments of the retirement funds are valued on a monthly basis using publicly traded securities, limited partnerships, private equity limited partnerships and real estate limited partnerships.

**Publicly Traded Securities (Corporate Stock,** Commingled Funds, Investment Derivatives and Fixed **Income):** Fair values are based on published market prices, quotations from national security exchanges

and security pricing services as of each month-end closing of the New York Stock Exchange.

Limited Partnerships: The fair value of investments that are organized as limited partnerships and have no readily ascertainable fair value (such as private equity, real estate and tangible assets) has been determined by management. Those determinations are based on the individual investment's capital account balance, reported at fair value by the general partner, at the closest available reporting period, adjusted for subsequent contributions, distributions, management fees, changes in value of foreign currency and published market prices for certain securities. Independent auditors audit the limited partnerships' annual financial statements.

**Private Equity Limited Partnerships:** The fair value of individual capital account balances is based on the valuations private equity partnerships report using the following methodologies to value the underlying portfolio companies:

- Valuations of publicly traded portfolio companies are based on active exchanges using quoted market prices as of the close of trading for each month end.
- When a portfolio company investment does not have a readily available market price but has a return that is determined by reference to an asset for which a market price is readily available, valuations are based on the closing market price of the reference asset on the valuation date, adjusted for factors that affect the fair value of the investment held.
- When the portfolio company investments are private holdings and are not traded on active security exchanges, valuation methodologies

rely on income and market approaches. The income approach involves a discounted cashflow analysis based on portfolio companies' projections. The market approach involves valuing a company at a multiple of a specified financial measure (generally EBITDA, or earnings before interest, taxes, depreciation and amortization) based on multiples at which comparable companies trade.

Real Estate Limited Partnerships: Real estate partnerships provide quarterly valuations, based on the most recent capital account balance, to WSIB management. Individual properties are valued by the partnerships at least annually and are adjusted as frequently as quarterly if material market or operational changes have occurred.

Properties are generally externally valued every one to five years, depending on the partnership. Structured finance investments receive quarterly value adjustments by the partners, generally applying the assumption that all such positions will be held to maturity.

Annual audits of most partnerships include a review of compliance with the partnership's valuation policies.

Interest and dividend income is recognized when earned. Capital gains and losses are recognized on a trade-date basis. Purchases and sales of investments are also recorded on a trade-date basis. The investment results reported for these asset classes in the Investment Section reflect these practices.

#### Returns for the CTF Based on Total Fund and Asset Class Periods Ending June 30, 2020

	1-Year	3-Year	5-Year	10-Year
Total Fund	3.71 %	7.39 %	7.60 %	9.35 %
Passive Benchmark	3.92 %	5.95 %	6.05 %	7.96 %
Fixed Income	9.25 %	6.06 %	5.07 %	4.52 %
Barclays Capital Universal	7.88 %	5.15 %	4.42 %	4.12 %
Tangible	(0.11)%	2.40 %	4.38 %	3.73 %
CPI Lagged One Quarter + 400 bp	5.51 %	5.91 %	5.79 %	5.73 %
Real Estate	7.97 %	10.45 %	10.38 %	11.97 %
8% Return Over Rolling 10 Years	n/a	n/a	n/a	8.00 %
NCREIF Lagged One Quarter (for Comparison Purposes)	5.28 %	6.41 %	7.65 %	10.17 %
Public Equity	0.49 %	5.87 %	6.57 %	9.67 %
Dow Jones Wilshire Global Index	1.50 %	5.87 %	6.44 %	9.42 %
Private Equity	(0.16)%	9.35 %	9.84 %	12.24 %
Russell 3000 Lagged One Quarter + 300 bp	(9.45)%	4.07 %	5.77 %	9.11 %
Innovation	(8.89)%	(15.90)%	(12.87)%	(0.66)%
Custom Benchmark	(1.12)%	5.12 %	3.42 %	3.48 %
Cash	1.59 %	1.84 %	1.32 %	0.73 %
90-Day T-Bills	1.65 %	1.78 %	1.21 %	0.65 %

#### Performance

The chart above shows the time-weighted rates of return for the CTF on a total fund basis as well as by asset class. Appropriate benchmark returns are provided for comparison purposes.

Performance information is compiled by the custodian, State Street Bank. Performance numbers are reported net of management fees and are prepared using a time-weighted rate of return based on the current market value.

#### Asset Allocation

Investment performance is a result of two primary factors: individual asset selection and the allocation of the portfolio among asset classes (for example, stocks, fixed income and real estate). Studies suggest that more than 90% of investment performance can be explained by asset allocation decisions.

Accordingly, the WSIB sets a specific, long-term target asset mix and adopts tight ranges around those targets to control the overall risk and return of the CTF. On a daily basis, the WSIB reviews the asset allocation in relation to the established ranges. Its staff shifts assets whenever the allocation range for an asset exceeds the approved range or when cash is needed elsewhere.

The WSIB reviews changes to the overall asset mix every three to four years.

The chart below shows the CTF's asset allocation as of June 30, 2020, as well as the long-term target allocations.

#### Current Asset Allocation and Long-Term Target Allocations — As of June 30, 2020

Asset Type	<b>Target Allocation</b>	<b>Actual Allocation</b>
Fixed Income	20.00 %	21.29 %
Tangible Assets	7.00 %	5.36 %
Real Estate	18.00 %	18.43 %
Public Equity	32.00 %	33.56 %
Private Equity	23.00 %	21.03 %
Innovation	0.00 %	0.24 %
Cash	0.00 %	0.09 %
Total	100.00 %	100.00 %

#### Public Equity

The public equity program uses a global benchmark, the Morgan Stanley All Country World with USA Gross Investable Market Index, reflecting the globalization of capital markets. Since many U.S. companies like Coca-Cola get much of their revenue

from overseas and many so-called foreign companies serve mainly the U.S., distinctions between "U.S. stocks" and "international stocks" have become increasingly blurred. The WSIB believes the future success of the program depends on investment managers finding the most attractive opportunities wherever they are in the world.

Because U.S. equity markets are generally efficient and international equity markets are increasingly efficient, most of the WSIB's public equity investments are in lower-cost, broad-based passive index funds.

The WSIB employs both passive U.S. equity and passive international equity to maintain policy weights in both areas. All the global equity mandates in which investment firms can pick the most attractive stocks wherever they are in the world (U.S. or international) and all the emerging markets equity mandates are actively managed.

#### Retirement Funds' 10 Largest Public Equities June 30, 2020

Holdings		Exposure by Country	
Microsoft Corp.	3.01 %	United States	60.69 %
Apple Inc.	2.12 %	Japan	6.55 %
Alphabet Inc.	1.98 %	China	5.28 %
Amazon.com Inc.	1.71 %	United Kingdom	4.65 %
Facebook Inc.	1.38 %	Germany	2.64 %
Alibaba Group Holding Ltd.	1.32 %	Switzerland	2.58 %
Tencent Holdings Ltd.	1.05 %	France	2.43 %
Visa Inc.	0.85 %	Canada	1.57 %
Novartis AG	0.77 %	Korea, Republic of	1.48 %
Mastercard Inc.	0.72 %	Taiwan, Province of China	1.19 %

#### U.S. Equity

The U.S. equity portfolio is structured to capture the returns of the broad U.S. equity market as measured by the MSCI U.S. Investable Market Index (IMI). The index is composed of U.S. domiciled common equities for which pricing information is readily

available and currently represents over 2,400 companies. The portfolio is managed externally using a passive management strategy that tracks the index.

#### Non-U.S Equity

The non-U.S. equity portfolio is benchmarked to a broad non-U.S. equity benchmark, currently the MSCI All Country World Index (ACWI) IMI ex U.S. Investable Market Index. About 30% of the public equity portfolio is invested in non-U.S. markets, 69% of which is invested in developed markets with the remaining portion invested in emerging markets. Portfolios are managed by external managers employing primarily a passive approach in developed markets and solely active strategies in emerging markets.

#### Global Equity

The global equity portfolio is benchmarked to a broad global equity benchmark, currently the MSCI ACWI IMI with U.S. Gross. About 32% of the public equity portfolio is invested in global equity strategies, which includes U.S. and non-U.S. markets. External managers employing active strategies manage these strategies.

#### Fixed Income

WSIB staff members internally manage the fixed income portfolio using Barclays Capital Universal Index as the performance benchmark. The management strategy is primarily one of sector selection.

The portfolio is structured to be over- or underweighted relative to the benchmark's sectors: primarily treasuries, agencies, credit, mortgagebacked securities and asset-backed securities. The duration of the portfolio is slightly shorter than that of the Barclays Capital Universal Index.

# Retirement Funds' Fixed Income Sector Distribution As of June 30, 2020

Investment Type	WSIB Fixed Income	Barclays Capital Universal Index
Cash	0.25 %	0.00 %
Treasury Inflation Protected Securities (TIPS)	0.00 %	0.00 %
U.S. Treasury	25.64 %	31.29 %
U.S. Agency	0.00 %	1.13 %
U.S. Credit	67.57 %	42.67 %
Pass-Through Mortgages	5.31 %	22.63 %
Collateral Mortgage Obligations (CMO) Commercial Mortgage-Backed	0.70 %	0.00 %
Securities (CMBS)	0.39 %	1.94 %
Asset-Backed Securities (ABS)	0.15 %	0.34 %

Private Equity

The private equity portfolio, originated in 1981, is primarily invested in partnerships that acquire or create ongoing businesses or operating companies. The WSIB has investments in all stages of the business cycle, from private startup technology companies to large multinational public concerns. These are long-term investments, typically spanning at least 10 to 12 years. They are expected to generate investment returns well in excess of public equity securities.

#### Real Estate

The real estate portfolio is invested in a diversified group of properties, including office buildings, retail facilities, apartments, warehouses and specialty properties. The majority of these investments have been made in partnerships with operating management groups. The WSIB invests in real estate opportunities globally.

#### Tangible Assets

The board added tangible assets to its asset allocation in November 2007 and adopted an investment policy for the new assets class in January 2008.

The long-term allocation target is 7%, plus or minus 2%, and the benchmark is the Consumer Price Index (CPI) lagged one quarter plus 400 basis points. The categories of investments in this asset class include agriculture, commodities, infrastructure, natural resource rights and timber.

#### Portfolio Holdings

A complete list of portfolio holdings is available by contacting:

Washington State Investment Board 2100 Evergreen Park Drive SW PO Box 40916 Olympia, WA 98504-0916 360-956-4600

### Summary of Investment Policies

The Washington State Investment Board (WSIB), as authorized by statute, has the investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk (RCW 43.33A.110).

#### Retirement Fund Asset Allocation

The WSIB establishes asset allocation targets that must be considered at all times when making investment decisions. The asset mix might deviate from the target.

Deviations in asset allocations greater than predetermined, acceptable levels may require rebalancing back to the target levels. If an asset class exceeds its range, rebalancing will restore the portfolio to target allocation within consideration of the other remaining asset classes.

Retirement funds are invested in the Commingled Trust Funds (CTF). The CTF's performance benchmark objective is to exceed the return of a policy benchmark consisting of public market indices weighted according to asset allocation targets. The WSIB reviews the asset allocation for the CTF every three or four years and periodically reviews asset allocation in relation to established ranges.

#### Public Markets Equity

The Public Markets equity program seeks to:

- Achieve the highest return possible from active management with passive as the default consistent with prudent risk management and the desire for downside protection
- Maintain liquidity and transparency in public equity, given the WSIB's allocation to illiquid markets and investment structures in other asset classes
- Provide diversification to the WSIB's overall investment program

The public markets equity portion of the retirement funds invests in publicly traded equities globally, including equity securities in the U.S., developed non-U.S. and emerging markets. The program has a global benchmark, currently the MSCI All Country World Investable Market Index with U.S. Gross (MSCI ACWI IMI w/ U.S. Gross).

#### Fixed Income

The WSIB's fixed income investments are actively managed with the goal of exceeding the return of the Barclays Capital Universal Index over the long term. The major permissible investments include U.S. treasuries and government agencies, Treasury Inflation Protection Securities (TIPS), mortgage-backed securities, asset-backed securities, and credit bonds, both investment grade in quality and below investment grade.

Policy constrains the portfolio from investing more than 1% of the portfolio's par holdings in any single issuer with a quality rating below investment grade and from having a duration (the sensitivity of the portfolio's market value to changes in the level of interest rates) that is more than 20% different from the duration of the Universal Index. In addition, the major sector allocations are limited to the following ranges:

Range Limitations of Major Sector Allocati	ons
U.S. Treasuries and Government Agencies	10-45%
Credit Bonds	10-80%
Asset-Backed Securities	0-10%
Commercial Mortgage-Backed Securities	0-10%
Mortgage-Backed Securities	5-45%

#### Private Equity Investing

The WSIB can invest in any appropriate private equity investment opportunity that has the potential for returns superior to traditional investment opportunities and that is not prohibited by law or the WSIB's policies.

These investment types are divided into venture capital investments, corporate finance (including leveraged, management and employee buyouts), distressed, international and mezzanine investments. Private equity investments are made through limited partnership vehicles.

## Summary of Investment Policies (cont.)

To meet the return and plan objectives, the private equity portfolio has diversified investments in companies in a variety of stages of growth. The portfolio also includes a broad cross-section of opportunities in different industries and geographic regions.

#### Real Estate Program

The WSIB's real estate program is an externally managed pool of selected partnership investments, intended to provide alternative portfolio characteristics when compared to traditional stock and bond investments.

The majority of the WSIB's partnerships invest in institutional-quality real estate assets that are leased to third parties. Income generated from bond-like lease payments coupled with the hard asset qualities of real estate combine to generate returns that are expected to fall between the return expectations for fixed income and equities.

The real estate portfolio is managed to deliver riskadjusted returns that are consistent with the board's long-term return expectations for the asset class. The WSIB's real estate partnerships typically invest in private real estate assets that are held for long-term income and appreciation.

Many of the WSIB's investment partnerships do not involve co-investment with other financial entities, thereby providing the WSIB with control provisions related to liquidation, acquisition and ongoing operational decisions for annual capital expenditures.

Volatility within the real estate portfolio is minimized through a combination of factors. First, the majority of the WSIB's partners own real estate assets in a private investment form, which is not subject to public market volatility. Second, real estate capital is diversified among a host of partners with varying investment styles. Third, partnership assets are invested in numerous economic regions, across the globe, and in various property types. Fourth, the

WSIB's partners invest at different points within the properties' capital structures and life cycles.

The WSIB's current benchmark for real estate is an 8% return over a rolling 10 years. The National Council of Real Estate Investment Fiduciaries (NCREIF) property index lagged one quarter is still used for comparison purposes but is no longer the policy benchmark.

#### Tangible Assets

The WSIB can invest in any tangible asset investment opportunity that demonstrates acceptable riskadjusted returns as long as law and board policy do not prohibit such opportunities. The WSIB seeks a prudent and disciplined approach to achieving a well-diversified portfolio of tangible asset investments targeting appropriate risk-adjusted returns for the asset class. Staff members make best efforts to obtain significant co-investment from their investment partners to improve alignment of interests.

Staff members prudently seek to diversify the portfolio cognizant of each partner's strategy and business plan. Investments are not made solely to achieve product type or geographic diversification.

#### **Investment Professionals**

#### For the Year Ended June 30, 2020 — Page 1 of 2

The investment professionals below provided services for the retirement funds during fiscal year 2020.

#### **Private Equity Partners**

Actis

Advent International
Affinity Equity Partners

Alta Communications

**Apax Partners** 

**Apex Investment Partners** 

Austin Ventures

Banc Funds

**Battery Ventures** 

**BC** Partners

BGH Capital

Blackstone Group

Bridgepoint Capital

Canaan Partners

Carlyle Group

**CDH** Investments

Centurium Capital

Charterhouse Capital Partners

Cinven Ltd.

Denham Capital

EIG Global Energy Partners

**Endeavour Capital** 

Essex Woodlands

First Reserve Corp.

Fisher Lynch Capital

Fortress Investment Group

FountainVest Partners

Francisco Partners

Friedman Fleischer & Lowe

GI Partners

**GTCR** 

HarbourVest Partners

Hellman & Friedman

**Insight Venture Partners** 

Intersouth Partners

Kohlberg Kravis Roberts & Co.

KSL Capital Partners

Leonard Green & Partners

Madison Dearborn Partners

MatlinPatterson Global Advisors

Menlo Ventures

New Enterprise Associates

New Mountain Capital

Nordic Capital

Oak Investment Partners

Oaktree Capital Management

**OVP Venture Partners** 

PAG Asia Capital

**PAI Partners** 

Palamon Capital Partners

Permira

Polaris Venture Partners

Providence Equity Partners

Rhone Capital

Roark Capital Group

Searchlight Capital Partners

Sequoia Capital

Silver Lake Partners

Sixth Street Partners

Southern Cross Group

Stone Point Capital

**TA** Associates

Tailwind Capital Partners

Technology Crossover Ventures

The Riverside Co.

TowerBrook Capital Partners

TPG Partners

**Trident Capital Partners** 

Triton Partners

Union Square Ventures

Unitas Capital

**Vestar Capital Partners** 

Warburg Pincus

Wellspring Capital Management

## Investment Professionals (cont.)

#### For the Year Ended June 30, 2020 — Page 2 of 2

#### **Real Estate Partners**

Aevitas Property Partners

Calzada Capital Partners

Cherokee

Crane Capital

Emerging Markets Fund of Funds

Evergreen Investment Advisors

Fillmore Capital Partners

Global Co-Investment

Hemisferio Sul

Hudson Advisors

Morgan Stanley

Pacific Realty

Partners Enterprise Capital

Proprium

Warburg Pincus

#### **Tangible Partners**

Agriculture Capital Management

Alinda Capital Partners

Arable Capital

Barings

**Ecosystem Investment Partners** 

EnerVest Ltd.

Geronimo Energy

Global Infrastructure Partners

Homestead Capital

I Squared Capital

International Farming Corp.

KKR & Co.

Laguna Bay Pastoral Co.

Lime Rock Resource

Oaktree Capital Management

Orion Resource Partners

Prostar Capital

Reservoir Resource Partners

Sheridan Production Partners

Silver Creek Advisory Partners

Sprott

Stonepeak Advisors

**Teays River Investments** 

**UBS** Farmland Investors

Warwick Management Co.

#### **Public Equity Fund Managers**

Arrowstreet Capital LP

BlackRock Institutional Trust Co.

**Brandes Investment Partners** 

D.E. Shaw Investment Management

GQG Partners LLC

**Longview Partners** 

LSV Asset Management

Magellan Asset Management Ltd.

Mondrian Investment Partners Ltd.

State Street Global Advisors

TT International

William Blair & Co.

# Schedule of Investment Management Fees and Commissions

# For the Year Ended June 30, 2020 Dollars in Thousands

**Total Fees and Net Assets Under Fees Paid** Netted Fees<sup>1</sup> **Expenses** Management **Equity Securities** Public Equity Active Management \$ 59,691 59,691 16,920,549 Public Equity Passive Management 2,756 798 3,554 18,690,695 **Alternative Investments** Private Equity 376,793 158,834 535,627 26,107,292 Real Estate 49,938 30,729 80,667 20,698,713 Tangible Assets 79,396 16,662 96,058 5,986,129 **Cash Management** 3,049 3,049 3,055,838 **Debt Securities** 22,662,990 **Other Fees** Consultants and Accounting 995 995 Legal Fees 1,443 1,443 Research Services 2,512 2,512 Securities Lending Rebates and Fees 10,230 10,230 Miscellaneous Fees 1,360 1,360 DCP Management Fees 7,177 7,177 JRA Management Fees 11 11 PERS Plan 3 Management Fees 1,561 1,561 SERS Plan 3 Management Fees 632 632 TRS Plan 3 Management Fees 4,214 4,214 WSIB Operating Costs 22,086 22,086 **Total Investment Expenses** 623,844 207,023 830,867 114,122,206

<sup>&</sup>lt;sup>1</sup> Netted fees are included in unrealized gains (losses) in the accompanying Statement of Changes in Fiduciary Net Position.

# Schedule of Broker Volume and Equity Commissions Paid

## For the Year Ended June 30, 2020 Dollars in Thousands — Page 1 of 6

		Eq	Fixed Income			
	Volume		Long-Term Volume	Short-Term Volume		
Broker	Transacted	Buy Cost	Proceeds	Commission	Transacted	Transacted
Arqaam Capital Ltd.	\$ 5	\$ —	\$ 42	\$ —	\$ —	\$ —
B.Riley & Co. LLC	247	_	9,982	10	_	_
Banco BTG Pactual SA Cayman Branch	_	_	_	_	458	_
Banco Itau SA	2,374	7,200	8,370	16	_	_
Banco Pactual SA	1,748	5,368	3,971	10	_	_
Banco Santander Central Hispano	2,235	3,924	_	5	37,918	_
Bank of America Intl. NY United States	_	_	_	_	2,052,751	_
Bank of America Merrill Lynch Secur Inc.	4,334	156,486	168,884	33	_	_
Bank of America Securities, Inc.	81,694	1,456,292	1,632,306	566	_	_
Bank of America Securities, Inc. / Fixed Income	_	_	_	_	296,363	_
Banque Paribas London Repo	1	_	23	_	_	_
Barclays Bank PLC	_	_	_	_	1,554,570	_
Barclays Capital	58,442	235,323	42,342	59	14,968	_
Barclays Capital BBPLC London Branch	_	_	_	_	19,957	_
Barclays Capital Inc.	_	_	_	_	66,856	_
Barclays Capital Inc./LE	16,657	467,582	460,960	1	_	_
Barclays Capital LE	116	923	_	2	_	_
BBVA Securities Inc.	_	_	_	_	42,908	_
BBVA/Securities NY	_	_	_	_	31,931	_
BCS Prime Brokerage Ltd.	50	2,031	_	2	_	_
BMO Capital Markets	_	_	1	_	_	_
BNP Paribas Securities Bond	_	_	_	_	286,384	_
BNP Paribas Securities Corp./Fixed Income	_	_	_	_	232,001	_
BNP Paribas Securities Services	16,294	65,571	47,678	43	_	_
BNP Paribas Securities Services Australia	536	1,586	7,844	4	_	_
BNP Paribas Securities Services SA	22,668	55,236	1,682	21	_	_
BNP Paribas U.S.A New York Branch	_	_	_	_	339,270	_
BNY Barclays Cap Securities Ltd. Sbl PB	93	1,204	1,950	2	_	_
Bnymellon/Re Anz Melbourne	_	_	_	_	69,850	_
Boci Securities Ltd.	_	_	_	_	4,989	_
Bony/Toronto Dominion Securities Inc.	_	_	_	_	409,120	_
Bradesco SA CTVM	10,051	35,758	29,574	50	_	_
Bradesco Securities	_	_	_	_	198,573	_
BTG Capital Corp	104	608	15	2	_	_
BTG Pactual Casa De Bolsa	364	654	_	1	_	_
BTG Pactual Chile SA Corredores de Bolsa	29	201	_	_	_	_
BTIG LLC	496	2,530	25,968	14	_	_
Canadian Imperial Bank of Commerce	1,966	31,508	10,809	7	_	_
Carnegie Investment Bank AB	195	4,860	_	2	_	_
China Intl. Capital Co.	11,169	18,655	14,361	14	_	_
CIBC World Markets Inc.	10	_	94	_	99,785	_
CIMB Securities USA Inc.	323	452	568	1	_	_
Citation Group	58	2,660	234	1	_	_
		2,000	201			

# Schedule of Broker Volume and Equity Commissions Paid (cont.)

## For the Year Ended June 30, 2020 Dollars in Thousands — Page 2 of 6

		E	Fixed Income			
	Volume				Long-Term Volume	Short-Term Volume
Broker	Transacted	Buy Cos	t Proceeds	Commission	Transacted	Transacted
Citi	\$ 25,012	\$ 62,390		\$ —	\$ 11,295,386	\$ —
Citigroup Global Market Korea Securities Ltd.	320	1,062	6,018	8	_	_
Citigroup Global Markets Australia Pty.	329	2,627	_	1	_	_
Citigroup Global Markets Inc.	29,167	487,002	417,211	139	1,308,331	_
Citigroup Global Markets Inc. Salomon Brothers	_	_		_	584,742	_
Citigroup Global Markets India	3,271	6,873	_	12	_	_
Citigroup Global Markets Ltd.	45,047	219,222	134,373	117	_	_
Citigroup Global Markets Taiwan	1,714	742	6,499	5	_	_
CI Securities Taiwan Company Ltd.	3,461	135	8,065	5	_	_
CLSA Australia Pty. Ltd.	2,847	3,135	19,422	8	_	_
CLSA Securities Korea Ltd.	162	8,899	3,077	6	_	_
CLSA Singapore Pte. Ltd.	18,321	96,773	55,856	125	_	_
Cowen & Co. LLC	49	_	- 5	_	_	_
Cowen Execution Services LLC	27,653	154,648	3 137,766	67	_	_
Credicorp Capital Colombia SA	4,493	2,129	—	1	_	_
Credit Agricole CIB	178	110	7,240	4	_	_
Credit Lyonnais Securities (Asia)	36,016	19,257	7 19,298	18	_	_
Credit Lyonnais Securities (Usa) Inc.	_	_		_	548,819	_
Credit Lyonnais Securities India	2,849	12,036	14,734	22	_	_
Credit Suisse Ag-New York Branch/Dtc I.D	_	_		_	2,922,715	_
Credit Suisse First Boston	32,500	27,792	2 31,223	19	_	_
Credit Suisse First Boston (Europe)	825	9,343	3 10,157	5	_	_
Credit Suisse First Boston SA CTVM	1,192	2,294	4,378	11	_	_
Credit Suisse Securities (Europe) Ltd.	11,794	64,703	3 40,771	70	_	_
Credit Suisse Securities (USA) LLC	429,790	520,831	411,864	245	44,903	_
CS First Boston (Hong Kong) Ltd.	103	4,953	_	1	_	_
CSFB Australia Equities Ltd.	327	347	· _	_	_	_
Daiwa Securities America Inc.	121	2,438	7,857	6	174,624	_
Daiwa Securities Co. Ltd.	71	1,642		5	_	_
Deutsche Bank Securities Inc.	10,191	4,412			95,794	_
Deutsche Securities Asia Ltd.	506	_	- 1	_	· _	_
DSP Merrill Lynch Ltd.	20,772	53,571	28,097	75	_	_
Edelweiss Securities Pvt. Ltd.	2,402	6,010			_	_
Euroclear Bank SA NV	184	475			_	_
Evercore Group LLC	11	1,263			_	_
Evercore ISI	12	_	- 1,243		_	_
Exane SA	32,403	153,452			_	_
Financial Brokerage Group (FBG)	1,452	501			_	_
Flow Corretora de Mercadorias Ltd.	4,096	16,192			_	_
Goldman Sachs & Co.	1,082,377	650,198			282,405,503	_
Goldman Sachs (Asia) LLC	4,391	15,538				_
Goldman Sachs (India)	2,679	13,775		10	_	_
Goldman Sachs Australia Pty. Ltd.	457	2,629		1	_	_

## For the Year Ended June 30, 2020 Dollars in Thousands — Page 3 of 6

	Equity			Fixed Income		
					Long-Term	Short-Term
	Volume				Volume	Volume
Broker	Transacted	Buy Cost		Commission	Transacted	Transacted
Goldman Sachs do Brasil Corretora	\$ 2,112	\$ 1,486		\$ 11	\$ —	\$ —
Goldman Sachs Intl.	12,262	392,877		55	_	_
Haitong Intl. Secs. Company Ltd.	120	_	110	_	_	_
Hongkong & Shanghai Banking Corp.	6,949	3,417		40	_	_
HSBC Bank PLC	70,491	215,206	279,929	119	_	_
HSBC Brokerage (USA) Inc.	6,977	178,067	134,717	48	_	_
HSBC Securities	392	_	1,017	1	_	_
HSBC Securities (USA) Inc.	200,183	478,499	491,294	316	219,528	_
HSBC Securities (USA) Inc. (Fixed Income)	_	_	_	_	39,914	_
HSBC Securities Inc.	_	_	_	_	82,822	_
HSBC Securities India Holdings	6,617	15,130	2,483	32	_	_
ICICI Brokerage Services	4,512	11,814	3,124	7	_	_
IM Trust SA Corredores de Bolsa	46,489	5,887	3,303	4	_	_
Instinet	10	432	118	_	_	_
Instinet Australia Clearing Services Pty. Ltd.	13,050	60,451	74,649	27	_	_
Instinet LLC	38,051	585,306	456,295	144	_	_
Instinet Pacific Ltd.	377,431	205,045	154,817	67	_	_
Instinet Singapore Services Pte.	6,089	9,329	_	1	_	_
Instinet UK Ltd.	17,800	184,227	176,701	84	_	_
Intl. Fcstone Dtvm Ltd.	19,775	38,517	33,434	29	_	_
Investec Bank (Uk) Ltd.	267	1,589	1,919	2	_	_
Investec Bank PLC	19	_	237	_	_	_
Investec Markets (Proprietary) Ltd.	20	1,672	1,630	3	_	_
Investec Securities Ltd.	64	715	_	1	_	_
Investment Technology Group Inc.	1,495	77,176	82,892	12	_	_
Investment Technology Group Ltd.	8,292	20,184	35,359	22	_	_
ITG Australia Ltd.	3,381	5,215	438	2	_	_
ITG Canada	113	935	_	1	_	_
ITG Inc.	353	1,178	561	1	_	_
Jefferies & Co. Inc.	43,198	443,701	521,638	175	89,807	_
Jefferies Hong Kong Ltd.	16,644	13,697	9,934	18	_	_
Jefferies Intl. Ltd.	5,763	17,610	19,368	16	_	_
JMP Securities	327	_	10,681	13	_	_
Joh. Berenberg, Gossler & Co.	8	_	302	_	_	_
JonesTrading Institutional Services LLC	721	_	22,810	27	_	_
Jpmorgan Chase Bank, N.A.	_	_	_	_	635,050	_
JPMorgan Chase Bank/Euroclear Bank	_	_	<u> </u>	_	132,257	_
JPMorgan Clearing Corp.	14,629	285,698	257,382	82	_	_
JPMorgan India Pte. Ltd.	736	803		1	_	_
JPMorgan Securities (Asia Pacific) Ltd.	152,530	105,789		240	_	_
JPMorgan Securities (Far East) Ltd. Seoul	152	4,564		6	_	_
JPMorgan Securities (Taiwan) Ltd.	698	_	4,074	3	_	_
JPMorgan Securities Australia Ltd.	3,647	18,920		6	_	_
	0,011	. 0,520	.,201			

# Schedule of Broker Volume and Equity Commissions Paid (cont.)

## For the Year Ended June 30, 2020 Dollars in Thousands — Page 4 of 6

			Fixed Income						
	Volumo	Volume							Short-Term Volume
Broker	Transacted		Buy Cost		Proceeds	Commissi	on	Volume Transacted	Transacted
JPMorgan Securities Inc.	\$ 5,548	\$	27,220	\$	18,876	\$	27	\$ —	\$ —
JPMorgan Securities Ltd.	7,557		184,089		211,387		70	780,322	_
JPMorgan Securities PLC	43,295		156,715		230,091	1	47	_	_
Kepler Equities Paris	_		_		5		_	_	_
Kim Eng Securities (HK) Ltd.	63		1,433		_		1	_	_
Kim Eng Securities, P.T.	1,774		_		2,927		4	_	_
Kotak Securities Ltd.	468		3,872		_		4	_	_
Larrain Vial	45		312		_		_	_	_
Leerink Partners LLC	17		_		310		1	_	_
Liquidnet Asia Ltd.	2,691		336		3,664		3	_	_
Liquidnet Canada Inc.	30		4,260		_		1	_	_
Liquidnet Europe Ltd.	8,754		9,711		8,310		8	_	_
Liquidnet Inc.	3,646		174,128		158,860		44	_	_
Loop Capital Markets	5,501		44,589		136,308		44	_	_
Luminex Trading & Analytics LLC	1,183		73,004		39,660		6	_	_
Macquarie Bank Ltd.	346,304		322,614		260,320	2	.08	_	_
Macquarie Bank Ltd., London	8,093		11,679		_		27	_	_
Macquarie Capital (Europe) Ltd.	238		4,666		5,916		7	_	_
Macquarie Securities (India) Pvt. Ltd.	28,080		1,262		79,962		33	_	_
Macquarie Securities (NZ) Ltd.	19		_		4		_	_	_
Macquarie Securities Korea Ltd.	6,474		109,212		73,704		74	_	_
Macquarie Securities Ltd.	95,171		112,121		47,785		69	_	_
Maxim Group	1,197		_		66,442		48	_	_
Merrill Lynch Canada Inc.	1,093		13,697		13,804		_	_	_
Merrill Lynch Intl.	220,409		312,544		367,144	2	96	_	_
Merrill Lynch SA CVTM	667		2,474		1,329		4	_	_
Merrill Lynch, Pierce, Fenner & Smith Inc.	10,465		280,783		33,145		20	_	_
Mirabaud Securities LLP	75		_		1,250		_	_	_
Mirae Asset Daewoo Co. Ltd.	399		5,231		7,467		13	_	_
Mitsubishi UFJ Securities (USA) Inc.	_		_		_		_	14,968	_
Mizuho Securities USA Inc.	199		2,468		806		3	29,936	_
MKM Partners LLC	145		11,041		3,603		1	_	_
Morgan Stanley & Co. Intl.	9,596		52,722		89,861		29	_	_
Morgan Stanley Co. Inc.	92,904		143,106		91,411	2	01	847,255	_
Morgan Stanley DW Australia	936		2,965		_		1	_	_
Morgan Stanley DW Inc.	1,114		1,329		43,797		46	_	_
Morgan Stanley India Co. Pvt. Ltd.	600		1,688		3,076		6	_	_
Morgan Stanley Intl. Ltd.	1,328		42,210		65,294		12	_	_
Motilal Oswal Securities Ltd.	32		766		_		1	_	_
National Financial Services Corp.	956		12,835		12,490		8	69,850	_
NH Investment & Securities Co. Ltd.	50		926		800		1	_	_
Nomura Financial Advisory & Securities India	38		435		_		_	_	_
Nomura Securities Intl. Inc.	_		_		_		_	383,431	_

## For the Year Ended June 30, 2020 Dollars in Thousands — Page 5 of 6

		Equity			Fixed	Income
					Long-Term	Short-Term
Duoleon	Volume	Pun Coot	Dragondo	Commission	Volume	Volume
Broker  Numis Securities Inc.	\$ 47	Buy Cost  \$ —	\$ 760	<b>Commission</b>	Transacted  \$ —	Transacted \$
	\$ 47 247	ъ — 701	\$ 700 701	Φ Ι	Ф —	<b>Ф</b> —
NVDR to Foreign Noncash Penserra Securities LLC	450			_	_	_
		2,531	6,078	9	000 401	_
Pershing LLC	28,756	85,795	106,388	44	236,491	_
Pershing Securities Ltd.	3,328	29,634	19,942	15	_	_
Piper Jaffray & Co.	13,784	290,553	196,801	74	_	_
Raiffeisen Zentralbank Oesterreich AG	23		337	_	_	<del>-</del>
Raymond James & Associates	176	1,056	3,687	3	_	_
Raymond James & Associates Inc.	1,400	14,415	46,849	59		_
RBC Capital Markets LLC	178	6,714	3,454	1	59,871	_
RBC Dominion Securities Corp.	858	3,338	318	1	_	_
RBS Securities Inc.	_	_	_	_	1,022,800	_
Redburn (Europe) Ltd.	887	_	156	_	_	_
Renaissance Securities (Cyprus) Ltd.	109	1,178	240	1	_	_
Rencap Securities Inc.	67	912	_	1	_	_
Rosenblatt Securities Inc.	27	448	_	1	_	_
Royal Bank of Canada Europe Ltd.	798	10,342	_	6	_	_
S.D. Indeval, SA DE C.V.	234	180	_	_	_	_
Samsung Securities Co. Ltd.	15	1,465	_	1	_	_
Sanford C. Bernstein Co. LLC	74,559	775,589	623,825	192	_	_
Sanford C. Bernstein Ltd.	41,052	131,997	189,794	79	_	_
Santander Investment Securities	303	_	2,599	_	_	_
Scotia Capital (USA) Inc.	5	_	50	_	99,785	_
Scotia Capital Inc.	1,285	970	763	2	_	_
Serbank CIB USA Inc.	243	_	1,902	3	_	_
SG Americas Securities LLC	17,926	276,142	306,954	89	_	_
SG Asia Securities (Inoia) Pvt. Ltd.	328	_	1,130	1	_	_
SG Securities (London) Ltd.	2,721	1,916	2,033	2	_	_
SG Securities HK	5,508	94,064	31,839	29	_	_
Sinopac Securities Corp.	1,319	1,476	208	1	_	_
SMBC Nikko Capital Markets Ltd.	2,413	47,768	34,509	33	_	_
SMBC Nikko Securities America, Inc.	_	_	_	_	169,635	_
SMBC Securities Inc.	74	_	3,274	2	8,981	
Societe Generale	15,190	81,319	57,827	32	_	_
Societe Generale London Branch	3,787	30,245	31,665	25	_	_
Standard Chartered Bank	2,288		6,103	12	_	_
State Street Bank & Trust Co.		_	-	_	_	35,062,661
Stifel, Nicolaus & Co. Inc.	527	11,133	_	_	_	
Topline Securities Pvt. Ltd.	21		11	_	_	_
Toronto Dominion Securities Inc.	279	4,921	994	2		_
Troika Dialog USA Inc.	469	4,321	4,852	6		
UBS AG	56,939	149,054	212,547	106	_	_
UBS AG (Formerly Swiss Bank Co.) Zurich	143	960			_	_
UDO AU (FUITHELLY OWISS DAHK CO.) ZUHCH	143	900	2,105	1	_	_

# Schedule of Broker Volume and Equity Commissions Paid (cont.)

## For the Year Ended June 30, 2020 Dollars in Thousands — Page 6 of 6

		Eq	Fixed Income			
Broker	Volume Transacted	Buy Cost	Proceeds	Commission	Long-Term Volume Transacted	Short-Term Volume Transacted
UBS AG London	\$ 1,066	\$ 19,690	\$ 60,384	\$ 20	\$ —	\$ —
UBS Financial Services Inc.	14	426	_	_	_	_
UBS Securities Asia Ltd.	15,238	36,404	3,910	13	_	_
UBS Securities Canada Inc.	1,436	31,428	14,594	7	_	_
UBS Securities India Pte. Ltd.	150	366	1,059	2	_	_
UBS Securities LLC	22,672	410,378	326,511	118	19,957	_
UBS Securities Pte. Ltd.	1,125	3,624	_	2	_	_
UBS Securities Pte. Ltd. Seoul	146	537	4,055	4	_	_
UBS Warburg Australia Equities	284	234	40	_	_	_
US Bancorp Investments Inc.	_	_	_	_	29,936	_
Virtu Americas LLC	2,731	5,277	46,157	53	_	_
Virtu Financial Ireland Ltd.	155	3,406	4,788	1	_	_
Weeden & Co.	563	9,956	25,829	6	_	_
Wells Fargo Bank, N.A	_	_	_	_	135,883	_
Wells Fargo Securities LLC	2,114	2,104	109,686	14	216,529	_
Williams Capital Group LP (The)	169	356	2,591	1	_	_
Wolfe Trahan Securities	7	_	966	_	_	_
XP Investimentos CCTVM SA	4,217	21,440	4,559	12	_	_
Total	\$ 4,392,175	\$ 13,302,032	\$ 12,513,888	\$ 6,356	\$310,464,477	\$ 35,062,661

# Summary of Investments Owned — Pension Trust Funds

# Schedule of Investments Owned as of June 30, 2020

Dollars in Thousands — Page 1 of 7

Description	Rate	Maturity	Market Value	% of Total Market Value
Residential Mortgage-Backed Securities				
FNMA Pool MA3155	3.00	10/1/2032	\$ 192,142	0.15 %
FED HM LN PC Pool SB8031	2.50	2/1/2035	99,005	0.08 %
FED HM LN PC Pool ZT2104	2.50	12/1/2033	85,493	0.07 %
FNMA TBA 30 YR 3	3.00	7/14/2050	76,961	0.06 %
FNMA Pool BH5704	3.00	10/1/2032	71,884	0.06 %
FNMA TBA 30 YR 4	4.00	7/14/2050	61,677	0.05 %
FNMA TBA 15 YR 2.5	2.50	7/16/2035	54,440	0.04 %
FNMA TBA 30 YR 3.5	3.50	7/14/2050	52,597	0.04 %
FNMA Pool MA3955	2.50	3/1/2035	50,172	0.04 %
FNMA Pool MA3871	3.00	12/1/2049	48,380	0.04 %
Other	_	_	695,617	0.56 %
Total Residential Mortgage-Backed Securities			1,488,368	1.19 %
Commercial Mortgage-Backed Securities				
Freddie Mac SLST	3.50	11/25/2028	78,888	0.06 %
Freddie Mac	2.50	4/15/2047	52,749	0.04 %
GS Mortgage Securities Trust	3.57	5/10/2052	22,660	0.02 %
Wells Fargo Commercial Mortgage	3.47	11/15/2050	22,220	0.02 %
Freddie Mac	3.00	10/15/2040	15,498	0.01 %
Morgan Stanley BAML Trust	3.33	5/15/2049	12,468	0.01 %
Wells Fargo Commercial Mortgage	3.17	2/15/2048	10,654	0.01 %
UBS Barclays Commercial Mortgage	3.09	8/10/2049	10,128	0.01 %
Fannie Mae	2.50	7/25/2028	9,928	0.01 %
GS Mortgage Securities Trust	3.52	6/10/2047	9,376	0.01 %
Other	_	_	756	0.00 %
Total Commercial Mortgage-Backed Securities			245,325	0.20 %
Corporate Bonds — Domestic Dollar Denominated				
JPMorgan Chase & Co.	3.96	11/15/2048	66,177	0.05 %
Apple Inc.	3.75	11/13/2047	61,114	0.05 %
Boeing Co.	5.81	5/1/2050	59,058	0.05 %
Walmart Inc.	3.70	6/26/2028	58,953	0.05 %
Southwestern Electric Power	4.10	9/15/2028	57,081	0.05 %
Morgan Stanley	3.77	1/24/2029	56,800	0.05 %
Reliance Holdings USA	4.50	10/19/2020	55,324	0.04 %
Citigroup Inc.	3.52	10/27/2028	55,275	0.04 %
Perkinelmer Inc.	3.30	9/15/2029	53,446	0.04 %
Bank Of America Corp.	3.42	12/20/2028	52,648	0.04 %
Other	_	_	3,386,988	2.71 %
Total Corporate Bonds — Domestic Dollar Denominated			3,962,864	3.17 %

## Schedule of Investments Owned as of June 30, 2020 Dollars in Thousands — Page 2 of 7

Description	Rate	Maturity	Market Value	% of Total Market Value
Corporate Bonds — Foreign Nondollar Denominated				
SACI Falabella	6.50	4/30/2023	\$ 22,373	0.02 %
America Movil SAB de CV	8.46	12/18/2036	17,794	0.01 %
Empresas Public Medellin	7.63	9/10/2024	13,490	0.01 %
Emgesa SA ESP	8.75	1/25/2021	7,599	0.01 %
Total Corporate Bonds — Foreign Nondollar Denominated			61,256	0.05 %
Corporate Bonds — Foreign Dollar Denominated				
Banco de Bogota SA	6.25	5/12/2026	84,307	0.07 %
Klabin Austria GMBH	5.75	4/3/2029	78,804	0.06 %
Perusahaan Gas Negara	5.13	5/16/2024	78,270	0.06 %
Alibaba Group Holding	3.40	12/6/2027	66,243	0.05 %
APT Pipelines Ltd.	4.20	3/23/2025	65,684	0.05 %
Vale SA	5.63	9/11/2042	65,659	0.05 %
Barclays PLC	2.65	6/24/2031	59,605	0.05 %
Sumitomo Mitsui Financial Group	2.72	9/27/2029	57,991	0.05 %
Itau Unibanco Holding SA/KY	4.50	11/21/2029	56,965	0.05 %
Macquarie Bank Ltd.	4.00	7/29/2025	55,886	0.04 %
Other	_	_	8,622,420	6.89 %
Total Corporate Bonds — Foreign Dollar Denominated			9,291,834	7.42 %
U.S. Government Treasuries				
U.S. Treasury N/B	2.88	8/15/2028	472,733	0.38 %
U.S. Treasury N/B	2.75	8/15/2047	391,127	0.31 %
U.S. Treasury N/B	2.38	8/15/2024	363,557	0.29 %
U.S. Treasury N/B	2.00	8/15/2025	352,122	0.28 %
U.S. Treasury N/B	3.00	8/15/2048	308,746	0.25 %
U.S. Treasury N/B	3.13	11/15/2028	289,552	0.23 %
U.S. Treasury N/B	2.38	5/15/2029	287,896	0.23 %
U.S. Treasury N/B	0.38	3/31/2022	270,410	0.22 %
U.S. Treasury N/B	2.25	8/15/2027	224,112	0.18 %
U.S. Treasury N/B	1.63	5/15/2026	213,837	0.17 %
Other	_	_	2,610,844	2.09 %
Total U.S. Government Treasuries			5,784,936	4.63 %

# Summary of Investments Owned — Pension Trust Funds (cont.)

# Schedule of Investments Owned as of June 30, 2020

Dollars in Thousands — Page 3 of 7

Description	Rate	Maturity	Market Value	% of Total Market Value
Foreign Government and Agencies — Dollar Denominated				
Ontario Teachers Finance Trust	2.13	9/19/2022	\$ 77,621	0.06 %
Republic of Finland	1.50	9/21/2020	75,044	0.06 %
Socialist Republic of Vietnam	4.80	11/19/2024	63,276	0.05 %
Republic of Indonesia	5.38	10/17/2023	55,432	0.04 %
CPPIB Capital Inc.	3.13	9/25/2023	53,161	0.04 %
Province of Alberta	2.95	1/23/2024	52,821	0.04 %
Province of British Columbia	1.75	9/27/2024	52,464	0.04 %
Japan Bank for International Cooperation	2.38	11/16/2022	46,891	0.04 %
Kuntarahoitus OYJ	2.75	6/8/2021	45,906	0.04 %
Cemig Geracao E Transm	9.25	12/5/2024	44,060	0.04 %
Other	_	_	945,819	0.76 %
Total Foreign Government and Agencies — Dollar			4 = 40 40=	1 21 0/
Denominated			1,512,495	1.21 %
Foreign Government and Agencies — Nondollar Denominated	4.00	40,45,6000	44.407	0.04.0/
Republica Orient Uruguay	4.38	12/15/2028	44,407	0.04 %
Queensland Treasury Corp.	4.25	7/21/2023	38,334	0.03 %
Republic of Colombia	4.38	3/21/2023	33,485	0.03 %
Nota do Tesouro Nacional	10.00	1/1/2023	30,950	0.02 %
Republic of Chile	5.50	8/5/2020	27,556	0.02 %
New S. Wales Treasury Corp.	5.00	8/20/2024	20,281	0.02 %
Mex Bonos Desarr Fix Rt	6.50	6/9/2022	15,648	0.01 %
Queensland Treasury Corp.	5.50	6/21/2021	14,434	0.01 %
Indonesia Government	11.00	11/15/2020	14,358	0.01 %
India Government Bond	7.80	4/11/2021	13,626	0.01 %
Other	_	_	59,559	0.05 %
Total Foreign Government and Agencies — Nondollar Denominated			312,638	0.25 %
Supranational — Nondollar Denominated			,	
International Finance Corp.	8.25	6/10/2021	20,337	0.02 %
Asian Development Bank	2.85	10/21/2020	12,714	0.01 %
Total Supranational — Nondollar Denominated			33,051	0.03 %

## Schedule of Investments Owned as of June 30, 2020 Dollars in Thousands — Page 4 of 7

Description	Market Value	% of Total Market Value
Equity Securities — Domestic Dollar Denominated		
Microsoft Corp.	\$ 493,870	0.39 %
Facebook Inc. Class A	277,600	0.22 %
Alphabet Inc. Class C	185,003	0.15 %
Alphabet Inc. Class A	181,385	0.15 %
Visa Inc. Class A Shares	171,439	0.14 %
Mastercard Inc.	152,798	0.12 %
Amazon.com Inc.	151,792	0.12 %
UnitedHealth Group Inc.	136,749	0.11 %
Starbucks Corp.	135,417	0.11 %
Apple Inc.	129,228	0.10 %
Other	5,940,830	4.75 %
Total Equity Securities — Domestic Dollar Denominated	7,956,111	6.36 %
Equity Securities — Domestic Nondollar Denominated		
ResMed Inc. CDI	1,415	0.00 %
Autoliv Inc.	649	0.00 %
Newmont Corp.	148	0.00 %
News Corp.	5	0.00 %
Veoneer Inc.	1	0.00 %
Total Equity Securities — Domestic Nondollar Denominated	2,218	0.00 %
Equity Securities — Foreign Nondollar Denominated		
Tencent Holding Ltd.	335,633	0.27 %
Novartis AG-Reg	233,755	0.19 %
Nestle SA-Reg	224,928	0.18 %
Sanofi	192,507	0.15 %
SAP SE	170,016	0.14 %
Reckitt Benckiser Group PLC	165,682	0.13 %
Samsung Electronics Co. Ltd.	161,391	0.13 %
Taiwan Semiconductor SP ADR	140,772	0.11 %
Roche Holding AG Genusschein	136,371	0.11 %
Lloyds Banking Group PLC	105,922	0.08 %
Other	10,563,894	8.45 %
Total Equity Securities — Foreign Nondollar Denominated	12,430,871	9.94 %
Equity Securities — Foreign Dollar Denominated		
Alibaba Group Holding SP ADR	356,381	0.29 %
Willis Towers Watson PLC	93,706	0.08 %
Aon PLC	93,415	0.07 %
Medtronic PLC	91,539	0.07 %
Reliance Inds Spons GDR 144A	60,472	0.05 %
JD.com Inc. ADR	51,963	0.04 %
Taiwan Semiconductor SP ADR	43,400	0.03 %
Sea Ltd. ADR	42,801	0.03 %
Infosys Ltd. SP ADR	41,575	0.03 %
Novartis AG Sponsored ADR	35,242	0.03 %
Other	845,874	0.68 %
Total Equity Securities — Foreign Dollar Denominated	1,756,368	1.40 %

# Summary of Investments Owned — Pension Trust Funds (cont.)

## Schedule of Investments Owned as of June 30, 2020 Dollars in Thousands — Page 5 of 7

Description	Market Value	% of Total Market Value
Commingled Index Funds — Domestic		
BlackRock MSCI U.S. IMI	\$ 12,100,390	9.67 %
Total Commingled Index Funds — Domestic	12,100,390	9.67 %
Commingled Index Funds — Foreign		
BlackRock MSCI EM IMI Index Fund	681,799	0.55 %
Vinacapital Cietnam Opportunity	3,907	— %
SPDR S&P 500 ETF Trust	2,478	0.00 %
Pollen Street Secured Lending	303	0.00 %
Total Commingled Index Funds — Foreign	688,487	0.55 %
Cash and Money Market		
State Street Bank & Trust	3,382,111	2.70 %
BlackRock Liquidity Funds	209,143	0.17 %
U.S. Dollar	116,489	0.09 %
BGI Money Market Fund	_	0.00 %
Total Cash and Money Market	3,707,743	2.96 %
Private Equity		
Fisher Lynch Co-Investment Partnership III LP	816,620	0.65 %
Warburg Pincus Private Equity XII LP	755,595	0.60 %
Hellman & Friedman Capital Partners VIII LP	722,264	0.58 %
Advent International GPE VIII-B LP	628,946	0.50 %
TPG Partners VII LP	612,468	0.49 %
Hellman & Friedman Capital Partners VII LP	538,589	0.43 %
Silver Lake Partners IV LP	513,276	0.41 %
Permira V LP	483,066	0.39 %
KKR North America Fund XII LP	459,058	0.37 %
Blackstone Capital Partners VII LP	437,291	0.35 %
Other	20,160,010	16.12 %
Total Private Equity	26,127,183	20.89 %
Real Estate		
Partners Enterprise Capital Holdings	5,764,527	4.61 %
Calzada Capital Partners LLC	4,876,176	3.90 %
Evergreen Real Estate Partners LP	4,771,178	3.81 %
Aevitas Property Partners LLC	1,462,810	1.17 %
Fillmore Strategic Investors	1,145,360	0.92 %
Union Square LLC	735,044	0.59 %
Crane Capital Partners LLC	445,421	0.36 %
PacTrust Realty Association	428,428	0.34 %
Zocalo Special Situations LLC	338,731	0.27 %
Emerging Market Fund of Funds II	249,441	0.20 %
Other	504,087	0.40 %
Total Real Estate	20,721,203	16.57 %

## Schedule of Investments Owned as of June 30, 2020 Dollars in Thousands — Page 6 of 7

Description	Market Value	% of Total Market Value
Tangible Asset		
Global Infrastructure Partners Cascade I LP	\$ 469,780	0.38 %
Stonepeak Infrastructure Fund III LP	453,966	0.36 %
Teays River Investments LLC	422,095	0.34 %
Global Infrastructure Partners III LP	366,934	0.29 %
Twin Creeks Timber LLC	366,421	0.29 %
Stonepeak Infrastructure Fund II LP	351,454	0.28 %
Global Infrastructure Partners II LP	253,899	0.20 %
Stonepeak Evergreen Investment Partners LP	252,594	0.20 %
U.S. Farming Realty Trust III LP	244,612	0.20 %
Sound Terminals LP	233,034	0.19 %
Other	2,576,450	2.06 %
Total Tangible Asset	5,991,239	4.79 %
Foreign Currency	, ,	
Japanese Yen	16,002	0.02 %
Hong Kong Dollar	10,728	0.01 %
Canadian Dollar	8,973	0.01 %
Euro Currency	6,412	0.01 %
Pound Sterling	6,074	— %
South African Rand	4,138	0.00 %
Australian Dollar	2,685	0.00 %
Singapore Dollar	2,524	0.00 %
Yuan Renminbi	2,153	0.00 %
Swiss Franc	1,547	0.00 %
Other	2,568	— %
Total Foreign Currency	63,804	0.05 %
Return Swap Contracts		
Total Return Swap Contracts	_	0.00 %
Total Return Swap Contracts	_	0.00 %
In Plan 3 Defined Contribution and Deferred Compensation Program: Retirement Strategy Funds (Target Date Funds)		
Retirement Strategy 2025	1,140,270	0.91 %
Retirement Strategy 2020	954,198	0.76 %
Retirement Strategy 2030	843,218	0.67 %
	637,533	0.51 %
Retirement Strateny 20135	007,000	
Retirement Strategy 2035 Retirement Strategy 2015	438 8N3	
Retirement Strategy 2015	438,803 400 028	
Retirement Strategy 2015 Retirement Strategy 2040	400,028	0.32 %
Retirement Strategy 2015 Retirement Strategy 2040 Retirement Strategy 2045	400,028 270,738	0.32 % 0.22 %
Retirement Strategy 2015 Retirement Strategy 2040 Retirement Strategy 2045 Retirement Strategy 2010	400,028 270,738 184,496	0.32 % 0.22 % 0.15 %
Retirement Strategy 2015 Retirement Strategy 2040 Retirement Strategy 2045 Retirement Strategy 2010 Retirement Strategy 2050	400,028 270,738 184,496 181,530	0.32 % 0.22 % 0.15 % 0.15 %
Retirement Strategy 2015 Retirement Strategy 2040 Retirement Strategy 2045 Retirement Strategy 2010	400,028 270,738 184,496	0.22 %

# Summary of Investments Owned — Pension Trust Funds (cont.)

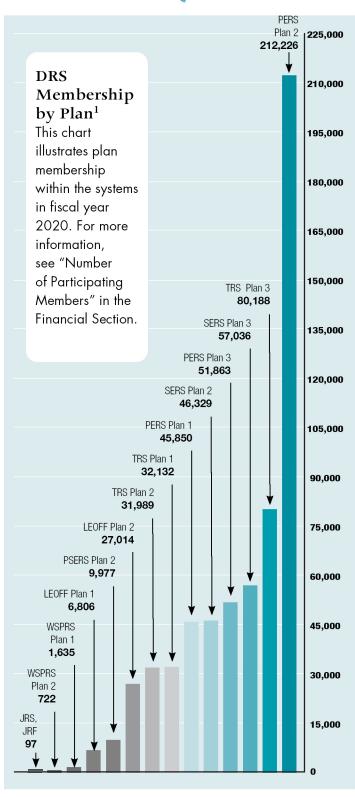
# Schedule of Investments Owned as of June 30, 2020

Dollars in Thousands — Page 7 of 7

Description	Market Value	% of Total Market Value
Equity Index Funds	market Talae	market raide
U.S. Large Cap Equity Index	\$ 1,685,911	1.35 %
U.S. Small Cap Value Equity Index	357,980	0.29 %
Global Equity Index	352,158	0.28 %
Emerging Market Index	139,260	0.11 %
Total Equity Index Funds	2,535,309	2.03 %
Guaranteed Investment Contracts		
Savings Pool	970,968	0.78 %
Total Guaranteed Investment Contracts	970,968	0.78 %
Bond Funds		
Washington State Bond Fund	779,432	0.62 %
U.S. Socially Responsible Fund	325,327	0.26 %
Total Bond Funds	1,104,759	0.88 %
Short-Term Investment Funds (in Defined Contribution Plans)		
WSIB Short-Term Investment Fund	569,944	0.46 %
Short-Term Contribution Interest Fund	281	0.00 %
Total Short-Term Investment Funds (in Defined Contribution Plans)	570,225	0.46 %
Securities Under Lending Agreements		
Collateral Held Under Securities Lending Agreements	275,912	0.22 %
Total Securities Under Lending Agreements	275,912	0.22 %
Total Investments	\$ 125,073,727	100.00 %

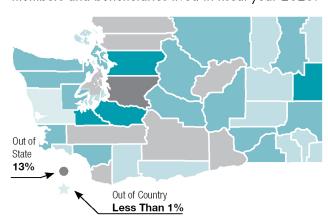
This page is intentionally blank.

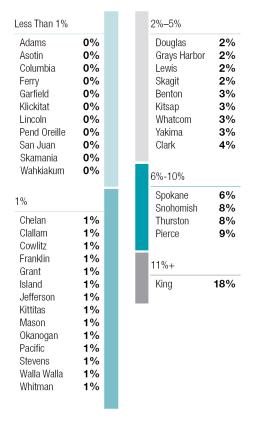
# 836,000 CURRENT AND FORMER PUBLIC EMPLOYEES ARE BEING SERVED IN WASHINGTON



#### Membership Density by County<sup>2</sup>

This map illustrates the counties in which retired members and beneficiaries lived in fiscal year 2020.





<sup>&</sup>lt;sup>2</sup> Due to rounding, combined total membership might not equal 100%.

# **Actuarial Section**



# Office of the State Actuary

"Supporting financial security for generations."

October 8, 2020

Ms. Tracy Guerin Director Department of Retirement Systems PO Box 48380 Olympia, Washington 98504-8380

#### SUBJECT: ACTUARIAL CERTIFICATION LETTER

Dear Ms. Guerin:

At your request, we prepared the following information for inclusion in the 2020 Comprehensive Annual Financial Report (CAFR):

- 1. Introductory Section.
  - ❖ Financial Information Funding Paragraph.
- 2. Financial Section.
  - Components for the Schedule of Changes in Net Pension Liability (NPL).
    - Service Cost; Interest; Changes of Benefit Terms; Differences between Expected and Actual Experience; Changes in Assumptions.
  - Total Pension Liability (TPL) component for the Schedule of NPL.
  - Actuarially Determined Contributions and Contractually Required Contributions components for the Schedule of Contributions.
  - Actuarial components of the Governmental Accounting Standards Board (GASB) Statement Number 67 requirements.
    - Including the TPL component of the Sensitivity of the NPL to Changes in the Discount Rate.
  - ❖ GASB 67 Notes for Required Supplementary Information.
    - Methods and Assumptions.

PO Box 40914 | Olympia, Washington 98504-0914 | state.actuary@leg.wa.gov | leg.wa.gov/osa Phone: 360.786.6140 | Fax: 360.586.8135 | TDD: 711

## State Actuary's Certification Letter (cont.)



# Actuarial Certification Letter Page 2 of 4

- 3. Actuarial Section.
  - Summary of Actuarial Assumptions and Methods.
  - Schedules of Active Member Valuation Data.
  - Schedules of Retirees and Beneficiaries Added to and Removed from Rolls.
  - ❖ Solvency Tests.
  - Analysis of Financial Experience.
  - Schedules of Funding Progress.
  - Funded Status and Funding Progress (One Year).
  - ❖ Additional Information for the Defined Benefit Plans.
- 4. Statistical Section.
  - Distribution of Membership by System and Plan.
  - Schedule of Benefit Recipients by Type of Benefit.
  - Schedule of Average Benefit Payments to Service Retirees in Year of Retirement.

The primary purpose of this information is to satisfy the actuarial reporting requirements of GASB and the Government Finance Officers Association (GFOA). Readers should not use this information for other purposes. Please replace this information with more recent information from next year's CAFR when available.

We also prepare annual actuarial valuations for determining contribution requirements and funding progress (a "funding" valuation) consistent with the state's funding policy. The funding valuations serve a different purpose from accounting valuations or measurements, and the results of the funding valuations may not match these accounting disclosures.

We performed the most recent actuarial valuation in 2020 with a valuation date of June 30, 2019. The TPL was calculated as of that valuation date and projected to the measurement date of June 30, 2020. Plan liabilities were rolled forward from June 30, 2019, to June 30, 2020, reflecting each plan's service cost (using the Entry Age cost method), assumed interest, and actual benefit payments. We made no assumption changes when rolling forward plan liabilities from June 30, 2019, to June 30, 2020. Unless otherwise noted herein, all underlying assumptions match those disclosed in the *June 30, 2019, Actuarial Valuation Report* (AVR) available on the OSA website .

GASB 67 requires an "asset sufficiency test" to determine whether (or how long) we can use the long-term expected rate of return on assets to measure the present value of accrued plan liabilities for accounting purposes. The results of this asset sufficiency test should not be used for other purposes.

Office of the State Actuary

October 8, 2020

# State Actuary's Certification Letter (cont.)



# Actuarial Certification Letter Page 3 of 4

For this test, we made the following assumptions to determine projected employee and employer contributions:

- ❖ A 7.5 percent long-term discount rate to determine funding liabilities consistent with current law for calculating future contribution rate requirements for all plans, except the Law Enforcement Officers' and Fire Fighters' Plan 2 which uses a 7.4 percent assumption.
  - The Judicial Retirement System (JRS) and Judges are funded on a "pay-as-you-go" basis.
- ❖ We reflected actual asset returns through June 30, 2020, and assumed a 7.4 percent rate of investment return on invested assets thereafter, consistent with the long-term expected rate of return (for all plans except JRS and Judges). Please see the 2019 Report on Financial Condition and Economic Experience Study available on the OSA website for additional background on how we selected this assumption. We plan to update this study in 2021.
- ❖ With the exception of determining future Plan 1 Unfunded Actuarial Accrued Liability (UAAL) contributions from employers of the Public Employees' Retirement System (PERS), the Teachers' Retirement System (TRS), the School Employees' Retirement System (SERS), and the Public Safety Employees' Retirement System (PSERS), we assumed no new entrants for purposes of the asset sufficiency test.
- Consistent with current law, employers of PERS, TRS, SERS, and PSERS would continue to pay the minimum Plan 1 UAAL contribution rate until the applicable Plan 1 is fully funded.

The asset sufficiency test requires the application of a closed-group funding policy that does not currently exist for our open pension plans. Where necessary, we applied our professional judgment to determine the projected contributions that would result in our open plans under the hypothetical funding policy required for this test. Lastly, we reviewed the resulting contribution projections for all plans in relation to projected budget dollars available to fund pensions and found them to be reasonable for purposes of performing this test.

As of this measurement, all plans—with the exception of JRS and Judges ("pay-as-you-go" plans)—are expected to retain sufficient assets to pay all future benefits for current members using current assumptions, current plan provisions, and assuming the continuation of current state funding policy in Chapter 41.45 RCW (the actuarial funding chapter). As a result, we can continue to use the long-term expected rate of return on assets, as noted above, to measure the present value of accrued plan liabilities for accounting purposes for this year's measurement.

Except as noted above, we used the same data, assumptions, and methods for the asset sufficiency test as we disclosed in our 2019 AVR. The demographic assumptions used for this analysis come from our 2013-2018 Demographic Experience Study available on the OSA website.

Office of the State Actuary

October 8, 2020

## State Actuary's Certification Letter (cont.)



Actuarial Certification Letter Page 4 of 4

We relied on participant data provided by your department to perform the latest actuarial valuation. The Washington State Investment Board, your department, and the Office of the State Treasurer provided financial and asset information. We reviewed the data and the assets for reasonableness as appropriate based on the purpose of the valuation. We relied on all the information provided as complete and accurate. In our opinion, this information is adequate and substantially complete for purposes of this valuation. Please see the Actuarial Certification Letter in the 2019 AVR for additional information on the certification of the latest actuarial valuation results.

We prepared the required accounting disclosures in accordance with GASB 67. Please see the Department of Retirement Systems' 2020 Participating Employer Financial Information Report for our actuarial certification of disclosures that are unique to GASB 68. We relied on the same participant data, assumptions, and methods for the GASB 67 disclosures as we did for the GASB 68 disclosures.

GASB 67 requires an actuary to review a plan's past practices of granting ad hoc postemployment benefit adjustments [e.g., ad hoc Cost-of-Living Adjustments (COLAs)] and to determine if the granting of such adjustments has become substantively automatic. If deemed as such, an actuary must include future adjustments in the projection of benefits and the associated TPL. We have reviewed the ad hoc COLAs granted in PERS 1 and TRS 1 (two increases in the last three years since the automatic COLA in the plans was rescinded in 2011) and determined, based on our professional judgment, that these ad hoc adjustments have not become substantively automatic at this time. We will continue to monitor practices in this area and could reach a different conclusion in the future if practices change.

At your request, we also prepared accounting disclosures under GASB Statements 25, 27, and 50. We prepared all the financial reporting disclosures outlined in this letter in accordance with generally accepted actuarial principles and Actuarial Standards of Practice as of the date of this letter.

We certify, to the best of our knowledge, that the actuarial submissions in the 2020 CAFR meet the GFOA standards for actuarial reporting as of the date of this letter.

The undersigned, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. We are available to provide extra advice and explanations as needed.

Sincerely,

Matthew M. Smith, FCA, EA, MAAA

State Actuary

Michael T. Harbour, ASA, MAAA Actuary

Michael Harborn

N:\MS\2020\2020.CAFR.Certification.Letter.docx

Office of the State Actuary

October 8, 2020

# Summary of Plan Provisions

A narrative summary of retirement plans DRS manages is provided in Section B of Note 2 in the Financial Section of this CAFR. A tabular summary of key plan provisions as of June 30, 2020, is provided below.

	une 30, 2020 — Page 1 of 2	Vaatina	Datingment Filmibility	Damafik
Plan	Membership Eligibility	Vesting	Retirement Eligibility	Benefit
PERS Plan 1	State employees, elected officials, employees of local governments, legislative committee employees, community/technical college employees, classified employees of school districts, district/municipal court judges, and some employees of the Supreme Court, Court of Appeals and superior courts (by 9/30/1977)	After five years of eligible service	After 30 years of service, at age 60 with five years of service or at age 55 with 25 years of service	2% of Average Final Compensation (AFC) per year of service, capped at 60% of AFC Judicial Benefit Multiplier (JBM) participants: 3.5% of AFC per year of service, capped at 75% of AFC
DED0		A () ()	A. 05 W.C	,
PERS Plan 2	New members who met the same employer membership eligibility requirements as PERS Plan 1 and were hired on or after 10/1/77, new state agency and higher education members hired on or after 3/1/2002 who chose Plan 2, and new members for all other employers hired on or after 9/1/2002 who chose Plan 2	After five years of eligible service	At age 65 with five years of service or an actuarially reduced benefit at age 55 with 20 years of service	2% of AFC per year of service  JBM participants: 3.5% of AFC per year of service, capped at 75% of AFC
	PERS Plan 2 excludes classified employees of school districts.			
PERS Plan 3 <sup>1</sup>	New members who met the same employer membership eligibility requirements as PERS Plan 2, new state agency and higher education members hired on or after 3/1/2002 who chose Plan 3, new members for all other employers hired on or after 9/1/2002 who chose Plan 3, and PERS Plan 2 members hired on or after 10/1/1977 who met transfer eligibility requirements and made a permanent choice to	Varies	At age 65 if vested or an actuarially reduced benefit at age 55 with 10 years of service (defined benefit portion)	1% of AFC per year of service (defined benefit portion)  JBM participants: 1.6% of AFC per year of service, capped at 37.5% of AFC
	transfer to PERS Plan 3			The defined contribution portion depends on the member's contribution level and or
SERS Plan 2	All classified employees of school districts or educational service districts (by 8/31/2000 and employees on or after 7/1/2007 with no past PERS Plan 2 service who chose Plan 2)	After five years of eligible service	After age 65 with five years of service or an actuarially reduced benefit at age 55 with 20 years of service	2% of AFC per year of service
SERS Plan 3 <sup>1</sup>	All classified employees of school districts or educational service districts (on or after 9/1/2000 and employees on or after 7/1/2007 with no past PERS Plan 2 service who chose Plan 3)	Varies	At age 65 if vested or an actuarially reduced benefit at age 55 with 10 years of service (defined benefit portion)	1% of AFC per year of service (defined benefit portion)  The defined contribution portion depends on the member's contribution level and or
DOEDO	All full time public cofety officers at a last t	After five	At any CF with the second of	on the member's contribution level and or
PSERS Plan 2	All full-time public safety officers at select state agencies, counties and cities except the cities of Seattle, Spokane and Tacoma (on or after 7/1/2006)	After five years of eligible service	At age 65 with five years of service, at age 60 with 10 years of PSERS service or at age 53 with 20 years of service reduced 3% for each year younger than age 60	2% of AFC per year of service
TRS Plan 1	All certificated public school employees who worked in an instructional, administrative or supervisory capacity (by 9/30/1977)	After five years of eligible service	After 30 years of service, at age 60 with five years of service or at age 55 with 25 years of service	2% of AFC per year of service, capped at 60% of AFC
				JBM participants: 3.5% of AFC per year of

# Summary of Plan Provisions (cont.)

As of J	une 30, 2020 — Page 2 of 2			
Plan	Membership Eligibility	Vesting	Retirement Eligibility	Benefit
TRS Plan 2	All certificated public school employees who worked in an instructional, administrative or supervisory capacity (on or after 10/1/1977 and by 6/30/1996 and employees on or after 7/1/2007 who chose Plan 2)	After five years of eligible service	At age 65 with five years of service or an actuarially reduced benefit at age 55 with 20 years of service	2% of AFC per year of service
TRS Plan 3 <sup>1</sup>	All certificated public school employees who worked in an instructional, administrative or supervisory capacity (on or after 7/1/1996 and employees on or after 7/1/2007 who chose Plan 3)	Varies	At age 65 if vested or an actuarially reduced benefit at age 55 with 10 years of service (defined benefit portion)	1% of AFC per year of service (defined benefit portion)  The defined contribution portion depends on the member's contribution level and on
LEOFF Plan 1	All full-time, fully compensated law enforcement officers and fire fighters (by 9/30/1977)	After five years of eligible service	At age 50 with five years of service	20 or more years of service: 2% of Final Average Salary (FAS) per year of service  10-19 years of service: 1.5% of FAS per year of service
LEOFF Plan 2	All full-time, fully compensated law enforcement officers, fire fighters and emergency medical technicians (on or after 10/1/1977)	After five years of eligible service	At age 53 with five years of service or a benefit at age 50 with 20 years of service reduced 3% for each year younger than age 53	2% of FAS per year of service
WSPRS Plan 1	Commissioned employees of the Washington State Patrol (on or after 8/1/1947 and by 12/31/2002)	No requirement for active members; after five years of eligible service for inactive members	At age 55 or after 25 years of service	2% of Average Final Salary (AFS) per year of service, capped at 75% of AFS
WSPRS Plan 2	Commissioned employees of the Washington State Patrol (on or after 1/1/2003)	No requirement for active members; after five years of eligible service for inactive members	At age 55 or after 25 years of service	2% of AFS per year of service, capped at 75% of AFS
JRS	Judges elected or appointed to the Supreme Court, Court of Appeals and superior courts (on or after 8/9/1971 and by 6/30/1988; new judges on or after 7/1/1988 join PERS)	After 15 years of service	At age 60	15 years of service: 3.5% of FAS per year of service, capped at 75% of FAS  10-14 years of service: 3% of FAS per
JRF	Judges elected or appointed to the Supreme Court, Court of Appeals and superior courts (by 8/8/1971)	After 12 years of service	At age 70 with 10 years of service or any age with 18 years of service	Half the monthly salary

<sup>1</sup> Members who are eligible to choose PERS, SERS or TRS Plan 2 or Plan 3 who do not make a plan choice within 90 days of hire default into PERS, SERS or TRS Plan 3.

DRS publishes handbooks describing the rights and benefits for each system and plan, including disability and survivor benefits. They are available on the DRS website at www.drs.wa.gov.

## Summary of Actuarial Assumptions and Methods

#### 1. Actuarial Assumptions and Method Selection

**Economic Assumptions and Methods:** These were developed in accordance with Washington state law, the Pension Funding Council, and the LEOFF 2 Board. For additional information see the Washington State Office of the State Actuary's 2019 Economic Experience Study on the Office of the State Actuary website (leg.wa.gov/osa).

**Demographic Assumptions and Methods:** These were derived from Washington's Office of the State Actuary and are based on the 2013-2018 Experience Study (enacted in 2020). Additional assumptions for subsequent events and law changes are current as of the 2019 Actuarial Valuation Report.

#### 2. Investment Return

The assumed investment return is 7.5% per annum for all systems except LEOFF Plan 2 (7.4%).

#### 3. Mortality Tables

Probabilities of mortality are developed using the Pub.H-2010 tables, which reflect national public retirement plan mortality data compiled by the Society of Actuaries and released in January 2019. The Pub.H-2010 tables we selected for the DRS systems vary depending on the types of jobs that comprise that system. We also apply age adjustments, if necessary, to better tailor the mortality rates to the demographics of each system. These mortality rates also vary by member status (that is...active, member with disability, retiree, or survivor). We use the long-term MP-2017 generational improvement scale to project mortality rates every year thereafter. For more information on the mortality assumption, please see the 2013-2018 Demographic Experience Study on the Office of the State Actuary website (leg.wa.gov/osa).

# Summary of Actuarial Assumptions and Methods (cont.)

#### 4. Retirement

Probability of Service Retirement — Table 1 of 2

	PERS Plan 1	TRS Plan 1	PSERS	Plan 2	LEOFF Plan 1	LEOFF Plan 2	WSPRS Plans 1/2
Age	All years of service	All years of service	Less than 20 years of service	20 or more years of service	All years of service	All years of service	All years of service
45	0 %	0 %	0 %	0 %	0 %	0 %	50 %
46	0 %	0 %	0 %	0 %	0 %	0 %	38 %
47	0 %	0 %	0 %	0 %	0 %	0 %	38 %
48	0 %	0 %	0 %	0 %	0 %	0 %	38 %
49	0 %	0 %	0 %	0 %	0 %	0 %	33 %
50	0 %	0 %	0 %	0 %	12 %	3 %	33 %
51	0 %	0 %	0 %	0 %	12 %	3 %	27 %
52	0 %	0 %	0 %	0 %	12 %	5 %	27 %
53	0 %	0 %	0 %	6 %	12 %	9 %	27 %
54	0 %	0 %	0 %	6 %	16 %	9 %	27 %
55	20 %	15 %	0 %	6 %	20 %	9 %	20 %
56	15 %	15 %	0 %	6 %	20 %	9 %	20 %
57	10 %	15 %	0 %	8 %	20 %	10 %	20 %
58	10 %	15 %	0 %	12 %	20 %	14 %	20 %
59	15 %	15 %	0 %	16 %	20 %	15 %	33 %
60	15 %	15 %	32 %	32 %	25 %	15 %	33 %
61	15 %	15 %	24 %	24 %	25 %	19 %	33 %
62	20 %	25 %	28 %	28 %	25 %	23 %	33 %
63	15 %	25 %	22 %	24 %	25 %	20 %	33 %
64	15 %	25 %	20 %	24 %	25 %	20 %	50 %
65	30 %	35 %	25 %	30 %	25 %	30 %	100 %
66	35 %	35 %	25 %	30 %	25 %	30 %	100 %
67	25 %	35 %	25 %	30 %	25 %	30 %	100 %
68	25 %	35 %	25 %	30 %	25 %	30 %	100 %
69	25 %	35 %	25 %	30 %	25 %	30 %	100 %
70	25 %	35 %	100 %	100 %	100 %	100 %	100 %
71	25 %	35 %	100 %	100 %	100 %	100 %	100 %
72	25 %	35 %	100 %	100 %	100 %	100 %	100 %
73	25 %	35 %	100 %	100 %	100 %	100 %	100 %
74	25 %	35 %	100 %	100 %	100 %	100 %	100 %
75	25 %	35 %	100 %	100 %	100 %	100 %	100 %
76	25 %	35 %	100 %	100 %	100 %	100 %	100 %
77	25 %	35 %	100 %	100 %	100 %	100 %	100 %
78	25 %	35 %	100 %	100 %	100 %	100 %	100 %
79	25 %	35 %	100 %	100 %	100 %	100 %	100 %
80	100 %	100 %	100 %	100 %	100 %	100 %	100 %

# Summary of Actuarial Assumptions and Methods (cont.)

## 4. Retirement (cont.)

Probability of Service Retirement — Table 2 of 2

PERS, TRS, & SERS

	Plans 2	Plans 3	Plans 2	Plans 3	Plans 2	Plans 3
A	Loca than 20 years of comics		30 or more years of service & hired before 5/1/2013			
Age 45	0 %	0 %	0 %	0 %	on or after	0 %
46	0 %	0 %	0 %	0 %	0 %	0 %
47	0 %	0 %	0 %	0 %	0 %	0 %
48	0 %	0 %	0 %	0 %	0 %	0 %
49	0 %	0 %	0 %	0 %	0 %	0 %
50	0 %	0 %	0 %	0 %	0 %	0 %
51	0 %	0 %	0 %	0 %	0 %	0 %
52	0 %	0 %	0 %	0 %	0 %	0 %
53	0 %	0 %	0 %	0 %	0 %	0 %
54	0 %	0 %	0 %	0 %	0 %	0 %
55	1 %	1 %	8 %	4 %	1 %	1 %
56	1 %	1 %	8 %	4 %	2 %	1 %
57	2 %	1 %	8 %	4 %	3 %	2 %
58	2 %	1 %	8 %	5 %	3 %	2 %
59	4 %	2 %	10 %	10 %	6 %	4 %
60	5 %	2 %	15 %	12 %	10 %	8 %
61	8 %	6 %	20 %	15 %	12 %	10 %
62	15 %	12 %	40 %	35 %	20 %	17 %
63	20 %	12 %	30 %	25 %	25 %	20 %
64	40 %	20 %	35 %	30 %	35 %	30 %
65	35 %	35 %	45 %	45 %	45 %	45 %
66	30 %	30 %	40 %	40 %	40 %	40 %
67	27 %	27 %	30 %	30 %	30 %	30 %
68	25 %	25 %	30 %	30 %	30 %	30 %
69	25 %	25 %	30 %	30 %	30 %	30 %
70	25 %	25 %	30 %	30 %	30 %	30 %
71	25 %	25 %	30 %	30 %	30 %	30 %
72	25 %	25 %	30 %	30 %	30 %	30 %
73	25 %	25 %	30 %	30 %	30 %	30 %
74	25 %	25 %	30 %	30 %	30 %	30 %
75	25 %	25 %	30 %	30 %	30 %	30 %
76	25 %	25 %	30 %	30 %	30 %	30 %
77	25 %	25 %	30 %	30 %	30 %	30 %
78	25 %	25 %	30 %	30 %	30 %	30 %
79	25 %	25 %	30 %	30 %	30 %	30 %
80	100 %	100 %	100 %	100 %	100 %	100 %

# Summary of Actuarial Assumptions and Methods (cont.)

## 5. Disablement

PER	S, TRS, & SEF						WSPRS
	-,,	15	PSERS	Plan 2	LEO	LEOFF	
Plan 1	Plan 2	Plan 3	Less than 10 years of service	10 or more years of service	Plan 1	Plan 2	Plans 1/2
0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0300 %
0.0000 %	0.0100 %	0.0100 %	0.0100 %	0.0200 %	0.0000 %	0.0100 %	0.0300 %
0.0000 %	0.0100 %	0.0100 %	0.0100 %	0.0200 %	0.0000 %	0.0200 %	0.0300 %
0.0000 %	0.0200 %	0.0100 %	0.0200 %	0.0300 %	0.0000 %	0.1000 %	0.0300 %
0.0000 %	0.0200 %	0.0100 %	0.0200 %	0.0300 %	0.0000 %	0.1000 %	0.0300 %
0.0000 %	0.0500 %	0.2000 %	0.0500 %	0.0800 %	0.0000 %	0.2000 %	0.1500 %
0.0000 %	0.1500 %	0.0600 %	0.1500 %	0.2500 %	0.0000 %	0.4000 %	0.1500 %
0.0000 %	0.3000 %	0.1200 %	0.3000 %	0.4500 %	0.0000 %	0.6000 %	0.1500 %
0.0000 %	0.6000 %	0.2400 %	0.6000 %	0.9000 %	0.0000 %	0.7000 %	0.1500 %
0.0000 %	0.2000 %	0.0800 %	0.2000 %	0.3000 %	0.0000 %	0.3600 %	0.1500 %
0.0000 %	0.2000 %	0.0800 %	0.2000 %	0.3000 %	0.0000 %	0.3600 %	0.1500 %
0.0000 %	0.2000 %	0.0800 %	0.2000 %	0.3000 %	0.0000 %	0.3600 %	0.1500 %
0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0000 %	0.0000 %
	0.0000 % 0.0000 % 0.0000 % 0.0000 % 0.0000 % 0.0000 % 0.0000 % 0.0000 % 0.0000 % 0.0000 % 0.0000 %	0.0000 %       0.0000 %         0.0000 %       0.0100 %         0.0000 %       0.0100 %         0.0000 %       0.0200 %         0.0000 %       0.0200 %         0.0000 %       0.0500 %         0.0000 %       0.1500 %         0.0000 %       0.3000 %         0.0000 %       0.6000 %         0.0000 %       0.2000 %         0.0000 %       0.2000 %         0.0000 %       0.2000 %         0.0000 %       0.2000 %	0.0000 %         0.0000 %         0.0000 %           0.0000 %         0.0100 %         0.0100 %           0.0000 %         0.0100 %         0.0100 %           0.0000 %         0.0100 %         0.0100 %           0.0000 %         0.0200 %         0.0100 %           0.0000 %         0.0500 %         0.2000 %           0.0000 %         0.1500 %         0.0600 %           0.0000 %         0.3000 %         0.1200 %           0.0000 %         0.6000 %         0.2400 %           0.0000 %         0.2000 %         0.0800 %           0.0000 %         0.2000 %         0.0800 %           0.0000 %         0.2000 %         0.0800 %	Plan 1         Plan 2         Plan 3         10 years of service           0.0000 %         0.0000 %         0.0000 %         0.0000 %           0.0000 %         0.0100 %         0.0100 %         0.0100 %           0.0000 %         0.0100 %         0.0100 %         0.0100 %           0.0000 %         0.0200 %         0.0100 %         0.0200 %           0.0000 %         0.0200 %         0.0100 %         0.0200 %           0.0000 %         0.0500 %         0.2000 %         0.0500 %           0.0000 %         0.1500 %         0.0600 %         0.1500 %           0.0000 %         0.3000 %         0.1200 %         0.3000 %           0.0000 %         0.6000 %         0.2400 %         0.6000 %           0.0000 %         0.2000 %         0.0800 %         0.2000 %           0.0000 %         0.2000 %         0.0800 %         0.2000 %	Plan 1         Plan 2         Plan 3         10 years of service         years of service           0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %           0.0000 %         0.0100 %         0.0100 %         0.0100 %         0.0200 %         0.0200 %           0.0000 %         0.0200 %         0.0100 %         0.0200 %         0.0300 %         0.0300 %           0.0000 %         0.0200 %         0.0100 %         0.0200 %         0.0300 %         0.0300 %           0.0000 %         0.0500 %         0.2000 %         0.0500 %         0.0800 %         0.0500 %         0.2500 %           0.0000 %         0.1500 %         0.0600 %         0.1500 %         0.2500 %         0.4500 %           0.0000 %         0.3000 %         0.2400 %         0.6000 %         0.9000 %         0.3000 %           0.0000 %         0.2000 %         0.0800 %         0.2000 %         0.3000 %         0.3000 %           0.0000 %         0.2000 %         0.0800 %         0.2000 %         0.3000 %         0.3000 %           0.0000 %         0.2000 %         0.0800 %         0.2000 %         0.3000 %         0.3000 %           0.0000 %         0.2000 %         0.0800 %         0.2000	Plan 1         Plan 2         Plan 3         10 years of service         years of service         Plan 1           0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %           0.0000 %         0.0100 %         0.0100 %         0.0100 %         0.0200 %         0.0000 %           0.0000 %         0.0100 %         0.0100 %         0.0200 %         0.0000 %         0.0000 %           0.0000 %         0.0200 %         0.0100 %         0.0200 %         0.0300 %         0.0000 %           0.0000 %         0.0200 %         0.0100 %         0.0200 %         0.0300 %         0.0000 %           0.0000 %         0.0500 %         0.0500 %         0.0500 %         0.0800 %         0.0000 %           0.0000 %         0.1500 %         0.0600 %         0.1500 %         0.2500 %         0.0000 %           0.0000 %         0.1500 %         0.0600 %         0.1500 %         0.2500 %         0.0000 %           0.0000 %         0.3000 %         0.1200 %         0.3000 %         0.4500 %         0.0000 %           0.0000 %         0.2000 %         0.6000 %         0.2000 %         0.3000 %         0.0000 %           0.0000 %         0.2000 %         0.0800 %         0.2000 %<	Plan 1         Plan 2         Plan 3         service service service         Plan 1         Plan 2           0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0000 %         0.0100 %         0.0100 %         0.0200 %         0.0000 %         0.0200 %         0.0000 %         0.0200 %         0.0200 %         0.0200 %         0.0200 %         0.0200 %         0.0000 %         0.0200 %         0.0000 %         0.1000 %         0.0200 %         0.0000 %         0.1000 %         0.0200 %         0.0000 %         0.1000 %         0.0200 %         0.0000 %         0.1000 %         0.0200 %         0.0000 %         0.1000 %         0.0200 %         0.0000 %         0.1000 %         0.0000 %         0.0000 %         0.1000 %         0.0000 %         0.0000 %         0.1000 %         0.1000 %         0.0000 %         0.10000 %         0.10000 %         0.10000 %         0.10000 %         0.0000 %         0.10000 %         0.10000 %         0.2000 %         0.0000 %         0.2000 %         0.0000 %         0.2000 %         0.0000 %         0.2000 %         0.0000 %         0.0000 %         0.00000 %         0.2000 %         0.00000 %         0.00000 %

### 6. Other Terminations of Employment

Proba	Probability of Termination — Members Not Eligible for Retirement								
	PE	RS	SE	RS	PSERS	TR	IS	LEOFF	WSPRS
Service	Plan 1/2	Plan 3	Plan 2	Plan 3	Plan 2	Plan 1/2	Plan 3	Plan 2	Plan 1/2
0	26.0000 %	30.0000 %	18.0000 %	18.0000 %	25.0000 %	12.0000 %	12.0000 %	10.5000 %	4.5000 %
1	15.0000 %	19.0000 %	13.0000 %	15.0000 %	14.0000 %	8.0000 %	9.0000 %	5.0000 %	2.0000 %
2	10.5000 %	13.0000 %	11.0000 %	12.0000 %	10.0000 %	6.5000 %	7.5000 %	2.5000 %	2.0000 %
3	8.0000 %	10.0000 %	9.0000 %	10.0000 %	7.5000 %	5.0000 %	6.0000 %	2.0000 %	2.0000 %
4	6.5000 %	8.5000 %	7.0000 %	8.0000 %	6.0000 %	5.0000 %	5.5000 %	2.0000 %	2.0000 %
5	6.0000 %	7.0000 %	7.0000 %	7.5000 %	6.0000 %	4.5000 %	5.0000 %	2.0000 %	2.0000 %
6	5.5000 %	6.5000 %	6.0000 %	6.5000 %	5.0000 %	4.0000 %	4.5000 %	2.0000 %	2.0000 %
7	5.0000 %	6.0000 %	5.5000 %	6.0000 %	5.0000 %	3.5000 %	4.0000 %	1.5000 %	2.0000 %
8	4.5000 %	5.5000 %	5.0000 %	5.5000 %	4.0000 %	3.0000 %	3.0000 %	1.5000 %	1.5000 %
9	4.0000 %	5.5000 %	5.0000 %	5.0000 %	4.0000 %	3.0000 %	3.0000 %	1.5000 %	1.5000 %
10	4.0000 %	4.0000 %	4.5000 %	4.5000 %	4.0000 %	2.5000 %	2.5000 %	1.5000 %	1.0000 %
11	3.5000 %	3.5000 %	4.0000 %	4.0000 %	3.5000 %	2.0000 %	2.0000 %	1.0000 %	1.0000 %
12	3.0000 %	3.0000 %	4.0000 %	4.0000 %	3.0000 %	2.0000 %	2.0000 %	1.0000 %	1.0000 %
13	3.0000 %	3.0000 %	4.0000 %	4.0000 %	3.0000 %	2.0000 %	2.0000 %	1.0000 %	1.0000 %
14	3.0000 %	3.0000 %	3.5000 %	3.5000 %	3.0000 %	1.5000 %	1.5000 %	1.0000 %	1.0000 %
15	3.0000 %	3.0000 %	3.5000 %	3.5000 %	3.0000 %	1.5000 %	1.5000 %	1.0000 %	1.0000 %
16	2.5000 %	2.5000 %	3.5000 %	3.5000 %	2.5000 %	1.5000 %	1.5000 %	1.0000 %	0.5000 %
17	2.0000 %	2.0000 %	3.0000 %	3.0000 %	2.0000 %	1.0000 %	1.0000 %	1.0000 %	0.5000 %
18	2.0000 %	2.0000 %	3.0000 %	3.0000 %	2.0000 %	1.0000 %	1.0000 %	1.0000 %	0.5000 %
19	2.0000 %	2.0000 %	2.5000 %	2.5000 %	2.0000 %	1.0000 %	1.0000 %	1.0000 %	0.5000 %
20	2.0000 %	2.0000 %	2.5000 %	2.5000 %	2.0000 %	1.0000 %	1.0000 %	1.0000 %	0.5000 %
21	2.0000 %	2.0000 %	2.5000 %	2.5000 %	2.0000 %	1.0000 %	1.0000 %	0.5000 %	0.5000 %
22	1.5000 %	1.5000 %	2.0000 %	2.0000 %	1.5000 %	1.0000 %	1.0000 %	0.5000 %	0.5000 %
23	1.5000 %	1.5000 %	2.0000 %	2.0000 %	1.5000 %	1.0000 %	1.0000 %	0.5000 %	0.5000 %
24	1.5000 %	1.5000 %	2.0000 %	2.0000 %	1.5000 %	1.0000 %	1.0000 %	0.5000 %	0.5000 %
25	1.5000 %	1.5000 %	1.0000 %	1.0000 %	1.5000 %	1.0000 %	1.0000 %	0.5000 %	0.0000 %
26+	1.0000 %	1.0000 %	1.0000 %	1.0000 %	1.0000 %	1.0000 %	1.0000 %	0.5000 %	0.0000 %

Note: Termination rates for LEOFF Plan 1 are zero for all service levels.

### 6. Other Terminations of Employment (cont.)

#### **Probability of Termination** — Members **Eligible for Retirement**

	PERS, TRS, &	SERS	PSERS
Age	Plan 2	Plan 3	Plan 2
53	0.0000 %	0.0000 %	1.5000 %
54	0.0000 %	0.0000 %	1.5000 %
55	1.5000 %	3.0000 %	1.5000 %
56	1.5000 %	3.0000 %	1.5000 %
57	1.5000 %	3.0000 %	1.5000 %
58	1.5000 %	3.0000 %	1.5000 %
59	1.5000 %	4.5000 %	1.5000 %
60	1.5000 %	4.5000 %	0.0000 %
61	1.5000 %	4.5000 %	0.0000 %
62	1.5000 %	5.5000 %	0.0000 %
63	0.5000 %	2.0000 %	0.0000 %
64	0.5000 %	1.0000 %	0.0000 %
65+	0.0000 %	0.0000 %	0.0000 %

Note: Termination rates for LEOFF, WSPRS, and the Plans 1 are zero for all retirement-eligible members.

#### 7. Future Salaries

The following tables indicate the scale used to estimate future salaries for valuation purposes. In addition to increases in salary due to promotions and longevity, there is an assumed 3.50% per annum rate of increase in members' general salary level.

Step Salary Increases							
Years of Service	PERS	SERS	PSERS	TRS	LEOFF	WSPRS	
0	6.00 %	8.00 %	6.00 %	5.50 %	11.00 %	11.00 %	
1	6.00 %	8.00 %	6.00 %	5.50 %	11.00 %	11.00 %	
2	4.50 %	4.00 %	4.50 %	3.70 %	7.50 %	7.50 %	
3	3.70 %	3.00 %	3.70 %	3.70 %	6.00 %	6.00 %	
4	3.00 %	2.50 %	3.00 %	3.50 %	4.00 %	4.00 %	
5	2.20 %	2.00 %	2.20 %	3.20 %	2.50 %	2.50 %	
6	1.70 %	1.70 %	1.70 %	3.00 %	2.00 %	2.00 %	
7	1.50 %	1.50 %	1.50 %	3.00 %	1.50 %	1.50 %	
8	1.00 %	1.50 %	1.00 %	3.00 %	1.00 %	1.00 %	
9	1.00 %	1.20 %	1.00 %	3.00 %	1.00 %	1.00 %	
10	0.70 %	1.20 %	0.70 %	2.70 %	1.50 %	1.50 %	
11	0.50 %	1.00 %	0.50 %	2.50 %	1.00 %	1.00 %	
12	0.50 %	0.50 %	0.50 %	2.20 %	1.00 %	1.00 %	
13	0.50 %	0.70 %	0.50 %	2.00 %	1.00 %	1.00 %	
14	0.30 %	0.70 %	0.30 %	1.70 %	1.00 %	1.00 %	
15	0.30 %	0.70 %	0.30 %	1.50 %	1.50 %	1.50 %	
16	0.30 %	0.50 %	0.30 %	1.00 %	1.00 %	1.00 %	
17	0.30 %	0.50 %	0.30 %	0.50 %	1.00 %	1.00 %	
18	0.10 %	0.20 %	0.10 %	0.20 %	1.00 %	1.00 %	
19	0.10 %	0.20 %	0.10 %	0.10 %	1.00 %	1.00 %	
20	0.10 %	0.10 %	0.10 %	0.10 %	1.00 %	1.00 %	
21	0.00 %	0.00 %	0.00 %	0.10 %	0.50 %	0.50 %	
22	0.00 %	0.00 %	0.00 %	0.10 %	0.50 %	0.50 %	
23	0.00 %	0.00 %	0.00 %	0.10 %	0.50 %	0.50 %	
24	0.00 %	0.00 %	0.00 %	0.10 %	0.50 %	0.50 %	
25	0.00 %	0.00 %	0.00 %	0.10 %	0.50 %	0.50 %	
26	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	
27	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	
28	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	
29	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	
30+	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	

Relative Salary Values							
	PERS, SERS, PSERS	TRS	LE0FF	WSPRS			
Annual % Increase	4.48 %	4.79 %	4.79 %	4.48 %			
Attributed to Growth in Active Group Size	0.95 %	1.25 %	1.25 %	0.95 %			
Attributed to Effects of Inflation on Salaries	3.50 %	3.50 %	3.50 %	3.50 %			

8. Other Specific Assumptions That Have a Material Impact on Valuation Results Information on other specific assumptions that have a material impact on results can be obtained from the 2019 Actuarial Valuation Report and on the Office of the State Actuary website (leg.ws.gov/osa).

9. Change in Assumptions **Assumption Changes:** We updated our demographic assumption based on the results of our latest demographic experience study. This study is completed every six years and includes updates to a wide range of behavioral and demographic assumptions. For more details, please see the 2013-2018 Demographic Experience Study on the

Office of the State Actuary website (leg.wa.gov/osa).

We updated the Early Retirement Factors and Jointand-Survivor Factors used in our model. These factors are used to value benefits for members who elect to retire early and for survivors of members that die prior to retirement. These factors match the ones that DRS plans to implement on October 1, 2020.

Method Changes: This valuation includes liabilities and assets for Plan 3 members purchasing Total Allocation Portfolio annuities when determining contribution rates and funded status.

We simplified our modeling of medical premium reimbursements for survivors of duty-related deaths in LEOFF Plan 2 and WSPRS.

We changed our method to updating certain data items that change annually. Examples include the public safety duty-related death lump sum and Washington state average wage. We have set these values at 2018 and will project them into the future using assumptions until the next Demographic Experience Study in 2025. Please see our website for more information on this method change.

10. Actuarial Cost Method Valuation assets are at market value with annual gains and losses recognized on a graded scale over an eight-year period. Additionally, the actuarial value of assets may not exceed 130% nor drop below 70% of the market value of assets.

PERS Plan 1, TRS Plan 1, and LEOFF Plan 1 Funding (Actual Contributions): A variation of the Entry Age Normal (EAN) cost method is used for PERS Plan 1 and TRS Plan 1. The contribution toward the Unfunded Actuarially Accrued Liability (UAAL) has been developed in the valuation as a level percentage of expected future covered payrolls, which will amortize the UAAL over a rolling 10-year period. PERS Plan 1 amortizes the UAAL over all PERS, SERS and PSERS payrolls, including projected system growth. TRS Plan 1 amortizes the UAAL over all TRS payroll, including projected system growth. PERS Plan 1 has a minimum UAAL rate of 3.50%, and TRS Plan1 has a minimum UAAL rate of 5.75%. No contributions for LEOFF Plan 1 are required when it is fully funded.

PERS Plan 2/3, SERS Plan 2/3, TRS Plan 2/3, PSERS Plan 2, LEOFF Plan 2 and WSPRS Plan 1/2: The aggregate actuarial cost method is used to calculate contribution rates.

Under this method, the unfunded actuarial present value of fully projected benefits is amortized over the projected earnings of the active group. The entire contribution is normal cost, and no UAAL exists. All gains and losses are amortized over future salaries of current active members.

PERS Plan 2/3, TRS Plan 2/3, SERS Plan 2/3 and PSERS Plan 2 minimum contribution rates are based on 80% of the entry age normal cost rate (EANC). WSPRS Plan 1/2 minimum contribution rates are based on 70% of the EANC. Similarly, LEOFF Plan 2 minimum contribution rates are based on 100% of the EANC.

#### 11. Change in Funding Policy

- The LEOFF 2 Board revised their long-term funding policy in 2019 to reduce minimum contribution rates to 90 percent of the Entry Age Normal Cost (EANC) when the plan's funded ratio meets or exceeds 105 percent. The minimum rates remain at 100 percent of the EANC when the plan's funded ratio is below 105 percent.
- Employer contribution rates for WSPRS will be smoothed over the 2019-2021, 20201-2023, and 2023-2025 Biennia as required in (C 416 L 19, Sec 711(6)). The calculated WSPRS contribution rates displayed in the actuarial valuation exclude this smoothing policy. OSA provided the Pension Funding Council with separate analysis that documented this smoothing approach.

#### 12. Material Changes in Benefit Provisions and Contribution Rates

The following laws enacted in 2020 had an impact on the latest actuarial valuation (that is, legislation that produced supplemental contribution rate impacts):

- Plan 1 COLA 3.0% Increase (C 329 L20)): This bill enacts a one-time permanent increase for all eligible PERS Plan 1 and TRS Plan 1 retirees equal to 3.0% of their benefit, not to exceed a maximum of \$62.50 per month.
- Modified definition of "Veteran" (C 178 L20): This bill expands the definition of veteran to include individuals who received the respective campaign med (or badge) during an armed conflict.
- Leave Cash-Out as Pensionable Salary (C 97 L 20): This bill allows WSPRS troopers who were commissioned from July 1, 2001 to December 31, 2002 to include cash-outs of vacation and holiday pay when calculating retirement benefits.

				Annualized % Increase
Valuation Date	<b>Active Members</b>	<b>Annual Payroll in Millions</b>	<b>Average Annual Pay</b>	in Average Pay
6/30/2019	1,538	104.8	68,120	4.4%
6/30/2018	2,011	131.3	65,269	4.2%
6/30/2017	2,597	162.6	62,610	2.4%
6/30/2016	3,227	197.4	61,171	4.1%
6/30/2015	3,927	230.7	58,748	1.5%
6/30/2014	4,782	276.8	57,884	3.0%
6/30/2013	5,653	317.8	56,224	0.6%
6/30/2012	6,635	370.8	55,878	0.1%
6/30/2011	7,733	431.8	55,842	(0.9)%
6/30/2010	9,007	507.3	56,324	0.5%

PERS Plan 2				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	122,454	8,581.5	70,079	3.7%
6/30/2018	122,165	8,251.8	67,547	3.9%
6/30/2017	121,934	7,926.0	65,002	2.8%
6/30/2016	119,677	7,569.5	63,249	3.4%
6/30/2015	117,768	7,204.6	61,176	1.9%
6/30/2014	116,985	7,023.3	60,036	2.8%
6/30/2013	115,751	6,758.5	58,388	1.2%
6/30/2012	115,877	6,688.2	57,718	1.2%
6/30/2011	117,096	6,679.4	57,042	1.3%
6/30/2010	119,826	6,748.3	56,317	2.0%

PERS Plan 3				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	38,047	2,449.0	64,368	3.7%
6/30/2018	36,707	2,278.0	62,058	3.8%
6/30/2017	34,943	2,089.9	59,809	2.9%
6/30/2016	33,240	1,931.6	58,110	3.2%
6/30/2015	31,602	1,779.8	56,320	2.0%
6/30/2014	30,694	1,695.4	55,235	2.4%
6/30/2013	29,302	1,580.8	53,948	0.7%
6/30/2012	28,078	1,504.4	53,579	0.6%
6/30/2011	27,588	1,468.9	53,245	1.1%
6/30/2010	27,693	1,458.0	52,647	1.2%

SERS Plan 2				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	28,239	1,087.4	38,505	10.0%
6/30/2018	27,431	959.9	34,994	5.6%
6/30/2017	26,697	885.1	33,153	5.3%
6/30/2016	25,950	817.2	31,493	5.0%
6/30/2015	24,479	734.3	29,998	2.8%
6/30/2014	22,950	670.0	29,195	2.0%
6/30/2013	21,760	622.8	28,620	0.4%
6/30/2012	20,846	594.0	28,494	0.1%
6/30/2011	20,784	591.4	28,453	0.6%
6/30/2010	20,358	576.0	28,293	0.8%

SERS Plan 3				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	35,527	1,365.2	38,427	9.7%
6/30/2018	34,781	1,218.6	35,037	4.8%
6/30/2017	33,715	1,127.3	33,436	3.6%
6/30/2016	32,314	1,042.8	32,269	5.0%
6/30/2015	31,326	962.5	30,725	2.9%
6/30/2014	30,832	920.7	29,861	2.3%
6/30/2013	30,535	891.5	29,195	1.3%
6/30/2012	30,712	884.8	28,810	1.1%
6/30/2011	31,548	898.6	28,483	1.3%
6/30/2010	31,981	899.0	28,110	0.9%

PSERS Plan 2				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	7,758	529.4	68,236	5.6%
6/30/2018	6,180	399.3	64,619	3.8%
6/30/2017	5,822	362.4	62,247	4.3%
6/30/2016	5,483	327.3	59,700	2.7%
6/30/2015	5,202	302.3	58,115	1.8%
6/30/2014	4,820	275.3	57,115	1.9%
6/30/2013	4,513	253.1	56,075	0.1%
6/30/2012	4,250	238.0	55,999	0.7%
6/30/2011	4,187	232.8	55,597	3.0%
6/30/2010	4,210	227.4	54,003	4.9%

TRS Plan 1				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	350	35.7	102,091	11.3%
6/30/2018	491	45.0	91,688	4.9%
6/30/2017	698	61.0	87,446	4.8%
6/30/2016	967	80.7	83,405	4.8%
6/30/2015	1,353	107.7	79,603	1.3%
6/30/2014	1,824	143.3	78,549	2.6%
6/30/2013	2,393	183.2	76,549	1.1%
6/30/2012	3,019	228.5	75,681	(0.4)%
6/30/2011	3,740	284.2	75,994	1.4%
6/30/2010	4,591	344.0	74,930	0.3%

TRS Plan 2				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	21,561	1,687.3	78,259	11.8%
6/30/2018	20,096	1,406.5	69,990	5.4%
6/30/2017	18,747	1,244.3	66,374	3.6%
6/30/2016	17,242	1,104.4	64,055	4.0%
6/30/2015	15,342	945.2	61,610	0.1%
6/30/2014	13,632	838.9	61,538	0.4%
6/30/2013	12,071	740.2	61,320	(0.5)%
6/30/2012	10,849	668.8	61,648	(2.2)%
6/30/2011	10,285	648.2	63,025	(0.6)%
6/30/2010	9,442	598.8	63,423	(1.3)%

TRS Plan 3				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	55,351	5,079.6	91,770	11.7%
6/30/2018	54,432	4,472.6	82,168	5.3%
6/30/2017	53,780	4,196.1	78,023	4.2%
6/30/2016	52,706	3,947.3	74,892	4.9%
6/30/2015	52,125	3,721.9	71,403	2.5%
6/30/2014	51,837	3,611.5	69,670	3.0%
6/30/2013	51,471	3,482.7	67,664	2.2%
6/30/2012	51,489	3,408.1	66,191	0.5%
6/30/2011	52,178	3,436.7	65,866	2.3%
6/30/2010	52,292	3,366.7	64,382	1.3%

				Annualized % Increase
Valuation Date	<b>Active Members</b>	<b>Annual Payroll in Millions</b>	<b>Average Annual Pay</b>	in Average Pay
6/30/2019	20	2.1	106,597	(2.1)%
6/30/2018	26	2.8	108,832	(4.6)%
6/30/2017	40	4.6	114,135	5.6%
6/30/2016	62	6.7	108,061	1.3%
6/30/2015	82	8.7	106,683	1.2%
6/30/2014	120	12.6	105,385	2.0%
6/30/2013	143	14.8	103,362	2.5%
6/30/2012	186	18.8	100,828	2.8%
6/30/2011	250	24.5	98,078	1.4%
6/30/2010	301	29.1	96,686	3.2%

				<b>Annualized % Increase</b>
Valuation Date	Active Members	<b>Annual Payroll in Millions</b>	<b>Average Annual Pay</b>	in Average Pay
6/30/2019	18,557	2,117.1	114,085	4.4%
6/30/2018	18,130	1,981.9	109,319	3.0%
6/30/2017	17,694	1,878.5	106,169	2.1%
6/30/2016	17,186	1,786.4	103,947	1.5%
6/30/2015	17,019	1,742.9	102,411	3.4%
6/30/2014	16,773	1,661.3	99,048	3.5%
6/30/2013	16,687	1,596.8	95,694	2.6%
6/30/2012	16,720	1,560.1	93,308	2.2%
6/30/2011	16,805	1,534.7	91,322	2.8%
6/30/2010	16,775	1,490.1	88,828	4.4%

WSPRS Plan 1				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	397	47.4	119,395	2.4%
6/30/2018	444	51.8	116,625	13.6%
6/30/2017	464	47.6	102,624	9.9%
6/30/2016	498	46.5	93,338	7.9%
6/30/2015	560	48.5	86,535	2.0%
6/30/2014	609	51.6	84,804	4.1%
6/30/2013	657	53.5	81,465	1.5%
6/30/2012	712	57.1	80,263	0.4%
6/30/2011	767	61.3	79,983	(0.3)%
6/30/2010	806	64.6	80,197	0.1%

WSPRS Plan 2				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	646	61.7	95,495	3.7%
6/30/2018	597	55.0	92,066	11.1%
6/30/2017	546	45.2	82,863	7.1%
6/30/2016	470	36.4	77,349	10.1%
6/30/2015	475	33.4	70,238	1.5%
6/30/2014	435	30.1	69,226	6.4%
6/30/2013	409	26.6	65,058	(0.2)%
6/30/2012	354	23.1	65,165	1.7%
6/30/2011	315	20.2	64,103	0.7%
6/30/2010	281	17.9	63,660	1.7%

JRS				
Valuation Date	Active Members	Annual Payroll in Millions	Average Annual Pay	Annualized % Increase in Average Pay
6/30/2019	_	_		n/a
6/30/2018	_	_	_	n/a
6/30/2017	_	_	_	n/a
6/30/2016	_	_	_	n/a
6/30/2015	_	_	_	n/a
6/30/2014	_	_	_	n/a
6/30/2013	_	_	_	(100.0)%
6/30/2012	2	0.3	148,832	(3.3)%
6/30/2011	3	0.5	153,962	1.4%
6/30/2010	5	0.8	151,908	0.7%

Averages are based on actual amounts, not rounded amounts.

Source: Office of the State Actuary

PERS Pla	ın l							
	Added t	o Rolls	Removed from R	olls	Rolls — End of Year			
Valuation Date	Number	Annual Allowances	Number All	Annual lowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	906	\$ 23,765,071	2,153 \$ 4	1,206,815	45,633	\$1,182,127,486	\$ 25,905	0.5%
6/30/2018	1,064	27,079,475	2,295 42	2,511,150	46,880	1,176,056,579	25,087	(0.5)%
6/30/2017	1,157	29,173,258	2,314 4	1,783,003	48,111	1,182,116,311	24,571	(0.4)%
6/30/2016	1,269	31,328,241	2,271 3	8,944,553	49,268	1,186,959,021	24,092	0.0%
6/30/2015	1,427	34,495,824	2,227 3	6,970,754	50,270	1,186,941,835	23,611	0.3%
6/30/2014	1,446	36,218,524	2,236 3	6,578,459	51,070	1,183,089,117	23,166	0.5%
6/30/2013	1,596	40,451,809	2,408 3	8,081,771	51,860	1,177,115,047	22,698	0.7%
6/30/2012	1,643	42,344,185	2,235 3	3,066,677	52,672	1,169,187,194	22,198	1.5%
6/30/2011	1,829	49,678,585	2,307 3	1,131,283	53,264	1,151,599,650	21,621	3.6%
6/30/2010	1,891	48,714,779	2,296 3	0,635,880	53,742	1,112,108,596	20,693	3.5%

PERS Pla	nn 2							
	Added	to Rolls	Removed	from Rolls	Rolls — End of Year			
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	Annual
6/30/2019	5,482	\$ 143,920,798	1,198	\$ 18,330,599	54,948	\$1,171,948,288	\$ 21,328	15.0%
6/30/2018	5,236	127,142,615	1,109	15,810,509	50,664	1,018,698,643	20,107	14.6%
6/30/2017	4,899	119,219,311	953	12,828,139	46,537	889,036,122	19,104	14.7%
6/30/2016	4,746	107,212,926	848	11,025,471	42,591	775,137,400	18,200	16.3%
6/30/2015	4,388	96,222,376	837	10,807,578	38,693	666,289,799	17,220	16.2%
6/30/2014	4,500	98,401,222	687	8,476,109	35,142	573,268,436	16,313	21.5%
6/30/2013	4,167	82,479,614	658	7,214,843	31,329	472,011,858	15,066	22.1%
6/30/2012	3,685	67,895,490	576	5,893,503	27,820	386,547,451	13,895	20.6%
6/30/2011	3,206	59,754,016	538	5,248,298	24,711	320,615,736	12,975	23.2%
6/30/2010	2,732	45,416,589	479	4,302,408	22,043	260,152,502	11,802	21.8%

PERS Pla	an 3							
	Added to	Rolls	Removed fr	om Rolls	Rolls — End of Year			
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	771 \$	10,339,832	52 3	\$ 434,547	5,684	\$ 67,490,777	\$ 11,874	20.2%
6/30/2018	760	10,183,950	57	522,312	4,965	56,138,161	11,307	23.3%
6/30/2017	635	7,368,171	57	523,055	4,262	45,529,344	10,683	18.8%
6/30/2016	549	6,749,974	51	472,466	3,684	38,310,147	10,399	21.8%
6/30/2015	581	6,525,449	29	179,408	3,186	31,459,343	9,874	26.8%
6/30/2014	527	5,973,884	32	179,191	2,634	24,801,688	9,416	33.6%
6/30/2013	414	4,231,693	25	175,440	2,139	18,566,461	8,680	31.1%
6/30/2012	377	3,768,015	15	95,645	1,750	14,165,571	8,095	36.6%
6/30/2011	289	2,750,573	15	115,610	1,388	10,366,918	7,469	36.8%
6/30/2010	211	1,847,618	17	105,335	1,114	7,575,590	6,800	33.1%

SERS Pla	n 2							
	Added to I	Rolls	Removed fr	rom Rolls	Rolls — End of Year			
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	1,077 \$	12,953,253	178	\$ 1,635,862	10,056	\$ 113,576,531	\$ 11,294	14.2%
6/30/2018	1,079	12,353,771	138	1,408,130	9,157	99,489,379	10,865	14.8%
6/30/2017	981	11,144,019	145	1,285,195	8,216	86,679,206	10,550	13.9%
6/30/2016	951	10,196,114	133	1,208,588	7,380	76,081,031	10,309	15.6%
6/30/2015	865	9,200,978	99	851,704	6,562	65,840,085	10,034	16.1%
6/30/2014	796	8,658,343	84	710,331	5,796	56,703,435	9,783	19.2%
6/30/2013	729	7,922,612	82	669,493	5,084	47,586,513	9,360	21.1%
6/30/2012	685	7,196,654	71	556,280	4,437	39,304,032	8,858	22.0%
6/30/2011	560	5,481,726	48	331,627	3,823	32,224,861	8,429	21.8%
6/30/2010	482	4,325,732	41	339,774	3,311	26,455,961	7,990	20.9%

SERS Pla	ın 3							
	Added to	Rolls	Removed fro	om Rolls	Rolls — End of Year			
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	1,259 \$	8,600,755	122 \$	655,946	9,987	\$ 62,644,209	\$ 6,273	17.7%
6/30/2018	1,227	8,264,566	102	466,904	8,850	53,241,154	6,016	19.6%
6/30/2017	1,107	6,932,099	90	427,741	7,725	44,505,909	5,761	18.3%
6/30/2016	1,020	6,004,617	62	332,298	6,708	37,605,743	5,606	20.0%
6/30/2015	981	6,027,951	56	226,130	5,750	31,328,571	5,448	24.4%
6/30/2014	875	5,235,885	45	185,272	4,825	25,178,188	5,218	28.1%
6/30/2013	803	4,385,800	22	91,177	3,995	19,657,323	4,920	31.1%
6/30/2012	636	3,285,871	27	105,484	3,214	14,992,908	4,665	28.5%
6/30/2011	553	3,038,825	21	73,455	2,605	11,667,747	4,479	37.2%
6/30/2010	332	1,614,718	18	51,140	2,073	8,504,426	4,102	25.6%

PSERS P	lan 2							
	Added to	Rolls	Removed	from Rolls	Rolls — End of Year			
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	66 \$	\$ 868,475	1	\$ 4,047	296	\$ 3,196,642	\$ 10,799	40.6%
6/30/2018	65	756,436	1	2,049	231	2,273,090	9,840	52.2%
6/30/2017	60	731,960	1	2,662	167	1,493,188	8,941	97.2%
6/30/2016	29	292,170	1	8,993	108	757,267	7,012	62.4%
6/30/2015	19	141,388	1	4,020	80	466,218	5,828	43.2%
6/30/2014	19	137,777	_	_	62	325,492	5,250	76.0%
6/30/2013	16	98,050	_	_	43	184,938	4,301	116.0%
6/30/2012	12	46,142	_	_	27	85,628	3,171	117.6%
6/30/2011	8	25,844	_	_	15	39,355	2,624	192.3%
6/30/2010	5	10,383	_	_	7	13,645	1,924	339.7%

TRS Plan	1							
	Added to	Rolls	Removed fro	m Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	364 \$	11,037,146	1,179 \$	25,239,066	32,570	\$ 883,913,977	\$ 27,139	0.2%
6/30/2018	415	12,542,186	1,181	24,809,661	33,385	882,369,797	26,430	(1.1)%
6/30/2017	507	15,521,132	1,143	22,683,502	34,151	892,397,120	26,131	(0.6)%
6/30/2016	646	20,261,374	1,098	22,164,314	34,787	897,662,583	25,805	0.0%
6/30/2015	745	23,336,449	1,145	22,271,095	35,239	897,354,684	25,465	0.3%
6/30/2014	834	27,345,364	1,107	21,680,225	35,639	894,749,810	25,106	0.8%
6/30/2013	889	28,516,769	1,031	19,814,149	35,912	887,718,032	24,719	1.2%
6/30/2012	1,007	32,011,915	1,071	19,959,639	36,054	877,408,017	24,336	1.6%
6/30/2011	1,161	37,444,310	1,058	18,622,578	36,118	863,605,633	23,911	4.0%
6/30/2010	947	27,363,548	964	16,376,709	36,015	829,998,363	23,046	3.2%

TRS Plan	n 2							
	Added to	Rolls	Removed f	rom Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	500 \$	14,684,731	81	\$ 1,708,617	5,855	\$ 147,429,039	\$ 25,180	12.9%
6/30/2018	449	12,512,286	73	1,370,188	5,436	130,592,485	24,024	11.8%
6/30/2017	443	12,236,147	70	1,222,920	5,060	116,829,889	23,089	11.5%
6/30/2016	444	11,780,089	62	1,099,744	4,687	104,820,736	22,364	13.6%
6/30/2015	452	11,891,498	41	703,305	4,305	92,291,775	21,438	15.4%
6/30/2014	493	12,353,083	44	699,410	3,894	79,974,743	20,538	20.0%
6/30/2013	422	10,037,156	37	626,458	3,445	66,622,927	19,339	19.6%
6/30/2012	424	9,371,702	21	336,553	3,060	55,682,494	18,197	20.8%
6/30/2011	362	7,470,573	25	307,667	2,657	46,085,043	17,345	21.3%
6/30/2010	249	5,208,999	33	383,886	2,320	37,984,977	16,373	17.7%

TRS Plan	1 3							
	Added to	Rolls	Removed fr	om Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annua Allowance	l Annual
6/30/2019	1,873 \$	33,603,801	97 3	\$ 1,209,523	13,701	\$ 209,054,726	\$ 15,258	3 21.7%
6/30/2018	1,736	29,434,230	75	925,142	11,925	171,767,574	14,404	22.5%
6/30/2017	1,487	23,877,322	66	717,229	10,264	140,243,092	13,664	21.0%
6/30/2016	1,452	21,733,070	62	710,943	8,843	115,928,937	13,110	24.5%
6/30/2015	1,411	20,685,113	52	518,497	7,453	93,089,105	12,490	29.4%
6/30/2014	1,271	18,346,307	40	361,104	6,094	71,957,258	11,808	36.5%
6/30/2013	1,083	13,777,247	24	234,999	4,863	52,704,816	10,838	38.0%
6/30/2012	896	10,668,293	26	207,788	3,804	38,191,899	10,040	39.3%
6/30/2011	714	8,168,048	15	132,216	2,934	27,425,422	9,347	44.5%
6/30/2010	454	4,632,283	10	73,282	2,235	18,983,833	8,494	34.9%

LEOFF P	lan 1							
	Added to	Rolls	Removed f	rom Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	Annual
6/30/2019	124 \$	6,248,768	307	\$ 14,076,426	6,891	\$ 372,727,451	\$ 54,089	1.1%
6/30/2018	128	6,921,347	282	12,692,982	7,074	368,563,427	52,101	1.6%
6/30/2017	129	7,252,592	279	11,953,943	7,228	362,660,957	50,174	0.8%
6/30/2016	132	7,074,185	261	11,649,210	7,378	359,684,499	48,751	(0.4)%
6/30/2015	153	8,756,563	251	10,586,867	7,507	361,094,205	48,101	1.4%
6/30/2014	124	6,809,466	248	10,922,714	7,605	356,280,207	46,848	0.0%
6/30/2013	146	7,890,561	262	10,485,897	7,729	356,229,923	46,090	1.7%
6/30/2012	162	9,325,170	249	9,732,437	7,845	350,199,616	44,640	3.0%
6/30/2011	136	7,331,503	212	8,121,870	7,932	340,160,704	42,885	0.5%
6/30/2010	167	9,065,821	246	9,545,410	8,008	338,503,613	42,271	0.3%

LEOFF P	lan 2							
	Added to	Rolls	Removed	from Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	666 \$	38,257,935	38	\$ 1,426,617	6,064	\$ 309,986,412	\$ 51,119	16.8%
6/30/2018	627	35,477,394	42	1,461,425	5,436	265,509,226	48,843	17.1%
6/30/2017	627	35,094,355	35	1,278,043	4,851	226,672,138	46,727	19.0%
6/30/2016	586	31,191,906	37	1,239,165	4,259	190,425,480	44,711	21.2%
6/30/2015	497	25,745,170	22	891,857	3,710	157,094,929	42,344	20.4%
6/30/2014	478	23,448,749	25	779,746	3,235	130,428,517	40,318	24.0%
6/30/2013	457	21,512,439	19	571,580	2,782	105,193,996	37,812	28.5%
6/30/2012	355	16,447,618	26	705,284	2,344	81,874,896	34,930	25.1%
6/30/2011	389	15,718,562	13	333,059	2,015	65,459,659	32,486	33.8%
6/30/2010	285	10,278,954	13	332,332	1,639	48,926,257	29,851	29.2%

WSPRS I	Plan 1							
	Added to	Rolls	Removed fro	om Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	61 \$	4,130,792	16 \$	751,399	1,181	\$ 65,345,923	\$ 55,331	8.6%
6/30/2018	41	2,386,374	18	791,692	1,136	60,174,528	52,971	5.1%
6/30/2017	54	2,725,385	19	888,471	1,113	57,262,228	51,449	5.0%
6/30/2016	69	3,646,614	24	922,612	1,078	54,523,333	50,578	7.6%
6/30/2015	60	2,780,816	23	781,775	1,033	50,674,128	49,055	5.9%
6/30/2014	51	2,304,665	19	597,779	996	47,829,447	48,022	6.5%
6/30/2013	67	3,124,867	18	587,613	964	44,897,586	46,574	9.1%
6/30/2012	59	2,674,231	19	715,514	915	41,147,922	44,970	6.6%
6/30/2011	42	1,918,898	18	476,475	875	38,597,849	44,112	5.1%
6/30/2010	33	1,549,594	16	489,562	851	36,718,045	43,147	6.0%

JRS								
	Added to	Rolls	Removed f	rom Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowance	% Increase in Annual Allowance
6/30/2019	1 \$	104,409	5	\$ 505,355	90	\$ 7,849,799	\$ 87,220	(3.0)%
6/30/2018	2	87,882	8	578,916	93	8,088,944	86,978	(4.9)%
6/30/2017	2	108,002	7	524,965	99	8,501,724	85,876	(5.0)%
6/30/2016	4	227,622	6	591,387	104	8,952,238	86,079	(2.5)%
6/30/2015	3	166,803	5	414,930	106	9,185,874	86,659	(1.3)%
6/30/2014	_	_	6	366,825	108	9,308,919	86,194	(1.4)%
6/30/2013	7	476,184	12	877,160	114	9,440,927	82,815	(1.5)%
6/30/2012	4	317,799	9	670,577	119	9,584,381	80,541	(1.7)%
6/30/2011	4	285,689	5	400,572	124	9,745,840	78,595	0.1%
6/30/2010	10	700,776	9	626,362	125	9,733,805	77,870	3.5%

JRF								
	Added to	Rolls	Removed fi	rom Rolls	Rolls — E	nd of Year		
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Averaç Annu Allowand	al Annual
6/30/2019	1 \$	10,588	2	\$ 77,125	10	\$ 328,034	\$ 32,80	3 (16.9)%
6/30/2018	_	_	_	_	11	394,572	35,87	0.0%
6/30/2017	1	44,310	1	5,397	11	394,572	35,87	0 (10.1)%
6/30/2016	_	_	1	_	11	438,882	39,89	1.2)%
6/30/2015	_	_	_	_	12	444,282	37,02	0.0%
6/30/2014	_	_	_	_	12	444,282	37,02	0.0%
6/30/2013	_	_	_	_	12	444,282	37,02	.4 (7.7)%
6/30/2012	_	_	1	18,329	12	481,389	40,11	6 (3.7)%
6/30/2011	_	_	_	_	13	499,719	38,44	0.0%
6/30/2010	_	_	_	_	13	499,719	38,44	0.0%

Source: Office of the State Actuary

### **Solvency Tests**

#### PERS Plan 1 **Dollars in Millions**

	Accrued Liabi	lities (Entry Aç	ge Normal Cost Method		Portion o	f Accrued Liabilit	ties Covered by	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 252.7	\$ 11,041.4	\$ 240.9	\$ 11,535.0	\$ 7,461.4	100 %	65 %	0 %
6/30/2018	313.6	11,305.2	323.4	11,942.2	7,193.4	100 %	61 %	0 %
6/30/2017	373.9	11,446.2	520.5	12,340.5	7,042.0	100 %	58 %	0 %
6/30/2016	443.8	11,378.5	501.0	12,323.2	6,958.2	100 %	57 %	0 %
6/30/2015	513.7	11,439.9	599.9	12,553.5	7,314.9	100 %	59 %	0 %
6/30/2014	589.2	11,387.8	743.3	12,720.4	7,761.5	100 %	63 %	0 %
6/30/2013	662.6	11,371.1	613.4	12,647.1	8,053.1	100 %	65 %	0 %
6/30/2012	740.8	10,685.6	707.0	12,133.4	8,520.6	100 %	73 %	0 %
6/30/2011	818.7	10,677.5	852.1	12,348.4	8,883.4	100 %	76 %	0 %
6/30/2010	912.6	10,232.0	1,096.0	12,240.7	9,293.0	100 %	82 %	0 %

### PERS Plan 2/3

**Dollars in Millions** 

	Accrued Li	iabilities (Aggı	regate Cost Method)		Portion o	of Accrued Liabilit	ties Covered by <i>I</i>	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 6,382.3	\$ 18,628.4	\$ 15,755.6	\$ 40,766.3	\$ 40,766.3	100 %	100 %	100 %
6/30/2018	5,960.0	16,577.6	14,063.4	36,601.0	36,601.0	100 %	100 %	100 %
6/30/2017	5,262.7	14,857.4	13,071.4	33,191.5	33,191.5	100 %	100 %	100 %
6/30/2016	4,932.6	13,186.4	12,143.6	30,262.5	30,262.5	100 %	100 %	100 %
6/30/2015	4,596.6	11,541.9	12,153.8	28,282.3	28,292.3	100 %	100 %	100 %
6/30/2014	4,357.1	9,925.2	12,104.0	26,386.3	26,386.3	100 %	100 %	100 %
6/30/2013	4,121.6	8,388.8	11,824.2	24,334.6	24,334.6	100 %	100 %	100 %
6/30/2012	3,878.2	6,710.3	12,064.0	22,652.6	22,652.6	100 %	100 %	100 %
6/30/2011	3,605.7	5,756.8	11,634.2	20,996.7	20,996.7	100 %	100 %	100 %
6/30/2010	3,388.0	4,753.4	11,332.7	19,474.1	19,474.1	100 %	100 %	100 %

### SERS Plan 2/3

#### **Dollars in Millions**

	tion Date         Member Contributions¹         Vested Members²         (employer-financed portion)         Total Ac Liz					Portion o	of Accrued Liabilit	ties Covered by A	Assets
Valuation Date	Member	Vested	(employer-financed	(1+2+3) Total Accrued Liability		Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 548.4	\$ 2,986.0	\$ 2,337.5	\$ 5,871.9	\$	5,871.9	100 %	100 %	100 %
6/30/2018	487.4	2,568.4	2,075.6	5,131.4		5,131.4	100 %	100 %	100 %
6/30/2017	408.4	2,272.2	1,932.2	4,612.8		4,612.8	100 %	100 %	100 %
6/30/2016	377.0	2,011.1	1,793.1	4,181.2		4,181.2	100 %	100 %	100 %
6/30/2015	347.4	1,751.4	1,801.8	3,900.6		3,900.6	100 %	100 %	100 %
6/30/2014	328.0	1,492.9	1,803.0	3,623.8		3,623.8	100 %	100 %	100 %
6/30/2013	309.2	1,267.1	1,758.3	3,334.6		3,334.6	100 %	100 %	100 %
6/30/2012	295.3	1,018.0	1,787.0	3,100.3		3,100.3	100 %	100 %	100 %
6/30/2011	279.8	862.1	1,730.3	2,872.1		2,872.1	100 %	100 %	100 %
6/30/2010	266.2	713.8	1,684.1	2,664.1		2,664.1	100 %	100 %	100 %

#### **PSERS Plan 2**

#### **Dollars in Millions**

	Accrued Li	iabilities (Agg	regate Cost Method)		Portion o	of Accrued Liabilit	ties Covered by	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 242.3	\$ 89.1	\$ 358.8	\$ 690.2	\$ 690.2	100 %	100 %	100 %
6/30/2018	208.9	69.6	293.7	572.2	572.2	100 %	100 %	100 %
6/30/2017	169.3	63.5	247.6	480.4	480.4	100 %	100 %	100 %
6/30/2016	147.9	43.1	210.6	401.6	401.6	100 %	100 %	100 %
6/30/2015	128.4	29.5	180.1	337.9	337.9	100 %	100 %	100 %
6/30/2014	109.5	21.5	147.2	278.2	278.2	100 %	100 %	100 %
6/30/2013	92.5	14.7	117.1	224.2	224.2	100 %	100 %	100 %
6/30/2012	76.5	9.2	94.8	180.5	180.5	100 %	100 %	100 %
6/30/2011	62.0	6.1	72.6	140.7	140.7	100 %	100 %	100 %
6/30/2010	46.9	4.2	51.7	102.9	102.9	100 %	100 %	100 %

TRS Plan 1 **Dollars in Millions** 

	Accrued Liabi	lities (Entry Aç	je Normal Cost Method)		Portion o	f Accrued Liabilit	ies Covered by	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 93.7	\$ 8,222.4	\$ 88.5	\$ 8,404.6	\$ 5,557.7	100 %	66 %	0 %
6/30/2018	124.0	8,349.9	108.6	8,582.5	5,399.1	100 %	63 %	0 %
6/30/2017	161.2	8,513.9	242.6	8,917.7	5,370.6	100 %	61 %	0 %
6/30/2016	209.6	8,494.7	195.7	8,900.0	5,439.6	100 %	62 %	0 %
6/30/2015	277.0	8,562.6	268.0	9,107.5	5,870.5	100 %	65 %	0 %
6/30/2014	347.4	8,530.4	372.3	9,250.1	6,352.8	100 %	70 %	0 %
6/30/2013	433.7	8,511.5	441.0	9,386.1	6,717.1	100 %	74 %	0 %
6/30/2012	509.9	7,952.4	534.4	8,996.7	7,144.5	100 %	83 %	0 %
6/30/2011	598.1	7,934.2	662.4	9,194.7	7,485.0	100 %	87 %	0 %
6/30/2010	663.6	7,586.5	870.0	9,120.0	7,791.3	100 %	94 %	0 %

TRS Plan 2/3 **Dollars in Millions** 

	Accrued Li	abilities (Aggı	regate Cost Method)		Portion o	of Accrued Liabilit	ties Covered by	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 816.4	\$ 6,335.9	\$ 8,158.6	\$ 15,310.9	\$ 15,310.9	100 %	100 %	100 %
6/30/2018	711.7	5,179.4	7,341.4	13,232.5	13,232.5	100 %	100 %	100 %
6/30/2017	577.2	4,545.5	6,762.4	11,885.1	11,885.1	100 %	100 %	100 %
6/30/2016	522.9	4,019.4	6,179.5	10,721.8	10,721.8	100 %	100 %	100 %
6/30/2015	474.6	3,443.8	6,034.4	9,952.8	9,952.8	100 %	100 %	100 %
6/30/2014	448.5	2,858.6	5,885.9	9,193.0	9,193.0	100 %	100 %	100 %
6/30/2013	424.4	2,335.8	5,645.8	8,406.1	8,406.1	100 %	100 %	100 %
6/30/2012	402.9	1,831.7	5,523.4	7,757.9	7,757.9	100 %	100 %	100 %
6/30/2011	382.6	1,516.3	5,241.7	7,140.6	7,140.6	100 %	100 %	100 %
6/30/2010	366.3	1,224.5	5,002.5	6,593.3	6,593.3	100 %	100 %	100 %

LEOFF Plan 1 **Dollars in Millions** 

	Accrued L	iabilities (Entr	y Age Cost Method)		Portion o	f Accrued Liabilit	ties Covered by A	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 4.9	\$ 4,052.2	\$ 19.8	\$ 4,076.8	\$ 5,734.1	100 %	100 %	100 %
6/30/2018	6.1	4,062.4	26.2	4,094.7	5,538.3	100 %	100 %	100 %
6/30/2017	8.6	4,070.6	41.8	4,121.0	5,403.3	100 %	100 %	100 %
6/30/2016	13.0	4,123.4	61.0	4,197.4	5,275.0	100 %	100 %	100 %
6/30/2015	16.8	4,212.1	78.2	4,307.1	5,403.6	100 %	100 %	100 %
6/30/2014	23.4	4,188.6	110.6	4,322.6	5,499.3	100 %	100 %	100 %
6/30/2013	27.1	4,254.5	119.4	4,401.0	5,516.4	100 %	100 %	100 %
6/30/2012	33.5	3,945.9	134.5	4,113.9	5,561.6	100 %	100 %	100 %
6/30/2011	43.3	3,898.6	196.2	4,138.0	5,565.3	100 %	100 %	100 %
6/30/2010	49.5	4,090.6	245.9	4,386.0	5,560.9	100 %	100 %	100 %

#### LEOFF Plan 2 **Dollars in Millions**

	Accrued Li	iabilities (Aggı	regate Cost Method)		Portion o	of Accrued Liabilit	ties Covered by A	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets <sup>3</sup>	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 2,777.6	\$ 5,061.3	\$ 5,454.9	\$ 13,293.8	\$ 13,293.8	100 %	100 %	100 %
6/30/2018	2,653.7	4,408.1	4,909.8	11,971.6	11,971.6	100 %	100 %	100 %
6/30/2017	2,522.7	3,798.9	4,715.9	11,037.5	11,037.5	100 %	100 %	100 %
6/30/2016	2,392.2	3,365.0	4,264.0	10,021.3	10,021.3	100 %	100 %	100 %
6/30/2015	2,311.3	2,746.8	4,262.0	9,320.2	9,320.2	100 %	100 %	100 %
6/30/2014	2,179.6	2,287.3	4,171.1	8,637.9	8,637.9	100 %	100 %	100 %
6/30/2013	2,054.4	1,862.4	3,945.5	7,862.3	7,862.3	100 %	100 %	100 %
6/30/2012	1,925.9	1,427.7	3,868.3	7,221.9	7,221.9	100 %	100 %	100 %
6/30/2011	1,782.2	1,166.1	3,672.3	6,620.7	6,620.7	100 %	100 %	100 %
6/30/2010	1.615.0	924.7	3,503,0	6.042.7	6.042.7	100 %	100 %	100 %

#### WSPRS Plan 1/2

#### **Dollars in Millions**

	Accrued L	iabilities (Aggı	regate Cost Method)		Portion o	of Accrued Liabilit	ties Covered by A	Assets
Valuation Date	(1) Active Member Contributions <sup>1</sup>	(2) Retired/ Vested Members <sup>2</sup>	(3) Active Members (employer-financed portion)	(1+2+3) Total Accrued Liability	Valuation Assets	(1) Active Member Contributions	(2) Inactive Member Liability	(3) Excess Accrued Liability
6/30/2019	\$ 91.0	\$ 935.3	\$ 274.4	\$ 1,300.7	\$ 1,300.7	100 %	100 %	100 %
6/30/2018	87.5	871.9	255.5	1,214.9	1,214.9	100 %	100 %	100 %
6/30/2017	79.7	837.1	227.6	1,144.4	1,144.4	100 %	100 %	100 %
6/30/2016	75.0	811.2	197.7	1,084.0	1,084.0	100 %	100 %	100 %
6/30/2015	75.5	752.0	239.6	1,067.1	1,067.1	100 %	100 %	100 %
6/30/2014	74.1	703.2	266.9	1,044.2	1,044.2	100 %	100 %	100 %
6/30/2013	71.6	663.3	274.4	1,009.4	1,009.4	100 %	100 %	100 %
6/30/2012	70.8	576.1	334.9	981.7	981.7	100 %	100 %	100 %
6/30/2011	69.0	541.2	339.3	949.5	949.5	100 %	100 %	100 %
6/30/2010	66.4	496.5	356.7	919.6	919.6	100 %	100 %	100 %

<sup>&</sup>lt;sup>1</sup> Includes prior contributions made by terminated non-vested members which remain in the trust fund.

Totals might not agree due to rounding, and percentages are based on actual, not rounded, totals.

PERS Plan 2/3, SERS Plan 2/3, PSERS Plan 2, TRS Plan 2/3, LEOFF Plan 2 and WSPRS Plan 1/2: The Actuarial Accrued Liability (AAL) presented in these charts reflects the actual actuarial valuation method (Aggregate Cost) used to calculate the annual required contributions for these plans. This aggregate actuarial cost method does not separately amortize unfunded actuarial liabilities and, by definition, sets the accrued liabilities equal to the assets. Therefore, the funded status is always 100%. These AAL amounts differ from those presented in the schedules of funded status and funding progress included within the Actuarial Section, where a different valuation method (Entry Age Normal) is used as a surrogate.

JRS and JRF are funded on a pay-as-you-go basis, the solvency of the plans is guaranteed by the state and the plans are excluded from the actuarial valuations of the retirements systems. JRS and JRF are excluded from the Solvency Test schedules.

Source: Office of the State Actuary

<sup>&</sup>lt;sup>2</sup> Includes inactive liabilities from beneficiaries, members on disability retirement, and legal order payees.

<sup>&</sup>lt;sup>3</sup> LEOFF Plan 2 Actuarial Value of Assets excludes \$22.0 Million held in the LEOFF 2 Benefit Improvement Account (BIA). The plans assets for 2019 have also been reduced by \$300 Million payable to the BIA effective 7/1/19 (C 366 L 19). Under RCW 41.26.805, assets held in the BIA are not included when calculating contribution rates.

# Analysis of Financial Experience

PERS Plan 1																				
Dollars in Millions																				
Type of Activity	6	/30/2019	6/	30/2018	6	/30/2017	6	/30/2016	6	30/2015	6	6/30/2014	(	6/30/2013	(	6/30/2012	6	/30/2011	6/	30/2010
Investment Returns <sup>1</sup>	\$	453.9	\$	211.1	\$	118.4	\$	(339.8)	\$	(447.8)	\$	(308.7)	\$	(417.4)	\$	(340.4)	\$	(397.7)	\$	(668.0)
Salary Growth		(3.4)		(3.9)		2.5		(6.2)		10.5		(1.4)		25.8		47.9		59.9		54.2
Termination of Employment		0.4		(0.5)		(0.7)		(0.4)		0.2		(0.3)		1.1		0.5		0.1		1.2
Return to Work from Terminated Status		(1.3)		(2.5)		(3.0)		(4.8)		(2.6)		(3.9)		(2.8)		(3.2)		(6.4)		(8.0)
Gain (or Loss) During Year from Selected Experience	\$	449.6	\$	204.2	\$	117.2	\$	(351.2)	\$	(439.7)	\$	(314.3)	\$	(393.3)	\$	(295.2)	\$	(344.1)	\$	(620.6)

PERS Plan 2/3																				
Dollars in Millions																				
Type of Activity	6	6/30/2019	6	/30/2018	6	/30/2017	6	/30/2016	6	/30/2015	6	6/30/2014	(	6/30/2013	6	/30/2012	6	/30/2011	6/	30/2010
Investment Returns <sup>1</sup>	\$	1,238.7	\$	616.5	\$	151.4	\$	(700.3)	\$	(591.8)	\$	(323.2)	\$	(302.6)	\$	(295.6)	\$	(404.3)	\$	(619.2)
Salary Growth		(171.8)		(112.5)		157.4		(61.2)		331.5		60.7		481.1		663.9		731.7		577.8
Termination of Employment		228.3		169.9		115.9		162.3		192.2		116.6		131.8		129.3		118.3		18.0
Return to Work from Terminated Status		(105.7)		(70.5)		(72.0)		(98.1)		(68.1)		(64.7)		(66.3)		(58.3)		(44.1)		(50.2)
Gain (or Loss) During Year from Selected Experience	\$	1,189.5	\$	603.4	\$	352.7	\$	(697.3)	\$	(136.2)	\$	(210.6)	\$	244.0	\$	439.3	\$	401.6	\$	(73.6)

SERS Plan 2/3																				
Dollars in Millions																				
Type of Activity	6	/30/2019	6	/30/2018	6	/30/2017	6	/30/2016	6	/30/2015	6	6/30/2014	6	30/2013	6.	/30/2012	6/	30/2011	6/	30/2010
Investment Returns <sup>1</sup>	\$	173.9	\$	79.2	\$	4.9	\$	(126.3)	\$	(96.2)	\$	(64.0)	\$	(66.4)	\$	(69.6)	\$	(80.5)	\$	(115.1)
Salary Growth		(217.6)		(109.7)		(60.4)		(93.5)		(7.1)		9.1		53.1		94.1		75.1		84.5
Termination of Employment		38.5		46.7		41.8		28.1		30.9		27.0		18.0		20.3		8.3		3.1
Return to Work from Terminated Status		(17.1)		(8.2)		(6.3)		(5.9)		(8.9)		(6.5)		(4.7)		(3.5)		(5.2)		(5.5)
Gain (or Loss) During Year from Selected Experience	\$	(22.3)	\$	8.0	\$	(20.0)	\$	(197.6)	\$	(81.3)	\$	(34.4)	\$	_	\$	41.3	\$	(2.3)	\$	(33.0)

<sup>&</sup>lt;sup>1</sup> Actuarial value of assets

# Analysis of Financial Experience (cont.)

PSERS Plan 2																				
Dollars in Millions																				
Type of Activity	6/	/30/2019	6/3	30/2018	6	/30/2017	6	/30/2016	6	30/2015	6	/30/2014	6	6/30/2013	6/	30/2012	6/	30/2011	6/3	30/2010
Investment Returns <sup>1</sup>	\$	29.2	\$	9.3	\$	4.1	\$	(3.9)	\$	0.8	\$	1.3	\$	0.8	\$	(0.4)	\$	0.4	\$	(1.2)
Salary Growth		(21.8)		(7.5)		(8.2)		3.9		5.3		6.1		14.1		17.7		14.9		10.3
Termination of Employment		17.5		11.9		11.7		16.4		9.8		6.9		3.7		7.7		4.2		4.7
Return to Work from Terminated Status		(3.7)		(2.4)		(3.2)		(3.5)		(2.5)		(0.5)		(0.9)		_		_		_
Gain (or Loss) During Year from Selected Experience	\$	21.2	\$	11.3	\$	4.4	\$	12.9	\$	13.4	\$	13.8	\$	17.7	\$	25.0	\$	19.5	\$	13.8

TRS Plan 1																				
Dollars in Millions																				
Type of Activity	6	/30/2019	6	/30/2018	6/	30/2017	6	/30/2016	6	/30/2015	E	6/30/2014	(	6/30/2013	6	/30/2012	6	/30/2011	6	/30/2010
Investment Returns <sup>1</sup>	\$	326.7	\$	130.1	\$	20.9	\$	(355.6)	\$	(414.5)	\$	(311.3)	\$	(324.0)	\$	(262.3)	\$	(247.3)	\$	(502.1)
Salary Growth		(5.6)		(3.7)		(1.4)		(5.7)		11.4		4.4		20.6		45.5		36.5		60.7
Termination of Employment		_		_		0.0		_		(0.3)		(0.2)		0.3		(0.3)		0.2		0.9
Return to Work from Terminated Status		(1.7)		(0.7)		(0.5)		(1.2)		(1.0)		(0.9)		(1.6)		(2.2)		(4.4)		(7.3)
Gain (or Loss) During Year from Selected Experience	\$	319.4	\$	125.7	\$	19.0	\$	(362.5)	\$	(404.4)	\$	(308.0)	\$	(304.7)	\$	(219.3)	\$	(215.0)	\$	(447.8)

TRS Plan 2/3																				
Dollars in Millions																				
Type of Activity	6/	/30/2019	6/	30/2018	6/	30/2017	6	/30/2016	6.	/30/2015	6	/30/2014	•	6/30/2013	6	/30/2012	6/	30/2011	6/	30/2010
Investment Returns <sup>1</sup>	\$	409.0	\$	223.4	\$	85.3	\$	(259.5)	\$	(200.8)	\$	(120.4)	\$	(122.3)	\$	(142.0)	\$	(180.6)	\$	(266.8)
Salary Growth		(512.4)		(168.5)		23.9		(72.2)		234.4		148.9		226.6		389.0		252.6		341.3
Termination of Employment		208.0		216.3		214.3		209.9		201.4		152.6		120.7		130.0		85.5		92.9
Return to Work from Terminated Status		(186.2)		(142.2)		(139.7)		(122.1)		(94.3)		(78.0)		(56.5)		(39.9)		(43.7)		(37.5)
Gain (or Loss) During Year from Selected Experience	\$	(81.6)	\$	129.0	\$	183.8	\$	(243.9)	\$	140.7	\$	103.1	\$	168.5	\$	337.1	\$	113.8	\$	129.9

<sup>&</sup>lt;sup>1</sup> Actuarial value of assets

### Analysis of Financial Experience (cont.)

LEOFF Plan 1																				
Dollars in Millions																				
Type of Activity	6	/30/2019	6/	30/2018	6/	30/2017	6	/30/2016	(	6/30/2015	6	6/30/2014	6	6/30/2013	6	/30/2012	6	/30/2011	6.	/30/2010
Investment Returns <sup>1</sup>	\$	159.0	\$	105.8	\$	96.1	\$	(169.2)	\$	(153.1)	\$	(75.9)	\$	(118.6)	\$	(86.9)	\$	(84.2)	\$	(144.8)
Salary Growth		1.0		2.6		(1.8)		3.5		0.9		4.0		3.5		4.3		6.2		1.9
Termination of Employment		_		(0.1)		_		(0.1)		_		(0.2)		(0.1)		_		(0.1)		(0.1)
Return to Work from Terminated Status		_		_		(0.1)		0.3		0.3		(1.2)		_		_		(0.2)		0.5
Gain (or Loss) During Year from Selected Experience	\$	160.0	\$	108.3	\$	94.2	\$	(165.5)	\$	(151.9)	\$	(73.3)	\$	(115.2)	\$	(82.6)	\$	(78.3)	\$	(142.5)

LEOFF Plan 2																				
Dollars in Millions																				
Type of Activity	6/	/30/2019	6/	30/2018	6/	/30/2017	6	/30/2016	6	/30/2015	6.	/30/2014	6	/30/2013	E	6/30/2012	6/	30/2011	6/3	30/2010
Investment Returns <sup>1</sup>	\$	493.9	\$	140.5	\$	216.2	\$	(74.8)	\$	(43.6)	\$	88.0	\$	16.7	\$	(4.5)	\$	(1.9)	\$	(68.7)
Salary Growth		(144.5)		(14.2)		92.2		154.7		(2.2)		6.9		117.5		186.3		164.7		91.1
Termination of Employment		9.3		10.0		3.6		28.3		7.6		6.5		3.4		9.0		2.5		25.8
Return to Work from Terminated Status		(2.3)		(2.4)		(25.5)		(3.2)		(4.5)		(5.4)		(6.6)		(4.5)		(16.8)		(12.6)
Gain (or Loss) During Year from Selected Experience	\$	356.4	\$	133.9	\$	286.5	\$	105.0	\$	(42.7)	\$	96.0	\$	131.0	\$	186.3	\$	148.5	\$	35.6

WSPRS Plan 1/2																				
Dollars in Millions																				
Type of Activity	6/	/30/2019	6/3	30/2018	6/	/30/2017	6	/30/2016	6	/30/2015	6	/30/2014	6	/30/2013	6/	/30/2012	6	/30/2011	6/3	30/2010
Investment Returns <sup>1</sup>	\$	30.0	\$	13.9	\$	7.7	\$	(30.7)	\$	(23.3)	\$	(10.0)	\$	(10.2)	\$	(6.7)	\$	(8.5)	\$	(20.5)
Salary Growth		2.8		1.5		(22.8)		(20.3)		7.2		(1.3)		8.6		12.5		18.8		19.0
Termination of Employment		(0.1)		0.9		(0.5)		7.2		5.7		2.8		(0.3)		2.5		0.1		(1.0)
Return to Work from Terminated Status		_		_		_		(0.2)		(0.5)		_		(0.4)		(0.3)		(0.2)		(0.5)
Gain (or Loss) During Year from Selected Experience	\$	32.7	\$	16.3	\$	(15.6)	\$	(44.0)	\$	(10.9)	\$	(8.5)	\$	(2.3)	\$	8.0	\$	10.2	\$	(3.0)

<sup>&</sup>lt;sup>1</sup> Actuarial value of assets

Source: Office of the State Actuary

Totals are a result of differences between assumed experience and actual experience.

JRS and JRF are funded on a pay-as-you-go basis, the solvency of the plans is guaranteed by the state and the plans are excluded from the actuarial valuations of the retirement systems. JRS and JRF are excluded from the Analysis of Financial Experience schedules.

### **Schedules of Funding Progress**

The Schedules of Funding Progress present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the Actuarial Accrued Liabilities for benefits.

PERS Plan 1																			
Dollars in Millions																			
Actuarial Valuation Date	6/30/2019	6	6/30/2018	Е	30/2017	Е	/30/2016	Е	/30/2015	(	6/30/2014	6	/30/2013	6	/30/2012	Е	/30/2011	6	30/2010
<b>Actuarial Value of Plan Assets</b>	\$ 7,461	\$	7,193	\$	7,042	\$	6,958	\$	7,315	\$	7,761	\$	8,053	\$	8,521	\$	8,883	\$	9,293
Actuarial Accrued Liability	\$ 11,535	\$	11,942	\$	12,341	\$	12,323	\$	12,553	\$	12,720	\$	12,874	\$	12,360	\$	12,571	\$	12,538
<b>Unfunded Actuarial Liability</b>	\$ 4,074	\$	4,749	\$	5,299	\$	5,365	\$	5,239	\$	4,959	\$	4,821	\$	3,839	\$	3,688	\$	3,245
Percentage Funded	65%		60%		57%		56%		58%		61%		63%		69%		71%		74%
Covered Payroll <sup>1</sup>	\$ 13,984	\$	13,176	\$	12,436	\$	11,744	\$	11,151	\$	10,804	\$	10,417	\$	10,400	\$	10,516	\$	10,575
Unfunded Actuarial Liability as a Percentage of Covered Payroll	29%		36%		43%		46%		47%		46%		46%		37%		35%		31%

<sup>1</sup> Portions of the above covered payroll include the covered payrolls of PERS Plan 2/3, SERS Plan 2/3 and PSERS Plan 2. Refer to "Required Supplementary Information" in the Financial Section for the covered payroll detail by system plan.

PERS Plan 2/3																		
Dollars in Millions																		
Actuarial Valuation Date	6/30/2019	6	6/30/2018	6	6/30/2017	6	30/2016	(	6/30/2015	6/30/2014	6	6/30/2013	6	/30/2012	6	30/2011	6	/30/2010
<b>Actuarial Value of Plan Assets</b>	\$ 40,766	\$	36,601	\$	33,191	\$	30,262	\$	28,292	\$ 26,386	\$	24,335	\$	22,653	\$	20,997	\$	19,474
Actuarial Accrued Liability	\$ 42,600	\$	40,024	\$	37,166	\$	34,759	\$	32,008	\$ 29,321	\$	26,540	\$	22,780	\$	21,627	\$	20,029
<b>Unfunded Actuarial Liability</b>	\$ 1,833	\$	3,423	\$	3,975	\$	4,497	\$	3,715	\$ 2,935	\$	2,205	\$	127	\$	630	\$	555
Percentage Funded	96%		91%		89%		87%		88%	90%		92%		99%		97%		97%
Covered Payroll	\$ 10,961	\$	10,419	\$	9,856	\$	9,323	\$	8,877	\$ 8,608	\$	8,265	\$	8,126	\$	8,140	\$	8,151
Unfunded Actuarial Liability as a																		
Percentage of Covered Payroll	17%		33%		40%		48%		42%	34%		27%		2%		8%		7%

### Schedules of Funding Progress (cont.)

SERS Plan 2/3																			
Dollars in Millions																			
<b>Actuarial Valuation Date</b>	6/30/2019	6	30/2018	6	/30/2017	6	/30/2016	6	/30/2015	(	6/30/2014	6	/30/2013	6	/30/2012	6	/30/2011	6	/30/2010
<b>Actuarial Value of Plan Assets</b>	\$ 5,872	\$	5,131	\$	4,613	\$	4,181	\$	3,901	\$	3,624	\$	3,335	\$	3,100	\$	2,872	\$	2,664
Actuarial Accrued Liability	\$ 6,474	\$	5,748	\$	5,242	\$	4,826	\$	4,381	\$	3,965	\$	3,581	\$	3,103	\$	2,956	\$	2,706
<b>Unfunded Actuarial Liability</b>	\$ 602	\$	617	\$	629	\$	644	\$	481	\$	341	\$	247	\$	3	\$	84	\$	41
Percentage Funded	91%		89%		88%		87%		89%		91%		93%		100%		97%		98%
Covered Payroll	\$ 2,435	\$	2,213	\$	2,040	\$	1,878	\$	1,720	\$	1,616	\$	1,549	\$	1,639	\$	1,650	\$	1,619
Unfunded Actuarial Liability as a Percentage of Covered Payroll	25%		28%		31%		34%		28%		21%		16%		0%		5%		3%

PSERS Plan 2																		
Dollars in Millions																		
<b>Actuarial Valuation Date</b>	6/30/2019	6	/30/2018	6	6/30/2017	6	/30/2016	6	30/2015	6/30/2014	6	/30/2013	(	6/30/2012	6	6/30/2011	6/	30/2010
<b>Actuarial Value of Plan Assets</b>	\$ 690	\$	572	\$	480	\$	402	\$	338	\$ 278	\$	224	\$	180	\$	141	\$	103
Actuarial Accrued Liability	\$ 685	\$	596	\$	506	\$	425	\$	357	\$ 291	\$	218	\$	159	\$	126	\$	94
<b>Unfunded Actuarial Liability</b>	\$ (6)	\$	24	\$	25	\$	24	\$	19	\$ 13	\$	(7)	\$	(22)	\$	(14)	\$	(9)
Percentage Funded	101%		96%		95%		94%		95%	96%		103%		114%		111%		109%
Covered Payroll	\$ 469	\$	393	\$	357	\$	325	\$	293	\$ 270	\$	249	\$	236	\$	232	\$	233
Unfunded Actuarial Liability as a																		
Percentage of Covered Payroll	(1)%		6%		7%		7%		6%	5%		(3)%		(9)%		(6)%		(4)%

TRS Plan 1																			
Dollars in Millions																			
<b>Actuarial Valuation Date</b>	6/30/2019	6	/30/2018	6	/30/2017	6	/30/2016	6	/30/2015	6	6/30/2014	Е	/30/2013	6	/30/2012	6	/30/2011	6/	30/2010
<b>Actuarial Value of Plan Assets</b>	\$ 5,558	\$	5,399	\$	5,371	\$	5,440	\$	5,870	\$	6,353	\$	6,717	\$	7,145	\$	7,485	\$	7,791
Actuarial Accrued Liability	\$ 8,405	\$	8,583	\$	8,918	\$	8,900	\$	9,107	\$	9,250	\$	9,429	\$	9,038	\$	9,232	\$	9,201
<b>Unfunded Actuarial Liability</b>	\$ 2,847	\$	3,183	\$	3,547	\$	3,460	\$	3,237	\$	2,897	\$	2,712	\$	1,894	\$	1,747	\$	1,410
Percentage Funded	66%		63%		60%		61%		64%		69%		71%		79%		81%		85%
Covered Payroll <sup>1</sup>	\$ 6,758	\$	5,939	\$	5,530	\$	5,138	\$	4,795	\$	4,585	\$	4,396	\$	4,443	\$	4,521	\$	4,475
Unfunded Actuarial Liability as a Percentage of Covered Payroll	42%		54%		64%		67%		68%		63%		62%		43%		39%		32%

<sup>1</sup> Portions of the above covered payroll include the covered payrolls of TRS Plan 2/3. Refer to "Required Supplementary Information" in the Financial Section for the covered payroll detail by system plan.

# Schedules of Funding Progress (cont.)

TRS Plan 2/3																			
Dollars in Millions																			
Actuarial Valuation Date	(	6/30/2019	6	/30/2018	(	6/30/2017	6	/30/2016	6	6/30/2015	6/30/2014	6	6/30/2013	6.	/30/2012	6	/30/2011	6	/30/2010
<b>Actuarial Value of Plan Assets</b>	\$	15,311	\$	13,232	\$	11,885	\$	10,722	\$	9,953	\$ 9,193	\$	8,406	\$	7,758	\$	7,141	\$	6,593
Actuarial Accrued Liability	\$	16,883	\$	14,705	\$	13,095	\$	11,983	\$	10,831	\$ 9,819	\$	8,794	\$	7,478	\$	7,194	\$	6,558
<b>Unfunded Actuarial Liability</b>	\$	1,572	\$	1,473	\$	1,210	\$	1,261	\$	879	\$ 626	\$	388	\$	(280)	\$	53	\$	(36)
Percentage Funded		91%		90%		91%		89%		92%	94%		96%		104%		99%		101%
Covered Payroll	\$	6,722	\$	5,892	\$	5,466	\$	5,054	\$	4,682	\$ 4,437	\$	4,204	\$	4,163	\$	4,171	\$	4,056
Unfunded Actuarial Liability as a																			
Percentage of Covered Payroll		23%		25%		22%		25%		19%	14%		9%		(7)%		1%		(1)%

LEOFF Plan 1																		
Dollars in Millions																		
<b>Actuarial Valuation Date</b>	6/30/2019	6/30/2018	(	6/30/2017	E	30/2016	E	3/30/2015	(	6/30/2014	6	30/2013	(	30/2012	E	30/2011	6	/30/2010
<b>Actuarial Value of Plan Assets</b>	\$ 5,734	\$ 5,538	\$	5,403	\$	5,275	\$	5,404	\$	5,499	\$	5,516	\$	5,562	\$	5,565	\$	5,561
Actuarial Accrued Liability	\$ 4,077	\$ 4,095	\$	4,121	\$	4,197	\$	4,307	\$	4,323	\$	4,409	\$	4,120	\$	4,145	\$	4,393
<b>Unfunded Actuarial Liability</b>	\$ (1,657)	\$ (1,444)	\$	(1,282)	\$	(1,078)	\$	(1,097)	\$	(1,177)	\$	(1,108)	\$	(1,441)	\$	(1,421)	\$	(1,168)
Percentage Funded	141%	135%		131%		126%		125%		127%		125%		135%		134%		127%
Covered Payroll	\$ 2	\$ 4	\$	5	\$	8	\$	11	\$	14	\$	17	\$	21	\$	27	\$	32
Unfunded Actuarial Liability as a																		
Percentage of Covered Payroll	(82,850)%	(36,100)%		(25,640)%		(13,475)%		(9,973)%		(8,407)%		(6,518)%		(6,862)%		(5,263)%		(3,650)%

LEOFF Plan 2																				
Dollars in Millions																				
Actuarial Valuation Date	(	6/30/2019	E	6/30/2018	6	6/30/2017	6	/30/2016	6	/30/2015	(	6/30/2014	6	/30/2013	6.	/30/2012	6	/30/2011	6	/30/2010
<b>Actuarial Value of Plan Assets</b>	\$	13,294	\$	11,972	\$	11,037	\$	10,021	\$	9,320	\$	8,638	\$	7,862	\$	7,222	\$	6,621	\$	6,043
Actuarial Accrued Liability	\$	11,992	\$	11,066	\$	10,160	\$	9,571	\$	8,838	\$	8,069	\$	7,220	\$	6,353	\$	5,941	\$	5,164
<b>Unfunded Actuarial Liability</b>	\$	(1,302)	\$	(906)	\$	(878)	\$	(450)	\$	(482)	\$	(569)	\$	(643)	\$	(869)	\$	(679)	\$	(879)
Percentage Funded		111%		108%		109%		105%		105%		107%		109%		114%		111%		117%
Covered Payroll	\$	2,151	\$	1,989	\$	1,883	\$	1,804	\$	1,744	\$	1,674	\$	1,605	\$	1,569	\$	1,542	\$	1,516
Unfunded Actuarial Liability as a																				
Percentage of Covered Payroll		(61)%		(46)%		(47)%		(25)%		(28)%		(34)%		(40)%		(55)%		(44)%		(58)%

### Schedules of Funding Progress (cont.)

#### WSPRS Plan 1/2 **Dollars in Millions** 6/30/2019 6/30/2018 6/30/2017 6/30/2015 6/30/2014 6/30/2013 6/30/2012 6/30/2011 6/30/2010 **Actuarial Valuation Date** 6/30/2016 Actuarial Value of Plan Assets \$ \$ \$ \$ \$ \$ \$ \$ 982 \$ \$ 1.301 1.215 1.144 1.084 1.067 1.044 1.009 949 920 **Actuarial Accrued Liability** 1,370 \$ 1,302 \$ 1.244 \$ \$ 1,093 \$ 1,042 \$ 987 \$ \$ \$ 1,186 884 859 812 Unfunded Actuarial Liability \$ 70 \$ 87 \$ 100 \$ 102 \$ 26 \$ (2) \$ \$ (90)\$ (107)(22)(97)\$ **Percentage Funded** 95% 93% 92% 91% 98% 100% 102% 111% 110% 113% Covered Payroll \$ 112 \$ 109 93 83 \$ 82 82 \$ \$ 87 84 82 \$ 83 **Unfunded Actuarial Liability as a**

Liability amounts and ratios/percentages are based on actual, not rounded, figures.

63%

**Percentage of Covered Payroll** 

PERS Plan 2/3, SERS Plan 2/3, PSERS Plan 2/3, LEOFF Plan 2 and WSPRS Plan 1/2: These plans all use the aggregate actuarial cost method, which does not separately amortize Unfunded Actuarial Accrued Liabilities (UAALs) outside the normal cost. Instead, the entry age normal actuarial cost method was used to determine the UAAL. This method is intended to serve as a surrogate for the funded status of these plans.

117%

31%

(2)%

(27)%

(118)%

(110)%

(129)%

JRS and JRF are funded on a pay-as-you-go basis, the solvency of the plans is guaranteed by the state and the plans are excluded from the actuarial valuations of the retirement systems. JRS and JRF are excluded from the Schedules of Funding Progress.

Sources: Office of the State Actuary and Department of Retirement Systems

Ten-year schedules of actuarially determined and actual contributions are included in "Required Supplementary Information" in the Financial Section.

80%

108%

### Funded Status and Funding Progress

# Funded Status of Each Plan as of June 30, 2019, the Most Recent Actuarial Valuation Date Dollars in Millions

Plan	Actua	arial Value of Assets (a)	Act	uarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
PERS Plan 1 <sup>1</sup>	\$	7,461.4	\$	11,535.0	\$ 4,073.6	65%	\$ 13,984.5	29%
PERS Plan 2/3 <sup>2</sup>		40,766.3		42,599.8	1,833.4	96%	10,960.7	17%
SERS Plan 2/3 <sup>2</sup>		5,871.9		6,474.3	602.4	91%	2,435.1	25%
PSERS Plan 2 <sup>2</sup>		690.2		684.7	(5.5)	101%	469.3	(1)%
TRS Plan 1 <sup>3</sup>		5,557.7		8,404.6	2,846.8	66%	6,758.3	42%
TRS Plan 2/3 <sup>2</sup>		15,310.9		16,882.7	1,571.8	91%	6,721.6	23%
LEOFF Plan 1		5,734.1		4,076.8	(1,657.2)	141%	2.5	(66,288)%
LEOFF Plan 2 <sup>2</sup>		13,293.8		11,992.0	(1,301.8)	111%	2,150.7	(61)%
WSPRS Plan 1/2 <sup>2</sup>		1,300.7		1,370.2	69.5	95%	111.6	62%
Total	\$	95,987	\$	104,020.2	\$ 8,032.9	92%	\$ 43,594.3	18%

<sup>&</sup>lt;sup>1</sup> Portions of the PERS Plan 1 covered payroll include the covered payrolls of PERS Plan 2/3, SERS Plan 2/3 and PSERS Plan 2. Refer to "Required Supplementary Information" in the Financial Section for the covered payroll detail by system plan..

JRS and JRF are funded on a pay-as-you-go basis, the solvency of the plans is guaranteed by the state and the plans are excluded from the actuarial valuations of the retirement systems. JRS and JRF are excluded from the Funded Status and Funding Progress.

Totals might not agree due to rounding. Percentages are calculated using unrounded totals.

Sources: Office of the State Actuary (Actuarial Value of Assets, Actuarial Accrued Liability (AAL) Entry Age, Unfunded AAL (UAAL)) and Department of Retirement Systems (Covered Payroll, UAAL as a % of Covered Payroll)

<sup>&</sup>lt;sup>2</sup> These plans use the aggregate actuarial cost method, which does not separately amortize UAALs outside the normal cost. Instead, the Entry Age Normal actuarial cost method was used to determine the UAAL. This method is intended to serve as a surrogate for the funded status of these plans.

<sup>&</sup>lt;sup>3</sup> Portions of the TRS Plan 1 covered payroll include the covered payrolls of TRS Plan 2/3. Refer to "Required Supplementary Information" in the Financial Section for the covered payroll detail by system plan.

This page is intentionally blank.

### Additional Information for the Defined Benefit Pension Plans

#### **Additional Information**

For the Fiscal Year Ended June 30, 2020 — Page 1 of 2

	PERS Plan 1	PERS Plan 2/3	TRS Plan 1	TRS Plan 2/3	SERS Plan 2/3	<b>PSERS Plan 2</b>
Valuation Date	6/30/2019	6/30/2019	6/30/2019	6/30/2019	6/30/2019	6/30/2019
	entry age		entry age			
Actuarial Cost Method	normal <sup>1</sup>	aggregate <sup>2</sup>	normal <sup>1</sup>	aggregate <sup>2</sup>	aggregate <sup>2</sup>	aggregate <sup>2</sup>
Amortization Method — Funding	level %3	n/a	level % <sup>3</sup>	n/a	n/a	n/a
Remaining Amortization Years	10	/	10	/s	/-	I-
(Closed)	10-year rolling	n/a	10-year rolling	n/a	n/a	n/a
Remaining Amortization Period	2/2	2/2	n la	2/2	2/2	n /a
(Closed)	n/a	n/a	n/a	n/a	n/a	n/a
Asset Valuation Method	8-year graded	8-year graded	8-year graded	8-year graded	8-year graded	8-year graded
	smoothed	smoothed	smoothed	smoothed	smoothed	smoothed
	fair value <sup>4</sup>	fair value <sup>4</sup>	fair value <sup>4</sup>	fair value <sup>4</sup>	fair value <sup>4</sup>	fair value <sup>4</sup>
<b>Actuarial Assumptions</b>						
Investment rate of return (beginning 7/1/2019) <sup>5</sup>	7.50 %	7.50 %	7.50 %	7.50 %	7.50 %	7.50 %
Projected Salary Increases (Salary Inflation at 3.50% Plus the Service- Based Salary Increase Described Below)						
Initial Increases (Grades Down to 0%)	6.00 %	6.00 %	5.50 %	5.10 %	8.00 %	6.00 %
Applied for X Years of Service	20 years	20 years	25 years	25 years	20 years	20 years
Includes Inflation at	n/a	2.75 %	n/a	2.75 %	2.75 %	2.75 %
		CPI increase,		CPI increase,	CPI increase,	CPI increase,
Cost-of-Living Adjustments	Minimum COLA <sup>6</sup>	maximum 3%	Minimum COLA <sup>6</sup>	maximum 3%	maximum 3%	maximum 3%

Annual Gain/Loss <sup>4</sup>		
Rate of Return	Smoothing Period	<b>Annual Recognition</b>
14.5% and up	8 years	12.50 %
13.5%-14.5%	7 years	14.29 %
12.5%-13.5%	6 years	16.67 %
11.5%-12.5%	5 years	20.00 %
10.5%-11.5%	4 years	25.00 %
9.5%-10.5%	3 years	33.33 %
8.5%-9.5%	2 years	50.00 %
6.5%-8.5%	1 year	100.00 %
5.5%-6.5%	2 years	50.00 %
4.5%-5.5%	3 years	33.33 %
3.5%-4.5%	4 years	25.00 %
2.5%-3.5%	5 years	20.00 %
1.5%-2.5%	6 years	16.67 %
0.5%-1.5%	7 years	14.29 %
0.5% and lower	8 years	12.50 %

Source: Office of the State Actuary

### Additional Information for the Defined Benefit Pension Plans (cont.)

#### Additional Information

For the Fiscal Year Ended June 30, 2020 — Page 2 of 2

	LEOFF Plan 1	LEOFF Plan 2	WSPRS Plan 1/2
Valuation Date	6/30/2019	6/30/2019	6/30/2019
	frozen initial		
Actuarial Cost Method	liability <sup>1</sup>	aggregate <sup>2</sup>	aggregate <sup>2</sup>
Amortization Method — Funding	level %3	n/a	n/a
Remaining Amortization Years			
(Closed)	6.00	n/a	n/a
Remaining Amortization Period			
(Closed)	6/30/2024	n/a	n/a
Asset Valuation Method	8-year graded	8-year graded	8-year graded
	smoothed	smoothed	smoothed
	fair value <sup>4</sup>	fair value <sup>4</sup>	fair value <sup>4</sup>
<b>Actuarial Assumptions</b>			
Investment rate of return (beginning			
7/1/2019) <sup>5</sup>	7.50 %	7.40 %	7.50 %
Projected Salary Increases (Salary			
Inflation at 3.50% Plus the Service-			
Based Salary Increase Described Below)			
Initial Increases (Grades Down to 0%)	11.00 %	11.00 %	11.00 %
Applied for X Years of Service	25 years	25 years	25 years
Includes Inflation at	2.75 %	2.75 %	2.75 %
		CPI increase,	CPI increase,
Cost-of-Living Adjustments	CPI increase	maximum 3%	maximum 3%

<sup>1</sup> PERS and TRS Plans 1 use a variation of the Entry Age Normal cost method, whereas LEOFF 1 uses a variation of the Frozen Initial Liability (FIL) cost method

The actuarial value of assets is calculated using an adjusted market value method by starting with the market value of assets. For subsequent years, the actuarial value of assets is determined by adjusting the market value of assets to reflect the difference between the actual investment return and the expected investment return during each of the past eight years - or, if fewer, the completed years since adoption - at the rates per year (annual recognition) shown above. We center the LEOFF 2 Annual Gain/Loss around their 7.4% expected rate of return instead of 7.5%, as these were the return assumptions in place for the fiscal year ending on June 30, 2019.

Qualifying retirees receive an increase in their monthly benefit once a year. The COLA on minimum benefit levels is calculated as the last unrounded COLA amount increased by 3%, rounded to the nearest penny. These are some historical monthly COLA amounts per year of service:

Historical Monthly COLA Amounts per Year of Service <sup>4</sup>					
Date	COLA Type	Amount			
7/1/2020	Minimum	\$2.53			
7/1/2019	Minimum	\$2.46			
7/1/2018	Minimum	\$2.39			
7/1/2017	Minimum	\$2.32			
7/1/2016	Minimum	\$2.25			
7/1/2015	Minimum	\$2.18			
7/1/2014	Minimum	\$2.12			
7/1/2013	Minimum	\$2.06			
7/1/2012	Minimum	\$2.00			
7/1/2011	Minimum	\$1.94			

<sup>&</sup>lt;sup>2</sup>The aggregate cost method does not identify or separately amortize unfunded actuarial accrued liabilities

<sup>&</sup>lt;sup>3</sup> Level percent of system payroll, including assumed system growth. This includes all PERS, SERS, and PSERS salaries for PERS 1; all TRS salaries for TRS 1; and all LEOFF salaries for LEOFF1

<sup>&</sup>lt;sup>4</sup> Asset Valuation Method - 8 Year Smoothed Fair Value

<sup>&</sup>lt;sup>5</sup> The Legislature prescribes the assumed rate of investment return for all plans listed above.

<sup>&</sup>lt;sup>6</sup> The PERS 1 and TRS 1 COLA

This page is intentionally blank.

93,492 TOTAL PARTICIPANTS

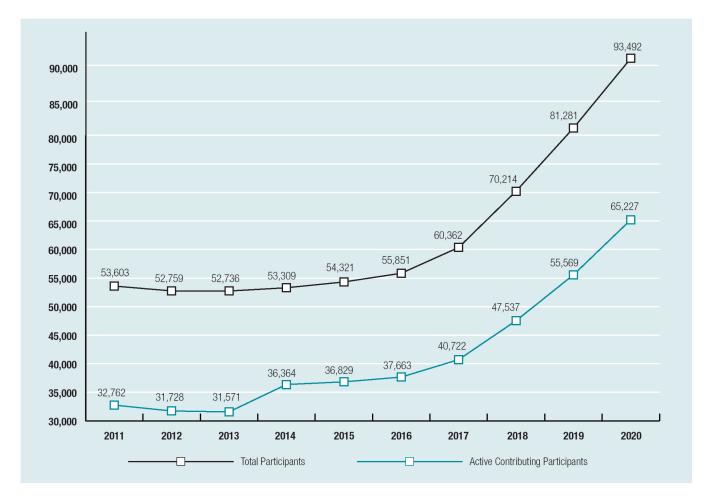
PARTICIPANTS ACTIVELY CONTRIBUTING

\$4.8 BILLION IN TOTAL ASSETS

INCREASE IN PARTICIPATION

#### **DCP Participation**

This chart illustrates participation in DCP for the fiscal years ended June 30, 2011-2020.



The Washington State Deferred Compensation

Program (DCP) is a supplemental retirement savings

program (an IRC Section 457 plan).

# Statistical Section

#### Statistical Section Table of Contents

This section of the Department of Retirement Systems' Comprehensive Annual Financial Report presents detailed information that expands on the financial statements, note disclosures and required supplementary information that speak to the overall financial health of DRS.

#### FINANCIAL TRENDS

174 These schedules contain trend information about how the financial performance and well-being of DRS have changed over time.

#### **DEMOGRAPHIC INFORMATION**

190 These schedules contain demographic and historical information regarding membership and employer participation in the pension plans DRS offers.

#### OPERATING INFORMATION

218 These schedules contain detailed payment information about the benefit services DRS provides.

#### DEFERRED COMPENSATION INFORMATION

246 These schedules contain comprehensive information about the state's Deferred Compensation Program.

Sources: Unless otherwise noted, the information in this section's schedules comes from the Comprehensive Annual Financial Reports for the years being discussed.

### Schedules of Changes in Fiduciary Net Position

PERS Plan 1 **Dollars** in Thousands

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Additions by Source</b>										
Employer Contributions	\$ 722,512	\$ 726,385	\$ 674,784	\$ 609,287	\$ 595,982	\$ 462,100	\$ 448,895	\$ 266,270	\$ 257,197	\$ 145,585
Employee Contributions	5,606	7,240	8,315	11,092	13,663	15,806	18,797	21,362	24,317	28,767
Investment Income (Loss) <sup>1</sup>	338,501	640,755	686,500	945,298	157,083	336,316	1,312,000	863,182	86,377	1,523,415
Transfers	_	17	_	7	117	22	36	38	97	90
Miscellaneous <sup>2</sup>	4,561	5,815	7,662	7,521	7,630	8,650	12,189	12,024	10,269	12,705
<b>Total Additions</b>	1,071,180	1,380,212	1,377,261	1,573,205	774,475	822,894	1,791,917	1,162,876	378,257	1,710,562
<b>Deductions by Type</b>										
Benefits	1,189,201	1,198,939	1,189,506	1,196,060	1,198,836	1,198,965	1,189,496	1,181,380	1,173,683	1,149,522
Refunds	4,001	3,859	3,705	3,159	4,373	4,029	4,219	3,998	4,554	3,470
Transfers	6	17	149	558	520	30	_	710	265	362
Administrative Expenses	2,902	3,067	3,005	3,342	2,819	2,707	3,016	4,773	3,522	3,213
<b>Total Deductions</b>	1,196,110	1,205,882	1,196,365	1,203,119	1,206,548	1,205,731	1,196,731	1,190,861	1,182,024	1,156,567
<b>Total Changes in</b>										
Fiduciary Net Position	\$ (124,930)	\$ 174,330	\$ 180,896	\$ 370,086	\$ (432,073)	\$ (382,837)	\$ 595,186	\$ (27,985)	\$ (803,767)	\$ 553,995
<b>Fiduciary Net Position</b>										
Beginning of Year	7,854,317	7,679,987	7,499,091	7,129,005	7,561,078	7,943,915	7,348,729	7,376,714	8,180,481	7,626,486
End of Year	\$ 7,729,387	\$ 7,854,317	\$ 7,679,987	\$ 7,499,091	\$ 7,129,005	\$ 7,561,078	\$ 7,943,915	\$ 7,348,729	\$ 7,376,714	\$ 8,180,481
Employer Contributions:										
% of Covered Payroll	4.84%	5.19%	5.12%	4.90%	5.07%	4.14%	4.15%	2.56%	2.47%	1.38%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

 $<sup>^{\</sup>rm 2}$  "Miscellaneous" includes restorations of employee contributions.

### PERS Plan 2/3

### **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
<b>Employer Contributions</b>	\$ 925,303	\$ 820,188	\$ 778,525	\$ 621,927	\$ 563,328	\$ 446,127	\$ 430,345	\$ 389,020	\$ 385,253	\$ 328,258
Employee Contributions	721,305	641,756	601,333	486,407	472,528	355,350	346,270	315,755	310,160	263,885
Investment Income (Loss) <sup>1</sup>	1,932,052	3,453,148	3,350,125	4,312,935	725,476	1,295,320	4,444,937	2,556,131	284,681	3,468,458
Transfers	37,129	32,589	834	385	360	206	141	293	270	4,036
Miscellaneous <sup>2</sup>	50,244	43,657	50,386	46,347	37,477	31,176	32,830	29,922	24,765	26,818
<b>Total Additions</b>	3,666,033	4,991,338	4,781,203	5,468,001	1,799,169	2,128,179	5,254,523	3,291,121	1,005,129	4,091,455
<b>Deductions by Type</b>										
Benefits <sup>3</sup>	1,379,739	1,207,093	1,033,728	894,229	776,213	665,408	565,660	460,074	376,999	310,943
Refunds	44,008	47,782	42,277	37,374	36,302	35,497	35,202	35,679	35,716	33,686
Transfers	4,796	4,251	4,695	5,999	4,740	1,823	2,441	5,538	2,180	8,528
Administrative Expenses	17,144	15,108	13,774	14,218	12,023	10,591	9,977	10,560	9,082	8,325
<b>Total Deductions</b>	1,445,687	1,274,234	1,094,474	951,820	829,278	713,319	613,280	511,851	423,977	361,482
<b>Total Changes in</b>										
Fiduciary Net Position	\$ 2,220,346	\$ 3,717,104	\$ 3,686,729	\$ 4,516,181	\$ 969,891	\$ 1,414,860	\$ 4,641,243	\$ 2,779,270	\$ 581,152	\$ 3,729,973
Fiduciary Net Position										
Beginning of Year <sup>4</sup>	42,536,796	38,819,692	35,001,233	30,485,052	29,515,161	28,100,301	23,459,058	20,679,788	20,098,636	16,368,663
End of Year	\$ 44,757,142	\$ 42,536,796	\$ 38,687,962	\$ 35,001,233	\$ 30,485,052	\$ 29,515,161	\$ 28,100,301	\$ 23,459,058	\$ 20,679,788	\$ 20,098,636
Employer Contributions: % of Covered Payroll	7.97%	7.48%	7.47%	6.31%	6.04%	5.03%	5.00%	4.71%	4.74%	4.03%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

<sup>&</sup>lt;sup>3</sup> PERS Plan 2/3 "Benefits" include PERS Plan 3 Total Allocation Portfolio (TAP) annuities. Prior to 6/30/19, PERS Plan 3 TAP annuities were presented in "Benefits" of PERS Plan 3.

<sup>&</sup>lt;sup>4</sup> June 30, 2019 Plan Fiduciary Net Position - Beginning has been restated to include the PERS Plan 3 Washington State Investment Board (WSIB) Total Allocation Portfolio (TAP) Annuity balance. See Note 1, Section R, of the Financial Section within the 2019 DRS CAFR...

PERS Plan 3 **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
Employer Contributions	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Employee Contributions	169,706	154,982	142,804	129,969	119,988	110,936	105,183	99,007	95,172	94,129
Investment Income (Loss) <sup>1</sup>	112,412	220,324	260,646	337,067	37,196	80,538	338,668	202,907	5,375	279,224
Transfers	3,946	3,390	3,570	3,244	2,165	1,708	1,871	1,539	1,432	1,546
Miscellaneous <sup>2</sup>	853	799	759	672	375	255	251	248	259	246
Total Additions	286,917	379,495	407,779	470,952	159,724	193,437	445,973	303,701	102,238	375,145
Deductions by Type										
Benefits <sup>3</sup>	_	_	7,855	6,400	4,112	2,641	1,435	697	322	164
Refunds	120,932	117,315	115,453	98,499	92,444	92,086	81,924	68,671	66,245	59,143
Transfers	37,120	33,054	855	712	567	387	326	428	338	612
Administrative Expenses	853	799	759	673	375	255	251	248	258	246
Total Deductions	158,905	151,168	124,922	106,284	97,498	95,369	83,936	70,044	67,163	60,165
Total Changes in										
Fiduciary Net Position	\$ 128,012	\$ 228,327	\$ 282,857	\$ 364,668	\$ 62,226	\$ 98,068	\$ 362,037	\$ 233,657	\$ 35,075	\$ 314,980
Fiduciary Net Position										
Beginning of Year	3,224,537	2,996,210	2,845,083	2,480,415	2,418,189	2,320,121	1,958,084	1,724,427	1,689,352	1,374,372
End of Year	\$ 3,352,549	\$ 3,224,537	\$ 3,127,940	\$ 2,845,083	\$ 2,480,415	\$ 2,418,189	\$ 2,320,121	\$ 1,958,084	\$ 1,724,427	\$ 1,689,352
Employer Contributions: % of Covered Payroll	n/a									

<sup>1 &</sup>quot;Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

<sup>&</sup>lt;sup>3</sup> PERS Plan 2/3 "Benefits" include PERS Plan 3 Total Allocation Portfolio (TAP) annuities. Prior to 6/30/19, PERS Plan 3 TAP annuities were presented in "Benefits" of PERS Plan 3.

### SERS Plan 2/3

### **Dollars in Thousands**

	(	6/30/2020	(	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source												
Employer Contributions	\$	216,713	\$	200,604	\$ 176,539	\$ 134,727	\$ 115,480	\$ 97,386	\$ 88,783	\$ 78,400	\$ 74,640	\$ 62,316
Employee Contributions		95,507		79,864	69,827	51,627	45,946	34,939	31,305	26,018	24,095	19,247
Investment Income (Loss) <sup>1</sup>		279,874		495,109	466,359	597,914	100,211	178,042	607,984	348,956	38,452	473,113
Transfers		17,690		21,251	317	29	27	49	42	6	11	413
Miscellaneous <sup>2</sup>		3,643		2,647	2,561	2,276	3,233	2,435	2,334	782	1,635	1,719
<b>Total Additions</b>		613,427		799,475	715,603	786,573	264,897	312,851	730,448	454,162	138,833	556,808
<b>Deductions by Type</b>												
Benefits <sup>3</sup>		211,121		183,406	151,456	130,039	112,753	96,184	81,216	66,426	53,630	43,338
Refunds		4,511		4,592	3,741	3,227	2,494	2,891	2,732	2,655	2,516	2,492
Transfers		2,151		1,983	1,772	2,606	1,242	630	504	330	454	423
Administrative Expenses		2,465		1,580	1,346	1,460	1,782	1,644	1,543	137	1,403	1,484
<b>Total Deductions</b>		220,248		191,561	158,315	137,332	118,271	101,349	85,995	69,548	58,003	47,737
Total Changes in												
Fiduciary Net Position	\$	393,179	\$	607,914	\$ 557,288	\$ 649,241	\$ 146,626	\$ 211,502	\$ 644,453	\$ 384,614	\$ 80,830	\$ 509,071
Fiduciary Net Position												
Beginning of Year <sup>4</sup>		6,119,152		5,511,238	 4,863,722	4,214,481	4,067,855	3,856,353	3,211,900	2,827,286	2,746,456	2,237,385
End of Year	\$	6,512,331	\$	6,119,152	\$ 5,421,010	\$ 4,863,722	\$ 4,214,481	\$ 4,067,855	\$ 3,856,353	\$ 3,211,900	\$ 2,827,286	\$ 2,746,456
Employer Contributions:												
% of Covered Payroll		8.30%		8.24%	7.98%	6.60%	6.15%	5.66%	5.49%	5.06%	4.55%	3.78%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

<sup>3</sup> SERS Plan 2/3 "Benefits" include SERS Plan 3 Total Allocation Portfolio (TAP) annuities. Prior to 6/30/19, SERS Plan 3 TAP annuities were presented in "Benefits" of SERS Plan 3.

<sup>&</sup>lt;sup>4</sup> June 30, 2019 Plan Fiduciary Net Position - Beginning has been restated to include the SERS Plan 3 Washington State Investment Board (WSIB) Total Allocation Portfolio (TAP) Annuity balance. See Note 1, Section R, of the Financial Section in the 2019 DRS CAFR.

SERS Plan 3 **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
<b>Employer Contributions</b>	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Employee Contributions	92,371	86,755	79,858	71,737	67,713	62,645	60,766	59,257	59,021	60,313
Investment Income (Loss) <sup>1</sup>	81,914	154,130	172,598	225,696	32,171	62,821	245,336	147,193	10,372	209,367
Transfers	2,145	1,976	1,782	2,498	1,102	825	682	466	407	500
Miscellaneous <sup>2</sup>	679	642	626	564	330	224	227	230	245	238
<b>Total Additions</b>	177,109	243,503	254,864	300,495	101,316	126,515	307,011	207,146	70,045	270,418
Deductions by Type										
Benefits <sup>3</sup>	_	_	5,768	4,055	2,610	1,526	854	463	302	182
Refunds	110,378	105,108	100,672	85,577	85,019	86,293	73,826	65,643	60,929	53,242
Transfers	17,721	21,237	333	258	311	270	302	190	163	597
Administrative Expenses	679	642	626	564	330	224	227	230	245	237
<b>Total Deductions</b>	128,778	126,987	107,399	90,454	88,270	88,313	75,209	66,526	61,639	54,258
<b>Total Changes in</b>										
Fiduciary Net Position	\$ 48,331	\$ 116,516	\$ 147,465	\$ 210,041	\$ 13,046	\$ 38,202	\$ 231,802	\$ 140,620	\$ 8,406	\$ 216,160
Fiduciary Net Position										
Beginning of Year	2,085,312	1,968,796	1,911,559	1,701,518	1,688,472	1,650,270	1,418,468	1,277,848	1,269,442	1,053,282
End of Year	\$ 2,133,643	\$ 2,085,312	\$ 2,059,024	\$ 1,911,559	\$ 1,701,518	\$ 1,688,472	\$ 1,650,270	\$ 1,418,468	\$ 1,277,848	\$ 1,269,442
Employer Contributions: % of Covered Payroll	n/a									
10 UI GOVELEU PAYIUII	II/a	II/a	II/a	11/a	II/a	11/a	II/a	II/a	II/a	II/a

<sup>1 &</sup>quot;Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

<sup>3</sup> SERS Plan 2/3 "Benefits" include SERS Plan 3 Total Allocation Portfolio (TAP) annuities. Prior to 6/30/19, SERS Plan 3 TAP annuities were presented in "Benefits" of SERS Plan 3.

## **PSERS Plan 2 Dollars in Thousands**

	6/30/2020	6	6/30/2019	6/30/2018	6/30/2017	6/30/2016		6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source												
Employer Contributions	\$ 44,392	\$	32,468	\$ 26,033	\$ 23,238	\$ 20,058	\$	18,704	\$ 17,124	\$ 15,650	\$ 15,285	\$ 15,591
Employee Contributions	44,292		32,934	26,280	23,409	21,134		18,650	17,344	15,798	15,228	15,353
Investment Income (Loss) <sup>1</sup>	34,814		57,066	49,840	59,852	10,097		15,082	45,144	22,468	2,778	21,255
Transfers	48		_	162	5	1		1	5	4	8	5
Miscellaneous <sup>2</sup>	516		559	484	507	173		146	212	81	141	124
<b>Total Additions</b>	124,062		123,027	102,799	107,011	51,463		52,583	79,829	54,001	33,440	52,328
Deductions by Type												
Benefits	3,961		2,935	1,966	1,148	630		444	256	148	70	35
Refunds	3,662		3,739	2,954	2,630	2,647		2,612	2,194	2,186	1,921	1,780
Transfers	25		_	113	85	90		_	_	4	6	3
Administrative Expenses	311		272	234	212	150		116	104	1	70	82
<b>Total Deductions</b>	7,959		6,946	5,267	4,075	3,517		3,172	2,554	2,339	2,067	1,900
Total Changes in												
Fiduciary Net Position	\$ 116,103	\$	116,081	\$ 97,532	\$ 102,936	\$ 47,946	\$	49,411	\$ 77,275	\$ 51,662	\$ 31,373	\$ 50,428
Fiduciary Net Position												
Beginning of Year	 717,290		601,209	 503,677	400,741	352,795	_	303,384	226,109	174,447	143,074	92,646
End of Year	\$ 833,393	\$	717,290	\$ 601,209	\$ 503,677	\$ 400,741	\$	352,795	\$ 303,384	\$ 226,109	\$ 174,447	\$ 143,074
Employer Contributions:												
% of Covered Payroll	7.23%		6.92%	6.63%	6.50%	6.17%		6.38%	6.34%	6.28%	6.46%	6.72%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

TRS Plan 1 **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
Employer Contributions	\$ 521,550	\$ 500,822	\$ 420,540	\$ 348,968	\$ 315,934	\$ 223,886	\$ 200,674	\$ 118,569	\$ 111,937	\$ 96,803
Employee Contributions	1,726	2,227	2,844	3,846	5,059	6,846	9,039	11,369	14,098	17,631
Investment Income (Loss) <sup>1</sup>	252,701	480,327	522,375	728,987	118,306	269,746	1,079,807	720,704	73,203	1,279,513
Transfers	38	17	_	_	_	_	51	_	38	1
Miscellaneous <sup>2</sup>	2,915	3,047	3,853	5,507	5,966	5,758	7,956	8,207	6,228	10,792
<b>Total Additions</b>	778,930	986,440	949,612	1,087,308	445,265	506,236	1,297,527	858,849	205,504	1,404,740
<b>Deductions by Type</b>										
Benefits	885,102	905,079	903,078	911,058	924,377	927,015	925,975	914,610	913,864	899,819
Refunds	759	1,010	1,664	1,256	1,182	1,555	2,262	1,989	1,552	1,820
Transfers	_	_	_	407	386	_	_	578	223	159
Administrative Expenses	2,116	2,184	2,185	2,445	2,015	1,985	2,195	3,965	2,699	2,686
<b>Total Deductions</b>	887,977	908,273	906,927	915,166	927,960	930,555	930,432	921,142	918,338	904,484
<b>Total Changes in</b>										
Fiduciary Net Position	\$ (109,047)	\$ 78,167	\$ 42,685	\$ 172,142	\$ (482,695)	\$ (424,319)	\$ 367,095	\$ (62,293)	\$ (712,834)	\$ 500,256
<b>Fiduciary Net Position</b>										
Beginning of Year	5,882,265	5,804,098	5,761,413	5,589,271	6,071,966	6,496,285	6,129,190	6,191,483	6,904,317	6,404,061
End of Year	\$ 5,773,218	\$ 5,882,265	\$ 5,804,098	\$ 5,761,413	\$ 5,589,271	\$ 6,071,966	\$ 6,496,285	\$ 6,129,190	\$ 6,191,483	\$ 6,904,317
Employer Contributions:										
% of Covered Payroll	7.25%	7.41%	7.08%	6.31%	6.15%	4.67%	4.38%	2.70%	2.52%	2.14%

<sup>1 &</sup>quot;Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

TRS Plan 2/3 **Dollars in Thousands** 

	6/30/20	20	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source											
Employer Contributions	\$ 584,4	24	\$ 523,733	\$ 446,275	\$ 364,106	\$ 316,022	\$ 267,038	\$ 249,342	\$ 228,974	\$ 213,852	\$ 168,264
Employee Contributions	142,2	18	119,844	97,753	75,481	64,263	47,206	41,081	34,494	29,829	21,881
Investment Income (Loss) <sup>1</sup>	732,0	12	1,290,637	1,203,549	1,539,464	258,964	453,535	1,539,901	877,562	96,411	1,175,293
Transfers	63,3	57	84,930	1,040	118	71	41	45	34	16	850
Miscellaneous <sup>2</sup>	10,6	84	8,996	8,930	9,163	10,386	11,278	8,260	4,178	5,476	5,416
<b>Total Additions</b>	1,532,6	95	2,028,140	1,757,547	1,988,332	649,706	779,098	1,838,629	1,145,242	345,584	1,371,704
<b>Deductions by Type</b>											
Benefits <sup>3</sup>	438,1	49	382,017	299,433	254,721	218,011	183,212	149,522	116,662	91,400	72,138
Refunds	4,3	64	4,393	3,575	3,010	2,971	2,840	1,988	2,914	2,169	2,281
Transfers	2,2	26	2,645	1,959	3,462	1,934	659	445	858	652	390
Administrative Expenses	7,2	54	3,530	2,797	3,192	5,321	4,909	4,585	2,830	4,020	4,273
<b>Total Deductions</b>	451,9	93	392,585	307,764	264,385	228,237	191,620	156,540	123,264	98,241	79,082
<b>Total Changes in</b>											
Fiduciary Net Position	\$ 1,080,7	02	\$ 1,635,555	\$ 1,449,783	\$ 1,723,947	\$ 421,469	\$ 587,478	\$ 1,682,089	\$ 1,021,978	\$ 247,343	\$ 1,292,622
Fiduciary Net Position											
Beginning of Year <sup>4</sup>	15,944,9	52	14,309,397	12,524,207	10,800,260	10,378,791	9,791,313	8,109,224	7,087,246	6,839,903	5,547,281
End of Year	\$ 17,025,6	54	\$ 15,944,952	\$ 13,973,990	\$ 12,524,207	\$ 10,800,260	\$ 10,378,791	\$ 9,791,313	\$ 8,109,224	\$ 7,087,246	\$ 6,839,903
Employer Contributions: % of Covered Payroll	8	6%	7.79%	7.57%	6.66%	6.25%	5.70%	5.62%	5.45%	5.14%	4.03%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

<sup>&</sup>lt;sup>3</sup> TRS Plan 2/3 "Benefits" include TRS Plan 3 Total Allocation Portfolio (TAP) annuities. Prior to 6/30/19, TRS Plan 3 TAP annuities were presented in "Benefits" of TRS Plan 3.

<sup>&</sup>lt;sup>4</sup> June 30, 2019 Plan Fiduciary Net Position - Beginning has been restated to include the TRS Plan 3 Washington State Investment Board (WSIB) Total Allocation Portfolio (TAP) Annuity balance. See Note 1, Section R, of the Financial Section in the 2019 DRS CAFR.

TRS Plan 3 **Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
<b>Employer Contributions</b>	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Employee Contributions	406,302	389,550	349,801	322,155	309,813	286,156	273,656	262,293	255,867	257,718
Investment Income (Loss) <sup>1</sup>	358,088	669,625	769,442	1,000,359	125,289	256,717	1,044,040	627,742	34,065	866,178
Transfers	2,157	3,004	1,991	3,542	1,585	1,372	1,115	839	618	650
Miscellaneous <sup>2</sup>	2,578	2,394	2,300	2,054	1,159	789	784	775	811	767
<b>Total Additions</b>	769,125	1,064,573	1,123,534	1,328,110	437,846	545,034	1,319,595	891,649	291,361	1,125,313
<b>Deductions by Type</b>										
Benefits <sup>3</sup>	_	_	20,864	14,687	10,034	5,924	3,084	1,569	1,149	542
Refunds	385,628	406,483	336,930	285,910	289,785	269,378	235,635	176,052	150,404	115,571
Transfers	63,273	84,958	1,087	948	938	717	721	522	520	1,368
Administrative Expenses	2,578	2,394	2,300	2,054	1,158	788	784	775	811	767
<b>Total Deductions</b>	451,479	493,835	361,181	303,599	301,915	276,807	240,224	178,918	152,884	118,248
Total Changes in										
Fiduciary Net Position	\$ 317,646	\$ 570,738	\$ 762,353	\$ 1,024,511	\$ 135,931	\$ 268,227	\$ 1,079,371	\$ 712,731	\$ 138,477	\$ 1,007,065
Fiduciary Net Position										
Beginning of Year	9,389,304	8,818,566	8,391,620	7,367,109	7,231,178	6,962,951	5,883,580	5,170,849	5,032,372	4,025,307
End of Year	\$ 9,706,950	\$ 9,389,304	\$ 9,153,973	\$ 8,391,620	\$ 7,367,109	\$ 7,231,178	\$ 6,962,951	\$ 5,883,580	\$ 5,170,849	\$ 5,032,372
Employer Contributions:	,	,		,	,	,		,		,
% of Covered Payroll	n/a									

<sup>1 &</sup>quot;Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

<sup>&</sup>lt;sup>3</sup> TRS Plan 2/3 "Benefits" include TRS Plan 3 Total Allocation Portfolio (TAP) annuities. Prior to 6/30/19, TRS Plan 3 TAP annuities were presented in "Benefits" of TRS Plan 3.

## LEOFF Plan 1 **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
<b>Employer Contributions</b>	\$ 5	\$ 3	\$ 1	\$ —	\$ —	\$ 60	\$ 98	\$ 555	\$ 2	\$ 3
Employee Contributions	_	_	_	_	_	47	_	_	_	_
Investment Income (Loss) <sup>1</sup>	260,659	495,135	529,894	723,823	120,952	248,796	934,125	586,475	61,152	937,507
Transfers	_	_	_	_	_	237	_	_	_	_
Miscellaneous <sup>2</sup>	2,189	2,620	2,876	4,342	2,973	3,071	2,931	4,300	3,393	3,130
<b>Total Additions</b>	262,853	497,758	532,771	728,165	123,925	252,211	937,154	591,330	64,547	940,640
<b>Deductions by Type</b>										
Benefits	372,287	369,070	364,041	360,060	360,484	358,411	355,740	351,796	343,438	338,775
Refunds	9	_	_	8	538	334	248	14	435	48
Transfers	_	1	_	405	371	_	_	484	176	331
Administrative Expenses	2,161	2,254	2,157	2,391	1,938	1,822	1,851	2,882	2,064	1,891
<b>Total Deductions</b>	374,457	371,325	366,198	362,864	363,331	360,567	357,839	355,176	346,113	341,045
Total Changes in										
Fiduciary Net Position	\$ (111,604)	\$ 126,433	\$ 166,573	\$ 365,301	\$ (239,406)	\$ (108,356)	\$ 579,315	\$ 236,154	\$ (281,566)	\$ 599,595
Fiduciary Net Position										
Beginning of Year	6,030,401	5,903,968	5,737,395	5,372,094	5,611,500	5,719,856	5,140,541	4,904,387	5,185,953	4,586,358
End of Year	\$ 5,918,797	\$ 6,030,401	\$ 5,903,968	\$ 5,737,395	\$ 5,372,094	\$ 5,611,500	\$ 5,719,856	\$ 5,140,541	\$ 4,904,387	\$ 5,185,953
Employer Contributions: % of Covered Payroll	0.23%	0.12%	0.03%	0.00%	0.00%	0.57%	0.71%	3.36%	0.01%	0.01%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

**LEOFF Plan 2 Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
Employer Contributions	\$ 117,774	\$ 115,882	\$ 106,424	\$ 95,920	\$ 92,049	\$ 89,122	\$ 85,532	\$ 82,397	\$ 80,480	\$ 79,733
Employee Contributions	192,255	188,113	173,993	158,316	151,659	146,679	140,921	135,797	132,584	131,252
State Contributions	76,298	72,960	68,152	62,155	60,375	58,339	55,551	54,246	52,770	52,024
Investment Income (Loss) <sup>1</sup>	645,413	1,155,555	1,127,021	1,448,382	244,054	430,410	1,456,269	825,071	92,867	1,084,240
Transfers	_	203	617	5	23	_	265	1,833	10	2,936
Miscellaneous <sup>2</sup>	27,776	22,116	28,634	34,658	26,273	22,776	13,496	9,351	9,220	7,754
<b>Total Additions</b>	1,059,516	1,554,829	1,504,841	1,799,436	574,433	747,326	1,752,034	1,108,695	367,931	1,357,939
<b>Deductions by Type</b>										
Benefits	355,509	304,872	259,609	219,715	184,067	151,486	124,921	100,532	78,153	61,876
Refunds	8,688	9,087	8,550	7,292	6,645	8,541	9,028	8,677	11,214	8,181
Transfers	_	_	_	832	705	238	24	226	282	147
Administrative Expenses	7,397	7,180	6,514	6,759	5,305	4,668	4,192	2,566	3,672	3,309
<b>Total Deductions</b>	371,594	321,139	274,673	234,598	196,722	164,933	138,165	112,001	93,321	73,513
<b>Total Changes in</b>										
Fiduciary Net Position	\$ 687,922	\$ 1,233,690	\$ 1,230,168	\$ 1,564,838	\$ 377,711	\$ 582,393	\$ 1,613,869	\$ 996,694	\$ 274,610	\$ 1,284,426
Fiduciary Net Position										
Beginning of Year	14,240,056	13,006,366	11,776,198	10,211,360	9,833,649	9,251,256	7,637,387	6,640,693	6,366,083	5,081,657
End of Year	\$ 14,927,978	\$ 14,240,056	\$ 13,006,366	\$ 11,776,198	\$ 10,211,360	\$ 9,833,649	\$ 9,251,256	\$ 7,637,387	\$ 6,640,693	\$ 6,366,083
Employer Contributions:										
% of Covered Payroll	8.67%	8.78%	8.78%	8.40%	8.45%	8.45%	8.43%	8.51%	8.49%	8.54%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

## WSPRS Plan 1/2

### **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source										
Employer Contributions	\$ 19,897	\$ 14,700	\$ 14,203	\$ 7,587	\$ 7,044	\$ 6,679	\$ 6,587	\$ 6,478	\$ 6,454	\$ 5,251
Employee Contributions	9,609	8,581	8,308	6,365	5,895	5,561	5,489	5,396	5,376	4,166
Investment Income (Loss) <sup>1</sup>	60,361	111,126	113,597	151,021	25,354	49,046	176,856	106,664	11,481	158,571
Transfers	808	769	911	524	429	293	510	574	54	415
Miscellaneous <sup>2</sup>	1,533	2,722	2,149	4,603	3,437	1,179	1,467	1,692	2,010	1,385
<b>Total Additions</b>	92,208	137,898	139,168	170,100	42,159	62,758	190,909	120,804	25,375	169,788
<b>Deductions by Type</b>										
Benefits	68,128	64,253	59,508	56,666	53,651	49,772	47,143	43,521	40,368	38,387
Refunds	710	117	126	155	508	303	367	304	262	315
Transfers	_	_	261	86	76	_	_	88	32	22
Administrative Expenses	594	619	592	551	448	425	431	538	392	356
<b>Total Deductions</b>	69,432	64,989	60,487	57,458	54,683	50,500	47,941	44,451	41,054	39,080
<b>Total Changes in</b>										
Fiduciary Net Position	\$ 22,776	\$ 72,909	\$ 78,681	\$ 112,642	\$ (12,524)	\$ 12,258	\$ 142,968	\$ 76,353	\$ (15,679)	\$ 130,708
Fiduciary Net Position										
Beginning of Year	1,362,507	1,289,598	1,210,917	1,098,275	1,110,799	1,098,541	955,573	879,220	894,899	764,191
End of Year	\$ 1,385,283	\$ 1,362,507	\$ 1,289,598	\$ 1,210,917	\$ 1,098,275	\$ 1,110,799	\$ 1,098,541	\$ 955,573	\$ 879,220	\$ 894,899
Employer Contributions: % of Covered Payroll	17.50%	13.17%	13.00%	8.15%	8.13%	7.92%	7.91%	7.91%	7.91%	6.41%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

## JRS **Dollars in Thousands**

	6	30/2020	6	/30/2019	6/30/2018		6/30/2017	6/30/2016		6/30/2015	6	30/2014	6/30/2013	6/30/2012	6/30/2011
Additions by Source															
Employer Contributions	\$	_	\$	_	\$ _	\$	_	\$ _	\$	_	\$	_	\$ 12	\$ 31	\$ 46
<b>Employee Contributions</b>		_		_	_		_	_		_		_	12	31	46
State Contributions		7,800		8,400	8,700		9,300	9,500		10,600		10,600	10,100	8,100	10,860
Investment Income (Loss) <sup>1</sup>		155		166	78		39	78		39		26	(11)	13	8
Transfers		_		_	_		_	_		_		_	_	_	_
Miscellaneous <sup>2</sup>		_			4		3	3		2		2	2	1	2
<b>Total Additions</b>		7,955		8,566	8,782		9,342	9,581		10,641		10,628	10,115	8,176	10,962
<b>Deductions by Type</b>															
Benefits		7,921		7,958	8,325		8,723	9,131		9,336		9,480	9,697	9,764	9,738
Refunds		_		_	_		_	_		_		_	_	_	_
Transfers		_		_	_		1	_		_		_	_	_	_
Administrative Expenses		_		2	3		2	2		2		2	2	2	2
<b>Total Deductions</b>		7,921		7,960	8,328		8,726	9,133		9,338		9,482	9,699	9,766	9,740
<b>Total Changes in</b>															
Fiduciary Net Position	\$	34	\$	606	\$ 454	\$	616	\$ 448	\$	1,303	\$	1,146	\$ 416	\$ (1,590)	\$ 1,222
Fiduciary Net Position															
Beginning of Year		8,460		7,854	 7,400	_	6,784	6,336	_	5,033		3,887	 3,471	5,061	3,839
End of Year	\$	8,494	\$	8,460	\$ 7,854	\$	7,400	\$ 6,784	\$	6,336	\$	5,033	\$ 3,887	\$ 3,471	\$ 5,061
Employer Contributions: % of Covered Payroll		n/a		n/a	n/a		n/a	n/a		n/a		n/a	6,320.00%	1,997.79%	1,784.94%

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

## JRF **Dollars in Thousands**

	6	30/2020	6/3	30/2019	6/	30/2018	6/30/2017	6/30/2016	6/30/2015	(	6/30/2014	(	6/30/2013	6/30/2012	6	/30/2011
Additions by Source																
Employer Contributions	\$	_	\$	_	\$	_	\$ _	\$ _	\$ _	\$	_	\$	_	\$ _	\$	_
Employee Contributions		_		_		_	_	_	_		_		_	_		_
State Contributions		400		500		500	499	501	_		_		_	_		_
Investment Income (Loss) <sup>1</sup>		18		17		7	4	7	4		8		(5)	19		11
Transfers		_		_		_	_	_	_		_		_	_		_
Miscellaneous <sup>2</sup>		_		_		1	_	_	_		_		_	1		1
<b>Total Additions</b>		418		517		508	503	508	4		8		(5)	20		12
Deductions by Type																
Benefits		265		338		396	402	440	444		444		474	482		499
Refunds		_		_		_	_	_	_		_		_	_		_
Transfers		_		_		_	_	_	_		_		_	_		_
Administrative Expenses		_		1		_	_	1	_		_		1	1		1
<b>Total Deductions</b>		265		339		396	402	441	444		444		475	483		500
Total Changes in																
Fiduciary Net Position	\$	153	\$	178	\$	112	\$ 101	\$ 67	\$ (440)	\$	(436)	\$	(480)	\$ (463)	\$	(488)
<b>Fiduciary Net Position</b>																
Beginning of Year		974		796		684	583	516	956		1,392		1,872	2,335		2,823
End of Year	\$	1,127	\$	974	\$	796	\$ 684	\$ 583	\$ 516	\$	956	\$	1,392	\$ 1,872	\$	2,335
Employer Contributions:																
% of Covered Payroll		n/a		n/a		n/a	n/a	n/a	n/a		n/a		n/a	n/a		n/a

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

 $<sup>^{\</sup>rm 2}$  "Miscellaneous" includes restorations of employee contributions.

## JRA **Dollars in Thousands**

	6	/30/2020	6/3	0/2019	6	/30/2018	(	6/30/2017	6/30/2016	6/30/2015	6	/30/2014	(	5/30/2013	(	6/30/2012	6	/30/2011
Additions by Source																		
Employer Contributions	\$	9	\$	9	\$	13	\$	17	\$ 21	\$ 20	\$	25	\$	32	\$	38	\$	43
Employee Contributions		8		9		13		17	21	20		25		32		38		43
Investment Income (Loss) <sup>1</sup>		145		348		731		1,143	(5)	150		1,372		1,015		(29)		1,940
Transfers		_		_		_		_	_	_		_		_		_		_
Miscellaneous <sup>2</sup>		_		_		_		_	_	_		(2)		2		5		5
<b>Total Additions</b>		162		366		757		1,177	37	190		1,420		1,081		52		2,031
Deductions by Type																		
Benefits		1,341		1,143		1,255		1,661	1,231	976		668		1,071		810		445
Refunds		_		_		_		_	_	_		_		_		_		_
Transfers		_		_		_		_	_	_		_		_		_		_
Administrative Expenses		_		_		_		_	1	_		_		_		_		_
<b>Total Deductions</b>		1,341		1,143		1,255		1,661	1,232	976		668		1,071		810		445
Total Changes in																		
<b>Fiduciary Net Position</b>	\$	(1,179)	\$	(777)	\$	(498)	\$	(484)	\$ (1,195)	\$ (786)	\$	752	\$	10	\$	(758)	\$	1,586
<b>Fiduciary Net Position</b>																		
Beginning of Year		9,291		10,068		10,566		11,050	12,245	13,031		12,279		12,269		13,027		11,441
End of Year	\$	8,112	\$	9,291	\$	10,068	\$	10,566	\$ 11,050	\$ 12,245	\$	13,031	\$	12,279	\$	12,269	\$	13,027
Employer Contributions:																		
% of Covered Payroll		n/a		n/a		n/a		n/a	n/a	n/a		n/a		n/a		n/a		n/a

<sup>1 &</sup>quot;Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

<sup>&</sup>lt;sup>2</sup> "Miscellaneous" includes restorations of employee contributions.

## DCP **Dollars** in Thousands

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
A 1 1222	0/00/2020	0/00/2013	0/00/2010	0/00/2011	0/00/2010	0/00/2010	0/00/2014	0/00/2010	0/00/2012	0/00/2011
Additions by Source										
Participant Contributions	\$ 342,339	\$ 312,768	\$ 275,725	\$ 287,130	\$ 213,531	\$ 208,424	\$ 190,538	\$ 182,305	\$ 178,449	\$ 186,734
Investment Income (Loss) <sup>1</sup>	102,392	222,118	306,332	401,891	12,008	51,431	397,083	263,381	(12,292)	451,033
Charges for Services	3,345	3,012	2,859	2,584	2,317	2,347	1,949	1,566	1,677	1,610
Transfers	_	_	_	_	_	_	_	_	_	_
Miscellaneous	5	27	20	14	3	11	314	527	794	1,461
<b>Total Additions</b>	448,081	537,925	584,936	691,619	227,859	262,213	589,884	447,779	168,628	640,838
<b>Deductions by Type</b>										
Refunds	290,429	256,448	232,496	232,229	215,450	225,334	212,298	178,638	171,741	149,010
Transfers	_	_	_	_	_	_	_	_	_	_
Administrative Expenses	2,173	2,106	2,017	2,208	1,941	2,196	1,651	1,568	1,594	1,735
<b>Total Deductions</b>	292,602	258,554	234,513	234,437	217,391	227,530	213,949	180,206	173,335	150,745
<b>Total Changes in</b>										
<b>Fiduciary Net Position</b>	\$ 155,479	\$ 279,371	\$ 350,423	\$ 457,182	\$ 10,468	\$ 34,683	\$ 375,935	\$ 267,573	\$ (4,707)	\$ 490,093
<b>Fiduciary Net Position</b>										
Beginning of Year	4,711,367	4,431,996	4,081,573	3,624,391	3,613,923	3,579,240	3,203,305	2,935,732	2,940,439	2,450,346
End of Year	\$ 4,866,846	\$ 4,711,367	\$ 4,431,996	\$ 4,081,573	\$ 3,624,391	\$ 3,613,923	\$ 3,579,240	\$ 3,203,305	\$ 2,935,732	\$ 2,940,439
Employer Contributions:										
% of Covered Payroll	n/a									

<sup>&</sup>lt;sup>1</sup> "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.

# Distribution of Membership by System and Plan

Activ	ve Memb	ers									
	ne Years Er										
Plan	0.4	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
PERS	%	0.47%	0.62%	0.82%	1.04%	1.30%	1.61%	1.94%	2.29%	2.64%	3.03%
Plan 1	Individuals	1,538	2,011	2,597	3,227	3,927	4,782	5,653	6,635	7,733	9,007
	Average Age	67	66	65	64	64	63	62	61	61	60
PERS	%	37.06%	37.76%	38.38%	38.73%	39.09%	39.47%	39.73%	40.00%	39.92%	40.27%
Plan 2	Individuals	122,454	122,165	121,934	119,677	117,768	116,985	115,751	115,877	117,096	119,826
	Average Age	48	48	48	48	48	48	48	48	48	48
PERS	%	11.51%	11.35%	11.00%	10.76%	10.49%	10.36%	10.06%	9.69%	9.41%	9.31%
Plan 3	Individuals	38,047	36,707	34,943	33,240	31,602	30,694	29,302	28,078	27,588	27,693
	Average Age	43	43	43	43	43	43	44	44	43	43
SERS	%	8.55%	8.48%	8.40%	8.40%	8.12%	7.75%	7.47%	7.20%	7.09%	6.84%
Plan 2	Individuals	28,239	27,431	26,697	25,950	24,479	22,950	21,760	20,846	20,784	20,358
	Average Age	50	50	50	50	50	51	51	51	51	51
SERS	%	10.75%	10.75%	10.61%	10.46%	10.40%	10.40%	10.48%	10.60%	10.76%	10.75%
Plan 3	Individuals	35,527	34,781	33,715	32,314	31,326	30,832	30,535	30,712	31,548	31,981
	Average Age	49	49	50	50	50	51	51	50	50	49
PSERS	%	2.35%	1.91%	1.83%	1.77%	1.73%	1.63%	1.55%	1.47%	1.43%	1.42%
Plan 2	Individuals	7,758	6,180	5,822	5,483	5,202	4,820	4,513	4,250	4,187	4,210
	Average Age	40	40	40	40	40	40	40	40	40	39
TRS	%	0.11%	0.15%	0.22%	0.31%	0.45%	0.62%	0.82%	1.04%	1.27%	1.54%
Plan 1	Individuals	350	491	698	967	1,353	1,824	2,393	3,019	3,740	4,591
	Average Age	68	67	66	65	65	64	63	62	62	61
TRS	%	6.52%	6.21%	5.90%	5.58%	5.09%	4.60%	4.14%	3.74%	3.51%	3.17%
Plan 2	Individuals	21,561	20,096	18,747	17,242	15,342	13,632	12,071	10,849	10,285	9,442
	Average Age	42	42	42	42	42	43	44	46	46	48
TRS	%	16.75%	16.83%	16.93%	17.06%	17.30%	17.50%	17.67%	17.77%	17.79%	17.57%
Plan 3	Individuals	55,351	54,432	53,780	52,706	52,125	51,837	51,471	51,489	52,178	52,292
	Average Age	46	46	46	46	46	46	46	46	45	45
LEOFF	%	0.01%	0.01%	0.01%	0.02%	0.03%	0.04%	0.05%	0.06%	0.08%	0.10%
Plan 1	Individuals	20	26	40	62	82	120	143	186	250	301
	Average Age	68	67	66	65	64	63	62	61	60	60
LEOFF	%	5.62%	5.60%	5.57%	5.56%	5.65%	5.66%	5.73%	5.77%	5.73%	5.64%
Plan 2	Individuals	18,557	18,130	17,694	17,186	17,019	16,773	16,687	16,720	16,805	16,775
	Average Age	43	43	43	44	44	44	44	43	43	42
WSPRS	%	0.12%	0.14%	0.15%	0.16%	0.19%	0.21%	0.22%	0.25%	0.26%	0.27%
Plan 1	Individuals	397	444	464	498	560	609	657	712	767	806
	Average Age	49	49	48	48	47	46	46	45	45	44
WSPRS	%	0.20%	0.18%	0.17%	0.15%	0.16%	0.15%	0.14%	0.12%	0.11%	0.09%
Plan 2	Individuals	646	597	546	470	475	435	409	354	315	281
	Average Age	34	34	34	34	33	33	33	32	32	32
JRS	%	0.00%	0.00%	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
บทบ	% Individuals	U.UU% —	0.00%	0.076	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00% 5
IDE	Average Age	n/a	n/a	n/a	n/a	n/a	n/a	n/a	66	69	69
JRF	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Individuals	— n/a									
	Average Age	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Totals	%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	Individuals	330,445	323,491	317,677	309,022	301,260	296,293	291,345	289,729	293,279	297,568

# Distribution of Membership by System and Plan (cont.)

Inact	tive and	Retired	Member	rs							
For th	ne Years Er	ided June	30, 2010-2	2019							
Plan		2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
PERS	%	17.90%	19.09%	20.38%	21.69%	23.10%	24.57%	26.14%	27.70%	29.18%	30.63%
Plan 1	Individuals	46,029	47,395	48,771	50,098	51,269	52,248	53,244	54,266	55,053	55,721
	Average Age	77	76	76	76	75	75	74	74	74	74
PERS	%	32.54%	31.77%	31.06%	30.31%	29.52%	28.73%	27.84%	26.93%	26.06%	25.04%
Plan 2	Individuals	83,674	78,896	74,333	70,021	65,523	61,105	56,712	52,773	49,167	45,556
	Average Age	66	65	65	64	64	63	63	62	62	61
PERS	%	4.65%	4.38%	4.12%	3.86%	3.67%	3.39%	3.15%	2.92%	2.69%	2.46%
Plan 3	Individuals	11,970	10,879	9,860	8,923	8,147	7,209	6,419	5,718	5,068	4,482
	Average Age	62	62	61	60	60	59	58	57	56	55
SERS	%	6.33%	6.14%	5.90%	5.67%	5.47%	5.25%	5.04%	4.81%	4.61%	4.44%
Plan 2	Individuals	16,278	15,237	14,130	13,104	12,134	11,153	10,274	9,429	8,697	8,069
	Average Age	66	65	65	64	64	63	62	62	61	60
SERS	%	7.40%	7.09%	6.74%	6.35%	5.97%	5.55%	5.10%	4.67%	4.24%	3.86%
Plan 3	Individuals	19,036	17,603	16,128	14,659	13,241	11,788	10,393	9,142	7,993	7,015
	Average Age	65	64	64	63	62	62	61	60	60	59
PSERS	%	0.36%	0.31%	0.27%	0.22%	0.17%	0.13%	0.08%	0.04%	0.01%	0.01%
Plan 2	Individuals	925	776	635	501	374	275	162	87	16	7
	Average Age	51	50	49	48	47	46	47	48	59	58
TRS	%	12.71%	13.51%	14.35%	15.15%	16.00%	16.92%	17.82%	18.65%	19.45%	20.18%
Plan 1	Individuals	32,689	33,537	34,338	35,004	35,506	35,962	36,303	36,531	36,699	36,716
	Average Age	77	77	76	75	75	74	74	73	73	72
TRS	%	3.37%	3.29%	3.21%	3.12%	3.03%	2.94%	2.84%	2.76%	2.69%	2.63%
Plan 2	Individuals	8,678	8,165	7,672	7,219	6,733	6,251	5,775	5,408	5,080	4,787
1 1011 2	Average Age	66	66	66	66	66	65	65	64	63	4,767
TRS	%	8.76%	8.46%	8.01%	7.60%	7.08%	6.47%	5.88%	5.37%	4.84%	4.41%
Plan 3	ndividuals	22,532	21,005	19,178	17,561	15,712		11,965	10,524	9,134	8,017
i idii o				63	62	•	13,749				
LEOFE	Average Age	64	63			61	61	60	59	58	58
LEOFF Plan 1	%	2.68%	2.85%	3.02%	3.19%	3.38%	3.58%	3.80%	4.00%	4.20%	4.40%
ΓΙαΙΙ Ι	Individuals	6,892	7,075	7,228	7,379	7,507	7,607	7,730	7,845	7,933	8,009
	Average Age	76	75	75	74	73	72	72	71	70	70
LEOFF	%	2.73%	2.57%	2.39%	2.26%	2.02%	1.87%	1.71%	1.55%	1.42%	1.33%
Plan 2	Individuals	7,033	6,370	5,714	5,212	4,495	3,984	3,480	3,033	2,670	2,420
	Average Age	61	60	60	59	59	58	58	57	56	55
WSPRS	%	0.50%	0.50%	0.51%	0.52%	0.52%	0.53%	0.53%	0.53%	0.53%	0.53%
Plan 1	Individuals	1,287	1,247	1,228	1,200	1,156	1,120	1,083	1,035	992	970
	Average Age	67	67	66	66	66	66	66	66	65	65
WSPRS	%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%
Plan 2	Individuals	37	34	31	28	20	15	10	8	6	6
	Average Age	39	38	38	38	38	38	36	36	37	35
JRS	%	0.03%	0.04%	0.04%	0.05%	0.05%	0.05%	0.06%	0.06%	0.07%	0.07%
	Individuals	90	93	99	104	106	108	114	119	124	125
	Average Age	83	83	82,000	82	81	0.08	0.08	80	80	79
JRF	%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
	Individuals	10	11	11	11	12	12	12	12	13	13
	A.,	87	88	87	87	85	84	83	83	83	82
	Average Age										
Totals	%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Figures are as of the latest valuation date for each year.

Source: Office of the State Actuary

PERS Plan 1

### **Current Year and Nine Years Prior**

For Fiscal Yea	ar Ended June 30	, 2020		2011 (C	alendar Year Statisti	ics)	
Employer	Covered Employees	Rank	% of Total Plan	Employer	Covered Employees	Rank	% of Total Plan
State of Washington <sup>1</sup>	553	1	44.1 %	State of Washington	3,207	1	47.0 %
King County	78	2	6.2 %	King County	422	2	6.2 %
Seattle SD 001	25	3	2.0 %	Seattle SD 001	125	3	1.8 %
Snohomish County	11	4	0.9 %	Pierce County	83	4	1.2 %
Bellevue SD 405	11	5	0.9 %	Snohomish County	72	5	1.1 %
Pierce County	10	6	0.8 %	Spokane SD 081	49	6	0.7 %
Tacoma SD 010	8	7	0.6 %	Spokane County	47	7	0.7 %
City of Everett	8	8	0.6 %	Yakima County	44	8	0.7 %
King County Rural Library District	7	9	0.6 %	Tacoma SD 010	42	9	0.6 %
Mount Vernon SD 320	7	10	0.6 %	City of Everett	36	10	0.5 %
All Other Employers <sup>2</sup>	535		42.7 %	All Other Employers	2,693		39.5 %
Total (269 Employers)	1,253		100.0 %	Total (548 Employers)	6,820		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington	_	_
School Districts	120	295
Counties/Municipalities	74	139
Other Political Subdivisions	65	101
Total	259	535

<sup>&</sup>lt;sup>1</sup> Includes 79 component units of the state

### PERS Plan 2

For Fiscal \	ear Ended June 30	, 2020		2011 (Ca	alendar Year Statisti	ics)	
	Covered		% of Total		Covered		% of Total
Employer	<b>Employees</b>	Rank	Plan	Employer	<b>Employees</b>	Rank	Plan
State of Washington <sup>1</sup>	66,081	1	51.8 %	State of Washington	64,476	1	52.4 %
King County	11,350	2	8.9 %	King County	9,938	2	8.1 %
Pierce County	1,902	3	1.5 %	Pierce County	2,169	3	1.8 %
Snohomish County	1,817	4	1.4 %	Snohomish County	1,912	4	1.6 %
Spokane County	1,144	5	0.9 %	Spokane County	1,347	5	1.1 %
Clark County	1,111	6	0.9 %	Clark County	1,175	6	1.0 %
Port of Seattle	1,078	7	0.8 %	Port of Seattle	898	7	0.7 %
Snohomish County PUD 01	933	8	0.7 %	Pierce County PTBA	878	8	0.7 %
City of Bellevue	840	9	0.7 %	Snohomish County PUD 01	860	9	0.7 %
Pierce County PTBA	798	10	0.6 %	Energy Northwest	856	10	0.7 %
All Other Employers <sup>2</sup>	40,560		31.8 %	All Other Employers	38,498		31.2 %
Total (838 Employers)	127,614		100.0 %	Total (773 Employers)	123,007		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington	_	_
School Districts	35	50
Counties/Municipalities	274	21,575
Other Political Subdivisions	539	18,935
Total	848	40,560

<sup>&</sup>lt;sup>1</sup> Includes 153 component units of the state

 $<sup>^{\</sup>rm 2}$  In 2020, "all other employers" consisted of the employers at left.

 $<sup>^{\</sup>rm 2}$  In 2020, "all other employers" consisted of the employers at left.

### PERS Plan 3

### **Current Year and Nine Years Prior**

For Fiscal Yea	r Ended June 30	, 2020		2011 (Cal	endar Year Statisti	ics)	
	Covered		% of Total		Covered		% of Total
Employer	<b>Employees</b>	Rank	Plan	Employer	<b>Employees</b>	Rank	Plan
State of Washington <sup>1</sup>	25,830	1	64.0 %	State of Washington	20,250	1	64.1 %
King County	2,509	2	6.2 %	King County	1,866	2	5.9 %
Tacoma Metropolitan Park District	608	3	1.5 %	Pierce County	481	3	1.5 %
Pierce County	452	4	1.1 %	Energy Northwest	416	4	1.3 %
Snohomish County	365	5	0.9 %	Snohomish County	351	5	1.1 %
Port of Seattle	309	6	0.8 %	Tacoma Metropolitan Park Dist.	304	6	1.0 %
Energy Northwest	299	7	0.7 %	Spokane County	239	7	0.8 %
Spokane County	271	8	0.7 %	Clark County	209	8	0.7 %
City of Bellevue	257	9	0.6 %	Yakima County	207	9	0.7 %
Clark County	238	10	0.6 %	Kitsap County	189	10	0.6 %
All Other Employers <sup>2</sup>	9,201		22.9 %	All Other Employers	7,103		22.3 %
Total (578 Employers)	40,339		100.0 %	Total (510 Employers)	31,615		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington	_	_
School Districts	_	_
Counties/Municipalities	216	4,943
Other Political Subdivisions	352	4,258
Total	568	9,201

<sup>&</sup>lt;sup>1</sup> Includes 148 component units of the state

### SERS Plan 2

For Fiscal Ye	ear Ended June 30,	2020		2011 (C	alendar Year Statisti	cs)	
Fundamen	Covered	Donle	% of Total	Familian	Covered	Donle	% of Total
Employer	Employees	Rank	Plan	Employer	Employees	Rank	Plan
Seattle SD 001	1,336	1	4.3 %	Seattle SD 001	1,020	1	4.6 %
Bellevue SD 405	633	2	2.1 %	Tacoma SD 010	674	2	3.0 %
Tacoma SD 010	633	3	2.1 %	Spokane SD 081	494	3	2.2 %
Highline SD 401	599	4	1.9 %	Highline SD 401	492	4	2.2 %
Evergreen SD 114	579	5	1.9 %	Kent SD 415	473	5	2.1 %
Kent SD 415	553	6	1.8 %	Vancouver SD 037	459	6	2.1 %
Vancouver SD 037	537	7	1.7 %	Bellevue SD 405	412	7	1.8 %
Spokane SD 081	537	8	1.7 %	Evergreen SD 114	411	8	1.8 %
Puyallup SD 003	536	9	1.7 %	Federal Way SD 210	385	9	1.7 %
Federal Way SD 210	504	10	1.6 %	Puyallup SD 003	358	10	1.6 %
All Other Employers <sup>1</sup>	24,331		79.2 %	All Other Employers	17,205		76.9 %
Total (309 Employers)	30,778		100.0 %	Total (300 Employers)	22,383		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington	_	_
School Districts	299	24,331
Counties/Municipalities	_	_
Other Political Subdivisions	_	_
Total	299	24,331

<sup>&</sup>lt;sup>1</sup> In 2020, "all other employers" consisted of the employers at left.

 $<sup>^{\</sup>rm 2}$  In 2020, "all other employers" consisted of the employers at left.

### SERS Plan 3

### **Current Year and Nine Years Prior**

For Fiscal Year Ended June 30, 2020			2011 (Calendar Year Statistics)				
	Covered		% of Total		Covered		% of Total
Employer	Employees	Rank	Plan	Employer	Employees	Rank	Plan
Seattle SD 001	1,602	1	4.2 %	Seattle SD 001	1,076	1	3.4 %
Kent SD 415	982	2	2.6 %	Kent SD 415	948	2	3.0 %
Lake Washington SD 414	973	3	2.5 %	Spokane SD 081	820	3	2.6 %
Spokane SD 081	901	4	2.4 %	Evergreen SD 114	767	4	2.4 %
Tacoma SD 010	889	5	2.3 %	Tacoma SD 010	691	5	2.2 %
Evergreen SD 114	877	6	2.2 %	Lake Washington SD 414	675	6	2.1 %
Vancouver SD 037	834	7	2.2 %	Vancouver SD 037	661	7	2.1 %
Northshore SD 417	793	8	2.1 %	Puyallup SD 003	658	8	2.1 %
Bethel SD 403	775	9	2.0 %	Edmonds SD 015	637	9	2.0 %
Kennewick SD 017	772	10	2.0 %	Bethel SD 403	632	10	2.0 %
All Other Employers <sup>1</sup>	28,886		75.5 %	All Other Employers	24,560		76.1 %
Total (310 Employers)	38,284		100.0 %	Total (301 Employers)	32,125		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington	_	_
School Districts	300	28,886
Counties/Municipalities	_	_
Other Political Subdivisions	_	_
Total	300	28,886

<sup>&</sup>lt;sup>1</sup> In 2020, "all other employers" consisted of the employers at left.

### **PSERS Plan 2**

For Fiscal Year Ended June 30, 2020			2011 (Calendar Year Statistics)				
Employer	Covered Employees	Rank	% of Total Plan	Employer	Covered Employees	Rank	% of Total Plan
State of Washington <sup>1</sup>	6,075	1	67.5 %	State of Washington	2,509	1	55.4 %
King County	487	2	5.4 %	King County	340	2	7.5 %
Pierce County	270	3	3.0 %	Pierce County	197	3	4.4 %
Snohomish County	236	4	2.6 %	Snohomish County	170	4	3.8 %
Spokane County	211	5	2.3 %	Spokane County	112	5	2.5 %
Thurston County	151	6	1.7 %	Yakima County	104	6	2.3 %
South Correctional Entity	123	7	1.4 %	Thurston County	102	7	2.3 %
Clark County	119	8	1.3 %	Benton County	90	8	2.0 %
Yakima County	113	9	1.3 %	Clark County	79	9	1.7 %
Benton County	109	10	1.2 %	South Correctional Entity	77	10	1.7 %
All Other Employers <sup>2</sup>	1,112		12.3 %	All Other Employers	752		16.4 %
Total (67 Employers)	9,006		100.0 %	Total (66 Employers)	4,532		100.0 %

All Other Employers	Number	Employees
State of Washington	_	_
School Districts	_	_
Counties/Municipalities	57	1,112
Other Political Subdivisions	_	_
Total	57	1,112

<sup>&</sup>lt;sup>1</sup> Includes 20 component units of the state

 $<sup>^{\</sup>rm 2}$  In 2020, "all other employers" consisted of the employers at left.

TRS Plan 1

### **Current Year and Nine Years Prior**

For Fiscal Year Ended June 30, 2020			2011 (Calendar Year Statistics)				
Employer	Covered Employees	Rank	% of Total Plan	Employer	Covered Employees	Rank	% of Total Plan
State of Washington <sup>1</sup>	27	1	4.8 %	State of Washington	245	1	6.9 %
Seattle SD 001	27	2	4.8 %	Seattle SD 001	217	2	6.1 %
Highline SD 401	27	3	4.8 %	Tacoma SD 010	133	3	3.7 %
Lake Washington SD 414	26	4	4.6 %	Lake Washington SD 414	108	4	3.0 %
Tacoma SD 010	19	5	3.4 %	Northshore SD 417	92	5	2.6 %
Bellevue SD 405	18	6	3.2 %	Spokane SD 081	75	6	2.1 %
Spokane SD 081	16	7	2.8 %	Evergreen SD 114	66	7	1.9 %
Yakima SD 007	16	8	2.8 %	Edmonds SD 015	62	8	1.7 %
Puyallup SD 003	13	9	2.3 %	Kent SD 415	62	9	1.7 %
North Thurston Public Schools 003	11	10	2.0 %	Puyallup SD 003	62	10	1.7 %
All Other Employers <sup>2</sup>	362		64.5 %	All Other Employers	2,439		68.6 %
Total (147 Employers)	562		100.0 %	Total (268 Employers)	3,561		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington	_	_
School Districts	137	362
Counties/Municipalities	_	_
Other Political Subdivisions	_	_
Total	137	362

<sup>&</sup>lt;sup>1</sup> Includes 19 component units of the state

### TRS Plan 2

For Fiscal Year Ended June 30, 2020			2011 (Calendar Year Statistics)				
	Covered		% of Total		Covered		% of Total
Employer	<b>Employees</b>	Rank	Plan	Employer	Employees	Rank	Plan
Seattle SD 001	1,640	1	6.7 %	Seattle SD 001	815	1	6.3 %
Lake Washington SD 414	734	2	3.0 %	Tacoma SD 010	494	2	3.8 %
Tacoma SD 010	638	3	2.6 %	Kent SD 415	340	3	2.6 %
Spokane SD 081	564	4	2.3 %	Evergreen SD 114	333	4	2.6 %
Vancouver SD 037	536	5	2.2 %	Lake Washington SD 414	330	5	2.6 %
Federal Way SD 210	532	6	2.2 %	Spokane SD 081	320	6	2.5 %
Evergreen SD 114	513	7	2.1 %	Highline SD 401	299	7	2.3 %
Bellevue SD 405	513	8	2.1 %	Vancouver SD 037	296	8	2.3 %
Kent SD 415	492	9	2.0 %	Bellevue SD 405	282	9	2.2 %
Highline SD 401	491	10	2.0 %	Issaquah SD 411	269	10	2.1 %
All Other Employers <sup>1</sup>	17,845		72.8 %	All Other Employers	9,123		70.7 %
Total (307 Employers)	24,498		100.0 %	Total (296 Employers)	12,901		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington <sup>2</sup>	1	107
School Districts	296	17,738
Counties/Municipalities	_	_
Other Political Subdivisions	_	_
Total	297	17,845

 $<sup>^{\</sup>rm 1}$  In 2020, "all other employers" consisted of the employers at left.

 $<sup>^{\</sup>rm 2}$  In 2020, "all other employers" consisted of the employers at left.

<sup>&</sup>lt;sup>2</sup> Includes 28 component units of the state

TRS Plan 3

### **Current Year and Nine Years Prior**

For Fiscal Year Ended June 30, 2020			2011 (Calendar Year Statistics)				
Employer	Covered Employees	Rank	% of Total Plan	Employer	Covered Employees	Rank	% of Total Plan
Seattle SD 001	2,877	1	4.9 %	Seattle SD 001	2,564	1	4.8 %
Spokane SD 081	1,772	2	3.0 %	Spokane SD 081	1,720	2	3.2 %
Lake Washington SD 414	1,672	3	2.8 %	Tacoma SD 010	1,509	3	2.8 %
Tacoma SD 010	1,625	4	2.8 %	Evergreen SD 114	1,472	4	2.8 %
Kent SD 415	1,428	5	2.4 %	Kent SD 415	1,373	5	2.6 %
Evergreen SD 114	1,410	6	2.4 %	Lake Washington SD 414	1,352	6	2.5 %
Puyallup SD 003	1,221	7	2.1 %	Federal Way SD 210	1,181	7	2.2 %
Vancouver SD 037	1,213	8	2.1 %	Vancouver SD 037	1,104	8	2.1 %
Northshore SD 417	1,202	9	2.0 %	Edmonds SD 015	1,063	9	2.0 %
Federal Way SD 210	1,157	10	2.0 %	Puyallup SD 003	1,045	10	2.0 %
All Other Employers <sup>1</sup>	43,115		73.5 %	All Other Employers	39,045		73.0 %
Total (313 Employers)	58,692		100.0 %	Total (302 Employers)	53,428		100.0 %

All Other Employers	Number	Employees
State of Washington <sup>2</sup>	1	1,125
School Districts	302	41,990
Counties/Municipalities	_	_
Other Political Subdivisions	_	_
Total	303	43,115

<sup>&</sup>lt;sup>1</sup> In 2020, "all other employers" consisted of the employers at left.

### LEOFF Plan 1

For Fiscal Year Ended June 30, 2020			2011 (Calendar Year Statistics)				
Employer	Covered Employees	Rank	% of Total Plan	Employer	Covered Employees	Rank	% of Total Plan
· '		Halik		• •	• •	Halik	
City of Seattle	6	l l	19.4 %	City of Seattle	65	- 1	31.9 %
City of Tacoma	4	2	12.9 %	City of Bellevue	10	2	4.9 %
Pierce County	3	3	9.7 %	City of Tacoma	10	3	4.9 %
King County	3	4	9.7 %	Adams County	1	4	0.5 %
City of Bellevue	2	5	6.5 %	City of Blaine	1	5	0.5 %
City of Bremerton	1	6	3.2 %	Clark County FPD 06	1	6	0.5 %
City of Pasco	1	7	3.2 %	City of Clarkston	1	7	0.5 %
City of Edmonds	1	8	3.2 %	City of College Place	1	8	0.5 %
City of Anacortes	1	9	3.2 %	City of Grand Coulee	1	9	0.5 %
City of Everett	1	10	3.2 %	City of Grandview	1	10	0.5 %
All Other Employers <sup>1</sup>	8		25.8 %	All Other Employers	112		54.8 %
Total (18 Employers)	31		100.0 %	Total (58 Employers)	204		100.0 %

All Other Employers	Number	<b>Employees</b>
State of Washington	_	_
School Districts	_	_
Counties/Municipalities	6	6
Other Political Subdivisions	2	2
Total	8	8

<sup>&</sup>lt;sup>1</sup> In 2020, "all other employers" consisted of the employers at left.

<sup>&</sup>lt;sup>2</sup> Includes 39 component units of the state

**LEOFF Plan 2** 

For Fiscal Year Ended June 30, 2020				2011 (Calendar Year Statistics)			
Employer	Covered Employees	Rank	% of Total Plan	Employer	Covered Employees	Rank	% of Total Plan
City of Seattle	2,391	1	12.5 %	City of Seattle	2,224	1	13.3 %
King County	834	2	4.3 %	City of Tacoma	740	2	4.4 %
City of Tacoma	752	3	3.9 %	King County	700	3	4.2 %
City of Spokane	657	4	3.4 %	City of Spokane	535	4	3.2 %
City of Vancouver	409	5	2.1 %	City of Bellevue	377	5	2.3 %
City of Bellevue	397	6	2.1 %	City of Vancouver	366	6	2.2 %
City of Everett	378	7	2.0 %	City of Everett	354	7	2.1 %
Pierce County	330	8	1.7 %	Pierce County	298	8	1.8 %
Snohomish County	325	9	1.7 %	Snohomish County	270	9	1.6 %
City of Bellingham	287	10	1.5 %	City of Renton	265	10	1.6 %
All Other Employers <sup>1</sup>	12,421		64.8 %	All Other Employers	10,632		63.3 %
Total (382 Employers)	19,181		100.0 %	Total (366 Employers)	16,761		100.0 %

All Other Employers	Number	Employees
State of Washington <sup>2</sup>	1	267
School Districts	_	_
Counties/Municipalities	193	6,980
Other Political Subdivisions	178	5,174
Total	372	12,421

<sup>&</sup>lt;sup>1</sup> In 2020, "all other employers" consisted of the employers at left.

 $<sup>^{\</sup>rm 2}$  Includes 9 component units of the state

# Number of Participating Employers

PERS Plan 1					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	79	78	124	66	347
6/30/2019	92	90	140	78	400
6/30/2018	101	100	155	88	444
6/30/2017	110	115	172	105	502
6/30/2016	115	123	191	120	549
6/30/2015	123	132	200	140	595
6/30/2014	128	147	212	147	634
6/30/2013	135	172	216	183	706
6/30/2012	129	220	155	174	678
6/30/2011	144	227	158	180	709

PERS Plan 2					·
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	153	280	35	542	1,010
6/30/2019	154	280	19	535	988
6/30/2018	154	280	_	530	964
6/30/2017	155	280	_	527	962
6/30/2016	153	278	_	515	946
6/30/2015	157	276	_	510	943
6/30/2014	169	275	_	490	934
6/30/2013	167	276	_	491	934
6/30/2012	169	274	_	494	937
6/30/2011	179	271	_	494	944

PERS Plan 3					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	148	222	_	355	725
6/30/2019	147	218	_	356	721
6/30/2018	147	217	_	340	704
6/30/2017	148	217	_	342	707
6/30/2016	145	212	_	330	687
6/30/2015	149	211	_	323	683
6/30/2014	158	209	_	306	673
6/30/2013	157	209	_	298	664
6/30/2012	157	206	_	300	663
6/30/2011	166	205	_	302	673

# Number of Participating Employers (cont.)

SERS Plan 2					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	_	_	309	_	309
6/30/2019	_	_	310	_	310
6/30/2018	_	_	309	_	309
6/30/2017	_	_	309	_	309
6/30/2016	_	_	307	_	307
6/30/2015	_	_	302	_	302
6/30/2014	_	_	303	_	303
6/30/2013	_	_	302	_	302
6/30/2012	_	_	299	_	299
6/30/2011	_	_	299	_	299

SERS Plan 3					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	_	_	310	_	310
6/30/2019	_	_	309	_	309
6/30/2018	_	_	308	_	308
6/30/2017	_	_	307	_	307
6/30/2016	_	_	306	_	306
6/30/2015	_	_	300	_	300
6/30/2014	_	_	300	_	300
6/30/2013	_	_	301	_	301
6/30/2012	_	_	301	_	301
6/30/2011	_	_	300	_	300

PSERS Plan 2					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	20	65	_	1	86
6/30/2019	21	65	_	1	87
6/30/2018	6	66	_	1	73
6/30/2017	6	66	_	1	73
6/30/2016	6	64	_	1	71
6/30/2015	9	65	_	1	75
6/30/2014	9	65	_	1	75
6/30/2013	9	65	_	1	75
6/30/2012	10	65	_	1	76
6/30/2011	11	65	_	1	77

# Number of Participating Employers (cont.)

TRS Plan 1					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	19	_	146	_	165
6/30/2019	18	_	142	_	160
6/30/2018	22	_	140	_	162
6/30/2017	26	_	162	_	188
6/30/2016	31	_	189	_	220
6/30/2015	34	_	217	_	251
6/30/2014	36	_	228	_	264
6/30/2013	49	_	295	_	344
6/30/2012	47	_	257	_	304
6/30/2011	49	_	263	_	312

TRS Plan 2					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	28	_	306	_	334
6/30/2019	27	_	306	_	333
6/30/2018	26	_	302	_	328
6/30/2017	26	_	306	_	332
6/30/2016	28	_	305	_	333
6/30/2015	26	_	295	_	321
6/30/2014	22	_	295	_	317
6/30/2013	36	_	304	_	340
6/30/2012	24	_	295	_	319
6/30/2011	25	_	288	_	313

TRS Plan 3					
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total
6/30/2020	39	_	312	_	351
6/30/2019	40	_	313	_	353
6/30/2018	41	_	312	_	353
6/30/2017	40	_	312	_	352
6/30/2016	40	_	310	_	350
6/30/2015	41	_	303	_	344
6/30/2014	39	_	302	_	341
6/30/2013	38	_	303	_	341
6/30/2012	35	_	302	_	337
6/30/2011	28	_	302	_	330

# Number of Participating Employers (cont.)

LEOFF Plan 1								
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total			
6/30/2020	_	16	_	2	18			
6/30/2019	_	14	_	2	16			
6/30/2018	_	13	_	3	16			
6/30/2017	_	18	_	5	23			
6/30/2016	_	23	_	6	29			
6/30/2015	_	27	_	6	33			
6/30/2014	_	36	_	9	45			
6/30/2013	_	41	_	10	51			
6/30/2012	_	42	_	12	54			
6/30/2011	_	48	_	14	62			

LEOFF Plan 2								
Fiscal Year Ended	Component Units of WA State	Counties/ Municipalities	School Districts	Other Political Subdivisions	Total			
6/30/2020	9	203	_	178	390			
6/30/2019	9	202	_	180	391			
6/30/2018	9	205	_	182	396			
6/30/2017	9	203	_	166	378			
6/30/2016	8	204	_	164	376			
6/30/2015	8	205	_	157	370			
6/30/2014	8	204	_	157	369			
6/30/2013	8	212	_	154	374			
6/30/2012	8	212	_	153	373			
6/30/2011	8	214	_	152	374			

As of June 30, 2020 — Page 1 of 16

### Aging and Long-Term Care

Aging & Long-Term Care of Eastern WA

Olympic Area Agency on Aging

SE WA Aging & Long Term Care Council of

Governments

SW WA Council Government on Aging and

Disability

### **Air Quality Agencies**

Benton Clean Air Agency

NW Clean Air Agency

Olympic Region Clean Air Agency

Puget Sound Clean Air Agency

Spokane Regional Clean Air Agency

SW Clean Air Agency

Yakima Regional Clean Air Agency

### Airports, Airport Boards

Spokane International Airport

Walla Walla Regional Airport

West Plains Airport Area PDA

#### Associations, Unions

King Co. Directors' Association

Sound Cities Association

### **Cemetery Districts**

Cowlitz Co. Cemetery Dist. 01, 02 & 05

Pend Oreille Cemetery Dist. 01

Skagit Co. Cemetery Dist. 02

### **Charter and Tribal Compact Schools**

Chief Leschi

Green Dot Public Schools

**PRIDE Prep Schools** 

Impact Public Schools

Innovation Schools

Quileute Tribal School

Rainier Prep

Spokane International Academy

Summit Public Schools

#### Cities and Towns

Aberdeen

Airway Heights

Algona

Anacortes

Arlington

Asotin

Auburn

Bainbridge Island

Battle Ground

Beaux Arts Village

Bellevue

Bellingham

Benton City

Bingen

Black Diamond

Blaine

Bonney Lake

Bothell

Bremerton

Brewster

Bridgeport

Brier

Buckley

Burien

Burlington

Camas

Carbonado (Town of)

Carnation

Cashmere

Castle Rock

Cathlamet (Town of)

Centralia

Chehalis

Chelan

Cheney

Chewelah

Clarkston

Cle Elum

Clyde Hill

Colfax

College Place

### As of June 30, 2020 — Page 2 of 16

### Cities and Towns (cont.)

Colton (Town of)

Colville

Conconully (Town of) Concrete (Town of)

Connell Cosmopolis

Coulee City (Town of) Coulee Dam (Town of) Coupeville (Town of) Creston (Town of) Cusick (Town of) Darrington (Town of)

**Davenport** Dayton Deer Park Des Moines DuPont Duvall

East Wenatchee Eatonville (Town of)

Edgewood Edmonds Electric City Ellensburg Elma

Elmer City (Town of)

Entiat Enumclaw **Ephrata** Everett Everson

Fairfield (Town of) Federal Way Ferndale Fife

**Fircrest** Forks

Friday Harbor (Town of) Garfield (Town of)

George Gig Harbor

Gold Bar Goldendale Grand Coulee Grandview

Granger (Town of)

Granite Falls

Hamilton (Town of) Harrington (Town of)

Hoquiam

Hunts Point (Town of)

Ilwaco Issaguah Kalama Kelso Kenmore Kennewick Kent Kettle Falls Kirkland Kittitas

La Conner (Town of) LaCrosse (Town of)

Lacey

La Center

Lake Forest Park Lake Stevens Lakewood Langley Leavenworth Liberty Lake Lind (Town of) Long Beach Longview Lynden Lynnwood Mabton

Mansfield (Town of) Maple Valley Marysville Mattawa McCleary Medical Lake Medina

### As of June 30, 2020 — Page 3 of 16

Mercer Island

Metaline Falls (Town of)

Mill Creek

Millwood (Town of)

Milton Monroe Montesano Morton Moses Lake

Mossyrock

Mount Vernon

Mountlake Terrace

Moxee Mukilteo

Naches (Town of)

Napavine Newcastle Newport Nooksack Normandy Park North Bend

North Bonneville Northport (Town of)

Oak Harbor

Oakesdale (Town of)

Oakville Ocean Shores

Odessa (Town of)

Okanogan Olympia Omak Oroville Orting

Othello Pacific Palouse Pasco

Pateros Port Angeles

Port Orchard Port Townsend Poulsbo

Prosser

Pullman

Puyallup Quincy

Rainier

Raymond

Reardan (Town of)

Redmond Renton

Republic Richland

Ridgefield Ritzville

Riverside (Town of)

Rock Island

Rosalia (Town of)

Roslyn Roy Royal City Ruston Sammamish SeaTac

Sedro-Woolley

Selah Sequim Shelton Shoreline

Seattle

Skykomish (Town of)

Snohomish Snoqualmie Soap Lake South Bend

South Cle Elum (Town of)

Spangle (Town of)

Spokane

Spokane Valley

Sprague

Springdale (Town of)

Stanwood

Steilacoom (Town of)

Stevenson

As of June 30, 2020 — Page 4 of 16

### Cities and Towns (cont.)

Sultan Sumas

Sumner

Sunnyside Tacoma

Tekoa

Tenino

Tieton Toledo

Tonasket Toppenish

Tukwila

Tumwater
Twisp (Town of)

Union Gap

Uniontown (Town of)

University Place

Vancouver

Waitsburg

Walla Walla

Wapato Warden

Washougal

Washtucna (Town of)
Waterville (Town of)

Wenatchee

West Richland

Westport

White Salmon

Winlock

Winthrop (Town of)

Woodinville Woodland

Woodway (Town of)

Yacolt (Town of)

Yakima

Yarrow Point (Town of)

Yelm Zillah

### **Conservation Districts**

Cascadia

Clallam

Columbia

Cowlitz

Grays Harbor

King

Kittitas Co.

Mason

Okanogan

**Pacific** 

Pend Oreille

San Juan Islands

Snohomish

Spokane Co.

Stevens Co.

Thurston

Wahkiakum

#### **Councils**

Columbia River Council of Governments

Cowlitz-Wahkiakum Council of Governments

Grays Harbor Council of Governments

Lewis, Mason, Thurston Council of Governments

Northwest Regional Council

Pacific Mountain Workforce Development Council

Puget Sound Regional Council

Skagit Council of Governments

South Central Workforce Council

Spokane Area Workforce Development Council

Thurston Regional Planning Council

Whatcom Council of Governments

### **Counties**

Adams

Asotin

**Benton** 

Chelan

Clallam

Clark

Columbia

As of June 30, 2020 — Page 5 of 16

### Counties (cont.)

Cowlitz Douglas Ferry Franklin Garfield

Grant

Grays Harbor

Island
Jefferson
King
Kitsap
Kittitas
Klickitat
Lewis
Lincoln
Mason

Okanogan Pacific

Pend Oreille

Pierce San Juan Skagit Skamania

Snohomish Spokane

Stevens Thurston

Wahkiakum Walla Walla

Whatcom Whitman

Yakima

### **Development Authorities/Districts**

Cultural Development Auth. of King Co.
North Bonneville Public Development Auth.
Seattle Southside Regional Tourism Auth.
Tricounty Economic Development Dist.
Walla Walla Valley Metro Planning Org.

### **Educational Service Districts**

ESD 101 ESD 105 ESD 112 ESD 113 ESD 123

North Central ESD 171 Northwest ESD 189 Olympic ESD 114 Puget Sound ESD 121

# **Emergency Services and Communication Districts**

Clark Regional Emergency Services Agency

Cowlitz 911

Franklin Co. Emergency Management

Grays Harbor Communications

Island Co. Emergency Services Communication Ctr.

Jefferson Co. 911 Communications

Kitsap 911 Public Auth.

KITTCOM 911

Klickitat Co. Emergency Medical Service Dist. 01

Mason Co. Emergency Communications Multi Agency Communications Center

NORCOM 911

North Country Emergency Medical Service

**RIVERCOM** 

Skagit Emergency Communication Center

Snohomish Co. 911 South Sound 911

Spokane Regional Emergency Comms

Thurston 911 Communications
Valley Communication Center

### **Fire Protection Districts**

Adams Co. FPD 05

Asotin Co. FPD 01

Bainbridge Island Fire Dept.

Benton Co. FPDs 01, 02, 04 & 06

Central Kitsap Fire & Rescue

Central Whidbey Island Fire & Rescue Chelan Co. FPDs 01, 03, 05, 06, 07 & 09

As of June 30, 2020 — Page 6 of 16

### Fire Protection Districts (cont.)

Clallam Co. FPDs 01, 02, 03 & 04

Clark Co. Fire & Rescue

Clark Co. FPDs 03, 05, 06, 10 & 13

Columbia Co. FPD 03

Cowlitz 02 Fire & Rescue

Cowlitz Co. FPDs 01, 03, 05 & 06

Cowlitz-Skamania Co. FPD 07

Douglas Co. FPD 02

Douglas-Okanogan Co. FPD 15

East County Fire & Rescue

East Pierce Co. Fire & Rescue

Fire District 38

Franklin Co. FPD 03

Garfield Co. FPD 01

Grant Co. FPDs 03, 05, 08 & 10

Grays Harbor Co. FPDs 02 & 05

Interlocal Organization of Lewis Co. Rural FPD 02,

07 & 15

Island Co. FPD 01

Jefferson Co. FPDs 01, 02, 03 & 04

King Co. FPDs 02, 10, 16, 20, 27, 28, 34, 39, 44,

45 & 50

Kitsap Co. FPDs 07, 10 & 18

Kittitas Co. FPDs 01, 02 & 07

Klickitat Co. FPDs 03 & 07

Lewis Co. FPDs 02, 03, 05, 06, 10, 14 & 15

Marysville Fire District Regional Fire Auth.

Mason Co. FPDs 03, 04, 05, 06, 11, 13, 16 & 18

North County Regional Fire Auth.

North Mason Regional Fire Auth.

North Whidbey Fire & Rescue

Okanogan Co. FPD 06

Pacific Co. FPD 01

Pend Oreille FPDs 02, 03 & 04

Pierce Co. FPDs 03, 05, 06, 10, 13, 14, 16, 17,

18, 21, 23 & 27

Puget Sound Regional Fire Auth.

Renton Regional Fire Auth.

Riverside Fire Auth.

San Juan Co. FPDs 02, 03 & 04

Shoreline Fire Dept.

Skagit Co. FPDs 02, 06, 08, 13 & 14

Snohomish Co. FPDs 04, 05, 07, 15, 17, 19, 21, 22, 24 & 26

Snoqualmie Pass Fire & Rescue

South Beach Regional Fire Auth.

South Snohomish Co. Regional Fire Auth.

South Whatcom Fire Auth.

South Whidbey Fire & EMS

Southeast Thurston Fire Auth.

Spokane Co. FPDs 01, 03, 04, 08, 09, 10 & 13

Stevens Co. FPD 01

Thurston Co. FPDs 03, 06, 08, 09, 12, 13 & 17

Valley Regional Fire Auth.

Vashon Island Fire & Rescue

Walla Walla Co. FPDs 04 & 05

West Benton Regional Fire Auth.

West Thurston Regional Fire Auth.

Whatcom Co. FPDs 01, 04, 05, 07, 11, 14, 17, 18

& 21

Woodinville Fire & Rescue

Yakima Co. FPDs 04, 05, 06 & 12

## **Housing Authorities**

Anacortes

Asotin Co.

Bellingham

**Bremerton** 

Chelan Co./Wenatchee

Everett

Grant Co.

Grays Harbor Co.

Island Co.

Joint Republic Ferry Co.

Kelso

Kennewick

King Co.

Kitsap Co. Consolidated

Kittitas Co.

Longview

Okanogan Co.

Othello

Pasco/Franklin Co.

Peninsula

As of June 30, 2020 — Page 7 of 16

### Housing Authorities (cont.)

Pierce Co.

Renton

Seattle

Skagit Co.

Snohomish Co.

Spokane

Tacoma

Thurston Co.

Vancouver

Walla Walla

### **Insurance Authorities**

**Enduris Washington** 

Health Benefit Exchange

Transit Insurance Pool of WA

WA Cities Insurance Auth.

WA Counties Insurance Fund

WA Counties Risk Pool

Water & Sewer Insurance Pool

### Irrigation, Sewer and Water Districts

Agnew Irrigation Dist.

Ahtanum Irrigation Dist.

Alderwood Water & Wastewater Dist.

Beacon Hill Water & Sewer Dist.

Belfair Water Dist.

Benton Irrigation Dist.

Birch Bay Water & Sewer Dist.

Brewster Flat Irrigation Dist.

Cascade Irrigation Dist.

Cedar River Water & Sewer Dist.

Chinook Water Dist.

Clark Regional Wastewater Dist.

Clinton Water Dist.

Coal Creek Utility Dist.

Columbia Irrigation Dist.

Columbia Valley Water Dist.

Consolidated Irrigation Dist. 19

Covington Water Dist.

Cowlitz Consolidated Diking Improvement Dist. 01 &

02

Cross Valley Water Dist.

Dallesport Water Dist.

Diamond Lake Water & Sewer Dist.

Douglas Co. Sewer Dist. 01

East Columbia Basin Irrigation Dist.

East Spokane Water Dist. 01

East Wenatchee Water Dist.

Eastsound Sewer & Water Dist.

Fall City Water Dist.

Franklin Co. Irrigation Dist. 01

Gardena Farms Irrigation Dist. 13

Glacier Water Dist.

Grays Harbor Co. Water Dist. 01

Greater Wenatchee Irrigation Dist.

Highland Irrigation Dist.

Highline Water Dist.

Holmes Harbor Sewer Dist.

Icicle Irrigation Dist.

Irvin Water Dist. 06

Kennewick Irrigation Dist.

King Co. Water Dist. 19, 20, 49, 54, 90, 119 & 125

Kiona Irrigation Dist.

Kittitas Reclamation Dist.

Lake Chelan Reclamation Dist.

Lake Forest Park Water Dist.

Lake Meridian Water District

Lake Stevens Sewer Dist.

Lake Whatcom Water & Sewer Dist.

Lakehaven Water & Sewer Dist.

Lakewood Water Dist.

Loon Lake Sewer Dist. 04

Lopez Solid Waste Disposal Dist.

LOTT Clean Water Alliance

Malaga Water Dist.

Manchester Water Dist.

Midway Sewer Dist.

Moab Irrigation Dist. 20

Model Irrigation Dist. 18

Moses Lake Irrigation & Rehabilitation Dist.

Mukilteo Water & Wastewater Dist.

Naches-Selah Irrigation Dist.

NE Sammamish Sewer & Water Dist.

As of June 30, 2020 — Page 8 of 16

### Irrigation, Sewer and Water Districts (cont.)

North Beach Water Dist.

North City Water Dist.

North Perry Ave. Water Dist.

North Spokane Irrigation Dist. 08

Northshore Utility Dist.

Okanogan Irrigation Dist.

Olympic View Water Dist.

Orchard Ave. Irrigation Dist.

Oroville-Tonasket Irrigation Dist.

Pasadena Park Irrigation Dist. 17

Point Roberts Water Dist. 04

Quincy-Columbia Basin Irrigation Dist.

Roza Irrigation Dist.

Sacheen Lake Sewer & Water Dist.

Samish Water Dist.

Sammamish Plateau Water & Sewer Dist.

Seaview Sewer Dist.

Selah-Moxee Irrigation Dist.

Silver Lake Water Dist.

Silverdale Water Dist. 16

Skyway Water & Sewer Dist.

Snoqualmie Pass Utility District

Snoqualmie Valley Watershed Improvement Dist.

Soos Creek Water & Sewer Dist.

South Columbia Basin Irrigation Dist.

South Kitsap Water Reclamation Facility

Spokane Co. Water Dist. 03

Stemilt Irrigation Dist.

Stevens Pass Sewer Dist.

Sunland Water Dist.

Sunnyside Valley Irrigation Dist.

SW Suburban Sewer Dist.

Terrace Heights Sewer Dist.

Three Rivers Regional Wastewater Auth.

Trentwood Irrigation Dist. 03

Valley View Sewer Dist.

Valley Water Dist.

Vera Water & Power

Walla Walla Watershed Management

Wenatchee Reclamation Dist.

Whatcom Co. Water Dist. 02 & 07

Whitestone Reclamation Dist.

Whitworth Water Dist. 2

Willapa Valley Water Dist.

Woodinville Water Dist.

Yakima-Tieton Irrigation Dist.

### Libraries, Library Districts

Asotin Co. Library Dist.

Central Skagit Rural Library Dist.

Columbia Co. Rural Library Dist.

Fort Vancouver Regional Library

Jefferson Co. Rural Library Dist.

King Co. Law Library

King Co. Rural Library Dist.

Kitsap Co. Rural Library Dist.

La Conner Regional Library

Lopez Island Library Dist.

Mid-Columbia Library

North Central Regional Library

North Olympic Library System

Orcas Island Library Dist.

Pend Oreille Co. Library Dist.

Pierce Co. Rural Library Dist.

Ritzville Library Dist. 02

San Juan Island Co. Library

Sno-Isle Regional Library

Spokane Co. Law Library

Spokane Co. Library Dist.

Stevens Co. Rural Library

Timberland Regional Library

Upper Skagit Library Dist.

Walla Walla Co. Rural Library Dist.

Whatcom Co. Rural Library Dist.

Whitman Co. Rural Library

Yakima Valley Regional Library

### **Mosquito Districts**

Adams Co. Mosquito Dist.

Benton Co. Mosquito Control Dist.

Columbia Mosquito Control Dist.

Franklin Co. Mosquito Control Dist.

Yakima Co. Mosquito Control Dist.

As of June 30, 2020 — Page 9 of 16

### **Parks and Recreation Districts**

Bainbridge Island Metro Parks & Recreation Dist

Eastmont Metropolitan Parks Dist.

Fidalgo Pool & Fitness Center

Key Peninsula Metro Park Dist.

Manson Parks & Recreation Dist.

Metropolitan Park Dist. of Tacoma

Peninsula Metropolitan Park Dist.

San Juan Island Park & Recreation Dist.

Si View Metropolitan Park Dist.

South Whidbey Parks & Recreation Dist.

Vashon-Maury Island Parks & Recreation Dist.

#### **Ports**

Allyn

Anacortes

Bellingham

**Benton** 

**Bremerton** 

Brownsville

Camas-Washougal

Centralia

Chehalis

Chelan Douglas Regional Port Auth.

Clarkston

Columbia

Edmonds

Everett

Friday Harbor

Garfield Co.

Grant Co. 01, 02, 03, 09 & 10

Grays Harbor

Ilwaco

Kalama

Kennewick

Kingston

Klickitat

Longview

Olympia

Orcas

Othello

Pasco

Peninsula

Port Angeles

Port Townsend

Ridgefield

Seattle

Shelton

Skagit Co.

Skamania Co.

Sunnyside

Tacoma

Vancouver

Wahkiakum Co. 01

Walla Walla

Whitman Co.

Willapa Harbor

Woodland

### **Public Facility Districts**

Asotin Co. Public Facilities Dist.

Edmonds Public Facilities Dist.

Lynnwood Public Facilities Dist.

Public Stadium Auth.

Spokane Public Facility Dist.

#### **Public Health**

Asotin Co. Health Dist.

Benton-Franklin Health Dist.

Chelan-Douglas Health Dist.

Garfield Co. Health Dist.

Grant Co. Health Dist.

Great Rivers Behavioral Health Organization

Greater Columbia Behavioral Health

King Co. Public Health Dept.

Kitsap Public Health Dist.

NE Tricounty Health Dist.

North Sound Regional Support Network

Okanogan Co. Heath Dist.

Snohomish Health Dist.

Spokane Regional Health Dist.

Thurston-Mason Behavioral Health

Yakima Co. Health Dist.

As of June 30, 2020 — Page 10 of 16

#### **Public Hospital Districts**

Benton Co. Public Hospital Dist. 1 Chelan Co. Public Hospital Dist. 1 & 2 Clallam Co. Public Hospital Dist. 1 Kittitas Co. Public Hospital Dist. 2 San Juan Co. Public Hospital Dist. 1 Skamania Co. Public Hospital Dist. 1 Whidbey Island Public Hospital Dist.

#### **Public Utility Districts**

Asotin Co. PUD 01 Benton Co. PUD 01 Chelan Co. PUD 01 Clallam Co. PUD 01 Clark Co. PUD

Columbia Basin Hydropower

Cowlitz Co. PUD 01 Douglas Co. PUD 01 Energy Northwest Ferry Co. PUD 01

Franklin Co. Public Works 01

Franklin Co. PUD Grant Co. Public Works Grant Co. PUD 02

Grays Harbor Co. PUD 01

Jefferson Co. PUD 01 Kitsap Co. PUD 01 Kittitas Co. PUD 01 Klickitat Co. PUD 01 Lewis Co. PUD 01

Mason Co. PUD 01 & 03 Okanogan Co. PUD 01 Pacific Co. PUD 02 Pend Oreille Co. PUD 01 Skagit Co. PUD 01 Skamania Co. PUD 01 Snohomish Co. PUD 01

Stevens Co. PUD
Thurston Co. PUD 01
Wahkiakum Co. PUD 01
West Sound Utility Dist.

#### **Road Departments**

Chelan Co. Roads

Lincoln Co. Highway Dept.

#### **School Districts**

Aberdeen Adna Almira Anacortes Arlington

Asotin Anatone

Auburn

Bainbridge Island
Battle Ground
Bellevue
Bellingham
Benge
Bethel
Bickleton
Blaine

Boistfort
Bremerton
Brewster
Bridgeport
Brinnon

Burlington-Edison

Camas

Cape Flattery

Carbonado Historical

Cascade
Cashmere
Castle Rock
Centerville
Central Kitsap
Central Valley
Centralia
Chehalis
Cheney
Chewelah
Chimacum

### As of June 30, 2020 — Page 11 of 16

### School Districts (cont.)

Clarkston

Cle Elum-Roslyn

Clover Park

Colfax

College Place

Colton

Columbia (Stevens Co.)

Columbia (Walla Walla Co.)

Colville

Concrete

Conway

Cosmopolis

Coulee Hartline

Coupeville

Crescent

Creston

Curlew

Cusick

Damman

Darrington

Davenport

Dayton

Deer Park

Dieringer

Dixie

East Valley (Spokane Co.)

East Valley (Yakima Co.)

Eastmont

Easton

Eatonville

**Edmonds** 

Ellensburg

Elma

Endicott

Entiat

Enumclaw

**Ephrata** 

**Evaline** 

Everett

Evergreen (Clark Co.)

Evergreen (Stevens Co.)

Federal Way

Ferndale

Fife

Finley

Franklin Pierce

Freeman

Garfield

Glenwood

Goldendale

Grand Coulee Dam

Grandview

Granger

Granite Falls

Grapeview

Great Northern

Green Mountain

Griffin

Harrington

Highland

Highline

Hockinson

**Hood Canal** 

Hoguiam

Inchelium

Index

Issaguah

Kahlotus

Kalama

Keller

Kelso

Kennewick

Kent

Kettle Falls

Kiona-Benton City

Kittitas

Klickitat

La Center

La Conner

LaCrosse

Lake Chelan

Lake Stevens

### As of June 30, 2020 — Page 12 of 16

Lake Washington

Lakewood Lamont

Liberty Lind

Longview Loon Lake

Lopez Island

Lyle Lynden Mabton Mansfield Manson

Mary M. Knight Mary Walker Marysville

McCleary Mead

Meridian

Medical Lake Mercer Island

Methow Valley

Mill A Monroe Montesano Morton Moses Lake

Mossyrock Mount Adams Mount Baker

Mount Pleasant Mount Vernon Mukilteo

Naches Valley

Napavine Naselle-Grays River Valley

Nespelem Newport Nine Mile Falls Nooksack Valley North Beach

North Franklin

North Kitsap

North Mason

North River

North Thurston

Northport

Northshore

Oak Harbor Oakesdale

Oakville

Ocean Beach

Ocosta

Odessa

Okanogan

Olympia

Omak

Onalaska

Onion Creek

Orcas Island

Orchard Prairie

Orient

Orondo

Oroville

Orting

Othello

**Palisades** 

**Palouse** 

Pasco

**Pateros** 

Paterson

Pe Ell

Peninsula

Pioneer

Pomeroy

Port Angeles

Port Townsend

Prescott

Prosser

Pullman

Puyallup

### As of June 30, 2020 — Page 13 of 16

### School Districts (cont.)

Queets-Clearwater

Quilcene Quillayute

Quinault Lake

Quincy Rainier Raymond

Reardan-Edwall

Renton
Republic
Richland
Ridgefield
Ritzville
Riverside
Riverview

Rochester Roosevelt Rosalia

Royal Saint John

San Juan Island Satsop

Seattle

Sedro-Woolley Selah Selkirk

Sequim Shaw Island Shelton Shoreline

Snohomish Snoqualmie Valley

Skamania

Skykomish

Soap Lake

South Bend South Kitsap South Whidbey Southside Spokane

Sprague

Stanwood-Camano

Star Starbuck Stehekin

Steilacoom Historical

Steptoe

Stevenson-Carson

Sultan
Summit
Sumner
Sunnyside
Tacoma
Taholah
Tahoma
Tekoa
Tenino
Thorp
Toledo
Tonasket
Toppenish
Touchet

Toutle Lake
Trout Lake
Tukwila
Tumwater
Union Gap
University Place

Valley
Vancouver
Vashon Island
Wahkiakum
Wahluke
Waitsburg
Walla Walla
Wapato

Warden Jr. Consolidated Washougal

Washtucna Waterville Wellpinit Wenatchee

West Valley (Spokane Co.) West Valley (Yakima Co.)

As of June 30, 2020 — Page 14 of 16

### School Districts (cont.)

White Pass

White River

White Salmon

Wilbur

Willapa Valley

Wilson Creek

Winlock

Wishkah Valley

Wishram

Woodland

Yakima

Yelm

Zillah

### Transportation Authorities, Transportation Districts

Asotin Co. P.T.B.A.

Ben Franklin Transit

Chelan-Douglas P.T.B.A.

Clallam Co. P.T.B.A.

Clark Co. P.T.B.A.

Columbia Co. Transportation Auth.

Garfield Co. Transportation Auth.

Grant Co. P.T.B.A.

Grays Harbor Transportation Auth.

Island Co. P.T.B.A.

Jefferson Transit Auth.

Kitsap Co. P.T.B.A.

Lewis P.T.B.A.

Mason Co. P.T.B.A.

Okanogan Co. Transit Auth.

Pacific Transit System

Pierce Co. P.T.B.A.

Snohomish Co. P.T.B.A.

Spokane Regional Transportation Council

Spokane Transit Auth.

SW WA Regional Transportation Council

Thurston Co. P.T.B.A.

Valley Transit

Wenatchee Valley Transportation Council

Whatcom Transportation Auth.

#### **Weed Control Districts**

Adams Co. Weed Dist. 1

Benton Co. Noxious Weed Control Board

Grant Co. Noxious Weed Board

Grant Co. Weed Dist. 1 & 3

Pierce Co. Noxious Weed Board

Spokane Co. Noxious Weed Control Board

#### Other

#### **Other Government Entities**

Housing Authorities Risk Retention Pool

Lower Columbia Fish Recovery Board

Northwest Seaport Alliance Port Development Auth.

School Information Processing Cooperative

South Correctional Entity

Tacoma-Pierce Co. Employment & Training

Consortium

Yakima Valley Conference of Governments

#### State Entities

#### **State Agencies**

Administrative Office of the Courts

Archaeology-Historic Preservation

Board for Volunteer Firefighters

Board of Industrial Insurance Appeals

Board of Registration for Professional Engineers &

Land Surveyors

Board of Tax Appeals

Child Study & Treatment Center

Civil Legal Aid

Consolidated Support Services

Consolidated Technology Services

County Road Administration Board

Court of Appeals

Dept. of Agriculture

Dept. of Children, Youth & Families

Dept. of Commerce

Dept. of Corrections

Dept. of Ecology

Dept. of Employment Security

Dept. of Enterprise Services

As of June 30, 2020 — Page 15 of 16

State Agencies (cont.)

Dept. of Financial Institutions

Dept. of Fish & Wildlife

Dept. of Health

Dept. of Labor & Industries

Dept. of Licensing

Dept. of Natural Resources

Dept. of Retirement Systems

Dept. of Revenue

Dept. of Services for the Blind

Dept. of Social & Health Services (8)

Dept. of Transportation

Dept. of Veterans Affairs

Eastern State Hospital

Eastern WA State Historical Society

Echo Glen Children's Center

Economic Development Finance Auth.

Environmental & Land Use Hearings Office

Fircrest School

Green Hill School

Health Care Facilities Auth.

House of Representatives

Indian Advisory Council

Joint Legislative Audit & Review Committee

Joint Legislative Systems Committee

Joint Transportation Committee

Lakeland Village

Law Library

LEAP Committee

LEOFF Plan 2 Retirement Board

Liquor & Cannabis Board

Military Dept.

Naselle Youth Camp

Office of Administrative Hearings

Office of Financial Management

Office of Forecast Council

Office of Legislative Support Services

Office of Minority & Women's Business Enterprises

Office of Public Defense

Office of the Attorney General

Office of the Governor

Office of the Insurance Commissioner

Office of the Lieutenant Governor

Office of the Secretary of State

Office of the State Actuary

Office of the State Auditor

Office of the State Treasurer

Puget Sound Partnership

Rainier School

Recreation & Conservation Office

Senate

Special Commitment Center

State Board for Community & Technical Colleges

State Board of Accountancy

Statute Law Committee

Student Achievement Council

Superintendent of Public Instruction

Supreme Court

Transportation Improvement Board

Veterans Home — Spokane

Veterans Home — Walla Walla

WA Pollution Liability Insurance Agency

WA Soldiers Home & Colony

WA State Bar Association

WA State Caseload Forecast Council

**WA State Ferries** 

WA State Health Care Auth.

WA State Historical Society

WA State Investment Board

WA State Patrol

WA State School Directors' Association

WA State School for the Blind

WA State School for the Deaf

WA Veterans Home

Western State Hospital

Workforce Training & Education Coordinating Board

Yakima Valley School

#### **State Commissions**

African-American Affairs

Apple

Arts

Asian American Affairs

Beef

Columbia River Gorge

Conservation

As of June 30, 2020 — Page 16 of 16

### **State Commissions (cont.)**

Criminal Justice Training

Dairy Products

Fruit

Gambling

Grain

Hispanic Affairs

Нор

Horse Racing

Housing Finance

Human Rights

**Judicial Conduct** 

Lottery

Parks & Recreation

Potato

Public Disclosure

**Public Employment Relations** 

Puget Sound Pilotage

Salaries for Elected Officials

Traffic Safety

Tree Fruit Research

**Utilities & Transportation** 

Wine

### Technical Colleges, Community Colleges

Bates Technical College

Bellevue Community College

Bellingham Technical College

Big Bend Community College

Cascadia College

Centralia College

Clark Community College

Clover Park Technical College

Columbia Basin Community College

Edmonds Community College

**Everett Community College** 

Grays Harbor College

Green River College

Highline Community College

Lake Washington Institute of Technology

Lower Columbia Community College

Olympic College

Peninsula College

Pierce College

Renton Technical College

Seattle Community College

Shoreline Community College

Skagit Valley College

South Puget Sound Community College

Spokane Community College

Tacoma Community College

Walla Walla Community College

Wenatchee Valley College

Whatcom Community College

Yakima Valley College

#### Universities

Central Washington University

Eastern Washington University

Evergreen State College, The

University of Washington

Washington State University

Western Washington University

PERS Plan 1

For the 12 Months Ended June 30, 2019

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500 <sup>2</sup>	2,652	2,062	4	112	474	1,767	583	270	32
501-1,000	5,914	4,066	3	240	1,605	3,510	1,312	961	131
1,001-1,500	6,185	4,554	1	220	1,410	3,670	1,372	935	208
1,501-2,000	9,273	8,192	1	127	953	6,441	1,666	874	292
2,001-2,500	6,963	6,498	_	30	435	4,682	1,205	753	323
2,501-3,000	5,086	4,855	_	11	220	3,385	815	611	275
3,001-3,500	3,427	3,310	_	4	113	2,289	480	408	250
3,501-4,000	2,292	2,224	_	_	68	1,448	387	274	183
4,001+	3,841	3,760	_	1	80	2,231	627	551	432
Totals	45,633	39,521	9	745	5,358	29,423	8,447	5,637	2,126

<sup>&</sup>lt;sup>1</sup> **1 (Life):** Retiree's lifetime; **2 (100%):** Beneficiary receives same monthly benefit for life; **3 (50%):** Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

#### PERS Plan 2

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500	8,981	6,937	_	970	1,074	6,066	2,180	529	206
501-1,000	10,819	9,025	_	614	1,180	6,878	2,700	829	412
1,001-1,500	9,502	8,677	_	207	618	6,066	2,069	927	440
1,501-2,000	7,229	6,900	_	45	284	4,739	1,293	825	372
2,001-2,500	5,263	5,066	_	16	181	3,300	940	674	349
2,501-3,000	3,945	3,844	_	8	93	2,423	637	588	297
3,001-3,500	2,843	2,801	_	3	39	1,787	419	397	240
3,501-4,000	1,949	1,921	_	4	24	1,186	280	312	171
4,001+	4,417	4,378		2	37	2,687	542	772	416
Totals	54,948	49,549		1,869	3,530	35,132	11,060	5,853	2,903

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

<sup>&</sup>lt;sup>2</sup> Includes L&I holdoffs

PERS Plan 3

For the 12 Months Ended June 30, 2019

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500	1,882	1,609	_	77	196	1,189	528	107	58
501-1,000	1,607	1,511	_	13	83	1,036	368	141	62
1,001-1,500	948	926	_	1	21	590	194	103	61
1,501-2,000	632	624	_	1	7	406	106	67	53
2,001-2,500	346	342	_	_	4	216	57	49	24
2,501-3,000	149	148	_	_	1	86	16	31	16
3,001-3,500	75	75	_	_	_	49	10	10	6
3,501-4,000	20	20	_	_	_	12	2	5	1
4,001+	25	25	_	_	_	15	2	4	4
Totals	5,684	5,280	_	92	312	3,599	1,283	517	285

<sup>&</sup>lt;sup>1</sup> **1 (Life):** Retiree's lifetime; **2 (100%):** Beneficiary receives same monthly benefit for life; **3 (50%):** Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

#### SERS Plan 2

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500	3,181	2,754	_	195	232	2,281	671	151	78
501-1,000	3,429	3,213	_	69	147	2,527	596	215	91
1,001-1,500	1,777	1,711	_	5	61	1,249	270	177	81
1,501-2,000	836	819	_	4	13	593	116	96	31
2,001-2,500	390	386	_	1	3	280	43	49	18
2,501-3,000	210	209	_	_	1	153	18	31	8
3,001-3,500	79	78	_	_	1	53	12	9	5
3,501-4,000	50	49	_	_	1	38	5	3	4
4,001+	104	104	_	_	_	76	6	16	6
Totals	10,056	9,323	_	274	459	7,250	1,737	747	322

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

#### SERS Plan 3

For the 12 Months Ended June 30, 2019

			Retireme	nt Type		Option Selected <sup>1</sup>				
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%	
\$ 0-500	6,224	5,836	_	85	303	4,450	1,333	305	136	
501-1,000	2,671	2,599	_	7	65	1,935	419	227	90	
1,001-1,500	756	744	_	1	11	526	121	74	35	
1,501-2,000	206	205	_	_	1	153	22	19	12	
2,001-2,500	75	73	_	_	2	50	14	7	4	
2,501-3,000	26	26	_	_	_	21	3	_	2	
3,001-3,500	13	13	_	_	_	9	2	2	_	
3,501-4,000	10	10	_	_	_	6	2	1	1	
4,001+	6	6				5			1	
Totals	9,987	9,512		93	382	7,155	1,916	635	281	

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

#### **PSERS Plan 2**

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500	73	55	_	11	7	42	22	4	5
501-1,000	117	107	_	6	4	72	30	9	6
1,001-1,500	71	70	_	1	_	45	15	7	4
1,501-2,000	25	24	_	_	1	20	3	1	1
2,001-2,500	5	5	_	_	_	4	_	1	_
2,501-3,000	4	4	_	_	_	2	_	2	_
3,001-3,500	1	1	_	_	_	1	_	_	_
3,501-4,000	_	_	_	_	_	_	_	_	_
4,001+	_	_	_	_	_	_	_	_	_
Totals	296	266	_	18	12	186	70	24	16

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

TRS Plan 1

For the 12 Months Ended June 30, 2019

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500	1,080	935	_	18	127	742	253	69	16
501-1,000	2,342	1,552	_	82	708	1,237	509	549	47
1,001-1,500	2,831	1,941	_	109	781	1,342	826	543	120
1,501-2,000	8,273	7,464	_	164	645	5,554	1,698	728	293
2,001-2,500	7,027	6,660	_	57	310	4,870	1,196	693	268
2,501-3,000	4,358	4,197	_	15	146	2,674	911	502	271
3,001-3,500	3,032	2,971	_	3	58	1,831	618	362	221
3,501-4,000	1,751	1,714	_	2	35	1,041	378	206	126
4,001+	1,876	1,841		3	32	1,058	372	279	167
Totals	32,570	29,275	_	453	2,842	20,349	6,761	3,931	1,529

<sup>&</sup>lt;sup>1</sup> **1 (Life):** Retiree's lifetime; **2 (100%):** Beneficiary receives same monthly benefit for life; **3 (50%):** Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

TRS Plan 2

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500	608	544	_	28	36	420	140	35	13
501-1,000	850	742	_	28	80	560	183	65	42
1,001-1,500	712	645	_	16	51	464	154	56	38
1,501-2,000	808	762	_	5	41	512	164	73	59
2,001-2,500	757	741	_	4	12	489	131	92	45
2,501-3,000	710	702	_	1	7	472	110	84	44
3,001-3,500	540	536	_	_	4	356	80	65	39
3,501-4,000	381	373	_	_	8	256	45	50	30
4,001+	489	487	_	_	2	364	48	53	24
Totals	5,855	5,532		82	241	3,893	1,055	573	334

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

TRS Plan 3 For the 12 Months Ended June 30, 2019

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2 100%	3 50%	4 66%
\$ 0-500	2,293	1,936	_	78	279	1,474	652	106	61
501-1,000	3,314	3,140	_	16	158	2,196	725	253	140
1,001-1,500	3,083	3,023	_	2	58	1,855	701	346	181
1,501-2,000	2,749	2,717	_	1	31	1,729	491	331	198
2,001-2,500	1,548	1,534	_	_	14	1,074	207	173	94
2,501-3,000	459	453	_	_	6	298	68	62	31
3,001-3,500	143	143	_	_	_	87	21	25	10
3,501-4,000	70	70	_	_	_	51	8	4	7
4,001+	42	42				33	4	4	1
Totals	13,701	13,058	_	97	546	8,797	2,877	1,304	723

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

## LEOFF Plan 1

			Retireme	ent Type						
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2² 100%	3 <sup>2</sup> 50%	4² 66%	A (Standard)
\$ 0-500	14	10	_	_	4	_	1	_	_	13
501-1,000	35	26	_	_	9	_	1	_	_	34
1,001-1,500	45	27	1	_	17	_	6	1	_	38
1,501-2,000	52	18	2	4	28	_	4	11	4	33
2,001-2,500	148	27	46	29	46	1	30	2	5	110
2,501-3,000	459	71	174	61	153	3	98	8	11	339
3,001-3,500	1,043	115	474	127	327	12	195	14	14	808
3,501-4,000	1,410	244	701	94	371	10	108	17	25	1,250
4,001+	3,685	1,784	1,158	33	710	23	87	25	24	3,526
Totals	6,891	2,322	2,556	348	1,665	49	530	78	83	6,151

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life;

<sup>4 (66%):</sup> Beneficiary receives two-thirds the monthly benefit for life; or A (Standard): Standard option, 100% joint and survivor, with additional benefits to eligible children

<sup>&</sup>lt;sup>2</sup> Joint and survivor options are available for post-retirement marriages.

LEOFF Plan 2

For the 12 Months Ended June 30, 2019

			Retireme	nt Type		Option Selected <sup>1</sup>			
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	1 Life	2² 100%	3² 50%	4 <sup>2</sup> 66%
\$ 0-500	115	79	11	7	18	58	47	8	2
501-1,000	242	167	29	2	44	104	113	15	10
1,001-1,500	310	238	32	7	33	132	126	28	24
1,501-2,000	312	235	36	8	33	119	147	23	23
2,001-2,500	350	280	33	6	31	139	140	41	30
2,501-3,000	430	362	44	3	21	164	171	56	39
3,001-3,500	533	467	34	6	26	209	182	86	56
3,501-4,000	556	493	39	10	14	236	183	74	63
4,001+	3,216	2,991	153	13	59	1,385	809	528	494
Totals	6,064	5,312	411	62	279	2,546	1,918	859	741

<sup>&</sup>lt;sup>1</sup> 1 (Life): Retiree's lifetime; 2 (100%): Beneficiary receives same monthly benefit for life; 3 (50%): Beneficiary receives half the monthly benefit for life; or 4 (66%): Beneficiary receives two-thirds the monthly benefit for life

#### WSPRS Plan 1

			Retireme	nt Type		C	ption Selected	l <sub>1</sub>
Monthly Benefit Amount	Number of Retirees	Service	Duty Disability	Nonduty Disability	Survivor Payment	A	В	Life
\$ 0-500	4	4	_	_	_	2	2	
501-1,000	11	7	_	_	4	6	5	_
1,001-1,500	16	3	_	_	13	15	1	_
1,501-2,000	28	13	_	_	15	22	6	_
2,001-2,500	34	9	_	_	25	27	6	1
2,501-3,000	34	10	_	_	24	28	6	_
3,001-3,500	77	50	_	_	27	36	40	1
3,501-4,000	168	133	_	_	35	59	106	3
4,001+	809	767			42	364	429	16
Totals	1,181	996			185	559	601	21

<sup>1</sup> A: 100% joint and survivor, with initial pension equal to the lesser of 50% AFC and 100% member's accrued benefit; B: 100% joint and survivor, with initial pension being the actuarial equivalent of the single-life annuity — this option is available for post-retirement marriages; or Life: Single-life annuity, joint annuitant removed post-retirement

<sup>&</sup>lt;sup>2</sup> Joint and survivor options are available for post-retirement marriages.

#### JRS

For the 12 Months Ended June 30, 2019

			Retireme	ent Type			Option Sel	ected <sup>1</sup>		
Monthly										
Benefit	Number		Duty	Nonduty	Survivor	1	<b>2</b> <sup>2</sup>	<b>3</b> <sup>2</sup>	<b>4</b> <sup>2</sup>	A
Amount	of Retirees	Service	Disability	Disability	Payment	Life	100%	50%	66%	(Standard)
\$ 0-500	_	_	_	_	_	_	_	_	_	_
501-1,000	_	_	_	_	_	_	_	_	_	_
1,001-1,500	_	_	_	_	_	_	_	_	_	_
1,501-2,000	_	_	_	_	_	_	_	_	_	_
2,001-2,500	_	_	_	_	_	_	_	_	_	_
2,501-3,000	1	_	_	_	1	_	_	_	_	1
3,001-3,500	2	_	_	_	2	_	_	_	_	2
3,501-4,000	7	_	_	_	7	_	_	_	_	7
4,001+	80	52	_	_	28	_	5	_	1	74
Totals	90	52	_		38	_	5		1	84

<sup>&</sup>lt;sup>1</sup> **1 (Life):** Retiree's lifetime; **2 (100%):** Beneficiary receives same monthly benefit for life; **3 (50%):** Beneficiary receives half the monthly benefit for life;

Source: Office of the State Actuary

<sup>4 (66%):</sup> Beneficiary receives two-thirds the monthly benefit for life; or A (Standard): Standard option, 50% joint and survivor, for eligible spouses

<sup>&</sup>lt;sup>2</sup> Joint and survivor options are available for post-retirement marriages.

PERS Plan 1										
					Years of Cr	edited	Service			
Retirement Effective Dates <sup>1</sup>		5-10	11-15		16-20		21-25	26-30		31+
Period 7/1/2018 to 6/30/2019										
Average Monthly Benefit	\$	634.23	\$ 1,332.96	\$	1,698.08	\$	2,508.13	\$ 3,140.23	\$	3,888.44
Average Final Salary (Monthly)	\$	3,941.69	\$ 4,485.06	\$	4,443.89	\$	5,336.33	\$ 5,544.86	\$	6,130.38
Number of Active Retirees		98	71		83		70	73		202
Period 7/1/2017 to 6/30/2018										
Average Monthly Benefit	\$	560.50	\$ 1,297.16	\$	1,817.75	\$	2,162.08	\$ 3,136.94	\$	3,665.18
Average Final Salary (Monthly)	\$	3,863.88	\$ 4,388.91	\$	4,767.00	\$	4,576.19	\$ 5,685.79	\$	5,937.14
Number of Active Retirees		111	97		90		91	91		246
Period 7/1/2016 to 6/30/2017										
Average Monthly Benefit	\$	566.36	\$ 1,296.87	\$	1,689.20	\$	2,175.65	\$ 2,936.54	\$	3,726.31
Average Final Salary (Monthly)	\$	4,135.31	\$ 4,601.19	\$	4,512.08	\$	4,729.62	\$ 5,334.97	\$	6,038.50
Number of Active Retirees		138	91		96		99	112		283
Period 7/1/2015 to 6/30/2016										
Average Monthly Benefit	\$	583.78	\$ 1,182.09	\$	1,503.50	\$	2,267.38	\$ 2,802.09	\$	3,537.80
Average Final Salary (Monthly)	\$	4,315.92	\$ 4,300.77	\$	4,073.05	\$	4,801.12	\$ 5,083.25	\$	5,700.81
Number of Active Retirees		139	96		124		124	136		300
Period 7/1/2014 to 6/30/2015										
Average Monthly Benefit	\$	479.68	\$ 1,087.93	\$	1,596.68	\$	2,134.72	\$ 2,739.83	\$	3,555.06
Average Final Salary (Monthly)	\$	3,853.94	\$ 4,104.79	\$	4,283.15	\$	4,644.25	\$ 4,975.68	\$	5,707.66
Number of Active Retirees		175	121		137		156	143		343
Period 7/1/2013 to 6/30/2014										
Average Monthly Benefit	\$	528.85	\$ 1,112.60	\$	1,690.84	\$	2,097.07	\$ 2,838.69	\$	3,414.25
Average Final Salary (Monthly)	\$	4,065.76	\$ 3,942.11	\$	4,645.48	\$	4,592.51	\$ 5,163.22	\$	5,511.91
Number of Active Retirees		163	98		127		173	165		377
Period 7/1/2012 to 6/30/2013										
Average Monthly Benefit	\$	517.46	\$ 1,039.77	\$	1,830.73	\$	2,210.82	\$ 2,944.52	\$	3,496.40
Average Final Salary (Monthly)	\$	4,096.87	\$ 4,051.23	\$	4,622.29	\$	4,716.57	\$ 5,296.58	\$	5,653.00
Number of Active Retirees		188	113		139		169	180		420
Period 7/1/2011 to 6/30/2012										
Average Monthly Benefit	\$	542.78	\$ 1,027.23	\$	1,523.69	\$	2,158.86	\$ 3,070.71	\$	3,387.70
Average Final Salary (Monthly)	\$	4,003.50	\$ 3,927.11	\$	4,023.64	\$	4,625.35	\$ 5,559.31	\$	5,635.18
Number of Active Retirees		160	145		125		187	198		474
Period 7/1/2010 to 6/30/2011										
Average Monthly Benefit	\$	437.37	\$ 1,018.91	\$	1,636.44	\$	2,316.51	\$ 3,120.62	\$	3,438.97
Average Final Salary (Monthly)	\$	3,781.19	\$ 3,960.69	\$	4,554.22	\$	5,012.80	\$ 5,735.43	\$	5,673.74
Number of Active Retirees		162	111		143		188	261		585
Period 7/1/2009 to 6/30/2010										
Average Monthly Benefit	\$	456.42	\$ 1,100.41	\$	1,426.42	\$	2,003.96	\$ 2,931.01	\$	3,388.27
Average Final Salary (Monthly)	\$	3,755.10	\$ 4,211.26	\$	4,053.07	\$	4,439.81	\$ 5,328.15	\$	5,679.56
Number of Active Retirees	·	158	126	•	169	•	215	228	•	596

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

PERS Plan 2							
			Years of Cr	edited	Service		
Retirement Effective Dates <sup>1</sup>	5-10	11-15	16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019							
Average Monthly Benefit	\$ 580.44	\$ 1,304.30	\$ 1,798.79	\$	2,323.72	\$ 3,160.14	\$ 4,187.88
Average Final Salary (Monthly)	\$ 4,578.69	\$ 5,070.93	\$ 5,269.20	\$	5,777.36	\$ 6,185.39	\$ 6,620.77
Number of Active Retirees	995	722	769		670	847	1,031
Period 7/1/2017 to 6/30/2018							
Average Monthly Benefit	\$ 539.87	\$ 1,218.08	\$ 1,745.07	\$	2,267.85	\$ 2,988.11	\$ 4,066.61
Average Final Salary (Monthly)	\$ 4,526.59	\$ 4,791.79	\$ 5,156.78	\$	5,612.51	\$ 5,878.86	\$ 6,458.35
Number of Active Retirees	1,052	641	760		678	808	865
Period 7/1/2016 to 6/30/2017							
Average Monthly Benefit	\$ 581.41	\$ 1,181.59	\$ 1,733.89	\$	2,276.96	\$ 3,020.26	\$ 3,908.33
Average Final Salary (Monthly)	\$ 4,358.09	\$ 4,674.83	\$ 5,167.16	\$	5,605.12	\$ 5,967.50	\$ 6,258.90
Number of Active Retirees	888	644	690		698	785	776
Period 7/1/2015 to 6/30/2016							
Average Monthly Benefit	\$ 520.94	\$ 1,161.40	\$ 1,705.85	\$	2,141.31	\$ 2,884.22	\$ 3,708.40
Average Final Salary (Monthly)	\$ 4,171.09	\$ 4,586.29	\$ 5,046.10	\$	5,352.40	\$ 5,663.64	\$ 6,084.77
Number of Active Retirees	909	602	668		736	715	703
Period 7/1/2014 to 6/30/2015							
Average Monthly Benefit	\$ 541.28	\$ 1,150.56	\$ 1,673.61	\$	2,133.07	\$ 2,844.06	\$ 3,591.82
Average Final Salary (Monthly)	\$ 4,267.06	\$ 4,470.17	\$ 5,015.36	\$	5,360.33	\$ 5,626.32	\$ 5,940.62
Number of Active Retirees	795	612	572		746	695	557
Period 7/1/2013 to 6/30/2014							
Average Monthly Benefit	\$ 506.78	\$ 1,079.98	\$ 1,589.12	\$	1,966.73	\$ 2,823.53	\$ 3,690.55
Average Final Salary (Monthly)	\$ 3,952.36	\$ 4,301.58	\$ 4,735.08	\$	5,044.72	\$ 5,602.89	\$ 6,184.80
Number of Active Retirees	852	592	527		777	710	655
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit	\$ 486.05	\$ 1,082.39	\$ 1,525.94	\$	1,947.79	\$ 2,681.87	\$ 3,529.08
Average Final Salary (Monthly)	\$ 3,934.94	\$ 4,373.18	\$ 4,574.85	\$	4,996.22	\$ 5,328.35	\$ 5,938.56
Number of Active Retirees	823	653	544		724	546	492
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit	\$ 480.30	\$ 1,074.08	\$ 1,491.74	\$	1,869.00	\$ 2,561.98	\$ 3,266.37
Average Final Salary (Monthly)	\$ 3,701.65	\$ 4,256.13	\$ 4,532.75	\$	4,857.44	\$ 5,227.28	\$ 5,651.05
Number of Active Retirees	735	556	526		679	446	372
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit	\$ 462.97	\$ 957.39	\$ 1,570.18	\$	1,779.72	\$ 2,645.09	\$ 3,149.46
Average Final Salary (Monthly)	\$ 3,651.50	\$ 3,916.39	\$ 4,754.82	\$	4,662.49	\$ 5,270.42	\$ 5,560.87
Number of Active Retirees	606	420	478		545	523	305
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit	\$ 476.80	\$ 891.24	\$ 1,407.69	\$	1,646.55	\$ 2,529.93	\$ 3,002.36
Average Final Salary (Monthly)	\$ 3,592.08	\$ 3,644.54	\$ 4,246.31	\$	4,405.77	\$ 5,011.27	\$ 5,291.83
Number of Active Retirees	461	403	489		430	435	157

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

PERS Plan 3							
			Years of Cr	edited	Service		
Retirement Effective Dates <sup>1</sup>	5-10	11-15	16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019							
Average Monthly Benefit	\$ 358.49	\$ 586.43	\$ 870.53	\$	1,440.57	\$ 1,535.33	\$ 2,194.69
Average Final Salary (Monthly)	\$ 4,920.76	\$ 5,280.74	\$ 5,431.33	\$	6,878.45	\$ 6,016.83	\$ 7,098.13
Number of Active Retirees	129	145	87		78	128	146
Period 7/1/2017 to 6/30/2018							
Average Monthly Benefit	\$ 364.89	\$ 586.32	\$ 908.17	\$	1,278.47	\$ 1,592.59	\$ 2,073.59
Average Final Salary (Monthly)	\$ 5,142.81	\$ 5,087.86	\$ 5,699.74	\$	6,255.41	\$ 6,228.58	\$ 6,716.53
Number of Active Retirees	122	137	95		107	132	131
Period 7/1/2016 to 6/30/2017							
Average Monthly Benefit	\$ 330.45	\$ 526.58	\$ 836.35	\$	1,273.32	\$ 1,392.99	\$ 1,989.98
Average Final Salary (Monthly)	\$ 4,506.75	\$ 4,707.25	\$ 5,164.39	\$	6,130.21	\$ 5,570.30	\$ 6,571.28
Number of Active Retirees	128	117	73		84	95	94
Period 7/1/2015 to 6/30/2016							
Average Monthly Benefit	\$ 365.39	\$ 499.19	\$ 840.05	\$	1,225.74	\$ 1,605.33	\$ 2,164.84
Average Final Salary (Monthly)	\$ 4,977.35	\$ 4,631.89	\$ 5,438.66	\$	5,737.42	\$ 6,439.90	\$ 7,084.10
Number of Active Retirees	108	87	71		81	79	79
Period 7/1/2014 to 6/30/2015							
Average Monthly Benefit	\$ 353.70	\$ 479.36	\$ 768.60	\$	1,074.86	\$ 1,548.70	\$ 1,788.16
Average Final Salary (Monthly)	\$ 4,664.91	\$ 4,706.12	\$ 4,964.99	\$	5,480.57	\$ 6,169.68	\$ 6,006.73
Number of Active Retirees	99	96	67		102	96	74
Period 7/1/2013 to 6/30/2014							
Average Monthly Benefit	\$ 326.31	\$ 506.34	\$ 796.50	\$	1,123.54	\$ 1,383.54	\$ 1,690.94
Average Final Salary (Monthly)	\$ 4,499.32	\$ 4,640.98	\$ 5,090.91	\$	5,678.77	\$ 5,511.32	\$ 5,758.12
Number of Active Retirees	93	65	69		97	90	78
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit	\$ 349.56	\$ 464.15	\$ 732.71	\$	1,079.98	\$ 1,456.36	\$ 1,701.71
Average Final Salary (Monthly)	\$ 4,695.89	\$ 4,418.39	\$ 4,744.94	\$	5,710.41	\$ 5,865.60	\$ 5,987.62
Number of Active Retirees	84	56	68		67	48	52
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit	\$ 287.76	\$ 435.93	\$ 704.13	\$	940.02	\$ 1,415.65	\$ 1,796.37
Average Final Salary (Monthly)	\$ 4,436.89	\$ 4,220.74	\$ 4,816.97	\$	5,293.55	\$ 5,929.81	\$ 6,378.63
Number of Active Retirees	58	60	61		70	61	37
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit	\$ 241.09	\$ 404.62	\$ 682.89	\$	935.99	\$ 1,393.48	\$ 1,664.84
Average Final Salary (Monthly)	\$ 4,045.67	\$ 3,928.43	\$ 4,681.79	\$	4,828.04	\$ 5,589.99	\$ 6,199.43
Number of Active Retirees	30	45	64		56	49	18
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit	\$ 206.96	\$ 372.48	\$ 650.80	\$	898.92	\$ 1,237.32	\$ 1,399.82
Average Final Salary (Monthly)	\$ 3,977.34	\$ 3,840.32	\$ 4,624.96	\$	4,778.36	\$ 5,284.05	\$ 5,238.95
Number of Active Retirees	14	41	50		40	30	17

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

SERS Plan 2							
			Years of Cr	edited	Service		
Retirement Effective Dates <sup>1</sup>	5-10	11-15	16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019							
Average Monthly Benefit	\$ 324.64	\$ 611.79	\$ 922.31	\$	1,166.17	\$ 1,642.77	\$ 2,662.61
Average Final Salary (Monthly)	\$ 2,750.68	\$ 2,516.07	\$ 2,700.68	\$	2,957.94	\$ 3,164.04	\$ 4,192.64
Number of Active Retirees	251	117	199		207	169	69
Period 7/1/2017 to 6/30/2018							
Average Monthly Benefit	\$ 342.37	\$ 589.27	\$ 898.98	\$	1,159.70	\$ 1,505.41	\$ 2,553.69
Average Final Salary (Monthly)	\$ 2,876.76	\$ 2,386.33	\$ 2,708.65	\$	2,824.35	\$ 3,072.62	\$ 3,974.50
Number of Active Retirees	242	127	235		209	141	66
Period 7/1/2016 to 6/30/2017							
Average Monthly Benefit	\$ 286.78	\$ 575.64	\$ 861.55	\$	1,069.13	\$ 1,564.10	\$ 2,582.09
Average Final Salary (Monthly)	\$ 2,382.49	\$ 2,411.30	\$ 2,591.66	\$	2,696.90	\$ 3,126.67	\$ 4,073.96
Number of Active Retirees	199	119	200		188	135	70
Period 7/1/2015 to 6/30/2016							
Average Monthly Benefit	\$ 279.35	\$ 614.17	\$ 868.70	\$	1,042.68	\$ 1,530.65	\$ 2,284.69
Average Final Salary (Monthly)	\$ 2,429.88	\$ 2,454.73	\$ 2,618.60	\$	2,661.27	\$ 3,000.84	\$ 3,649.45
Number of Active Retirees	189	126	192		192	113	57
Period 7/1/2014 to 6/30/2015							
Average Monthly Benefit	\$ 264.55	\$ 561.61	\$ 847.17	\$	1,037.71	\$ 1,567.41	\$ 2,214.59
Average Final Salary (Monthly)	\$ 2,307.13	\$ 2,212.53	\$ 2,542.82	\$	2,655.90	\$ 3,162.58	\$ 3,633.35
Number of Active Retirees	138	147	191		185	95	52
Period 7/1/2013 to 6/30/2014							
Average Monthly Benefit	\$ 268.86	\$ 551.46	\$ 859.70	\$	1,074.79	\$ 1,574.79	\$ 2,109.51
Average Final Salary (Monthly)	\$ 2,311.08	\$ 2,199.65	\$ 2,605.06	\$	2,729.61	\$ 3,057.53	\$ 3,485.55
Number of Active Retirees	119	142	159		164	97	55
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit	\$ 295.83	\$ 547.42	\$ 867.06	\$	984.72	\$ 1,587.72	\$ 2,455.16
Average Final Salary (Monthly)	\$ 2,552.68	\$ 2,277.65	\$ 2,634.94	\$	2,549.87	\$ 3,178.29	\$ 4,042.17
Number of Active Retirees	109	137	132		151	97	43
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit	\$ 277.30	\$ 561.49	\$ 773.26	\$	1,081.18	\$ 1,519.44	\$ 2,026.86
Average Final Salary (Monthly)	\$ 2,044.49	\$ 2,295.27	\$ 2,292.04	\$	2,755.05	\$ 3,061.83	\$ 3,424.90
Number of Active Retirees	77	141	143		145	79	42
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit	\$ 325.48	\$ 534.80	\$ 792.65	\$	980.32	\$ 1,455.60	\$ 2,150.54
Average Final Salary (Monthly)	\$ 2,239.23	\$ 2,126.03	\$ 2,341.99	\$	2,488.89	\$ 2,963.79	\$ 3,471.57
Number of Active Retirees	83	105	135		95	75	22
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit	\$ 329.64	\$ 499.38	\$ 697.76	\$	959.01	\$ 1,466.33	\$ 1,877.92
Average Final Salary (Monthly)	\$ 2,325.81	\$ 2,018.06	\$ 2,147.60	\$	2,636.97	\$ 2,910.30	\$ 3,246.34
Number of Active Retirees	76	102	94		86	56	18

<sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

SERS Plan 3							
			Years of Cr	edited	Service		
Retirement Effective Dates <sup>1</sup>	5-10	11-15	16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019							
Average Monthly Benefit	\$ 194.60	\$ 323.74	\$ 433.41	\$	662.41	\$ 862.29	\$ 1,402.70
Average Final Salary (Monthly)	\$ 2,743.32	\$ 2,761.63	\$ 2,691.43	\$	3,182.23	\$ 3,321.34	\$ 4,358.48
Number of Active Retirees	164	266	220		202	207	115
Period 7/1/2017 to 6/30/2018							
Average Monthly Benefit	\$ 189.05	\$ 317.65	\$ 451.92	\$	634.59	\$ 846.02	\$ 1,217.98
Average Final Salary (Monthly)	\$ 2,611.50	\$ 2,792.16	\$ 2,810.28	\$	3,041.47	\$ 3,305.96	\$ 3,870.44
Number of Active Retirees	136	253	195		213	226	116
Period 7/1/2016 to 6/30/2017							
Average Monthly Benefit	\$ 202.01	\$ 314.03	\$ 444.78	\$	621.84	\$ 830.58	\$ 1,185.39
Average Final Salary (Monthly)	\$ 2,696.85	\$ 2,664.57	\$ 2,741.98	\$	2,907.24	\$ 3,267.60	\$ 3,854.85
Number of Active Retirees	153	255	155		210	179	81
Period 7/1/2015 to 6/30/2016							
Average Monthly Benefit	\$ 191.19	\$ 287.54	\$ 353.89	\$	583.84	\$ 789.54	\$ 1,124.96
Average Final Salary (Monthly)	\$ 2,585.52	\$ 2,495.26	\$ 2,268.22	\$	2,807.68	\$ 3,147.46	\$ 3,773.25
Number of Active Retirees	142	208	158		236	147	79
Period 7/1/2014 to 6/30/2015							
Average Monthly Benefit	\$ 207.81	\$ 289.89	\$ 424.98	\$	590.73	\$ 836.68	\$ 1,157.83
Average Final Salary (Monthly)	\$ 2,725.94	\$ 2,583.33	\$ 2,691.20	\$	2,915.61	\$ 3,323.25	\$ 3,749.84
Number of Active Retirees	136	182	153		241	147	69
Period 7/1/2013 to 6/30/2014							
Average Monthly Benefit	\$ 195.52	\$ 292.50	\$ 434.43	\$	565.35	\$ 758.22	\$ 1,115.16
Average Final Salary (Monthly)	\$ 2,650.92	\$ 2,682.89	\$ 2,755.34	\$	2,798.40	\$ 3,080.10	\$ 3,628.01
Number of Active Retirees	126	161	143		200	122	71
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit	\$ 177.27	\$ 265.79	\$ 355.84	\$	568.30	\$ 814.29	\$ 1,043.69
Average Final Salary (Monthly)	\$ 2,488.97	\$ 2,326.54	\$ 2,309.34	\$	2,813.97	\$ 3,255.70	\$ 3,449.99
Number of Active Retirees	132	138	162		184	106	48
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit	\$ 162.22	\$ 264.03	\$ 350.01	\$	557.10	\$ 748.97	\$ 946.98
Average Final Salary (Monthly)	\$ 2,333.34	\$ 2,426.20	\$ 2,244.00	\$	2,853.50	\$ 2,945.74	\$ 3,105.56
Number of Active Retirees	107	81	150		160	78	31
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit	\$ 199.62	\$ 265.46	\$ 347.98	\$	527.52	\$ 801.12	\$ 970.47
Average Final Salary (Monthly)	\$ 2,644.80	\$ 2,303.44	\$ 2,351.06	\$	2,730.05	\$ 3,289.12	\$ 3,223.70
Number of Active Retirees	76	81	133		131	86	28
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit	\$ 179.29	\$ 250.79	\$ 345.57	\$	504.72	\$ 737.83	\$ 1,141.89
Average Final Salary (Monthly)	\$ 2,441.66	\$ 2,254.72	\$ 2,330.69	\$	2,659.54	\$ 2,888.18	\$ 4,035.92
Number of Active Retirees	41	46	77		92	39	5

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

PSERS Plan 2 <sup>1</sup>								
_			Y	ears of Cre	edited S	ervice		
Retirement Effective Dates <sup>2</sup>	5-10	11-15		16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019								
Average Monthly Benefit	\$ 603.34	\$ 1,393.96	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 4,713.12	\$ 6,353.53	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	21	39		_		_	_	_
Period 7/1/2017 to 6/30/2018								
Average Monthly Benefit	\$ 567.59	\$ 1,296.00	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 5,022.30	\$ 6,110.61	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	23	36		_		_	_	_
Period 7/1/2016 to 6/30/2017								
Average Monthly Benefit	\$ 998.93	\$ 1,203.43	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 5,794.24	\$ 5,864.03	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	37	17		_		_	_	_
Period 7/1/2015 to 6/30/2016								
Average Monthly Benefit	\$ 887.22	\$ _	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 5,590.67	\$ _	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	27	_		_		_	_	_
Period 7/1/2014 to 6/30/2015								
Average Monthly Benefit	\$ 668.47	\$ _	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 5,087.53	\$ _	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	17	_		_		_	_	_
Period 7/1/2013 to 6/30/2014								
Average Monthly Benefit	\$ 666.76	\$ _	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 5,168.06	\$ _	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	15	_		_		_	_	_
Period 7/1/2012 to 6/30/2013								
Average Monthly Benefit	\$ 510.68	\$ _	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 5,261.25	\$ _	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	16	_		_		_	_	_
Period 7/1/2011 to 6/30/2012								
Average Monthly Benefit	\$ 339.82	\$ _	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 4,376.32	\$ _	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	9	_		_		_	_	_
Period 7/1/2010 to 6/30/2011								
Average Monthly Benefit	\$ 324.12	\$ _	\$	_	\$	_	\$ _	\$ _
Average Final Salary (Monthly)	\$ 4,822.01	\$ _	\$	_	\$	_	\$ _	\$ _
Number of Active Retirees	6	_		_		_	_	_

<sup>&</sup>lt;sup>1</sup> PSERS Plan 2 became effective July 1, 2006.

<sup>&</sup>lt;sup>2</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

TRS Plan 1												
						Years of Cr	edited	Service				
Retirement Effective Dates <sup>1</sup>		5-10		11-15		16-20		21-25		26-30		31+
Period 7/1/2018 to 6/30/2019												
Average Monthly Benefit	\$	492.65	\$	1,451.57	\$	1,796.22	\$	2,700.30	\$	3,682.95	\$	4,373.44
Average Final Salary (Monthly)	\$	2,901.52	\$	4,896.19	\$	5,200.54	\$	6,041.63	\$	7,454.43	\$	7,839.71
Number of Active Retirees		20		5		11		14		24		103
Period 7/1/2017 to 6/30/2018												
Average Monthly Benefit	\$	502.94	\$	1,284.51	\$	2,019.48	\$	2,680.02	\$	3,370.12	\$	4,221.80
Average Final Salary (Monthly)	\$	2,471.61	\$	4,470.36	\$	5,594.56	\$	6,335.33	\$	6,538.32	\$	7,418.43
Number of Active Retirees		34		16		16		23		36		122
Period 7/1/2016 to 6/30/2017												
Average Monthly Benefit	\$	387.18	\$	1,574.31	\$	1,950.30	\$	2,861.76	\$	3,519.57	\$	3,879.18
Average Final Salary (Monthly)	\$	2,304.82	\$	5,611.70	\$	5,414.72	\$	6,393.55	\$	6,609.01	\$	6,660.14
Number of Active Retirees		20		19		18		31		51		163
Period 7/1/2015 to 6/30/2016												
Average Monthly Benefit	\$	660.74	\$	1,423.73	\$	1,748.99	\$	2,670.86	\$	3,299.09	\$	3,835.48
Average Final Salary (Monthly)	\$	3,085.66	\$	5,458.84	\$	5,334.95	\$	6,354.70	\$	6,423.42	\$	6,919.97
Number of Active Retirees		36		28		31		50		58		242
Period 7/1/2014 to 6/30/2015												
Average Monthly Benefit	\$	647.12	\$	1,092.42	\$	1,893.48	\$	2,623.54	\$	3,228.70	\$	3,801.44
Average Final Salary (Monthly)	\$	3,099.63	\$	3,884.19	\$	5,272.62	\$	6,078.62	\$	6,375.43	\$	6,776.52
Number of Active Retirees		38		28		41		76		67		286
Period 7/1/2013 to 6/30/2014												
Average Monthly Benefit	\$	509.01	\$	1,156.89	\$	1,984.68	\$	2,661.17	\$	3,231.48	\$	3,794.79
Average Final Salary (Monthly)	\$	3,485.83	\$	4,498.77	\$	5,693.54	\$	6,148.49	\$	6,303.26	\$	6,705.36
Number of Active Retirees		38		36		37		89		125		317
Period 7/1/2012 to 6/30/2013												
Average Monthly Benefit	\$	470.00	\$	1,123.24	\$	1,894.30	\$	2,644.85	\$	3,539.29	\$	3,775.79
Average Final Salary (Monthly)	\$	3,065.75	\$	4,277.86	\$	5,538.86	\$	6,107.19	\$	6,783.63	\$	6,667.23
Number of Active Retirees		59		51		61		94		102		350
Period 7/1/2011 to 6/30/2012												
Average Monthly Benefit	\$	536.53	\$	1,127.71	\$	1,649.43	\$	2,643.64	\$	3,191.03	\$	3,629.98
Average Final Salary (Monthly)	\$	3,395.33	\$	4,447.26	\$	5,174.59	\$	5,944.53	\$	6,243.29	\$	6,622.17
Number of Active Retirees		60		50		69		122		134		406
Period 7/1/2010 to 6/30/2011												
Average Monthly Benefit	\$	438.41	\$	977.55	\$	1,754.50	\$	2,556.44	\$	3,356.41	\$	3,665.13
Average Final Salary (Monthly)	\$	2,703.33	\$	3,893.89	\$	5,064.15	\$	5,972.05	\$	6,503.81	\$	6,557.94
Number of Active Retirees		63		63		82		143		165		475
Period 7/1/2009 to 6/30/2010												
Average Monthly Benefit	\$	438.54	\$	989.00	\$	1,631.06	\$	2,361.44	\$	3,124.49	\$	3,493.23
Average Final Salary (Monthly)	\$	3,228.12	\$	3,923.42	\$	4,939.54	\$	5,582.54	\$	6,092.38	\$	6,401.14
Number of Active Retirees	Ψ	74	-	56	*	72	*	128	-	132	-	330

<sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

TRS Plan 2							
			Years of Cr	edited	Service		
Retirement Effective Dates <sup>1</sup>	5-10	11-15	16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019							
Average Monthly Benefit	\$ 505.11	\$ 1,157.00	\$ 1,867.73	\$	2,784.67	\$ 3,541.89	\$ 4,544.18
Average Final Salary (Monthly)	\$ 4,007.02	\$ 4,542.44	\$ 5,840.12	\$	6,499.82	\$ 6,863.55	\$ 7,069.17
Number of Active Retirees	111	38	42		93	106	82
Period 7/1/2017 to 6/30/2018							
Average Monthly Benefit	\$ 539.84	\$ 1,229.28	\$ 1,925.28	\$	2,763.11	\$ 3,145.39	\$ 4,333.03
Average Final Salary (Monthly)	\$ 4,367.24	\$ 4,737.37	\$ 5,829.56	\$	6,653.48	\$ 6,265.39	\$ 6,798.50
Number of Active Retirees	94	42	37		98	71	78
Period 7/1/2016 to 6/30/2017							
Average Monthly Benefit	\$ 589.09	\$ 1,159.82	\$ 1,992.65	\$	2,524.50	\$ 3,378.41	\$ 4,295.54
Average Final Salary (Monthly)	\$ 4,571.17	\$ 4,527.28	\$ 5,820.64	\$	6,283.37	\$ 6,467.96	\$ 6,834.73
Number of Active Retirees	87	35	57		108	57	74
Period 7/1/2015 to 6/30/2016							
Average Monthly Benefit	\$ 528.55	\$ 1,111.93	\$ 1,984.42	\$	2,544.85	\$ 3,319.06	\$ 3,894.51
Average Final Salary (Monthly)	\$ 4,150.53	\$ 4,276.44	\$ 5,741.58	\$	6,172.50	\$ 6,417.27	\$ 6,311.66
Number of Active Retirees	95	36	54		97	77	68
Period 7/1/2014 to 6/30/2015							
Average Monthly Benefit	\$ 508.94	\$ 1,177.99	\$ 2,034.14	\$	2,514.55	\$ 3,094.29	\$ 4,103.13
Average Final Salary (Monthly)	\$ 4,167.38	\$ 4,573.45	\$ 5,878.92	\$	6,226.79	\$ 6,168.76	\$ 6,449.36
Number of Active Retirees	63	44	84		133	55	50
Period 7/1/2013 to 6/30/2014							
Average Monthly Benefit	\$ 484.37	\$ 1,142.52	\$ 1,850.92	\$	2,509.87	\$ 3,200.19	\$ 3,986.80
Average Final Salary (Monthly)	\$ 3,682.29	\$ 4,621.38	\$ 5,436.82	\$	6,290.13	\$ 6,282.34	\$ 6,753.01
Number of Active Retirees	88	50	88		126	65	53
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit	\$ 483.41	\$ 1,029.99	\$ 1,904.03	\$	2,302.44	\$ 2,928.52	\$ 3,588.57
Average Final Salary (Monthly)	\$ 3,666.26	\$ 4,265.74	\$ 5,590.87	\$	5,843.14	\$ 5,920.89	\$ 6,298.04
Number of Active Retirees	53	40	129		97	53	37
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit	\$ 469.38	\$ 1,098.85	\$ 1,815.96	\$	2,256.40	\$ 2,970.89	\$ 3,762.08
Average Final Salary (Monthly)	\$ 3,553.53	\$ 4,411.40	\$ 5,558.73	\$	5,771.40	\$ 6,059.92	\$ 6,219.80
Number of Active Retirees	79	54	98		97	48	33
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit	\$ 417.71	\$ 1,147.78	\$ 1,783.60	\$	2,052.93	\$ 3,094.93	\$ 3,559.00
Average Final Salary (Monthly)	\$ 3,507.78	\$ 4,578.42	\$ 5,406.28	\$	5,582.93	\$ 6,034.27	\$ 6,283.35
Number of Active Retirees	59	66	92		54	52	19
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit	\$ 511.71	\$ 1,228.38	\$ 1,902.99	\$	2,012.05	\$ 3,025.53	\$ 3,167.60
Average Final Salary (Monthly)	\$ 3,830.95	\$ 4,964.28	\$ 5,759.54	\$	5,413.19	\$ 5,762.55	\$ 5,520.72
Number of Active Retirees	42	47	47		42	41	13

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

Period 7/1/2018 to 6/30/2019   Average Monthly Benefit   \$ 321.96   \$ 6.75.68   \$ 1,020.29   \$ 1,410.51   \$ 1,822.56   \$ 2,433   Average Final Salary (Monthly)   \$ 4,599.06   \$ 5,420.10   \$ 6,324.46   \$ 6,790.10   \$ 7,162.28   \$ 7,469   Average Final Salary (Monthly)   \$ 4,599.06   \$ 5,420.10   \$ 6,324.46   \$ 6,790.10   \$ 7,162.28   \$ 7,469   Average Final Salary (Monthly)   \$ 4,562.4   \$ 6,601.7   \$ 1,016.00   \$ 1,421.68   \$ 1,790.57   \$ 2,2311   Average Final Salary (Monthly)   \$ 4,445.22   \$ 5,397.24   \$ 6,063.00   \$ 6,689.68   \$ 6,967.78   \$ 7,106   Average Final Salary (Monthly)   \$ 4,445.22   \$ 5,397.24   \$ 6,063.00   \$ 6,689.68   \$ 6,967.78   \$ 7,106   Average Final Salary (Monthly)   \$ 4,452.24   \$ 5,360.48   \$ 992.93   \$ 1,441.81   \$ 1,726.19   \$ 2,180   Average Final Salary (Monthly)   \$ 4,252.84   \$ 5,360.04   \$ 6,018.92   \$ 6,755.92   \$ 6,723.86   \$ 6,889   Average Final Salary (Monthly)   \$ 4,252.84   \$ 5,360.04   \$ 6,018.92   \$ 6,755.92   \$ 6,723.86   \$ 6,889   Average Final Salary (Monthly)   \$ 4,827.43   \$ 5,352.64   \$ 5,985.23   \$ 6,366.61   \$ 6,625.67   \$ 6,588   Average Final Salary (Monthly)   \$ 4,827.43   \$ 5,352.54   \$ 5,985.23   \$ 6,366.61   \$ 6,625.67   \$ 6,588   Average Final Salary (Monthly)   \$ 4,827.43   \$ 5,352.54   \$ 5,985.23   \$ 6,366.61   \$ 6,625.67   \$ 6,588   Average Final Salary (Monthly)   \$ 4,827.43   \$ 5,352.54   \$ 5,985.23   \$ 6,366.61   \$ 6,625.67   \$ 6,588   Average Final Salary (Monthly)   \$ 4,997.22   \$ 5,380.43   \$ 5,918.12   \$ 6,307.98   \$ 6,508.21   \$ 6,589   \$ 6,799.12   \$ 6,799	TRS Plan 3							
Period 7/1/2018 to 6/30/2019   Average Monthly Benefit   \$ 321.96   \$ 6.75.68   \$ 1.020.29   \$ 1.410.51   \$ 1.822.56   \$ 2.433   Average Final Salary (Monthly)   \$ 4.599.06   \$ 5.420.10   \$ 6.324.46   \$ 6.790.10   \$ 7.162.28   \$ 7.469   Number of Active Retirees   140   214   321   272   337   \$ 5.749   S 5.749   S 5.749   S 5.749   S 5.749   S 5.749   S 6.749.10   S 7.162.80   S 7.469   S 7				Years of Cr	edited	Service		
Average Monthly Benefit         \$ 321.96         \$ 675.68         \$ 1,020.29         \$ 1,410.51         \$ 1,822.56         \$ 2,433           Average Final Salary (Monthly)         \$ 4,599.06         \$ 5,420.10         \$ 6,324.46         \$ 6,790.10         \$ 7,162.28         \$ 7,462         \$ 7,462         \$ 7,462         \$ 7,469         \$ 7,462         \$ 2,410         \$ 7,162         \$ 7,106         \$ 7,106         \$ 6,603.50         \$ 6,689.68         \$ 6,677.78         \$ 7,106         \$ 7,106         \$ 6,307.00         \$	Retirement Effective Dates <sup>1</sup>	5-10	11-15	16-20		21-25	26-30	31+
Number of Active Retirees	Period 7/1/2018 to 6/30/2019							
Number of Active Retirees   140	Average Monthly Benefit	\$ 321.96	\$ 675.68	\$ 1,020.29	\$	1,410.51	\$ 1,822.56	\$ 2,433.92
Period 7/1/2017 to 6/30/2018   \$ 332.64   \$ 660.17   \$ 1,016.00   \$ 1,421.68   \$ 1,790.57   \$ 2,311	Average Final Salary (Monthly)	\$ 4,599.06	\$ 5,420.10	\$ 6,324.46	\$	6,790.10	\$ 7,162.28	\$ 7,469.41
Average Monthly Benefit   \$ 332.64   \$ 660.17   \$ 1,016.00   \$ 1,421.68   \$ 1,790.57   \$ 2,311     Average Final Salary (Monthly)   \$ 4,445.22   \$ 5,397.24   \$ 6,063.50   \$ 6,689.68   \$ 6,967.78   \$ 7,106     Number of Active Retirees   136   217   311   261   261   294   24     Period 71/2016 to 6/30/2017     Average Monthly Benefit   \$ 348.63   \$ 643.66   \$ 992.93   \$ 1,441.81   \$ 1,726.19   \$ 2,180     Average Monthly Benefit   \$ 348.63   \$ 638.60   \$ 992.93   \$ 1,441.81   \$ 1,726.19   \$ 2,180     Average Monthly Benefit   \$ 348.63   \$ 5,356.04   \$ 6,018.92   \$ 6,755.92   \$ 6,723.86   \$ 6,889     Number of Active Retirees   122   196   255   239   269   3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Number of Active Retirees	140	214	321		272	337	500
Average Final Salary (Monthly)	Period 7/1/2017 to 6/30/2018							
Number of Active Retirees   136   217   311   261   294   246   247	Average Monthly Benefit	\$ 332.64	\$ 660.17	\$ 1,016.00	\$	1,421.68	\$ 1,790.57	\$ 2,311.54
Period 7/1/2016 to 6/30/2017   Average Monthly Benefit	Average Final Salary (Monthly)	\$ 4,445.22	\$ 5,397.24	\$ 6,063.50	\$	6,689.68	\$ 6,967.78	\$ 7,106.08
Average Monthly Benefit         \$ 348.63         \$ 643.86         \$ 992.93         \$ 1,441.81         \$ 1,726.19         \$ 2,180           Average Final Salary (Monthly)         \$ 4,252.84         \$ 5,356.04         \$ 6,018.92         \$ 6,755.92         \$ 6,723.86         \$ 6,889           Number of Active Retirees         122         196         255         239         269         3           Period 7/1/2015 to 6/30/2016           Average Monthly Benefit         \$ 377.66         \$ 638.40         \$ 986.79         \$ 1,341.00         \$ 1,688.85         \$ 2,040           Average Final Salary (Monthly)         \$ 4,827.43         \$ 5,352.54         \$ 5,985.23         \$ 6,366.61         \$ 6,626.67         \$ 6,588           Number of Active Retirees         136         218         240         288         221         2.07           Average Monthly Benefit         \$ 356.11         \$ 631.90         \$ 961.06         \$ 1,318.54         \$ 1,675.09         \$ 2,007           Average Final Salary (Monthly)         \$ 4,799.72         \$ 5,380.43         \$ 5,918.12         \$ 6,307.98         \$ 6,582.21         \$ 6,589           Number of Active Retirees         137         214         224         264         216         22           Period 7/1/2013 to	Number of Active Retirees	136	217	311		261	294	434
Average Final Salary (Monthly)         \$ 4,252.84         \$ 5,356.04         \$ 6,018.92         \$ 6,755.92         \$ 6,723.86         \$ 6,889           Number of Active Retirees         122         196         255         239         269         3           Period 7/1/2015 to 6/30/2016           Average Monthly Benefit         \$ 377.66         \$ 638.40         \$ 986.79         \$ 1,341.00         \$ 1,688.85         \$ 2,040           Average Final Salary (Monthly)         \$ 4,827.43         \$ 5,352.54         \$ 5,985.23         \$ 6,366.61         \$ 6,625.67         \$ 6,588           Number of Active Retirees         136         218         240         288         221         2.040           Average Monthly Benefit         \$ 356.11         \$ 631.90         \$ 961.06         \$ 1,318.54         \$ 1,675.09         \$ 2,007           Average Final Salary (Monthly)         \$ 4,799.72         \$ 5,380.43         \$ 5,918.12         \$ 6,307.98         \$ 6,508.21         \$ 6,508           Number of Active Retirees         137         214         224         264         216         22           Period 71/2013 to 6/30/2014         \$ 354.31         \$ 628.17         \$ 946.36         \$ 1,274.12         \$ 1,661.82         \$ 1,944           Average Final Salary (Mont	Period 7/1/2016 to 6/30/2017							
Number of Active Retirees   122   196   255   239   269   255   269   265	Average Monthly Benefit	\$ 348.63	\$ 643.86	\$ 992.93	\$	1,441.81	\$ 1,726.19	\$ 2,180.66
Period 7/1/2015 to 6/30/2016   \$ 377.66	Average Final Salary (Monthly)	\$ 4,252.84	\$ 5,356.04	\$ 6,018.92	\$	6,755.92	\$ 6,723.86	\$ 6,889.78
Average Monthly Benefit         \$ 377.66         \$ 638.40         \$ 986.79         \$ 1,341.00         \$ 1,688.85         \$ 2,040           Average Final Salary (Monthly)         \$ 4,827.43         \$ 5,352.54         \$ 5,985.23         \$ 6,366.61         \$ 6,625.67         \$ 6,588           Number of Active Retirees         136         218         240         288         221         22           Period 7/1/2014 to 6/30/2015           Average Monthly Benefit         \$ 356.11         \$ 631.90         \$ 961.06         \$ 1,318.54         \$ 1,675.09         \$ 2,007           Average Final Salary (Monthly)         \$ 4,799.72         \$ 5,380.43         \$ 5,918.12         \$ 6,307.98         \$ 6,508.21         \$ 6,580           Number of Active Retirees         137         214         224         264         216         22           Period 7/1/2013 to 6/30/2014           Average Final Salary (Monthly)         \$ 4,564.18         \$ 5,273.10         \$ 5,799.82         \$ 6,236.91         \$ 6,569.09         \$ 6,484           Number of Active Retirees         130         198         208         231         193         22           Period 7/1/2012 to 6/30/2013           Average Final Salary (Monthly)         \$ 4,5553.37         \$ 5,264.59	Number of Active Retirees	122	196	255		239	269	325
Average Final Salary (Monthly)         \$ 4,827.43         \$ 5,352.54         \$ 5,985.23         \$ 6,366.61         \$ 6,625.67         \$ 6,588           Number of Active Retirees         136         218         240         288         221         228           Period 7/1/2014 to 6/30/2015           Average Monthly Benefit         \$ 356.11         \$ 631.90         \$ 961.06         \$ 1,318.54         \$ 1,675.09         \$ 2,007           Average Final Salary (Monthly)         \$ 4,799.72         \$ 5,380.43         \$ 5,918.12         \$ 6,307.98         \$ 6,508.21         \$ 6,580           Number of Active Retirees         137         214         224         264         216         22           Period 7/1/2013 to 6/30/2014         \$ 354.31         \$ 628.17         \$ 946.36         \$ 1,274.12         \$ 1,661.82         \$ 1,944           Average Final Salary (Monthly)         \$ 4,564.18         \$ 5,273.10         \$ 5,799.82         \$ 6,236.91         \$ 6,569.09         \$ 6,484           Number of Active Retirees         130         198         208         231         193         22           Period 7/1/2012 to 6/30/2013         \$ 345.92         \$ 593.34         \$ 961.44         \$ 1,242.35         \$ 1,572.79         \$ 1,909           Average Final Salary (Monthly) <td>Period 7/1/2015 to 6/30/2016</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Period 7/1/2015 to 6/30/2016							
Number of Active Retirees         136         218         240         288         221         288           Period 7/1/2014 to 6/30/2015         Period 7/1/2014 to 6/30/2015         Secondary Monthly Benefit         \$356.11         \$631.90         \$961.06         \$1,318.54         \$1,675.09         \$2,007           Average Final Salary (Monthly)         \$4,799.72         \$5,380.43         \$5,918.12         \$6,307.98         \$6,508.21         \$6,580           Number of Active Retirees         137         214         224         224         264         216         22           Period 7/1/2013 to 6/30/2014         \$354.31         \$628.17         \$946.36         \$1,274.12         \$1,661.82         \$1,944           Average Final Salary (Monthly)         \$4,564.18         \$5,273.10         \$5,799.82         \$6,236.91         \$6,569.09         \$6,484           Number of Active Retirees         130         198         208         231         193         22           Period 7/1/2012 to 6/30/2013         \$345.92         \$593.34         \$961.44         \$1,242.35         \$1,572.79         \$1,909           Average Final Salary (Monthly)         \$4,553.37         \$5,264.59         \$5,891.15         \$6,152.65         \$6,282.97         \$6,453           Number of Active Re	Average Monthly Benefit	\$ 377.66	\$ 638.40	\$ 986.79	\$	1,341.00	\$ 1,688.85	\$ 2,040.18
Period 7/1/2014 to 6/30/2015           Average Monthly Benefit         \$ 356.11         \$ 631.90         \$ 961.06         \$ 1,318.54         \$ 1,675.09         \$ 2,007           Average Final Salary (Monthly)         \$ 4,799.72         \$ 5,380.43         \$ 5,918.12         \$ 6,307.98         \$ 6,508.21         \$ 6,580           Number of Active Retirees         137         214         224         224         264         216         22           Period 7/1/2013 to 6/30/2014           Average Monthly Benefit         \$ 354.31         \$ 628.17         \$ 946.36         \$ 1,274.12         \$ 1,661.82         \$ 1,944           Average Final Salary (Monthly)         \$ 4,564.18         \$ 5,273.10         \$ 5,799.82         \$ 6,236.91         \$ 6,569.09         \$ 6,484           Number of Active Retirees         130         198         208         231         193         2           Period 7/1/2012 to 6/30/2013           Average Monthly Benefit         \$ 345.92         \$ 593.34         \$ 961.44         \$ 1,242.35         \$ 1,572.79         \$ 1,909           Average Final Salary (Monthly)         \$ 4,553.37         \$ 5,264.59         \$ 5,891.15         \$ 6,152.65         \$ 6,282.97         \$ 6,453           Period 7/1/2011 to 6/30/2012	Average Final Salary (Monthly)	\$ 4,827.43	\$ 5,352.54	\$ 5,985.23	\$	6,366.61	\$ 6,625.67	\$ 6,588.75
Average Monthly Benefit         \$ 356.11         \$ 631.90         \$ 961.06         \$ 1,318.54         \$ 1,675.09         \$ 2,007           Average Final Salary (Monthly)         \$ 4,799.72         \$ 5,380.43         \$ 5,918.12         \$ 6,307.98         \$ 6,508.21         \$ 6,580           Number of Active Retirees         137         214         224         264         216         22           Period 7/1/2013 to 6/30/2014           Average Monthly Benefit         \$ 354.31         \$ 628.17         \$ 946.36         \$ 1,274.12         \$ 1,661.82         \$ 1,944           Average Final Salary (Monthly)         \$ 4,564.18         \$ 5,273.10         \$ 5,799.82         \$ 6,236.91         \$ 6,569.09         \$ 6,484           Number of Active Retirees         130         198         208         231         193         22           Period 7/1/2012 to 6/30/2013           Average Monthly Benefit         \$ 345.92         \$ 593.34         \$ 961.44         \$ 1,242.35         \$ 1,572.79         \$ 1,909           Average Final Salary (Monthly)         \$ 4,553.37         \$ 5,264.59         \$ 5,891.15         \$ 6,152.65         \$ 6,282.97         \$ 6,453           Number of Active Retirees         150         179         165         227         167	Number of Active Retirees	136	218	240		288	221	290
Average Final Salary (Monthly)         \$ 4,799.72         \$ 5,380.43         \$ 5,918.12         \$ 6,307.98         \$ 6,508.21         \$ 6,580           Number of Active Retirees         137         214         224         264         216         2           Period 7/1/2013 to 6/30/2014           Average Monthly Benefit         \$ 354.31         \$ 628.17         \$ 946.36         \$ 1,274.12         \$ 1,661.82         \$ 1,944           Average Final Salary (Monthly)         \$ 4,564.18         \$ 5,273.10         \$ 5,799.82         \$ 6,236.91         \$ 6,569.09         \$ 6,484           Number of Active Retirees         130         198         208         231         193         2           Period 7/1/2012 to 6/30/2013         \$ 345.92         \$ 593.34         \$ 961.44         \$ 1,242.35         \$ 1,572.79         \$ 1,909           Average Final Salary (Monthly)         \$ 4,553.37         \$ 5,264.59         \$ 5,891.15         \$ 6,152.65         \$ 6,282.97         \$ 6,453           Number of Active Retirees         150         179         165         227         167         167           Period 7/1/2011 to 6/30/2012         \$ 331.43         \$ 570.43         \$ 863.21         \$ 1,139.55         \$ 1,610.39         \$ 1,737           Average Final Salary (M	Period 7/1/2014 to 6/30/2015							
Number of Active Retirees         137         214         224         264         216         226           Period 7/1/2013 to 6/30/2014           Average Monthly Benefit         \$ 354.31         \$ 628.17         \$ 946.36         \$ 1,274.12         \$ 1,661.82         \$ 1,944           Average Final Salary (Monthly)         \$ 4,564.18         \$ 5,273.10         \$ 5,799.82         \$ 6,236.91         \$ 6,569.09         \$ 6,484           Number of Active Retirees         130         198         208         231         193         208           Period 7/1/2012 to 6/30/2013         \$ 345.92         \$ 593.34         \$ 961.44         \$ 1,242.35         \$ 1,572.79         \$ 1,909           Average Final Salary (Monthly)         \$ 4,553.37         \$ 5,264.59         \$ 5,891.15         \$ 6,152.65         \$ 6,282.97         \$ 6,453           Number of Active Retirees         150         179         165         227         167         17           Period 7/1/2011 to 6/30/2012         Average Monthly Benefit         \$ 331.43         \$ 570.43         \$ 863.21         \$ 1,139.55         \$ 1,610.39         \$ 1,737           Average Final Salary (Monthly)         \$ 4,727.90         \$ 5,068.13         \$ 5,473.33         \$ 5,966.01         \$ 6,235.28         \$ 6,143	Average Monthly Benefit	\$ 356.11	\$ 631.90	\$ 961.06	\$	1,318.54	\$ 1,675.09	\$ 2,007.23
Period 7/1/2013 to 6/30/2014           Average Monthly Benefit         \$ 354.31         \$ 628.17         \$ 946.36         \$ 1,274.12         \$ 1,661.82         \$ 1,944           Average Final Salary (Monthly)         \$ 4,564.18         \$ 5,273.10         \$ 5,799.82         \$ 6,236.91         \$ 6,569.09         \$ 6,484           Number of Active Retirees         130         198         208         231         193         20           Period 7/1/2012 to 6/30/2013           Average Monthly Benefit         \$ 345.92         \$ 593.34         \$ 961.44         \$ 1,242.35         \$ 1,572.79         \$ 1,909           Average Final Salary (Monthly)         \$ 4,553.37         \$ 5,264.59         \$ 5,891.15         \$ 6,152.65         \$ 6,282.97         \$ 6,453           Number of Active Retirees         150         179         165         227         167         167           Period 7/1/2011 to 6/30/2012           Average Monthly Benefit         \$ 331.43         \$ 570.43         \$ 863.21         \$ 1,139.55         \$ 1,610.39         \$ 1,737           Average Final Salary (Monthly)         \$ 4,727.90         \$ 5,068.13         \$ 5,473.33         \$ 5,966.01         \$ 6,235.28         \$ 6,143           Number of Active Retirees         108	Average Final Salary (Monthly)	\$ 4,799.72	\$ 5,380.43	\$ 5,918.12	\$	6,307.98	\$ 6,508.21	\$ 6,580.13
Average Monthly Benefit       \$ 354.31       \$ 628.17       \$ 946.36       \$ 1,274.12       \$ 1,661.82       \$ 1,944         Average Final Salary (Monthly)       \$ 4,564.18       \$ 5,273.10       \$ 5,799.82       \$ 6,236.91       \$ 6,569.09       \$ 6,484         Number of Active Retirees       130       198       208       231       193       2         Period 7/1/2012 to 6/30/2013         Average Monthly Benefit       \$ 345.92       \$ 593.34       \$ 961.44       \$ 1,242.35       \$ 1,572.79       \$ 1,909         Average Final Salary (Monthly)       \$ 4,553.37       \$ 5,264.59       \$ 5,891.15       \$ 6,152.65       \$ 6,282.97       \$ 6,453         Number of Active Retirees       150       179       165       227       167       17         Period 7/1/2011 to 6/30/2012         Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131	Number of Active Retirees	137	214	224		264	216	289
Average Final Salary (Monthly)       \$ 4,564.18       \$ 5,273.10       \$ 5,799.82       \$ 6,236.91       \$ 6,569.09       \$ 6,484         Number of Active Retirees       130       198       208       231       193       208         Period 7/1/2012 to 6/30/2013         Average Monthly Benefit       \$ 345.92       \$ 593.34       \$ 961.44       \$ 1,242.35       \$ 1,572.79       \$ 1,909         Average Final Salary (Monthly)       \$ 4,553.37       \$ 5,264.59       \$ 5,891.15       \$ 6,152.65       \$ 6,282.97       \$ 6,453         Number of Active Retirees       150       179       165       227       167       17         Period 7/1/2011 to 6/30/2012       4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131	Period 7/1/2013 to 6/30/2014							
Number of Active Retirees         130         198         208         231         193         228           Period 7/1/2012 to 6/30/2013           Average Monthly Benefit         \$ 345.92         \$ 593.34         \$ 961.44         \$ 1,242.35         \$ 1,572.79         \$ 1,909           Average Final Salary (Monthly)         \$ 4,553.37         \$ 5,264.59         \$ 5,891.15         \$ 6,152.65         \$ 6,282.97         \$ 6,453           Number of Active Retirees         150         179         165         227         167         17           Period 7/1/2011 to 6/30/2012         4         4         570.43         \$ 863.21         \$ 1,139.55         \$ 1,610.39         \$ 1,737           Average Final Salary (Monthly)         \$ 4,727.90         \$ 5,068.13         \$ 5,473.33         \$ 5,966.01         \$ 6,235.28         \$ 6,143           Number of Active Retirees         108         164         151         184         131         131	Average Monthly Benefit	\$ 354.31	\$ 628.17	\$ 946.36	\$	1,274.12	\$ 1,661.82	\$ 1,944.26
Period 7/1/2012 to 6/30/2013         Average Monthly Benefit       \$ 345.92       \$ 593.34       \$ 961.44       \$ 1,242.35       \$ 1,572.79       \$ 1,909         Average Final Salary (Monthly)       \$ 4,553.37       \$ 5,264.59       \$ 5,891.15       \$ 6,152.65       \$ 6,282.97       \$ 6,453         Number of Active Retirees       150       179       165       227       167       167         Period 7/1/2011 to 6/30/2012         Average Monthly Benefit       \$ 331.43       \$ 570.43       \$ 863.21       \$ 1,139.55       \$ 1,610.39       \$ 1,737         Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131       131	Average Final Salary (Monthly)	\$ 4,564.18	\$ 5,273.10	\$ 5,799.82	\$	6,236.91	\$ 6,569.09	\$ 6,484.91
Average Monthly Benefit       \$ 345.92       \$ 593.34       \$ 961.44       \$ 1,242.35       \$ 1,572.79       \$ 1,909         Average Final Salary (Monthly)       \$ 4,553.37       \$ 5,264.59       \$ 5,891.15       \$ 6,152.65       \$ 6,282.97       \$ 6,453         Number of Active Retirees       150       179       165       227       167       1         Period 7/1/2011 to 6/30/2012         Average Monthly Benefit       \$ 331.43       \$ 570.43       \$ 863.21       \$ 1,139.55       \$ 1,610.39       \$ 1,737         Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131	Number of Active Retirees	130	198	208		231	193	269
Average Final Salary (Monthly)       \$ 4,553.37       \$ 5,264.59       \$ 5,891.15       \$ 6,152.65       \$ 6,282.97       \$ 6,453         Number of Active Retirees       150       179       165       227       167       1         Period 7/1/2011 to 6/30/2012         Average Monthly Benefit       \$ 331.43       \$ 570.43       \$ 863.21       \$ 1,139.55       \$ 1,610.39       \$ 1,737         Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131	Period 7/1/2012 to 6/30/2013							
Number of Active Retirees         150         179         165         227         167         167           Period 7/1/2011 to 6/30/2012           Average Monthly Benefit         \$ 331.43         \$ 570.43         \$ 863.21         \$ 1,139.55         \$ 1,610.39         \$ 1,737           Average Final Salary (Monthly)         \$ 4,727.90         \$ 5,068.13         \$ 5,473.33         \$ 5,966.01         \$ 6,235.28         \$ 6,143           Number of Active Retirees         108         164         151         184         131         17	Average Monthly Benefit	\$ 345.92	\$ 593.34	\$ 961.44	\$	1,242.35	\$ 1,572.79	\$ 1,909.04
Period 7/1/2011 to 6/30/2012         Average Monthly Benefit       \$ 331.43       \$ 570.43       \$ 863.21       \$ 1,139.55       \$ 1,610.39       \$ 1,737         Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131	Average Final Salary (Monthly)	\$ 4,553.37	\$ 5,264.59	\$ 5,891.15	\$	6,152.65	\$ 6,282.97	\$ 6,453.23
Average Monthly Benefit       \$ 331.43       \$ 570.43       \$ 863.21       \$ 1,139.55       \$ 1,610.39       \$ 1,737         Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131	Number of Active Retirees	150	179	165		227	167	140
Average Final Salary (Monthly)       \$ 4,727.90       \$ 5,068.13       \$ 5,473.33       \$ 5,966.01       \$ 6,235.28       \$ 6,143         Number of Active Retirees       108       164       151       184       131       131	Period 7/1/2011 to 6/30/2012							
Number of Active Retirees 108 164 151 184 131 1	Average Monthly Benefit	\$ 331.43	\$ 570.43	\$ 863.21	\$	1,139.55	\$ 1,610.39	\$ 1,737.76
	Average Final Salary (Monthly)	\$ 4,727.90	\$ 5,068.13	\$ 5,473.33	\$	5,966.01	\$ 6,235.28	\$ 6,143.64
Davied 7/4/0040 to 0/00/0044	Number of Active Retirees	108	164	151		184	131	105
Period // 1/2010 to 6/30/2011	Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit \$ 336.03 \$ 545.30 \$ 831.33 \$ 1,125.89 \$ 1,568.81 \$ 1,686	Average Monthly Benefit	\$ 336.03	\$ 545.30	\$ 831.33	\$	1,125.89	\$ 1,568.81	\$ 1,686.38
Average Final Salary (Monthly) \$ 4,553.15 \$ 4,830.15 \$ 5,435.01 \$ 5,780.35 \$ 6,160.69 \$ 6,065	Average Final Salary (Monthly)	\$ 4,553.15	\$ 4,830.15	\$ 5,435.01	\$	5,780.35	\$ 6,160.69	\$ 6,065.22
Number of Active Retirees 106 113 122 136 120	Number of Active Retirees	106	113	122		136	120	68
Period 7/1/2009 to 6/30/2010	Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit \$ 319.39 \$ 545.45 \$ 786.31 \$ 1,078.33 \$ 1,453.56 \$ 1,699	Average Monthly Benefit	\$ 319.39	\$ 545.45	\$ 786.31	\$	1,078.33	\$ 1,453.56	\$ 1,699.32
Average Final Salary (Monthly) \$ 4,468.37 \$ 4,766.92 \$ 5,254.99 \$ 5,634.96 \$ 5,839.55 \$ 5,992	Average Final Salary (Monthly)	\$ 4,468.37	\$ 4,766.92	\$ 5,254.99	\$	5,634.96	\$ 5,839.55	\$ 5,992.94
Number of Active Retirees 79 73 91 75 79	Number of Active Retirees	79	73	91		75	79	22

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

LEOFF Plan 1									
				Y	ears of Cre	edited S	ervice		
Retirement Effective Dates <sup>1</sup>	5-10		11-15		16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 8,800.33
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 10,140.47
Number of Active Retirees	_		_		_		_	_	6
Period 7/1/2017 to 6/30/2018									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ 5,520.00	\$ 9,481.27
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ 9,600.00	\$ 10,945.63
Number of Active Retirees	_		_		_		_	1	12
Period 7/1/2016 to 6/30/2017									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 8,455.39
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 10,012.32
Number of Active Retirees	_		_		_		_	_	24
Period 7/1/2015 to 6/30/2016									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ 5,469.87	\$ 8,201.17
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ 8,204.76	\$ 9,650.11
Number of Active Retirees	_		_		_		_	1	19
Period 7/1/2014 to 6/30/2015									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ 3,891.00	\$ 8,081.82
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ 6,708.00	\$ 9,859.16
Number of Active Retirees	_		_		_		_	1	40
Period 7/1/2013 to 6/30/2014									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ 3,690.00	\$ 7,788.21
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ 6,220.00	\$ 9,665.96
Number of Active Retirees	_		_		_		_	1	23
Period 7/1/2012 to 6/30/2013									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 7,105.97
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 9,171.69
Number of Active Retirees	_		_		_		_	_	42
Period 7/1/2011 to 6/30/2012									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 6,776.58
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ _	\$ 8,906.14
Number of Active Retirees	_		_		_		_	_	63
Period 7/1/2010 to 6/30/2011									
Average Monthly Benefit	\$ _	\$ 2	2,608.42	\$	_	\$	_	\$ 3,770.38	\$ 6,799.27
Average Final Salary (Monthly)	\$ _		2,347.54	\$	_	\$	_	\$ 6,693.02	\$ 9,117.73
Number of Active Retirees	_		1		_		_	1	49
Period 7/1/2009 to 6/30/2010									
Average Monthly Benefit	\$ _	\$	_	\$	_	\$	_	\$ 5,846.14	\$ 6,727.58
Average Final Salary (Monthly)	\$ _	\$	_	\$	_	\$	_	\$ 9,964.96	\$ 9,156.08
Number of Active Retirees	_		_		_		_	1	56

<sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

LEOFF Plan 2							
			Years of C	redited	Service		
Retirement Effective Dates <sup>1</sup>	5-10	11-15	16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019							
Average Monthly Benefit	\$ 983.29	\$ 1,639.96	\$ 2,982.58	\$	3,897.20	\$ 5,300.08	\$ 7,006.26
Average Final Salary (Monthly)	\$ 6,909.63	\$ 6,840.89	\$ 8,685.60	\$	8,966.85	\$ 9,901.12	\$ 11,007.26
Number of Active Retirees	33	36	58		100	194	193
Period 7/1/2017 to 6/30/2018							
Average Monthly Benefit	\$ 786.87	\$ 1,983.24	\$ 2,837.80	\$	3,936.91	\$ 5,055.76	\$ 6,856.22
Average Final Salary (Monthly)	\$ 6,158.44	\$ 7,686.92	\$ 7,978.73	\$	8,610.05	\$ 9,553.32	\$ 10,684.31
Number of Active Retirees	22	30	56		96	190	181
Period 7/1/2016 to 6/30/2017							
Average Monthly Benefit	\$ 927.85	\$ 2,100.74	\$ 2,857.25	\$	4,046.34	\$ 5,073.63	\$ 6,672.31
Average Final Salary (Monthly)	\$ 6,376.90	\$ 7,929.71	\$ 8,002.27	\$	8,719.53	\$ 9,443.16	\$ 10,363.06
Number of Active Retirees	29	29	57		113	162	182
Period 7/1/2015 to 6/30/2016							
Average Monthly Benefit	\$ 758.78	\$ 1,616.33	\$ 2,564.02	\$	3,865.95	\$ 4,902.78	\$ 6,347.89
Average Final Salary (Monthly)	\$ 5,915.24	\$ 6,911.12	\$ 7,401.28	\$	8,542.15	\$ 9,038.72	\$ 9,929.16
Number of Active Retirees	22	32	41		100	152	176
Period 7/1/2014 to 6/30/2015							
Average Monthly Benefit	\$ 887.31	\$ 1,696.16	\$ 2,488.40	\$	3,750.72	\$ 4,733.82	\$ 5,936.02
Average Final Salary (Monthly)	\$ 6,230.50	\$ 6,686.77	\$ 7,183.01	\$	8,294.40	\$ 8,604.70	\$ 9,482.73
Number of Active Retirees	17	18	49		95	118	155
Period 7/1/2013 to 6/30/2014							
Average Monthly Benefit	\$ 803.11	\$ 1,600.48	\$ 2,477.29	\$	3,531.18	\$ 4,758.98	\$ 5,607.91
Average Final Salary (Monthly)	\$ 6,199.64	\$ 6,603.23	\$ 7,405.91	\$	7,967.27	\$ 8,837.62	\$ 9,087.48
Number of Active Retirees	27	18	30		107	100	149
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit	\$ 751.29	\$ 1,612.33	\$ 2,510.38	\$	3,404.26	\$ 4,547.01	\$ 5,529.49
Average Final Salary (Monthly)	\$ 5,948.81	\$ 6,336.73	\$ 7,145.42	\$	7,691.69	\$ 8,400.58	\$ 9,100.80
Number of Active Retirees	27	25	32		63	123	132
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit	\$ 918.50	\$ 1,913.13	\$ 2,270.71	\$	3,261.72	\$ 4,377.04	\$ 5,398.33
Average Final Salary (Monthly)	\$ 5,730.21	\$ 7,272.37	\$ 6,685.73	\$	7,510.37	\$ 8,172.98	\$ 8,963.58
Number of Active Retirees	21	17	30		61	82	112
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit	\$ 786.80	\$ 1,346.38	\$ 2,628.43	\$	3,229.83	\$ 4,442.23	\$ 5,010.17
Average Final Salary (Monthly)	\$ 6,436.60	\$ 5,505.96	\$ 7,191.87	\$	7,200.29	\$ 8,131.03	\$ 8,349.92
Number of Active Retirees	21	17	31		71	104	73
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit	\$ 802.80	\$ 1,430.37	\$ 2,176.26	\$	2,935.73	\$ 4,107.79	\$ 4,329.19
Average Final Salary (Monthly)	\$ 5,885.87	\$ 5,662.91	\$ 6,203.07	\$	6,911.64	\$ 7,594.47	\$ 7,264.63
Number of Active Retirees	24	17	21		43	99	33

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

			Years of Cro	edited	Service		
Retirement Effective Dates <sup>1</sup>	 5-10	11-15	16-20		21-25	26-30	31+
Period 7/1/2018 to 6/30/2019							
Average Monthly Benefit	\$ _	\$ _	\$ 4,260.81	\$	5,332.93	\$ 6,441.38	\$ 6,702.65
Average Final Salary (Monthly)	\$ _	\$ _	\$ 9,966.77	\$	11,100.86	\$ 11,506.32	\$ 10,101.69
Number of Active Retirees	_	_	4		6	22	14
Period 7/1/2017 to 6/30/2018							
Average Monthly Benefit	\$ 1,237.32	\$ 1,633.29	\$ 2,523.96	\$	4,516.15	\$ 5,686.64	\$ 6,908.7
Average Final Salary (Monthly)	\$ 4,980.86	\$ 5,505.94	\$ 7,380.62	\$	8,686.79	\$ 10,125.85	\$ 10,912.3
Number of Active Retirees	3	1	4		3	15	
Period 7/1/2016 to 6/30/2017							
Average Monthly Benefit	\$ 633.63	\$ _	\$ 2,922.19	\$	4,500.47	\$ 4,677.63	\$ 5,663.6
Average Final Salary (Monthly)	\$ 3,450.65	\$ _	\$ 7,366.67	\$	8,965.88	\$ 8,471.29	\$ 9,032.6
Number of Active Retirees	2	_	2		17	12	
Period 7/1/2015 to 6/30/2016							
Average Monthly Benefit	\$ 1,057.39	\$ 1,949.09	\$ 3,951.29	\$	4,285.84	\$ 4,956.68	\$ 5,609.0
Average Final Salary (Monthly)	\$ 5,325.53	\$ 6,460.99	\$ 7,333.01	\$	8,608.50	\$ 8,623.81	\$ 8,319.7
Number of Active Retirees	1	1	4		15	29	
Period 7/1/2014 to 6/30/2015							
Average Monthly Benefit	\$ 515.10	\$ 1,616.68	\$ 3,108.68	\$	4,153.86	\$ 4,386.37	\$ 4,883.7
Average Final Salary (Monthly)	\$ 6,961.40	\$ 6,969.05	\$ 7,161.79	\$	8,328.60	\$ 8,007.96	\$ 7,820.7
Number of Active Retirees	1	2	2		16	24	
Period 7/1/2013 to 6/30/2014							
Average Monthly Benefit	\$ _	\$ 2,075.14	\$ 2,290.15	\$	3,490.49	\$ 4,335.50	\$ 4,441.6
Average Final Salary (Monthly)	\$ _	\$ 5,791.02	\$ 4,655.27	\$	7,110.57	\$ 7,755.76	\$ 7,017.0
Number of Active Retirees	_	1	1		14	20	
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit	\$ _	\$ 1,946.46	\$ 3,228.52	\$	3,916.57	\$ 4,033.93	\$ 5,808.6
Average Final Salary (Monthly)	\$ _	\$ 7,447.17	\$ 9,971.82	\$	8,046.79	\$ 7,561.30	\$ 8,363.8
Number of Active Retirees	_	2	2		12	30	
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit	\$ 332.19	\$ 1,371.65	\$ 1,641.71	\$	4,047.82	\$ 4,524.91	\$ 3,944.5
Average Final Salary (Monthly)	\$ 4,280.74	\$ 5,911.76	\$ 5,475.29	\$	7,926.38	\$ 8,487.26	\$ 6,294.7
Number of Active Retirees	1	2	2		19	20	
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit	\$ _	\$ _	\$ 1,300.91	\$	3,981.43	\$ 4,307.44	\$ 3,807.4
Average Final Salary (Monthly)	\$ _	\$ _	\$ 5,279.73	\$	7,767.77	\$ 7,696.70	\$ 6,534.5
Number of Active Retirees	_	_	1		14	20	
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit	\$ _	\$ _	\$ _	\$	3,603.10	\$ 5,653.44	\$ 5,437.7
Average Final Salary (Monthly)	\$ _	\$ _	\$ _	\$	7,241.18	\$ 9,302.30	\$ 8,000.3
Number of Active Retirees	_	_	_		9	10	

<sup>&</sup>lt;sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

JRS												
					Y	ears of Cre	edited S	ervice				
Retirement Effective Dates <sup>1</sup>		5-10		11-15		16-20		21-25		26-30		31+
Period 7/1/2018 to 6/30/2019												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Number of Active Retirees		_		_		_		_		_		_
Period 7/1/2017 to 6/30/2018												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Number of Active Retirees		_		_		_		_		_		_
Period 7/1/2016 to 6/30/2017												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Number of Active Retirees		_		_		_		_		_		_
Period 7/1/2015 to 6/30/2016												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Number of Active Retirees		_		_		_		_		_		_
Period 7/1/2014 to 6/30/2015												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Number of Active Retirees		_		_		_		_		_		_
Period 7/1/2013 to 6/30/2014												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Number of Active Retirees		_		_		_		_		_		_
Period 7/1/2012 to 6/30/2013												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$ 9	,302.01	\$	_
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$ 12	,402.68	\$	_
Number of Active Retirees		_		_		_		_		2		_
Period 7/1/2011 to 6/30/2012												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$	_	\$ 10	),263.81
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_	\$	_		3,685.08
Number of Active Retirees		_		_		_		_		_		1
Period 7/1/2010 to 6/30/2011												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	_	\$ 7	,376.49	\$ 9	3,302.01
Average Final Salary (Monthly)	\$	_	\$	_	\$	_	\$	_		,402.68		2,402.68
Number of Active Retirees	·	_	·	_		_	·	_		1		1
Period 7/1/2009 to 6/30/2010												
Average Monthly Benefit	\$	_	\$	_	\$	_	\$	7,904.34	\$ 8	,292.69	\$ 9	9,770.51
Average Final Salary (Monthly)	\$	_	\$	_	\$	_		3,027.34		,402.60		3,027.34
Number of Active Retirees	*	_	•	_	•	_		1		2		1

<sup>1</sup> Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

Source: Office of the State Actuary

### PERS Plan 1 Defined Benefit

**Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>										
Service	\$ 1,088,637	\$ 1,099,126	\$ 1,094,346	\$ 1,100,375	\$ 1,103,092	\$ 1,104,025	\$ 1,095,467	\$ 1,088,705	\$ 1,082,344	\$ 1,059,536
Disability	10,018	10,422	11,895	11,961	11,646	12,222	13,240	13,496	13,810	14,431
Survivor	90,546	89,391	83,265	83,724	84,098	82,718	80,789	79,180	77,529	75,555
Refunds										
Separation	2,807	3,139	2,890	2,654	2,912	3,171	3,373	3,365	3,667	2,930
Death	1,194	720	815	505	1,461	858	846	633	887	540
Total	\$ 1,193,202	\$ 1,202,798	\$ 1,193,211	\$ 1,199,219	\$ 1,203,209	\$ 1,202,994	\$ 1,193,715	\$ 1,185,379	\$ 1,178,237	\$ 1,152,992

### PERS Plan 2/3 Defined Benefit

**Dollars in Thousands** 

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>										
Service <sup>1</sup>	\$ 1,315,586	\$ 1,140,280	\$ 982,042	\$ 849,518	\$ 734,381	\$ 626,959	\$ 531,509	\$ 430,352	\$ 350,550	\$ 287,560
Disability	15,035	14,705	10,337	8,942	13,645	13,217	12,417	11,695	10,901	10,140
Survivor	49,118	42,548	41,349	35,769	28,188	25,232	21,734	18,028	15,548	13,243
Refunds										
Separation	34,032	36,141	32,976	29,152	28,527	28,494	28,119	28,286	30,148	27,956
Death	9,976	11,641	9,301	8,222	7,778	7,004	7,083	7,393	5,568	5,730
Total	\$ 1,423,747	\$ 1,245,315	\$ 1,076,005	\$ 931,603	\$ 812,519	\$ 700,906	\$ 600,862	\$ 495,754	\$ 412,715	\$ 344,629

1PERS Plan 3 TAP Annuity Benefits members purchased with Plan 3 Defined Contributions are included in the Service Benefit Expenses of PERS Plan 2/3 Defined Benefit. Prior to 6/30/19, PERS Plan 3 TAP Annuity Benefit Expenses were included in the Service Benefit Expenses of PERS Plan 3 Defined Contribution.

### **PERS Plan 3 Defined Contribution Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Benefit Expenses										
Service <sup>1</sup>	\$ —	\$ —	\$ 7,855	\$ 6,400	\$ 4,112	\$ 2,640	\$ 1,435	\$ 697	\$ 322	\$ 164
Disability	_	_	_	_	_	_	_	_	_	_
Survivor	_	_	_	_	_	_	_	_	_	_
Refunds										
Separation	114,688	111,911	106,245	90,295	86,436	87,143	78,756	65,761	63,671	56,974
Death	6,244	5,404	9,208	8,204	6,009	4,943	3,167	2,910	2,574	2,169
Total	\$ 120,932	\$ 117,315	\$ 123,308	\$ 104,899	\$ 96,557	\$ 94,726	\$ 83,358	\$ 69,368	\$ 66,567	\$ 59,307

<sup>1</sup> PERS Plan 3 TAP Annuity Benefits members purchased with Plan 3 Defined Contributions are included in the Service Benefit Expenses of PERS Plan 2/3 Defined Benefit. Prior to 6/30/19, PERS Plan 3 TAP Annuity Benefit Expenses were included in the Service Benefit Expenses of PERS Plan 3 Defined Contribution.

### SERS Plan 2/3 Defined Benefit

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Benefit Expenses										
Service <sup>1</sup>	\$ 203,448	\$ 176,424	\$ 145,398	\$ 124,838	\$ 107,962	\$ 91,986	\$ 77,320	\$ 63,134	\$ 50,597	\$ 40,753
Disability	1,804	1,785	1,514	1,300	1,604	1,549	1,553	1,457	1,387	1,198
Survivor	5,869	5,197	4,544	3,901	3,187	2,649	2,343	1,835	1,646	1,387
Refunds										
Separation	3,687	3,551	3,068	2,227	1,932	2,084	2,076	1,984	1,947	1,916
Death	824	1,041	673	1,000	562	807	656	671	569	576
Total	\$ 215,632	\$ 187,998	\$ 155,197	\$ 133,266	\$ 115,247	\$ 99,075	\$ 83,948	\$ 69,081	\$ 56,146	\$ 45,830

<sup>1</sup> SERS Plan 3 TAP Annuity Benefits members purchased with Plan 3 Defined Contributions are included in the Service Benefit Expenses of SERS Plan 2/3 Defined Benefit. Prior to 6/30/19, SERS Plan 3 TAP Annuity Benefit Expenses were included in the Service Benefit Expenses of SERS Plan 3 Defined Contribution.

### **SERS Plan 3 Defined Contribution Dollars in Thousands**

	6	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Benefit Expenses											
Service <sup>1</sup>	\$	_	\$ _	\$ 5,768	\$ 4,055	\$ 2,610	\$ 1,526	\$ 854	\$ 464	\$ 302	\$ 182
Disability		_	_	_	_	_	_	_	_	_	_
Survivor		_	_	_	_	_	_	_	_	_	_
Refunds											
Separation		105,407	99,434	95,667	81,041	80,759	82,241	71,228	63,122	57,516	51,431
Death		4,971	5,674	5,005	4,536	4,261	4,052	2,598	2,521	3,413	1,811
Total	\$	110,378	\$ 105,108	\$ 106,440	\$ 89,632	\$ 87,630	\$ 87,819	\$ 74,680	\$ 66,107	\$ 61,231	\$ 53,424

<sup>1</sup> SERS Plan 3 TAP Annuity Benefits members purchased with Plan 3 Defined Contributions are included in the Service Benefit Expenses of SERS Plan 2/3 Defined Benefit. Prior to 6/30/19, SERS Plan 3 TAP Annuity Benefit Expenses were included in the Service Benefit Expenses of SERS Plan 3 Defined Contribution.

### **PSERS Plan 2 Defined Benefit**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Benefit Expenses										
Service	\$ 3,767	\$ 2,754	\$ 1,848	\$ 1,079	\$ 593	\$ 411	\$ 237	\$ 129	\$ 63	\$ 30
Disability	113	117	98	46	13	12	12	17	5	4
Survivor	81	64	20	23	24	21	7	2	2	1
Refunds										
Separation	3,613	3,616	2,895	2,551	2,630	2,520	2,107	2,142	1,868	1,747
Death	49	123	59	79	17	92	87	44	53	33
Total	\$ 7,623	\$ 6,674	\$ 4,920	\$ 3,778	\$ 3,277	\$ 3,056	\$ 2,450	\$ 2,334	\$ 1,991	\$ 1,815

### TRS Plan 1 Defined Benefit **Dollars in Thousands**

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Benefit Expenses										
Service	\$ 823,569	\$ 844,683	\$ 839,862	\$ 856,395	\$ 866,940	\$ 870,547	\$ 871,366	\$ 860,631	\$ 860,848	\$ 847,353
Disability	8,343	8,626	9,031	9,111	9,529	10,013	10,074	10,607	10,618	11,111
Survivor	53,190	51,770	54,185	45,553	47,908	46,455	44,535	43,372	42,398	41,355
Refunds										
Separation	686	957	965	1,067	976	915	1,348	1,512	1,120	1,389
Death	73	53	699	188	206	640	914	477	432	431
Total	\$ 885,861	\$ 906,089	\$ 904,742	\$ 912,314	\$ 925,559	\$ 928,570	\$ 928,237	\$ 916,599	\$ 915,416	\$ 901,639

### TRS Plan 2/3 Defined Benefit

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>										
Service <sup>1</sup>	\$ 427,430	\$ 372,778	\$ 290,450	\$ 247,080	\$ 211,967	\$ 177,689	\$ 144,464	\$ 112,521	\$ 87,707	\$ 68,782
Disability	1,308	1,312	2,994	2,547	1,145	1,176	1,126	1,117	1,071	1,118
Survivor	9,411	7,927	5,989	5,094	4,899	4,347	3,932	3,024	2,622	2,238
Refunds										
Separation	3,806	3,228	2,967	2,348	2,409	2,401	1,460	2,115	1,652	1,584
Death	558	1,165	608	662	562	439	528	799	517	697
Total	\$ 442,513	\$ 386,410	\$ 303,008	\$ 257,731	\$ 220,982	\$ 186,052	\$ 151,510	\$ 119,576	\$ 93,569	\$ 74,419

<sup>1</sup> TRS Plan 3 TAP Annuity Benefits members purchased with Plan 3 Defined Contributions are included in the Service Benefit Expenses of TRS Plan 2/3 Defined Benefit. Prior to 6/30/19, TRS Plan 3 TAP Annuity Benefit Expenses were included in the Service Benefit Expenses of TRS Plan 3 Defined Contribution.

### TRS Plan 3 Defined Contribution **Dollars in Thousands**

	6/30/202	D	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>											
Service <sup>1</sup>	\$ -	- ;	\$ —	\$ 20,864	\$ 14,687	\$ 10,034	\$ 5,924	\$ 3,084	\$ 1,569	\$ 1,149	\$ 542
Disability	-	-	_	_	_	_	_	_	_	_	_
Survivor	-	-	_	_	_	_	_	_	_	_	_
Refunds											
Separation	374,74	)	393,036	326,099	276,846	279,300	261,465	227,760	168,558	142,364	110,425
Death	10,88	3	13,447	10,831	9,064	10,485	7,912	7,875	7,494	8,040	5,146
Total	\$ 385,62	3 :	\$ 406,483	\$ 357,794	\$ 300,597	\$ 299,819	\$ 275,301	\$ 238,719	\$ 177,621	\$ 151,553	\$ 116,113

<sup>1</sup> TRS Plan 3 TAP Annuity Benefits members purchased with Plan 3 Defined Contributions are included in the Service Benefit Expenses of TRS Plan 2/3 Defined Benefit. Prior to 6/30/19, TRS Plan 3 TAP Annuity Benefit Expenses were included in the Service Benefit Expenses of TRS Plan 3 Defined Contribution.

<b>LEOFF</b>	Plan	1	Defined	Benefit
--------------	------	---	---------	---------

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>										
Service	\$ 155,040	\$ 153,695	\$ 152,897	\$ 151,225	\$ 149,411	\$ 147,957	\$ 146,285	\$ 143,906	\$ 138,884	\$ 134,321
Disability	135,091	136,694	138,336	136,823	141,526	143,951	145,666	146,643	146,207	147,653
Survivor	82,156	78,681	72,808	72,012	69,547	66,503	63,789	61,247	58,347	56,801
Refunds										
Separation	2	_	_	_	440	330	248	14	4	48
Death	7	_	_	8	_	4	_	_	431	_
Total	\$ 372,296	\$ 369,070	\$ 364,041	\$ 360,068	\$ 360,924	\$ 358,745	\$ 355,988	\$ 351,810	\$ 343,873	\$ 338,823

<b>LEOFF Plan 2 Defined Benefit</b>
Dollars in Thousands

	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>										
Service	\$ 323,467	\$ 276,304	\$ 233,648	\$ 197,744	\$ 163,879	\$ 134,364	\$ 110,170	\$ 87,232	\$ 67,331	\$ 52,547
Disability	22,277	20,012	18,173	15,380	14,266	12,340	10,599	9,693	7,318	6,710
Survivor	9,765	8,556	7,788	6,591	5,922	4,782	4,152	3,607	3,504	2,619
Refunds										
Separation	5,251	6,010	7,097	6,490	6,287	6,798	7,730	8,117	9,774	7,155
Death	3,437	3,077	1,453	802	358	1,743	1,298	560	1,440	1,026
Total	\$ 364,197	\$ 313,959	\$ 268,159	\$ 227,007	\$ 190,712	\$ 160,027	\$ 133,949	\$ 109,209	\$ 89,367	\$ 70,057

Dallare in Thousands

Dollars in Tho	ousanc	is									
	6/	/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>											
Service	\$	60,707	\$ 57,376	\$ 52,962	\$ 51,000	\$ 48,540	\$ 45,034	\$ 42,805	\$ 39,537	\$ 36,687	\$ 35,073
Disability		_	_	_	_	_	_	_	_	_	_
Survivor		7,413	6,877	6,546	5,666	5,111	4,738	4,338	3,984	3,681	3,314
Refunds											
Separation		1	2	19	_	476	119	344	98	46	148
Death		327	_	1	65	15	_	_	88	216	99
Total	\$	68,448	\$ 64,255	\$ 59,528	\$ 56,731	\$ 54,142	\$ 49,891	\$ 47,487	\$ 43,707	\$ 40,630	\$ 38,634

WSPRS Plan	1 2	Defined	Be	nefit									
Dollars in Tho	ousa	ands											
		6/30/2020		6/30/2019	6/30/2018	6/30/2017	6/30/2016	П	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Benefit Expenses													
Service	\$	5	\$	_	\$ _	\$ _	\$ _	\$	_	\$ _	\$ _	\$ _	\$ _
Disability		_		_	_	_	_		_	_	_	_	_
Survivor		3		_	_	_	_		_	_	_	_	_
Refunds													
Separation		123		115	106	90	7		184	23	118	_	63
Death		259		_	_	_	10		_	_	_	_	5
Total	\$	390	\$	115	\$ 106	\$ 90	\$ 17	\$	184	\$ 23	\$ 118	\$ _	\$ 68

JRS Defined	d B	enefit									
Dollars in Tho	ousa	ands									
		6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
<b>Benefit Expenses</b>											
Service	\$	5,719	\$ 5,828	\$ 6,161	\$ 6,368	\$ 6,821	\$ 7,178	\$ 7,388	\$ 7,504	\$ 7,569	\$ 7,678
Disability		_	_	_	_	_	_	_	_	_	_
Survivor		2,202	2,130	2,164	2,355	2,310	2,158	2,092	2,193	2,195	2,060
Refunds											
Separation		_	_	_	_	_	_	_	_	_	_
Death		_	_	_	_	_	_	_	_	_	_
Total	\$	7,921	\$ 7,958	\$ 8,325	\$ 8,723	\$ 9,131	\$ 9,336	\$ 9,480	\$ 9,697	\$ 9,764	\$ 9,738

JRF Defined	d Bo	enefit									
Dollars in Tho	ousa	ınds									
		6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013	6/30/2012	6/30/2011
Benefit Expenses											
Service	\$	48	\$ 195	\$ 257	\$ 265	\$ 347	\$ 346	\$ 346	\$ 402	\$ 421	\$ 420
Disability		_	_	_	_	_	_	_	72	_	_
Survivor		217	143	139	137	93	98	98	_	61	79
Refunds											
Separation		_	_	_	_	_	_	_	_	_	_
Death		_	_	_	_	_	_	_	_	_	_
Total	\$	265	\$ 338	\$ 396	\$ 402	\$ 440	\$ 444	\$ 444	\$ 474	\$ 482	\$ 499

## Deferred Compensation Program Status Report

### **DCP Status Report**

Dollars in Thousands — Page 1 of 4

	6/30/2	020	6/30/2	019	6/30/2	018
	Plan		Plan		Plan	
Funding Media	Balance	%	Balance	%	Balance	%
Active U.S. Core Stock Fund <sup>1</sup>	\$ —	_	\$ —	_	\$ —	_
Active U.S. Value Stock Fund <sup>1</sup>	_	_	_	_	_	_
Emerging Market Equity Index <sup>2</sup>	65,343	1.34%	75,850	1.61%	82,848	1.87%
Fidelity Growth Company Fund <sup>1</sup>	_	_	_	_	_	_
Global Equity Index <sup>2</sup>	163,194	3.36%	173,574	3.69%	174,048	3.93%
International Stock Fund <sup>1</sup>	_	_	_	_	_	_
Savings Pool	968,892	19.93%	886,282	18.83%	862,255	19.47%
U.S. Large Cap Equity Index <sup>2</sup>	564,046	11.60%	548,079	11.65%	500,893	11.31%
U.S. Small Cap Equity Index <sup>2</sup>	171,292	3.52%	219,824	4.67%	238,559	5.39%
U.S. Small Stock Index Fund <sup>1</sup>	_	_	_	_	_	_
U.S. Stock Market Index Fund <sup>1</sup>	_	_	_	_	_	_
Washington State Bond Fund	302,556	6.22%	265,267	5.64%	240,807	5.44%
Washington State Socially Responsible Balanced Fund	178,842	3.68%	175,990	3.74%	158,863	3.59%
Retirement Maturity Strategy Fund	71,186	1.46%	29,843	0.63%	28,426	0.64%
Retirement Strategy 2005 <sup>3</sup>	_	_	36,944	0.78%	34,549	0.78%
Retirement Strategy 2010	98,814	2.03%	100,626	2.14%	103,199	2.33%
Retirement Strategy 2015	256,707	5.28%	277,795	5.90%	282,366	6.38%
Retirement Strategy 2020	482,240	9.92%	508,253	10.80%	494,312	11.16%
Retirement Strategy 2025	528,055	10.86%	508,003	10.79%	459,127	10.37%
Retirement Strategy 2030	374,817	7.71%	351,804	7.48%	308,941	6.98%
Retirement Strategy 2035	264,717	5.45%	240,075	5.10%	208,937	4.72%
Retirement Strategy 2040	162,466	3.35%	144,962	3.08%	121,125	2.74%
Retirement Strategy 2045	103,369	2.13%	86,789	1.84%	69,425	1.57%
Retirement Strategy 2050	51,640	1.06%	38,085	0.81%	27,858	0.63%
Retirement Strategy 2055	33,000	0.68%	23,905	0.51%	18,691	0.42%
Retirement Strategy 2060 <sup>4</sup>	18,980	0.39%	14,416	0.31%	12,543	0.28%
Retirement Strategy 2065 <sup>5</sup>	1,322	0.03%				
Total	\$ 4,861,478	100.00%	\$ 4,706,366	100.00%	\$ 4,427,772	100.00%

<sup>&</sup>lt;sup>1</sup>This investment option was discontinued in October 2011.

 $<sup>^{2}\</sup>mbox{This}$  investment option was added in October 2011.

 $<sup>^{\</sup>rm 3}$  This investment option was merged with Retirement Maturity Strategy Fund in January 2020.

 $<sup>^4\,\</sup>mbox{This}$  investment option was added in January 2015.

 $<sup>^{\</sup>rm 5}\text{This}$  investment option was added in January 2020.

## Deferred Compensation Program Status Report (cont.)

### **DCP Status Report**

Dollars in Thousands — Page 2 of 4

	6/30/2	2017	6/30/2	016	6/30/2	2015
	Plan		Plan		Plan	
Funding Media	Balance	%	Balance	%	Balance	%
Active U.S. Core Stock Fund <sup>1</sup>	\$ —	_	\$ —	_	\$ —	_
Active U.S. Value Stock Fund <sup>1</sup>	_	_	_	_	_	_
Emerging Market Equity Index <sup>2</sup>	69,912	1.72%	49,471	1.37%	56,912	1.58%
Fidelity Growth Company Fund <sup>1</sup>	_	_	_	_	_	_
Global Equity Index <sup>2</sup>	143,069	3.51%	116,099	3.21%	121,679	3.37%
International Stock Fund <sup>1</sup>	_	_	_	_	_	_
Savings Pool	869,125	21.31%	868,269	23.98%	863,001	23.91%
U.S. Large Cap Equity Index <sup>2</sup>	444,276	10.90%	384,369	10.61%	364,343	10.09%
U.S. Small Cap Equity Index <sup>2</sup>	221,996	5.44%	179,182	4.95%	188,368	5.22%
U.S. Small Stock Index Fund <sup>1</sup>	_	_	_	_	_	_
U.S. Stock Market Index Fund <sup>1</sup>	_	_	_	_	_	_
Washington State Bond Fund	248,808	6.10%	242,947	6.71%	230,429	6.38%
Washington State Socially Responsible Balanced Fund	154,665	3.79%	141,740	3.91%	132,229	3.66%
Retirement Maturity Strategy Fund	27,015	0.66%	24,052	0.66%	23,772	0.66%
Retirement Strategy 2005 <sup>3</sup>	35,738	0.88%	36,136	1.00%	37,874	1.05%
Retirement Strategy 2010	102,286	2.51%	100,244	2.77%	111,130	3.08%
Retirement Strategy 2015	286,150	7.02%	280,694	7.75%	313,588	8.69%
Retirement Strategy 2020	454,443	11.14%	399,657	11.04%	401,305	11.12%
Retirement Strategy 2025	400,990	9.83%	324,826	8.97%	313,852	8.70%
Retirement Strategy 2030	262,780	6.44%	205,154	5.67%	197,681	5.48%
Retirement Strategy 2035	172,841	4.24%	134,634	3.72%	129,075	3.58%
Retirement Strategy 2040	95,102	2.33%	72,012	1.99%	68,789	1.90%
Retirement Strategy 2045	51,859	1.27%	36,635	1.01%	32,737	0.91%
Retirement Strategy 2050	18,587	0.46%	12,411	0.34%	10,782	0.30%
Retirement Strategy 2055	13,239	0.33%	10,319	0.28%	9,760	0.27%
Retirement Strategy 2060 <sup>4</sup>	4,976	0.12%	2,172	0.06%	1,801	0.05%
Retirement Strategy 2065 <sup>5</sup>						
Total	\$ 4,077,857	100.00%	\$ 3,621,024	100.00%	\$ 3,609,107	100.00%

<sup>&</sup>lt;sup>1</sup>This investment option was discontinued in October 2011.

 $<sup>^{2}\,\</sup>mbox{This}$  investment option was added in October 2011.

 $<sup>^{\</sup>rm 3}$  This investment option was merged with Retirement Maturity Strategy Fund in January 2020.

 $<sup>^4\,\</sup>mbox{This}$  investment option was added in January 2015.

 $<sup>^{\</sup>rm 5}\text{This}$  investment option was added in January 2020.

## Deferred Compensation Program Status Report (cont.)

### **DCP Status Report**

Dollars in Thousands — Page 3 of 4

	6/30/2	014	6/30/2	013	6/30/2	012
	Plan		Plan		Plan	
Funding Media	Balance	%	Balance	%	Balance	%
Active U.S. Core Stock Fund <sup>1</sup>	\$ —	_	\$ —	— %	\$ —	— %
Active U.S. Value Stock Fund <sup>1</sup>	_	_	_	— %	_	— %
Emerging Market Equity Index <sup>2</sup>	59,894	1.68%	54,693	1.71%	52,542	1.79%
Fidelity Growth Company Fund <sup>1</sup>	_	_	_	— %	_	— %
Global Equity Index <sup>2</sup>	114,142	3.19%	84,495	2.64%	65,500	2.23%
International Stock Fund <sup>1</sup>	_	_	_	— %	_	— %
Savings Pool	937,359	26.21%	1,000,437	31.27%	1,045,569	35.66%
U.S. Large Cap Equity Index <sup>2</sup>	312,282	8.74%	227,917	7.12%	178,250	6.08%
U.S. Small Cap Equity Index <sup>2</sup>	199,588	5.58%	150,240	4.69%	109,915	3.75%
U.S. Small Stock Index Fund <sup>1</sup>	_	_	_	— %	_	— %
U.S. Stock Market Index Fund <sup>1</sup>	_	_	_	— %	_	— %
Washington State Bond Fund	222,168	6.21%	257,135	8.04%	267,316	9.12%
Washington State Socially Responsible Balanced Fund	128,312	3.59%	109,148	3.41%	101,014	3.45%
Retirement Maturity Strategy Fund	24,999	0.70%	25,468	0.80%	24,435	0.83%
Retirement Strategy 2005 <sup>3</sup>	39,905	1.12%	38,443	1.20%	35,891	1.22%
Retirement Strategy 2010	121,329	3.39%	117,647	3.68%	115,133	3.93%
Retirement Strategy 2015	332,310	9.29%	290,316	9.07%	253,859	8.66%
Retirement Strategy 2020	380,889	10.65%	308,468	9.64%	256,143	8.74%
Retirement Strategy 2025	288,862	8.08%	223,555	6.99%	179,951	6.14%
Retirement Strategy 2030	183,453	5.13%	143,763	4.49%	114,916	3.92%
Retirement Strategy 2035	120,809	3.38%	91,183	2.85%	73,173	2.50%
Retirement Strategy 2040	61,489	1.72%	44,745	1.40%	35,038	1.19%
Retirement Strategy 2045	28,288	0.79%	19,892	0.62%	14,996	0.51%
Retirement Strategy 2050	9,694	0.27%	5,706	0.18%	4,355	0.15%
Retirement Strategy 2055	9,964	0.28%	6,358	0.20%	3,868	0.13%
Retirement Strategy 2060 <sup>4</sup>	_	_	_	_	_	_
Retirement Strategy 2065 <sup>5</sup>	_	_			_	_
Total	\$ 3,575,736	100.00%	\$ 3,199,609	100.00%	\$ 2,931,864	100.00%

<sup>&</sup>lt;sup>1</sup>This investment option was discontinued in October 2011.

 $<sup>^{2}\,\</sup>mbox{This}$  investment option was added in October 2011.

 $<sup>^{3}</sup>$  This investment option was merged with Retirement Maturity Strategy Fund n January 2020.

 $<sup>^4\,\</sup>mbox{This}$  investment option was added in January 2015.

 $<sup>^{\</sup>rm 5}\text{This}$  investment option was added in January 2020.

## Deferred Compensation Program Status Report (cont.)

### **DCP Status Report** Dollars in Thousands — Page 4 of 4

	6/30/2011		
	Plan		
Funding Media	Balance	%	
Active U.S. Core Stock Fund <sup>1</sup>	\$ 238,087	8.11%	
Active U.S. Value Stock Fund <sup>1</sup>	299,662	10.20%	
Emerging Market Equity Index <sup>2</sup>	_	_	
Fidelity Growth Company Fund <sup>1</sup>	366,490	12.48%	
Global Equity Index <sup>2</sup>	_	_	
International Stock Fund <sup>1</sup>	123,184	4.20%	
Savings Pool	1,013,313	34.51%	
U.S. Large Cap Equity Index <sup>2</sup>	_	_	
U.S. Small Cap Equity Index <sup>2</sup>	_	_	
U.S. Small Stock Index Fund <sup>1</sup>	116,776	3.98%	
U.S. Stock Market Index Fund <sup>1</sup>	163,011	5.55%	
Washington State Bond Fund	179,032	6.10%	
Washington State Socially Responsible Balanced Fund	73,021	2.49%	
Retirement Maturity Strategy Fund	6,312	0.21%	
Retirement Strategy 2005 <sup>3</sup>	11,313	0.39%	
Retirement Strategy 2010	48,294	1.64%	
Retirement Strategy 2015	100,846	3.43%	
Retirement Strategy 2020	81,120	2.76%	
Retirement Strategy 2025	50,278	1.71%	
Retirement Strategy 2030	29,300	1.00%	
Retirement Strategy 2035	17,332	0.59%	
Retirement Strategy 2040	10,251	0.35%	
Retirement Strategy 2045	5,554	0.19%	
Retirement Strategy 2050	2,228	0.08%	
Retirement Strategy 2055	1,023	0.03%	
Retirement Strategy 2060 <sup>4</sup>	_	_	
Retirement Strategy 2065 <sup>5</sup>	_	_	
Total	\$ 2,936,427	100.00%	

<sup>&</sup>lt;sup>1</sup>This investment option was discontinued in October 2011.

 $<sup>^{2}\,\</sup>mbox{This}$  investment option was added in October 2011.

 $<sup>^{3}</sup>$  This investment option was merged with Retirement Maturity Strategy Fund in January 2020.

<sup>&</sup>lt;sup>4</sup>This investment option was added in January 2015.

 $<sup>^{\</sup>rm 5}\text{This}$  investment option was added in January 2020.

### DCP Performance

**DCP Performance** 

Performance Periods Ending June 30, 2020

		Performance History <sup>1</sup>			
			Average Annual Total Returns		
Fund Name	Quarter Ending	4.11		- v 2	10 Years/Since
Benchmark	6/30/2020	1 Year	3 Years	5 Years <sup>2</sup>	Inception
Emerging Market Equity Index Fund	19.03%	(4.02)%	1.32%	2.31%	3.99%
MSCI Emerging Markets Investable Market Index	18.93%	(3.97)%	1.35%	2.35%	4.12%
Global Equity Index Fund	19.03%	(4.02)%	1.32%	2.31%	3.99%
MSCI ACWI Investable Market Index	18.93%	(3.97)%	1.35%	2.35%	4.12%
Savings Pool	0.57%	2.51%	2.36%	1.90%	1.80%
U.S. Large Cap Equity Index Fund	20.57%	7.57%	10.79%	10.77%	14.05%
S&P 500 Index	20.54%	7.51%	10.73%	10.73%	13.99%
U.S. Small Cap Value Equity Index Fund	18.95%	(17.27)%	(4.13)%	1.49%	7.94%
Russell 2000 Value Index	18.91%	(17.48)%	(4.35)%	1.26%	7.82%
Washington State Bond Fund	6.97%	7.70%	5.24%	4.57%	4.42%
Barclays Capital Intermediate Credit Index	6.67%	6.97%	4.88%	4.18%	4.18%
Washington State Socially Responsible Balanced Fund	10.13%	4.33%	7.51%	7.92%	9.13%
55% S&P 500/45% BC US Aggregate Index <sup>2</sup>	13.07%	6.96%	7.55%	7.12%	9.01%
Retirement Maturity Strategy Fund <sup>3</sup>	8.87%	4.95%	5.07%	4.65%	5.78%
Maturity Composite Benchmark <sup>2</sup>	8.34%	4.07%	4.53%	4.19%	5.60%
2010 Retirement Strategy	10.79%	4.54%	5.49%	5.31%	7.29%
2010 Composite Benchmark <sup>2</sup>	10.21%	3.43%	4.90%	4.86%	7.26%
2015 Retirement Strategy	12.78%	3.96%	5.70%	5.70%	7.92%
2015 Composite Benchmark <sup>2</sup>	12.18%	2.77%	5.06%	5.25%	7.92%
2020 Retirement Strategy	14.92%	3.36%	5.82%	5.94%	8.35%
2020 Composite Benchmark <sup>2</sup>	14.19%	2.02%	5.11%	5.47%	8.37%
2025 Retirement Strategy	15.93%	2.70%	5.79%	6.06%	8.68%
2025 Composite Benchmark <sup>2</sup>	15.30%	1.36%	5.05%	5.56%	8.74%
2030 Retirement Strategy	16.93%	1.86%	5.69%	6.12%	8.90%
2030 Composite Benchmark <sup>2</sup>	16.34%	0.67%	4.98%	5.65%	9.02%
2035 Retirement Strategy	17.90%	0.90%	5.50%	6.09%	8.95%
2035 Composite Benchmark <sup>2</sup>	17.34%	0.02%	4.90%	5.66%	9.17%
2040 Retirement Strategy	18.45%	0.76%	5.56%	6.16%	9.02%
2040 Composite Benchmark <sup>2</sup>	17.96%	0.01%	4.98%	5.74%	9.29%
2045 Retirement Strategy	19.00%	0.76%	5.58%	6.20%	9.05%
2045 Composite Benchmark <sup>2</sup>	18.54%	0.06%	5.02%	5.79%	9.32%
2050 Retirement Strategy	18.91%	0.71%	5.58%	6.21%	9.07%
2050 Composite Benchmark <sup>2</sup>	18.57%	0.09%	5.03%	5.80%	9.32%
2055 Retirement Strategy	19.00%	0.82%	5.61%	6.23%	9.07%
2055 Composite Benchmark <sup>2</sup>	18.57%	0.09%	5.03%	5.80%	9.32%
2060 Retirement Strategy <sup>3</sup>	19.05%	0.79%	5.63%	6.25%	6.32%
2060 Composite Benchmark <sup>2</sup>	18.57%	0.09%	5.03%	5.80%	5.87%
2065 Retirement Strategy <sup>4</sup>	19.02%	N/A	N/A	N/A	(7.40)%
2065 Composite Benchmark <sup>2</sup>	18.57%	N/A	N/A	N/A	(8.29)%

<sup>1</sup> Current performance might be lower or higher than the performance data shown. Quoted performance data represents past performance and is not a guarantee or prediction of future results. The investment return and principal value of an investment will fluctuate so that, when redeemed, shares/units might be worth more or less than their original costs. All returns are calculated in U.S. dollars.

<sup>&</sup>lt;sup>2</sup> A benchmark index is not actively managed, does not have a defined investment objective, and does not incur fees or expenses. You cannot invest directly in a benchmark

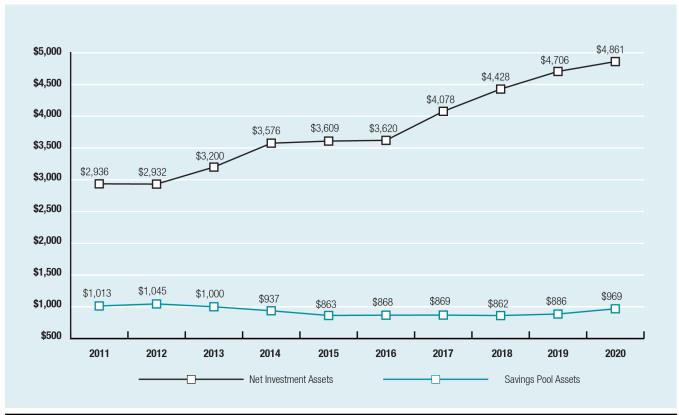
<sup>3</sup> Retirement Maturity Strategy Fund replaced Retirement Strategy 2000 in January 2015 and Retirement Strategy 2005 in January 2020.

<sup>&</sup>lt;sup>4</sup> This investment option was added in January 2020.

## DCP Net Asset Growth and Average Participant Balance by Age

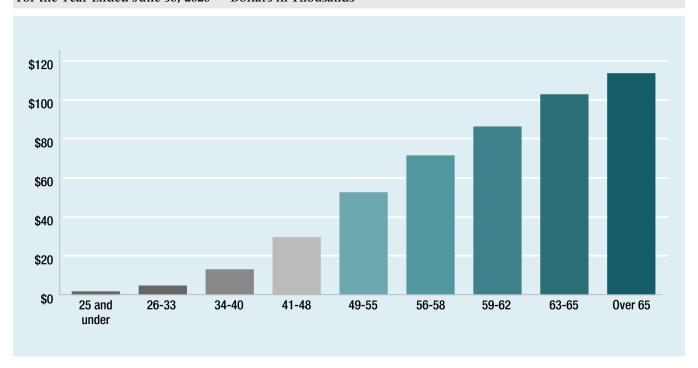
#### **DCP Net Investment Asset Growth**

For the Fiscal Years Ended June 30, 2011-2020 — Dollars in Millions



### Average Participant Balance by Age

For the Year Ended June 30, 2020 — Dollars in Thousands



This page is intentionally blank.



Department of Retirement Systems drs.wa.gov