Index

Notes to the Financial Statements

For the Fiscal Year Ended June 30, 2018

Note 1
Summary of Significant Accounting Policies

The accompanying financial statements of the state of Washington have been prepared in conformity with generally accepted accounting principles (GAAP). The Office of Financial Management (OFM) is the primary authority for the state's accounting and reporting requirements. OFM has adopted the pronouncements of the Governmental Accounting Standards Board (GASB), which is nationally accepted as the standard-setting body for establishing governmental accounting and financial reporting principles. Following is a summary of the significant accounting policies:

A. REPORTING ENTITY

In defining the state of Washington for financial reporting purposes, management considers all funds, organizations, institutions, agencies, departments, and offices that are legally part of the state (the primary government) and organizations that are financially accountable to the state. Additionally, other organizations that do not meet the financial accountability criteria may be included in the reporting entity if the nature and significance of their relationship with the state are such that exclusion would cause the state's financial statements to be misleading.

Financial accountability exists when the primary government appoints a voting majority of an organization's governing body and is either (1) able to impose its will on that organization or (2) there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government. The primary government is also financially accountable if an organization is fiscally dependent on and there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government regardless of whether the organization has (1) a separately elected governing board, (2) a governing board appointed by a higher level of government, or (3) a jointly appointed board. An organization is fiscally dependent if it is unable to determine its budget without another government having the substantive authority to approve or modify that budget, to levy taxes or set rates or charges without substantive approval by another government, or to issue bonded debt without substantive approval by another government. The organization has a financial benefit or burden relationship with the primary government if, for example, any one of these conditions exists: (1) the primary government is legally entitled to or can access the organization's resources, (2) the primary government is legally obligated or has otherwise assumed the obligation to finance or provide financial support to the organization, (3) the primary government is obligated in some manner for the debt of the organization.

Based on these criteria, the following are included in the financial statements of the primary government:

State Agencies. Except as otherwise described herein, all state elected offices, departments, agencies, commissions, boards, committees, authorities, councils (agencies), and all funds and subsidiary accounts of the state are included in the primary government. Executives of these agencies are either elected, directly appointed by the Governor, appointed by a board which is appointed by the Governor, or appointed by a board which is in part appointed by the Governor. Additionally, a small number of board positions are established by statute or independently elected.

The Legislature creates these agencies, assigns their programs, approves operational funding, and requires financial accountability. The Legislature also authorizes all bond issuances for capital construction projects for the benefit of state agencies. The legal liability for these bonds and the ownership of agency assets reside with the state.

Colleges and Universities. The governing boards of the five state universities, the state college, and the 34 state community and technical colleges are appointed by the Governor. The governing board of each college and university appoints a president to function as chief administrator. The Legislature approves budgets and budget amendments for the appropriated funds of each college and university, which include the state's General Fund as well as certain capital projects funds. The State Treasurer issues general obligation debt for major campus construction projects. However, the colleges and universities are authorized to issue revenue bonds.

The University of Washington (UW) and Washington State University issue general revenue bonds that are payable from general revenues, including student tuition, grant indirect cost recovery, sales and services revenue, and investment income. All other revenue bonds issued by colleges and universities pledge the income derived from acquired or constructed assets such as housing, dining, and parking facilities. These revenue bonds are payable solely from, and secured by, fees and revenues derived from the operation of constructed facilities. The legal liability for the bonds and the ownership of the college and university assets reside with the state.

Colleges and universities do not have separate corporate powers and sue and are sued as part of the state with legal representation provided through the state Attorney General's Office. Since the colleges and universities are legally part of the state, their financial operations, including their blended component units, are reported in the state's financial statements using the fund structure prescribed by GASB.

Retirement Systems. The state of Washington, through the Department of Retirement Systems (DRS), administers eight retirement systems for public employees of the state and political subdivisions: the Public Employees' Retirement System, the Teachers' Retirement System, the School Employees' Retirement System, the Law Enforcement Officers' and Fire Fighters' Retirement System, the Washington State Patrol Retirement System, the Public Safety Employees' Retirement System, the Judicial Retirement System, and the Judges' Retirement Fund. The director of DRS is appointed by the Governor.

There are three additional retirement systems administered outside of the DRS. The Volunteer Fire Fighters' and Reserve Officers' Relief and Pension Fund is administered through the State Board for Volunteer Fire Fighters and Reserve Officers, which is appointed by the Governor. The Judicial Retirement Account is administered through the Administrative Office of the Courts under the direction of the Board for Judicial Administration. The Higher Education Retirement Plan Supplemental Benefit Fund Plans are administered by the state's colleges and universities.

The Legislature establishes laws pertaining to the creation and administration of all public retirement systems. The participants of the public retirement systems, together with the state, provide funding for all costs of the systems based upon actuarial valuations. The state establishes benefit levels and approves the actuarial assumptions used in determining contribution levels.

All of the aforementioned retirement systems are included in the primary government's financial statements.

Blended Component Units

Blended component units, although legally separate entities, are part of the state's operations in substance. Accordingly, they are reported as part of the state and blended into the appropriate funds. Financial information for the state's blended component units may be obtained from the Office of Financial Management, Accounting Division, P.O. Box 43127, Olympia, WA 98504-3127. The following entities are blended in the state's financial statements:

Tobacco Settlement Authority was created by the Legislature in March 2002 as a public instrumentality separate and distinct from the state. It is governed by a five-member board appointed by the Governor. It was created solely for the purpose of issuing bonds to securitize a portion of the state's future tobacco settlement revenue. Proceeds of the debt instrument were transferred to the state to help fund health care, long-term care, and other programs of the state. Refer to Note 7.A for additional information.

University of Washington Physicians (UWP) was established for the exclusive benefit of the University of Washington School of Medicine (UWSOM). UWP employs UWSOM faculty and bills and collects for their clinical services as an agent for UWSOM.

UW Medicine Neighborhood Clinics (UW Neighborhood Clinics) were established for the exclusive benefit of the UWSOM, UWP and its affiliated medical centers, Harborview Medical Center and the UW Medical Center. The UW Neighborhood Clinics were organized to coordinate and develop patient care in a community clinical setting. They enhance the academic environment of UWSOM by providing additional sites of primary care practice and training for faculty, residents, and students.

Washington Biomedical Research Properties I and II, and Washington Biomedical Research Facilities 3, 3.2, and 3.3 were formed to acquire, construct, or renovate certain real properties for the benefit of the UW in fulfilling its educational, medical, or scientific research missions.

Tumwater Office Properties and FYI Properties were formed to design and construct office facilities to house state employees. The facilities were financed with tax-exempt obligations that meet the requirements of Revenue Ruling 63-20 and Revenue Procedure 82-26 issued by the Internal Revenue Service.

Northwest Hospital and Medical Center was created January 1, 2010, under an affiliation agreement between UW Medicine and Northwest Hospital and Medical Center (Northwest Hospital). UW Medicine is an academic medical center comprised of UWSOM, UW Neighborhood Clinics, UW Medical Center, Harborview Medical Center, UWP, as well as the University's membership in the Seattle Cancer Care Alliance and the Children's University Medical Group.

Northwest Hospital is a 281-bed full service acute care hospital. The University is the sole corporate member of Northwest Hospital.

Discrete Component Units

Discretely presented component units are reported in a separate column in the government-wide financial statements. Discretely presented component units are legally separate from the state and primarily serve or benefit those outside of the state. They are financially accountable to the state or have relationships with the state such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete. These entities are reported as discrete component units because state officials either serve on or appoint the members of the governing bodies of the authorities. The state also has the ability to influence the operations of the authorities through legislation.

The state's component units each have a year end of June 30 with the exception of the Washington Economic Development Finance Authority which has a December 31 year end.

The following entities are discretely presented in the financial statements of the state in the component unit's column:

The **Washington State Public Stadium Authority (PSA)** was created by the Legislature to acquire, construct, own, and operate a football/soccer stadium, exhibition center, and parking garage. Construction was completed in 2002. At June 30, 2018, PSA capital assets, net of accumulated depreciation, total $251.4 million. The state issued general obligation bonds for a portion of the cost of the stadium construction. The total public share of the stadium and exhibition center cost did not exceed $300 million from all state and local government funding sources, as required in statute.

Project costs in excess of $300 million were the responsibility of the project's private partner, First & Goal, Inc. The bonds are being repaid through new state lottery games, a state sales tax credit, extension of the local hotel/motel tax, and parking and admissions taxes at the new facility.

Financial reports of the PSA may be obtained at the following address:

Washington State Public Stadium Authority
CenturyLink Field & Event Center
800 Occidental Avenue South, #700
Seattle, WA 98134

The **Washington Health Benefit Exchange (Exchange)** was created by the Legislature to implement a central marketplace for individuals, families, and small employers to shop for health insurance and access federal tax credits pursuant to the Patient Protection and Affordable Care Act of 2010. Federal grant funding financed the Exchange design, development, and implementation phases as well as the first full year of operation during 2014. Beginning in 2015, the Exchange became self-sustaining through Medicaid program cost reimbursements, premium tax assessments, and other assessments.

Financial reports of the Exchange may be obtained at the following address:

Washington Health Benefit Exchange
810 Jefferson Street SE
PO Box 657
Olympia, WA 98507

Valley Medical Center was created July 1, 2011, through a strategic alliance between UW Medicine and Public Hospital District No. 1 of King County. Valley Medical Center owns and operates a 321-bed full service acute care hospital and 45 clinics located throughout southeast King County.

Financial reports of Valley Medical Center may be obtained at the following address:

Valley Medical Center
400 S. 43rd Street
Renton, WA 98055-5010

The **Washington State Housing Finance Commission,** the **Washington Higher Education Facilities Authority,** the **Washington Health Care Facilities Authority,** and the **Washington Economic Development Finance Authority** (financing authorities) were created by the Legislature in a way that specifically prevents them from causing the state to be liable or responsible for their acts and obligations including, but not limited to, any obligation to pay principal and interest on financing authority bonds. The financing authorities cannot obligate the state, either legally or morally, and the state has not assumed any obligation of, or with respect to, the financing authorities.

Financial reports of these financing authorities may be obtained from each authority at the following addresses:

Washington Health Care Facilities Authority
410 11th Avenue SE, Suite 201
Olympia, WA 98501

Washington State Housing Finance Commission
Washington Higher Education Facilities Authority
Washington Economic Development Finance Authority
1000 Second Avenue, Suite 2700
Seattle, WA 98104

Joint Ventures

In 1998, the University of Washington Medical Center (Medical Center) entered into an agreement with Seattle Children's Hospital and Fred Hutchinson Cancer Research Center to establish the **Seattle Cancer Care Alliance (SCCA)**. Each member of the SCCA has a one-third interest. The mission of the SCCA is to eliminate cancer as a cause of human suffering and death and to become recognized as the premier cancer research and treatment center in the Pacific Northwest. The SCCA integrates the cancer research, teaching, and clinical cancer programs of all three institutions to provide state-of-the-art cancer care. Under the agreement, the Medical Center provides the patient care to all adult inpatients of the SCCA.

Inpatient Services - The SCCA operates a 20-bed unit located within the Medical Center in which its adult inpatients receive care. The fiscal intermediary has determined that the 20-bed unit qualifies as a hospital within a hospital for Medicare reimbursement purposes. The SCCA provides medical oversight and management of the inpatient unit. Under agreements, the Medical Center provides inpatient care services to the SCCA including necessary personnel, equipment, and ancillary services.

Outpatient Services - The SCCA operates an ambulatory cancer care service facility in Seattle. The Medical Center provides various services to the SCCA's outpatient facility including certain pharmacy, laboratory, and pathology services as well as billing, purchasing, and other administrative services.

The state accounts for the Medical Center's interest in the SCCA under the equity method of accounting. Income of $17.3 million was recorded in fiscal year 2018, bringing the total equity investment to $159.1 million which is recognized in the state's financial statements in the Higher Education Student Services Fund.

Separate financial statements for the SCCA may be obtained from:

Seattle Cancer Care Alliance
825 Eastlake Avenue East
PO Box 19023
Seattle, WA 98109-1023

The University of Washington and Seattle Children's Hospital established **Children's University Medical Group (CUMG)** to assist the organizations in carrying out their pediatric patient care, as well as charitable, educational, and scientific missions.

CUMG employs UWSOM faculty physicians and bills and collects for their services as an agent for UWSOM. The University records revenue from CUMG based on the income distribution plan effective December 31, 2008. The University's patient services receivable includes amounts due from CUMG of $17.5 million in 2018.

Separate financial statements for CUMG may be obtained from:

Children's University Medical Group
4500 Sand Point Way NE, Suite 100
Seattle, WA 98105

B. GOVERNMENT-WIDE AND FUND FINANCIAL STATEMENTS

Government-wide Financial Statements

The state presents two basic government-wide financial statements: the Statement of Net Position and the Statement of Activities. These government-wide financial statements report information on all non-fiduciary activities of the primary government and its component units. The financial information for the primary government is distinguished between governmental and business-type activities. Governmental activities generally are financed through taxes, intergovernmental revenues, and other non-exchange revenues. Business-type activities are financed in whole or in part by fees charged to external parties for goods and services.

Statement of Net Position. The Statement of Net Position presents the state's non-fiduciary assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position. As a general rule, balances between governmental and business-type activities are eliminated.

Statement of Activities. The Statement of Activities reports the extent to which each major state program is supported by general state revenues or is self-financed through fees and intergovernmental aid. For governmental activities, a major program is defined as a function. For business-type activities, a major program is an identifiable activity.

Program revenues offset the direct expenses of major programs. Direct expenses are those that are clearly identifiable within a specific function or activity. Program revenues are identified using the following criteria:

- Charges to customers for goods and services of the program. A customer is one who directly benefits from the goods or services or is otherwise directly affected by the program, such as a state citizen or taxpayer, or other governments or nongovernmental entities.
- Amounts received from outside entities that are restricted to one or more specific programs. These amounts can be operating or capital in nature.
- Earnings on investments that are restricted to a specific program.

General revenues consist of taxes and other items not meeting the definition of program revenues.

Generally, the effect of internal activities is eliminated. Exceptions to this rule include charges between the workers' compensation insurance programs and various other state programs and functions. Elimination of these charges would distort the direct costs and revenues reported for the various activities involved.

Fund Financial Statements

The state uses 715 accounts that are combined into 52 rollup funds. The state presents separate financial statements for governmental funds, proprietary funds, and fiduciary funds. Major individual governmental funds and major individual proprietary funds are reported in separate columns in the fund financial statements, with nonmajor funds being combined into a single column regardless of fund type. Internal service and fiduciary funds are reported by fund type. Major funds include:

Major Governmental Funds:

- **General Fund** is the state's primary operating fund. This fund accounts for all financial resources and transactions not accounted for in other funds.

- **Higher Education Special Revenue Fund** primarily accounts for tuition, student fees, and grants and contracts received for educational and research purposes.

- **Higher Education Endowment Permanent Fund** accounts for gifts and bequests that the donors have specified must remain intact. Each gift is governed by various restrictions on the investment and use of the income earned on investments.

Major Enterprise Funds:

- **Workers' Compensation Fund** accounts for the workers' compensation program that provides medical, time-loss, and disability benefit payments to qualifying individuals sustaining work-related injuries.

- **Unemployment Compensation Fund** accounts for the unemployment compensation program. It accounts for the deposit of funds, requisitioned from the Federal Unemployment Trust Fund, to provide services to eligible participants within the state and to pay unemployment benefits.

- **Higher Education Student Services Fund** is used by colleges and universities principally for bookstore, cafeteria, parking, student housing, food service, and hospital business enterprise activities.

The state includes the following nonmajor funds:

Nonmajor Governmental Funds:

- **Special Revenue Funds** account for the proceeds of specific revenue sources (other than trusts for individuals, private organizations, other governments, or for major capital projects) that are restricted or committed to expenditures for specific purposes. These include a variety of state programs including public safety and health assistance programs; natural resource and wildlife protection and management programs; the state's transportation programs which include the operation of the state's ferry system and maintenance and preservation of interstate and non-interstate highway systems; driver licensing, highway and non-highway operations, and capital improvements; K-12 school construction; and construction and loan programs for local public works projects.

- **Debt Service Funds** account for the accumulation of resources that are restricted or committed to expenditures for, and the payment of, principal and interest on the state's bonds issued in support of governmental activities.

- **Capital Projects Funds** account for financial resources that are restricted or committed to expenditures for the acquisition, construction, or improvement of major state-owned capital facilities (other than highway infrastructure or those financed by proprietary funds).

- **Common School Permanent Fund** accounts for the principal derived from the sale of timber. Interest earned is used for the benefit of common schools.

Nonmajor Proprietary Funds:

- **Enterprise Funds** account for the state's business type operations for which a fee is charged to external users for goods or services including: the state lottery, vocational/education programs at correctional institutions, the Guaranteed Education Tuition program, paid family and medical leave compensation, and other activities.

- **Internal Service Funds** account for the provision of legal, motor pool, data processing, risk management, health insurance, and other services by one department or agency to other departments or agencies of the state on a cost-reimbursement basis.

Nonmajor Fiduciary Funds:

- **Pension (and other employee benefit) Trust Funds** are used to report resources that are required to be held in trust by the state for the members and beneficiaries of defined benefit pension plans, defined contribution pension plans, and other employee benefit plans.

- **Investment Trust Fund** accounts for the external portion of the local government investments, which is reported by the state as the sponsoring government.

- **Private-Purpose Trust Fund** is used to report trust arrangements, other than pension and investment trusts, under which principal and income benefit individuals, private organizations, or other governments such as the administration of unclaimed property.

- **Agency Funds** account for resources held by the state in a custodial capacity for other governments, private organizations, or individuals.

Operating and Nonoperating Revenues and Expenses. The state's proprietary funds make a distinction between operating and nonoperating revenues and expenses. Operating revenues and expenses generally result from providing goods and services directly related to the principal operations of the funds. For example, operating revenues for the state's workers' compensation and health insurance funds consist of premiums and assessments collected.

Operating expenses consist of claims paid to covered individuals, claims adjustment expenses, costs of commercial insurance coverage, and administrative expenses. All revenues and expenses not meeting this definition are reported as nonoperating, including interest expense and investment gains and losses.

C. MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

For government-wide reporting purposes, the state uses the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. Property taxes are recognized as revenue in the year for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

For fund statement reporting purposes, the state uses the current financial resources measurement focus and modified accrual basis of accounting for governmental funds. With the current financial resources measurement focus, generally only current assets, current liabilities, deferred outflows of resources, and deferred inflows of resources are included on the governmental funds balance sheet. Operating statements for these funds present inflows (i.e., revenues and other financing sources) and outflows (i.e., expenditures and other financing uses) of expendable financial resources.

Under the modified accrual basis of accounting, revenues are recognized when susceptible to accrual (i.e., when they become both measurable and available). "Measurable" means the amount of the transaction can be reasonably estimated. "Available" means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. Primary revenues that are determined to be susceptible to accrual include sales taxes, business and occupation taxes, motor fuel taxes, federal grants-in-aid, and charges for services.

Revenues from property taxes are determined to be available if collectible within 60 days. Taxes imposed on exchange transactions are accrued when the underlying exchange transaction occurs if collectible within one year. Revenue for timber cutting contracts is accrued when the timber is harvested. Revenues from licenses, permits, and fees related to a future time period are recognized when received in cash. Revenues related to expenditure-driven grant agreements are recognized when the qualifying expenditures are made, provided that the availability criteria are met. Expenditure-driven grant revenue is considered available if it can be collected by the state at the same time cash is disbursed to cover the associated grant expenditure. Pledges are accrued when the eligibility requirements are met and resources are available. All other accrued revenue sources are determined to be available if collectible within 12 months.

Property taxes are levied in December for the following calendar year. The first half-year collections are due by April 30, and the second half-year collections are due by October 31. Since the state is on a fiscal year ending June 30, the first half-year collections are recognized as revenue if collectible within 60 days of the fiscal year end. The second half-year collections are recognized as receivables offset by unavailable revenue. The lien date on property taxes is January 1 of the tax levy year.

Under modified accrual accounting, expenditures are generally recognized when the related liability is incurred. However, unmatured interest on general long-term obligations is recognized when due. Certain liabilities including compensated absences, other postemployment benefits, and claims and judgments are recognized when the obligations are expected to be liquidated with available spendable financial resources.

The state reports both unavailable and unearned revenues on its governmental fund balance sheet. Unavailable revenues arise when a potential revenue does not meet both the "measurable" and the "available" criteria for revenue recognition in the current period. Unearned revenues arise when resources are received by the state before it has a legal claim to them, such as when grant monies are received prior to incurring qualifying expenditures/expenses.

All proprietary and trust funds are accounted for using the economic resources measurement focus. With this measurement focus, all assets, liabilities, deferred outflows of resources, and deferred inflows of resources associated with the operations of these funds are included on their respective statements of net position. Operating statements present increases (i.e., revenues) and decreases (i.e., expenses) in total net position.

All proprietary and trust funds are reported using the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recognized when incurred.

D. ASSETS, LIABILITES, DEFERRED OUTFLOWS/INFLOWS OF RESOURCES AND NET POSITION/FUND BALANCE

1. Cash and Investments

Investments of surplus or pooled cash balances are reported on the accompanying Statements of Net Position, Balance Sheets, and Statements of Cash Flows as "Cash and Cash Equivalents." The Office of the State Treasurer invests state treasury cash surplus where funds can be disbursed at any time without prior notice or penalty. For reporting purposes, pooled investments are stated at fair value or amortized cost, which approximates fair value. For purposes of reporting cash flows, the state considers cash and pooled investments to be cash equivalents. Pooled investments include short-term, highly-liquid investments that are both readily convertible to cash and are so near their maturity dates that they present insignificant risk of changes in value because of changes in interest rates.

The method of accounting for investments varies depending upon the fund classification. Investments in the state's Local Government Investment Pool (LGIP), a qualified external investment pool, are reported at amortized cost which approximates fair value. The Office of the State Treasurer prepares a stand-alone LGIP financial report. A copy of the report is available from the Office of the State Treasurer, PO Box 40200, Olympia, WA 98504-0200, online at: https://tre.wa.gov/partners/for-local-governments/local-government-investment-pool-lgip/lgip-comprehensive-annual-financial-report/ or phone number (360) 902-9000. TTY users dial 711 to be connected to the state TTY operator.

The fair value of certain pension trust fund investments that are organized as limited partnerships and have no readily ascertainable fair values (including real estate, private equity, and tangible assets) has been determined by using the net asset value per share of the Pension Funds' ownership interest in partners' capital. These values are based on the individual investee's capital account balance reported at fair value at the closest available reporting period, adjusted for subsequent activity. At June 30, 2018, these alternative investments are valued at $43.39 billion. Because of the inherent uncertainties in the estimation of fair values, it is possible that the estimates will change in the near-term or the subsequent sale of assets will be different than the June 30, 2018, reported net asset value.

Short-term money market investments and participating interest-earning investment contracts that have a remaining maturity at time of purchase of one year or less are reported at amortized cost. Nonparticipating contracts, such as nonnegotiable certificates of deposit with redemption terms that do not consider market rates, are reported using a cost-based measure.

All other investments are reported at fair value. Fair values are based on published market prices, quotations from national security exchanges and security pricing services, or by the respective fund managers for securities that are not actively traded. Privately held mortgages are valued at cost, which approximates fair value. Additional disclosure describing investments is provided in Note 3.

2. Receivables and Payables

Receivables in the state's governmental fund type accounts consist primarily of taxes and federal revenues. Receivables in all other funds have arisen in the ordinary course of business. Receivables are recorded when either the asset or revenue recognition criteria (refer to Note 1.C) have been met. All receivables are reported net of an allowance for accounts estimated to be uncollectible.

For government-wide reporting purposes, amounts recorded as interfund/interagency receivables and payables are eliminated in the governmental and business-type activities columns on the Statement of Net Position, except for the net residual balances due between the governmental and business-type activities, which are reported as internal balances.

Amounts recorded in governmental and business-type activities as due to or from fiduciary funds have been reported as due to or from other governments.

3. Inventories and Prepaids

Consumable inventories, consisting of expendable materials and supplies held for consumption, are valued and reported in the state's financial statements if the fiscal year-end balance on hand at an inventory control point is estimated to be $50,000 or more. Consumable inventories are valued at cost using either the first-in, first-out or weighted average methods. Donated consumable inventories are recorded at fair value.

All merchandise inventories are considered reportable for financial statement purposes. Merchandise inventories are generally valued at cost using the first-in, first-out method. Inventories of governmental funds are valued at cost and recorded using the consumption method. Proprietary funds expense inventories when used or sold.

For governmental fund financial reporting, inventory balances are also recorded as a nonspendable fund balance indicating that they do not constitute "available spendable resources," except for $6.1 million in federally donated consumable inventories, which are offset by unearned revenue because they are not earned until they are distributed to clients.

Prepaid items are those certain types of supplies and/or services (not inventory) that are acquired or purchased during an accounting period but not used or consumed during that accounting period.

In governmental fund type accounts, prepaid items are generally accounted for using the purchases method. Under the purchases method, prepaid items are treated as expenditures when purchased and residual balances, if any, at year end are not accounted for as assets.

In proprietary and trust fund type accounts, prepaid items are accounted for using the consumption method. The portion of supplies or services consumed or used during a period is recorded as an expense. The balance that remains is reported as an asset until consumed or used.

4. Restricted Assets

Certain cash, investments, and other assets are classified as restricted assets on the Statement of Net Position and Balance Sheet because their use is limited by debt covenants, escrow arrangements, or other regulations.

5. Capital Assets

Capital assets are tangible and intangible assets held and used in state operations, which have a service life of more than one year and meet the state's capitalization policy.

It is the state's policy to capitalize:

- All land, including land use rights with indefinite lives acquired with the purchase of the underlying land, and ancillary costs.
- The state highway system operated by the Department of Transportation.
- Infrastructure, other than the state highway system, with a cost of $100,000 or more.
- Buildings, building improvements, improvements other than buildings, and leasehold improvements with a cost of $100,000 or more.
- Intangible assets, either purchased or internally developed, with a cost of $1 million or more that are identifiable by meeting one of the following conditions:
    - The asset is capable of being separated or divided and sold, transferred, licensed, rented, or exchanged.
    - The asset arises from contractual or other legal rights, regardless of whether those rights are transferable or separable.
- All capital assets acquired with Certificates of Participation, a debt financing program administered by the Office of the State Treasurer.
- All other capital assets with a unit cost (including ancillary costs) of $5,000 or greater, or collections with a total cost of $5,000 or greater.

Assets acquired by capital leases are capitalized if the assets' fair market value meets the state's capitalization thresholds described above.

Purchased capital assets are valued at cost where historical records are available and at estimated historical cost where no historical records exist. Capital asset costs include the purchase price plus those costs necessary to place the asset in its intended location and condition for use (ancillary costs). Normal maintenance and repair costs that do not materially add to the value or extend the life of the state's capital assets are not capitalized.

Donated capital assets, works of art, and historical treasures are valued at their estimated acquisition value on the date of donation, plus all appropriate ancillary costs. When the acquisition value is not practically determinable due to lack of sufficient records, estimated cost is used. Where necessary, estimates of value are derived by factoring price levels from the current period to the time of acquisition.

The value of assets constructed by agencies for their own use includes all direct construction costs and costs that are related to the construction. In enterprise and trust funds, net interest costs (if material) incurred during the period of construction are capitalized. In fiscal year 2018, $93.1 million in interest costs were incurred, and $16.2 million net interest costs were capitalized.

State agencies are not required to capitalize art collections, library reserve collections, and museum and historical collections that are considered inexhaustible, in that their value does not diminish over time, if all of the following conditions are met:

- The collection is held for public exhibition, education, or research in furtherance of public service, rather than financial gain.
- The collection is protected, kept unencumbered, cared for, and preserved.
- The collection is subject to policy requirements that the proceeds from sales of collection items be used to acquire other items for the collection.

Depreciation/amortization is calculated using the straight-line method over the estimated useful lives of the assets.

Generally, estimated useful lives are as follows:

Buildings & building components	5-50 years
Furnishings, equipment & collections	3-50 years
Other improvements	3-50 years
Intangibles	3-50 years
Infrastructure	20-50 years

The cost and related accumulated depreciation/ amortization of disposed capital assets are removed from the accounting records.

The state capitalizes the state highway system as a network but does not depreciate it since the system is being preserved approximately at or above a condition level established by the state. That condition level is documented and disclosed in the Required Supplementary Information. Additionally, the highway system is managed using an asset management system that includes:

- Maintenance of an up-to-date inventory of system assets.

- Performance of condition assessments of the assets at least every three years with summarization of the results using a measurement scale.

- Annual estimation of the amount to maintain and preserve the assets at the condition level established and disclosed.

All state highway system expenditures that preserve the useful life of the system are expensed in the period incurred. Additions and improvements that increase the capacity or efficiency of the system are capitalized. This approach of reporting condition instead of depreciating the highway system is called the modified approach.

For government-wide financial reporting purposes, capital assets of the state are reported as assets in the applicable governmental or business-type activities column on the Statement of Net Position. Depreciation/amortization expense related to capital assets is reported in the Statement of Activities.

Capital assets and the related depreciation/amortization expense are also reported in the proprietary fund financial statements.

In governmental funds, capital assets are not capitalized in the accounts that acquire or construct them. Instead, capital acquisitions and construction are reflected as expenditures in the year assets are acquired or construction costs are incurred. No depreciation/amortization is reported.

6. Deferred Outflows/Inflows of Resources

In addition to assets, the Balance Sheet and Statement of Net Position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of fund equity that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/ expenditure) until then. The category of deferred outflow of resources reported in the government-wide and proprietary fund statements of net position relates to debt refunding, pensions, other postemployment benefits (OPEB), and hedging derivative instruments.

Deferred outflows on debt refunding result when the net carrying value of refunded debt exceeds its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.

Deferred outflows on pensions are recorded when projected earnings on pension plan investments exceed actual earnings and are amortized to pension expense using a systematic and rational method over a closed five-year period. Deferred outflows on pensions also include the difference between expected and actual experience with regard to economic or demographic factors; changes of assumptions about future economic, demographic, or other input factors; or changes in the state's proportionate share of net pension liability. These are amortized over the average expected remaining service lives of all employees that are provided with pensions through each pension plan. State contributions to pension plans made subsequent to the measurement date are also deferred and reduce net pension liability in the subsequent year.

Deferred outflows on hedging derivative instruments represent the unrealized loss in fair value of the contract at fiscal year end.

Deferred outflows on OPEB include the difference between expected and actual experience with regard to economic or demographic factors or when actual experience is greater than expected; changes of assumptions about future economic, demographic, or other input factors; and changes in the state's proportionate share of total OPEB liability between funds within the state. These are amortized over the average expected remaining service lives of all employees, active and inactive, that are provided with benefits through the OPEB plan. State contributions to the OPEB plan, made subsequent to the measurement date, are also deferred and reduce total OPEB liability in the subsequent year.

In addition to liabilities, the Balance Sheet and Statement of Net Position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of fund equity that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. Deferred inflows of resources reported by the state relate to unavailable revenue, debt refunding, pensions, OPEB, and hedging derivative instruments.

Unavailable revenue arises only under the modified accrual basis of accounting, and so is reported only on the governmental funds Balance Sheet. Governmental funds report deferred inflows for unavailable revenues primarily from two sources: taxes and long-term receivables. These amounts are recognized as inflows of resources in the periods that the amounts become available.

Deferred inflows on refunding result when the reacquisition price of the refunding debt exceeds the net carrying value of the refunded debt. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.

Deferred inflows on pensions are recorded when actual earnings on pension plan investments exceed projected earnings and are amortized to pension expense using a systematic and rational method over a closed five-year period. Deferred inflows on pensions also include the difference between expected and actual experience with regard to economic or demographic factors; changes of assumptions about future economic, demographic, or other input factors; or changes in the state's proportionate share of net pension liability. These are amortized over the average expected remaining service lives of all employees that are provided with pensions through each pension plan.

Deferred inflows on hedging derivative instruments represent the unrealized gain in fair value of the contract at fiscal year end.

Deferred inflows on OPEB include the difference between expected and actual experience with regard to economic or demographic factors or when actual experience is less than expected; changes of assumptions about future economic, demographic, or other input factors; and changes in the state's proportionate share of total OPEB liability between funds within the state. These are amortized over the average expected remaining service lives of all employees, active and inactive, that are provided with benefits through the OPEB plan.

7. Compensated Absences

State employees accrue vested vacation leave at a variable rate based on years of service. In general, accrued vacation leave cannot exceed 240 hours at the employee's anniversary date.

Employees accrue sick leave at the rate of one day per month without limitation on the amount that can be accumulated. Sick leave is not vested (i.e., the state does not pay employees for unused sick leave upon termination except upon employee death or retirement). At death or retirement, the state is liable for 25 percent of the employee's accumulated sick leave. In addition, the state has a sick leave buyout option in which, each January, employees who accumulate sick leave in excess of 480 hours may redeem sick leave earned but not taken during the previous year at the rate of one day's pay in exchange for each four days of sick leave.

It is the state's policy to liquidate its compensated absences obligations with future resources rather than advance funding it with available spendable financial resources.

For government-wide reporting purposes, the state reports compensated absences obligations as liabilities in the applicable governmental or business-type activities columns on the Statement of Net Position.

For fund statement reporting purposes, governmental funds recognize an expenditure for annual and sick leave when it is payable (i.e., upon employee's use, resignation, death or retirement). Proprietary and trust funds recognize the expense and accrue a liability for annual leave and estimated sick leave buyout, including related payroll taxes and benefits, as applicable, as the leave is earned.

8. Long-Term Liabilities

In the government-wide and proprietary fund financial statements, long-term obligations of the state are reported as liabilities on the Statement of Net Position. Bonds payable are reported net of applicable original issuance premiums or discounts. When material, bond premiums and discounts are deferred and amortized over the life of the bonds.

For governmental fund financial reporting, the face (par) amount of debt issued is reported as other financing sources. Premiums and discounts on original debt issuance are also reported as other financing sources and uses, respectively. Issuance costs are reported as debt service expenditures.

9. Fund Equity

In governmental fund type accounts, fund equity is called "fund balance." Fund balance is reported in classifications which reflect the extent to which the state is bound to honor constraints on the purposes for which the amounts can be spent. Classifications include:

- **Nonspendable** fund balance represents amounts that are either not in a spendable form or are legally or contractually required to remain intact.

- **Restricted** fund balance represents amounts for which constraints are placed on their use by the state Constitution, enabling legislation, or external resource providers such as creditors, grantors, or laws or regulations of other governments.

- **Committed** fund balance represents amounts that can only be used for specific purposes pursuant to constraints imposed by state law as adopted by the state Legislature. The commitment remains in place until the Legislature changes or eliminates the state law.

- **Assigned** fund balance represents amounts that are intended for a specific purpose by management, but are neither restricted nor committed. Generally, assignment is expressed by joint legislative and executive staff action.

- **Unassigned** fund balance represents the residual amount for the General Fund that is not contained in the other classifications. Additionally, any deficit fund balance within the other governmental fund types is reported as unassigned.

When resources meeting more than one of the classifications (excluding nonspendable) are comingled in an account, assuming that the expenditure meets the constraints of the classification, the assumed order of spending is restricted first, committed second, and finally assigned.

For government-wide reporting as well as in proprietary funds, fund equity is called net position. Net position is comprised of three components: net investment in capital assets, restricted, and unrestricted.

- **Net investment in capital assets** consists of capital assets, net of accumulated depreciation and reduced by outstanding balances of bonds, notes, and other debt that are attributed to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are included in this component of net position.

- **Restricted** net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Assets are reported as restricted when constraints are placed on asset use either by external parties or by law through constitutional provision or enabling legislation.

- **Unrestricted** net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that does not meet the definition of the two preceding categories.

When both restricted and unrestricted resources are available for use, it is the state's policy to use restricted resources first and then use unrestricted resources as they are needed.

In fiduciary funds, net position is held in trust for individuals and external organizations.

E. OTHER INFORMATION

1. Insurance Activities

Workers' Compensation. Title 51 RCW establishes the state of Washington's workers' compensation program. The statute requires all employers to secure coverage for job-related injuries and diseases, with few exceptions, through the Workers' Compensation Fund or through self-insurance.

Direct private insurance is not authorized, although self-insurers are permitted to reinsure up to 80 percent of their obligations through private insurers.

The Workers' Compensation Fund, an enterprise fund, is used to account for the workers' compensation program which provides time-loss, medical, vocational, disability, and pension benefits to qualifying individuals sustaining work-related injuries or illnesses. The main benefit plans of the workers' compensation program are funded based on rates that will keep these plans solvent in accordance with recognized actuarial principles. The supplemental pension plan supports cost-of-living adjustments (COLA) granted for time-loss and disability payments; however, these are funded on a pay-as-you-go basis. By statute, the state is only allowed to collect enough revenue to fund the current COLA payments.

Premiums are based on individual employers' reported payroll hours and insurance rates based on each employer's risk classification(s) and past experience, except for the Supplemental Pension Fund premiums which are based on a flat rate per hours worked independent of risk class or past experience. In addition to its regular premium plan which is required for all employers, the Workers' Compensation Fund offers a voluntary retrospective premium-rating plan under which premiums are subject to three annual adjustments based on group and individual employers' loss experience. Initial adjustments to the standard premiums are paid to or collected from the groups and individual employers approximately ten months after the end of each plan year.

The Department of Labor and Industries, as administrator of the workers' compensation program, establishes claims liabilities based on estimates of the ultimate cost of claims (including future claims adjustment expenses) that have already occurred. The length of time for which such costs must be estimated varies depending on the benefit involved. Because actual claims costs depend on such complex factors as inflation, changes in doctrines of legal liabilities, claims adjudication, and judgments, the process used in computing claims liabilities does not necessarily result in an exact amount.

Claims payable are recomputed quarterly using a variety of actuarial and statistical techniques. These techniques are used to produce current estimates that reflect recent settlements, claim frequency, expected inflation, and other economic, legal, and social factors. Adjustments to claims payable are charged or credited to claims expense in the periods in which they are made.

The Department of Labor and Industries prepares a stand-alone financial report for its workers' compensation program. Copies of the report that include financial statements and required supplementary information may be obtained by writing to Washington State Department of Labor and Industries, PO Box 44833, Olympia, WA 98504-4833 or by visiting their website at: http://www.lni.wa.gov/ClaimsIns/Insurance/Learn/StateFund/Reports/Default.asp.

Risk Management. The state of Washington operates a self-insurance liability program pursuant to RCW 4.92.130. The state manages its tort claims as an insurance business activity rather than a general governmental activity. The state's policy is generally not to purchase commercial insurance for the risk of losses to which it is exposed. Instead, the state's management believes it is more economical to manage its risks internally and set aside assets for claims settlement in the Risk Management Fund, an internal service fund. Coverage is provided up to $10 million for each claim with no deductible. Commercial insurance is purchased for various liabilities arising from the operations of the Washington state governmental functions in order to limit the exposure to catastrophic losses. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past ten fiscal years. Otherwise, the self-insurance liability program services all claims against the state for injuries and property damage to third parties. The majority of state funds and agencies participate in the self-insurance liability program in proportion to their anticipated exposure to liability losses.

Health Insurance. The state of Washington administers and provides medical, dental, basic life, and basic long-term disability insurance coverage for eligible state employees and their dependents. In addition, school districts, educational service districts, charter schools, the Washington State Health Benefits Exchange, tribal governments, political subdivisions, and employee organizations representing state civil service employees can contract with the state to provide these benefits to their employees. The state establishes eligibility requirements and approves plan benefits of all participating health care organizations. Because the state and its employees are the predominant participants in the employee health insurance program, it is accounted for as an internal service fund, the Health Insurance Fund.

The state's share of the cost of coverage for state employees is based on a per capita amount determined annually by the Legislature and allocated to state agencies.

The Health Care Authority (HCA), as administrator of the health care benefits program, collects this monthly "premium" from agencies for each active employee enrolled in the program. State employees self pay for coverage beyond the state's contribution. For non-state employees, their respective employers, who have contracted with the HCA to provide employee benefits, pay the cost of coverage. Most coverage is available on a self-paid basis to former employees and employees who are temporarily not in pay status.

Most coverage is also available on a self-paid basis to eligible retirees. In accordance with the provisions of GASB Statement No. 74, the Health Insurance Fund is used to account for the retiree health insurance program. For additional information, refer to Note 12.

The state secures commercial insurance for certain coverage offered, but self-insures the risk of loss for the Uniform Medical Plan. The Uniform Medical Plan enrolled approximately 68 percent of the eligible subscribers in fiscal year 2018. Claims are paid from premiums collected, and claims adjudication is contracted through a third-party administrator.

Considerations in calculating liabilities include frequency of claims, administrative costs, industry inflation trends, advances in medical technology, and other social and economic factors. Liabilities include an amount for claims incurred but not reported.

2. Postemployment Benefits

COBRA. In compliance with federal law, the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), the state offers health and dental benefits on a temporary basis to qualified beneficiaries whose benefit coverage would otherwise end because of a qualifying event such as loss of employment. COBRA coverage is available on a self-paid basis and is the same medical and dental coverage available to state employees.

Medical Expense Plan. As disclosed in Note 1.D, at the time of separation from state service due to retirement or death, the state offers a 25 percent buyout of an employee's accumulated sick leave. Individual state agencies may offer eligible employees a medical expense plan (MEP) that meets the requirements of the Internal Revenue Code. Agencies offering an MEP deposit the retiring employee's sick leave buyout in the MEP for reimbursement of medical expenses.

Retirement Benefits. Refer to Note 11 Retirement Plans and Note 12 Other Postemployment Benefits.

3. Interfund/Interagency Activities

The state engages in two major categories of interfund/interagency activity: reciprocal and nonreciprocal. Reciprocal interfund/interagency activity is the internal counterpart to exchange and exchange-like transactions and includes both interfund loans and services provided and used. Nonreciprocal activity is nonexchange in nature and includes both transfers and reimbursements.

4. Donor-restricted Endowments

The state of Washington reports endowments in higher education endowment permanent accounts. These accounts are established outside of the state treasury for use by the higher education institutions. There is no state law that governs endowment spending; rather, the policies of individual university and college boards govern the spending of net appreciation on investments.

Under the current spending policies, distributions to programs approximate an annual percentage rate of 4 percent of a five-year rolling average of the endowments' market valuation.

The net appreciation available for authorization for expenditure by governing boards totaled $710.1 million. This amount is reported as restricted for expendable endowment funds on the government-wide Statement of Net Position.

Note 2
Accounting, Reporting, and Entity Changes

Reporting Changes. Effective for fiscal year 2018 reporting, the state adopted the following new standards issued by the Governmental Accounting Standards Board (GASB):

Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This statement establishes standards of accounting and financial reporting for defined benefit other postemployment benefits (OPEB) and defined contribution OPEB that are provided to the employees of state and local governmental employers.

Statement No. 81, *Irrevocable Split-Interest Agreements*. This statement establishes standards of accounting and financial reporting for irrevocable split-interest agreements in which a government is a beneficiary. Split-interest agreements are a type of giving agreement used by donors to provide resources to two or more beneficiaries, including governments. Split-interest agreements can be created through trusts or other legally enforceable agreements in which a donor transfers resources to an intermediary to hold and administer for the benefit of a government and at least one other beneficiary.

Statement No. 85, *Omnibus 2017*. This statement addresses practice issues that were identified during implementation and application of certain other GASB Statements. It addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and OPEB).

Statement No. 86, *Certain Debt Extinguishment Issues*. This statement establishes accounting and financial reporting guidance for transactions in which cash and other monetary assets acquired with only existing resources, resources other than the proceeds of refunding debt, are placed in an irrevocable trust for the sole purpose of extinguishing debt. It also provides guidance relating to prepaid insurance on debt that is extinguished.

Fund Reclassification. The Guaranteed Education Tuition Program was reclassified from a major enterprise fund to a nonmajor enterprise fund.

Prior Period Adjustments. The state recorded a reduction to the beginning net position in the following funds as a result of implementing GASB Statement No. 75:

- Major Enterprise Funds: Workers' Compensation $77.6 million and Higher Education Student Services $333.7 million.

- Nonmajor Enterprise Funds: Lottery $2.8 million, Institutional $9.4 million, Guaranteed Education Tuition Program $926 thousand, and Other Activities $11.2 million.

- Internal Service Funds: General Services $48.1 million, Data Processing Revolving $10.9 million, Higher Education Revolving $23.5 million, Risk Management $366 thousand, and Health Insurance $1.8 million.

- Fiduciary Funds: Pension and Other Employee Benefit Plans $245 thousand.

- Component Units: Health Benefit Exchange, a major component unit, $714 thousand; the Washington State Housing Finance Commission and the Washington State Health Care Facilities Authority, both nonmajor component units, $3.6 million and $204 thousand, respectively.

The state recorded an increase to the beginning fund balance of the Higher Education Endowment Fund, a major governmental fund, of $9.6 million as a result of implementing GASB Statement No. 81.

The state recorded a reduction to the beginning net position in the funds below in order to report their proportionate share of the state's net pension liability for the Higher Education Retirement Plans per GASB Statement No. 73. The state's entire liability was previously reported in long-term obligations associated with governmental funds.

- Major Enterprise Funds: Workers' Compensation $1.3 million and Higher Education Student Services $2.0 million.

- Internal Service Fund: Higher Education Revolving $601 thousand.

The Valley Medical Center, a major component unit, recorded a reduction to the beginning net position of $232 thousand to record transactions reported in the component unit's fiscal year 2017 financial statements after the state of Washington's fiscal year 2017 Comprehensive Annual Financial Report was published.

The state recorded a reduction to the beginning fund balance in the Higher Education Facilities Fund, a nonmajor governmental fund, of $17.0 million to adjust unrecorded capital expenditures.

Governmental Capital Assets and Long-term Obligations. The state recorded an increase in the beginning balance of long-term obligations associated with governmental funds of $2.43 billion as a result of implementing GASB Statement No. 75. The state recorded beginning balance reductions to long-term obligations associated with governmental funds of $55.4 million as a result of implementing GASB Statement No. 81 and $3.9 million from reclassifying the proportionate share of the state's net pension liability for the Higher Education Retirement Plans to the Workers' Compensation and Higher Education Student Services.

Fund equity at July 1, 2017, has been restated as follows (expressed in thousands):

	Fund equity (deficit) at June 30, 2017, as previously reported	Fund Reclassification	Prior Period Adjustment	Fund equity (deficit) at July 1, 2017, as restated
Governmental Funds:				
General	$ 4,201,092	$ —	$ —	$ 4,201,092
Higher Education Special Revenue	2,692,585	—	—	2,692,585
Higher Education Endowment	3,792,982	—	9,635	3,802,617
Nonmajor Governmental	6,208,005	—	(17,000)	6,191,005
Proprietary Funds:				
Enterprise Funds:				
Workers' Compensation	(9,647,105)	—	(78,913)	(9,726,018)
Unemployment Compensation	4,581,264	—	—	4,581,264
Higher Education Student Services	1,073,167	—	(335,682)	737,485
Guaranteed Education Tuition Program	562,693	(562,693)	—	—
Nonmajor Enterprise	28,461	562,693	(24,353)	566,801
Internal Service Funds	(163,696)	—	(85,299)	(248,995)
Fiduciary Funds:				
Private Purpose Trust	4,936	—	—	4,936
Local Government Investment Pool	10,908,266	—	—	10,908,266
Pension and Other Employee Benefit Plans	102,348,453	—	(245)	102,348,208
Component Units:				
Public Stadium Authority	273,411	—	—	273,411
Health Benefit Exchange	(3,151)	—	(714)	(3,865)
Valley Medical Center	219,793	—	(232)	219,561
Nonmajor Component Units	297,462	—	(3,827)	293,635

Note 3
Deposits and Investments

A. DEPOSITS

Custodial Credit Risk. Custodial credit risk is the risk associated with the failure of a depository financial institution. In the event of a depository financial institution's failure, it is the risk that the state would not be able to recover its deposits or collateralized securities that are in the possession of the outside parties.

The state minimizes custodial credit risk by restrictions set forth in state law. Statutes require state agencies to deposit funds in financial institutions that are physically located in Washington unless otherwise expressly permitted by statute and authorized by the Washington Public Deposit Protection Commission (PDPC). The PDPC, established under chapter 39.58 of the Revised Code of Washington (RCW), makes and enforces regulations and administers a collateral pool program to ensure public funds are protected if a financial institution becomes insolvent. Securities pledged are held by a trustee agent for the benefit of the collateral pool.

At June 30, 2018, $1.19 billion of the state's deposits with financial institutions were insured or collateralized, with the remaining $354 thousand uninsured/uncollateralized.

B. INVESTMENTS - PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS (PENSION TRUST FUNDS)

1. Summary of Investment Policies

Under RCW 43.33A.030, trusteeship of the pension trust funds is vested within the voting members of the Washington State Investment Board (WSIB). The Legislature has established a standard of care for investment of these funds in RCW 43.33A.140. Additionally, the WSIB and its staff must comply with other state laws, such as the Ethics in Public Service Act, chapter 42.52 RCW, in making investment decisions and seeking to meet investment objectives.

The pension trust funds consist of retirement contributions from employer and employee participants in the Washington State Retirement System and related earnings on those contributions. The Retirement System is administered by the Department of Retirement Systems. The WSIB has exclusive control of the investment of all money invested in the pension trust funds.

In accordance with RCW 43.33A.110, the WSIB manages the pension fund portfolio to achieve maximum return at a prudent level of risk. The WSIB establishes asset allocation targets that must be considered at all times when making investment decisions. The asset mix may deviate from the target. Deviations greater than predetermined acceptable levels require rebalancing back to the target. When an asset class exceeds its range, the goal of rebalancing is to meet the target allocation within consideration of the other remaining asset classes.

Eligible Investments. The WSIB is authorized by statute as having investment management responsibility for pension trust funds. The WSIB is authorized to invest as provided by statute (chapter 43.33A RCW) and WSIB policy in the following: U.S. treasury bills; discount notes; repurchase agreements; reverse repurchase agreements; banker's acceptances; commercial paper; guaranteed insurance contracts; U.S. government and agency (government sponsored corporations eligible for collateral purposes at the Federal Reserve) securities; non-U.S. dollar bonds; investment grade corporate bonds; non-investment 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 buy-outs, real estate and other tangible assets, or other forms of private equity; asset-backed securities; and derivative securities including futures, options, options on futures, forward contracts, and swap transactions. There were no violations of these investment restrictions during fiscal year 2018.

Commingled Trust Fund. Pension trust funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments used as an investment vehicle for 14 separate retirement plans and one supplemental pension funding account. These plans hold shares in the CTF which represent a percentage ownership in the pool of investments. Plans are allowed to purchase or sell shares in the CTF, based on the fair value of the underlying assets, on the first business day of each month.

In addition to share ownership in the CTF, each retirement plan holds short-term investments that are used to manage the cash needs of each retirement plan.

The CTF consists of the Public Employees' Retirement System (PERS) Plans 1, 2, and 3; Teachers' Retirement System (TRS) Plans 1, 2, and 3; School Employees' Retirement System (SERS) Plans 2 and 3; Law Enforcement Officers' and Fire Fighters' Retirement Plans 1 and 2; Washington State Patrol Retirement System Plans 1 and 2; Public Safety Employees' Retirement System Plan 2; Volunteer Fire Fighters' and Reserve Officers' Relief and Pension Fund; and the Higher Education Retirement Supplemental Benefit Fund. The CTF includes both the defined benefit and defined contribution portions of PERS Plan 3, TRS Plan 3, and SERS Plan 3, which are hybrid defined benefit/defined contribution plans. The participants of those plans have the option to direct their contributions to the CTF or invest their defined contributions in other external options not managed by the WSIB.

CTF Investment Policies and Restrictions. The CTF is comprised of public markets equities, fixed income securities, private equity investments, real estate, tangible assets, and an innovation portfolio. The CTF's performance objective is to exceed the return of two custom benchmarks, each consisting of public indices weighted according to asset allocation targets.

The asset allocation for the CTF is formally reviewed at least every four years. The allocation policy is reviewed more frequently if there has been a fundamental change in the structure of the capital markets or in the underlying cash flow or liability structure of the pension trust funds.

When market values fall outside policy ranges, assets are rebalanced first by using normal cash flows and then through reallocations of assets across asset classes. In cases of a major rebalancing, the pension trust funds can utilize futures, forward contracts, and options in order to maintain exposure within each asset class and reduce transaction costs. Major rebalancing can occur to bring asset classes within their target ranges or when the pension trust funds are transitioning managers.

Public Markets Equities. To achieve the performance and diversification objectives of the pension trust funds, the public markets equity program seeks to achieve the highest return possible consistent with prudent risk management and the desire for downside protection, with passive equity strategies as the default whenever strategies with better risk/return profiles cannot be identified; provide diversification to the pension trust funds' overall investment program; maintain liquidity in public equity; and maintain transparency into all public equity strategies to the extent possible.

The public markets equity portion of the pension trust 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 Morgan Stanley Capital International (MSCI) All Country World Investable Market Index. A mix of external managers approved by the WSIB is used to manage the program. Passive management delivers broad diversified equity market exposure at low cost and is used when active managers cannot be identified and monitored appropriately. Passive management is also used when it is considered an appropriate alternative to active management, typically in more efficient markets. Active management is used when the pension trust funds can identify, access, and monitor successful managers in markets that are less efficient. Active management seeks to enhance the risk/return profile of the program.

Fixed Income. The fixed income segment is managed to achieve the highest return possible consistent with the desire to control asset volatility, emphasize high yield to maturity opportunities to add value through active management, provide diversification to the overall investment program, provide liquidity to the pension trust fund investment program, and to meet or exceed the return of the Bloomberg Barclays U.S. Universal Index, with volatility similar to or less than the index.

RCW 43.33A.140 prohibits a corporate fixed income issues cost from exceeding 3 percent of the CTF's market value at the time of purchase and 6 percent of its market value thereafter. However, the WSIB manages with a more restrictive concentration constraint, limiting exposure to any corporate issuer to 3 percent of the CTF fixed income portfolio's market value at all times.

The fixed income portfolio is constrained by policy from investing more than 1 percent of the portfolio's par value in any single issuer with a quality rating below investment grade (as defined by Bloomberg Barclays Capital Global Family of Fixed Income Indices). Total market value of below investment grade credit bonds (as defined by Bloomberg Barclays Capital Global Family of Fixed Income Indices) shall not exceed 15 percent of the market value of the fixed income portfolio. Although below investment grade mortgage-backed, asset-backed, or commercial mortgage-backed securities may not be purchased, portfolio holdings that are downgraded to those levels or are no longer rated may continue to be held. The total market value of below investment grade mortgage-backed, asset-backed, and commercial mortgage-backed securities shall not exceed 5 percent of the market value of the fixed income portfolio. The duration of the portfolio is targeted to be within plus or minus 20 percent of the duration of the Bloomberg Barclays U.S. Universal Index.

The major sector allocations of the fixed income portfolio are limited to the following ranges:

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. Pension trust funds can be invested in any appropriate private equity investment opportunity that has the potential for returns superior to traditional investment opportunities and which is not prohibited by the WSIB's policies or by law. These investment types are generally divided into venture capital, corporate finance, growth equity, special situations, distressed, mezzanine, and other investments. Private equity investments are made through limited partnership or direct investment vehicles.

The private equity investment portfolio is managed to exceed the returns of the MSCI All Country World Index Investable Market Index, lagged by one calendar quarter, by 300 basis points in the long run. To meet the return and plan objectives, the private equity portfolio has diversified investments in companies in a variety of growth stages. The portfolio also includes a broad cross-section of opportunities in different industries and geographic regions.

Real Estate. 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. The income generated from bond-like lease payments coupled with the hard asset qualities of commercial real estate combine to generate returns that are expected to fall between the return expectations for fixed income and equities over the long term. The real estate portfolio is managed to deliver risk-adjusted returns that are consistent with the WSIB's long-term return expectations for the asset class.

The pension trust funds' real estate partnerships typically invest in private real estate assets that are held for long-term income and appreciation. Many of the pension trust funds' investment partnerships do not involve co-investment with other financial entities, thereby providing the WSIB with control provisions, related transactions, and ongoing operational decisions for annual capital expenditures.

The pension trust funds may invest in any real estate opportunity demonstrating acceptable risk-adjusted returns, provided it is not prohibited by state law or WSIB policy. Investment structures may include real estate operating companies, joint ventures, commingled funds (closed or open-ended), and co-investments with existing WSIB real estate partners. Diversification within the real estate program is achieved through consideration of property type, capital structure, life cycle, geographic region, partner concentration, and property level.

The WSIB's real estate portfolio current benchmark seeks to earn an 8 percent annual investment return over a rolling 10-year period.

Tangible Assets. The primary goal of the tangible asset portfolio is to generate a long-term, predictable and persistent income stream. The secondary goal is to generate appreciation approximately commensurate with inflation. The structure of the investments is primarily targeted to those private funds or separate accounts providing the WSIB with the most robust governance provisions related to acquisitions, dispositions, debt levels, and ongoing operational decisions for annual capital expenditures. For diversification purposes, the tangible asset portfolio focuses on income-producing physical assets in the upstream and midstream segments of four main industries: minerals and mining, energy, agriculture, and society essentials.

The WSIB's current return objective for tangible assets calls for a target benchmark of 4 percent above the U.S. Consumer Price Index over a long-term investment horizon defined as at least five years.

Innovation Portfolio. The innovation portfolio investment strategy is to provide the WSIB with the ability to invest in assets that fall outside of traditional asset classes and to provide the WSIB with comfort and demonstrated success before committing large dollar amounts to the strategy. The overall benchmark for the innovation portfolio is the weighted average of the underlying benchmark for each asset in the portfolio.

Currently, there are four investment strategies in the innovation portfolio involving private partnerships.

2. Valuation of Investments

The pension trust fund reports investments at fair value and categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. Unrealized gains and losses are included in the Statement of Changes in Net Position.

The following table presents fair value measurements as of June 30, 2018:

Pension Trust Funds
Investments Measured at Fair Value
June 30, 2018
(expressed in thousands)

		Fair Value Measurements Using		
Investments by fair value level	**Fair Value**	**Level 1 Inputs**	**Level 2 Inputs**	**Level 3 Inputs**
Debt securities				
Mortgage and other asset-backed securities	$ 1,688,863	$ —	$ 1,688,863	$ —
Corporate bonds	10,970,889	—	10,970,889	—
U.S. and foreign government and agency securities	8,908,586	—	8,908,586	—
Total debt securities	21,568,338	—	21,568,338	—
Equity securities				
Common and preferred stock	20,482,664	20,436,675	43,314	2,675
Depository receipts and other miscellaneous	650,415	629,423	20,992	—
Mutual funds and exchange traded funds	2,488	2,488	—	—
Real estate investment trusts	394,520	394,519	1	—
Private equity and tangible asset funds	165,764	165,764	—	—
Total equity securities	21,695,851	21,628,869	64,307	2,675
Total investments by fair value level	43,264,189	$ 21,628,869	$ 21,632,645	$ 2,675
Investments measured at net asset value (NAV)				
Private equity	21,766,983			
Real estate	17,212,473			
Tangible assets	4,241,685			
Collective investment trust funds (equity securities)	12,479,044			
Total investments measured at the NAV	55,700,185			
Total investments measured at fair value	$ 98,964,374			
Other assets (liabilities) measured at fair value				
Collateral held under securities lending agreements	$ 662,844	$ —	$ 662,844	$ —
Net foreign exchange contracts receivable-forward and spot	5,095	—	5,095	—
Net swap contracts receivable	(205)	—	(205)	—
Margin variation payable-futures contracts	3,246	3,246	—	—
Obligations under securities lending agreements	(662,844)	—	(662,844)	—
Total other assets (liabilities) measured at fair value	$ 8,136	$ 3,246	$ 4,890	$ —

Investments classified as level 1. Investments classified as level 1 in the previous table 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, as of each reporting period end.

Investments classified as level 2. Investments classified as level 2 in the above table are primarily comprised of publicly traded debt securities and exchange traded stocks traded in inactive markets. Publicly traded debt securities are sourced from reputable pricing vendors using models that are market-based measurements representing their good faith opinion as to the exit value of a debt 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 in the above table were publicly traded equity securities that have noncurrent or "stale" values and are included in the table at the last traded price. The stale pricing occurred due to trading suspensions, delisting from an active exchange, or lack of investor demand. The current market values of these securities are unknown.

Investments measured at net asset value (NAV). The fair value of investments that are organized as limited partnerships and have no readily ascertainable fair value is determined by using the net asset value per share (or its equivalent) of the pension trust funds' ownership interest in partners' capital. These values are based on the individual investee'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 values of foreign currency, and published market prices for certain securities.

The limited partnerships' annual financial statements are audited by independent auditors. These investments are valued at approximately $43.39 billion as of June 30, 2018. Because of the inherent uncertainties in estimating fair values, it is possible that the estimates will change in the near-term or the subsequent sale of assets will be different than the June 30, 2018, reported net asset value.

With the exception of two publicly traded funds, these investments can never be redeemed. Instead, the nature of these investments provides for distributions through the sale or liquidation of the underlying assets or net operating cash flows. It is anticipated that the various investments within each asset class will be liquidated over the following periods:

Pension Trust Funds
Alternative Assets Expected Liquidation Periods
June 30, 2018
(expressed in thousands)

	Investment Type				
Liquidation Periods	**Private Equity**	**Real Estate**	**Tangible Assets**	**Total**	**Percentage of Total**
Publicly traded-Level 1	$ 18,151	$ —	$ 147,613	$ 165,764	0.4%
Less than 3 years	175,816	43,960	—	219,776	0.5%
3 to 9 years	4,760,065	1,179,590	354,935	6,294,590	14.5%
10 or more years	16,831,102	15,988,923	3,886,750	36,706,775	84.6%
Total	$ 21,785,134	$ 17,212,473	$ 4,389,298	$ 43,386,905	100.0%

Private Equity. This includes 267 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 valuation reported by private equity partnerships 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 unique 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 consist primarily of income and market approaches. The income approach involves a discounted cash flow analysis based on portfolio companies' projections. The market approach involves valuing a company at a multiple of a specified financial measure, generally earnings before interest, taxes, depreciation, and amortization, based on multiples of comparable publicly traded companies.

Real Estate. This includes 27 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 to the pension trust fund management based on the most recent capital account balance. Individual properties are valued by the investment management at least annually and are adjusted as frequently as quarterly if material market or operational changes have occurred. Properties are externally appraised generally every one to five years, depending upon the investment. Structured finance investments receive quarterly 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.

Tangible Assets. This includes 42 limited liability structures and funds. The primary goal of the tangible asset portfolio is 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.

Collective Investment Trust Funds. The pension trust fund invests in three separate collective investment trust funds (fund). 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 MSCI U.S. Investable Market Index and the MSCI Emerging Markets Investable Market Index. Each fund has daily openings and contributions, and withdrawals can be made on any business day. The fund managers, at their discretion, may require withdrawal proceeds to be made partially or wholly in kind. Under certain circumstances, the fund managers 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.

The third 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 pension trust funds 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 their discretion, may require withdrawal proceeds to be made partially or wholly in kind.

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 pension trust funds' lending agent and sourced from reputable pricing vendors using models that are market-based measurements representing their good faith opinion as to 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 a notional (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.

3. Unfunded Commitments

The WSIB has entered into a number of agreements that commit the pension trust funds, upon request, to make additional investment purchases up to predetermined amounts. As of June 30, 2018, the pension trust funds had total unfunded commitments of $27.66 billion in the following asset classes: $15.92 billion in private equity, $8.28 billion in real estate, and $3.46 billion in tangible assets.

4. Securities Lending

State law and WSIB policy permit the pension trust funds to participate in securities lending programs to augment investment income. The WSIB has entered into an agreement with State Street Corporation to act as agent for the pension trust funds in securities lending transactions. As State Street Corporation is the custodian bank for the pension trust funds, it is counterparty to securities lending transactions.

The fair value of the securities on loan at June 30, 2018, was approximately $2.36 billion. The pension trust funds report securities on loan in their respective categories in the Statement of Net Position. At June 30, 2018, cash collateral received totaling $662.8 million is reported as securities lending obligation, and the fair value of the reinvested cash collateral totaling $662.8 million is reported as security lending collateral in the Statement of Net Position. Securities received as collateral for which the pension trust funds do not have the ability to pledge or sell unless the borrower defaults are not reported as assets and liabilities in the Statement of Net Position. Total securities received as collateral at June 30, 2018, was $1.74 billion.

During the fiscal year, debt and equity securities were loaned and collateralized by the pension trust funds' agent with cash and U.S. government or U.S. agency securities including U.S. agency mortgage-backed securities (exclusive of letters of credit). When the loaned securities had collateral denominated in the same currency, the collateral requirement was 102 percent of the fair value, including accrued interest, of the securities loaned. All other securities were required to be collateralized at 105 percent of the fair value, including accrued interest, of the loaned securities.

The following table summarizes the securities held by the pension trust funds from reinvestment of cash collateral and securities received as collateral at June 30, 2018 (in millions):

Mortgage-backed securities	$	1,425.6
U.S. treasuries		315.5
Yankee CD		223.3
Commercial paper		195.7
Repurchase agreements		155.6
Cash equivalents and other		88.2
Total collateral held	$	2,403.9

During fiscal year 2018, securities lending transactions could be terminated on demand by either the pension trust funds or the borrower. As of June 30, 2018, the cash collateral held had an average duration of 16.2 days and an average weighted final maturity of 79.0 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. Non-cash collateral could not be pledged or sold absent borrower default. No more than 20 percent of the total on loan value could be held by a specific borrower. Collateral investment guidelines specifically prohibit European domiciled holdings. There are no restrictions on the amount of securities that can be lent.

Securities were lent with the agreement that they would be returned in the future for exchange of the collateral. State Street Corporation indemnified the pension trust funds 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 thereon. State Street Corporation's responsibilities included performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral, and complying with applicable federal regulations concerning securities lending.

During fiscal year 2018, there were no significant violations of legal or contractual provisions and no failures by any borrowers to return loaned securities or to pay distributions thereon. Further, the pension trust funds incurred no losses during fiscal year 2018 resulting from a default by either the borrowers or the securities lending agents.

5. 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. The 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.

While the pension trust funds do not have a formal policy relating to interest rate risk, the pension trust funds' fixed income investments are 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 targeted within plus or minus 20 percent of the duration of the portfolio's performance benchmark. As of June 30, 2018, the duration of the pension trust funds' fixed income investments was within the duration target of this index.

The two following schedules provide information about the interest rate risks associated with the pension trust funds' investments as of June 30, 2018. 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, taking into account possible prepayments of principal.

Pension Trust Funds
Schedule of Maturities and Effective Duration
June 30, 2018
(expressed in thousands)

Investment Type	Total Fair Value	Maturity: Less than 1 Year	Maturity: 1-5 Years	Maturity: 6-10 Years	Maturity: More than 10 Years	Effective Duration (in years)*
Mortgage and other asset-backed securities	$ 1,243,243	$ 9,896	$ 917,741	$ 315,606	$ —	4.57
Corporate bonds	10,970,889	430,738	4,818,522	4,014,195	1,707,434	5.86
U.S. government and agency securities	7,010,090	2,018,133	2,579,815	1,541,110	871,032	4.90
Foreign government and agency securities	1,898,496	76,773	999,318	534,314	288,091	5.37
Total internally managed fixed income	21,122,718	2,535,540	9,315,396	6,405,225	2,866,557	5.42
Mortgage-backed TBA forwards	445,620	445,620	—	—	—	0.00
Total investments categorized	21,568,338	$ 2,981,160	$ 9,315,396	$ 6,405,225	$ 2,866,557	5.31
Investments not required to be categorized:						
Cash and cash equivalents	2,685,619					
Equity securities	34,009,131					
Alternative investments	43,386,905					
Total investments not categorized	80,081,655					
Total Investments	$101,649,993					

* Excludes cash and cash equivalents

Credit ratings of investments are presented using the Moody's rating scale as follows:

Pension Trust Funds
Investment Credit Ratings
June 30, 2018
(expressed in thousands)

Moody's Equivalent Credit Rating	Investment Type: Mortgage and Other Asset-Backed Securities	Investment Type: Corporate Bonds	Investment Type: Foreign Government and Agency Securities	Total Fair Value
Aaa	$ 1,688,289	$ 519,410	$ 62,169	$ 2,269,868
Aa1	—	95,546	246,154	341,700
Aa2	—	134,457	90,166	224,623
Aa3	—	705,778	110,643	816,421
A1	—	927,510	280,502	1,208,012
A2	23	760,666	11,428	772,117
A3	—	1,482,213	17,090	1,499,303
Baa1	—	1,479,603	65,780	1,545,383
Baa2	551	1,570,295	378,222	1,949,068
Baa3	—	1,954,688	17,291	1,971,979
Ba1 or lower	—	1,340,723	619,051	1,959,774
Total	$ 1,688,863	$ 10,970,889	$ 1,898,496	$ 14,558,248

6. Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The pension trust 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 rated debt investments of the pension trust funds as of June 30, 2018, 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 policy of the pension trust funds states no corporate fixed income issue cost shall exceed 3 percent of cost at the time of purchase or 6 percent of fair value thereafter of the fund, and no high yield issues shall exceed 1 percent of cost or 2 percent of fair value of the fund. There was no concentration of credit risk exceeding these policy guidelines as of June 30, 2018.

Custodial Credit Risk. Custodial credit risk is the risk that, in the event a depository institution or counterparty fails, the pension trust funds would not be able to recover the value of their deposits, investments, or collateral securities. The pension trust funds do not have a policy relating to custodial credit risk. The WSIB mitigates custodial credit risk by having its investment securities (excluding cash, cash equivalents, and repurchase agreements held as securities lending collateral) registered and held in the name of the WSIB for the benefit of the pension trust funds.

7. 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 pension trust funds do not have a formal policy to limit foreign currency risk. The WSIB manages their exposure to fair value loss by requiring their international securities investment managers to maintain diversified portfolios by sector and by issuer, to limit foreign currency and security risk.

The following schedule presents the exposure of the pension trust funds' investments to foreign currency risk. The schedule provides information on deposits and investments held in various foreign currencies. Private equity, real estate, and tangible assets are presented according to the financial reporting currency of the individual funds. This is not a presentation of currency exposure relating to the underlying holdings. The schedule is stated in U.S. dollars. In addition, the CTF has foreign currency exposure at June 30, 2018, of $1.2 billion invested in two emerging markets commingled equity investment funds.

Pension Trust Funds
Foreign Currency Exposure by Country
June 30, 2018
(expressed in thousands)

Foreign Currency Denomination	Investment Type in U.S. Dollar Equivalent: Cash and Cash Equivalents	Debt Securities	Equity Securities	Alternative Assets	Open Foreign Exchange Contracts-Net	Total
Australia-Dollar	$ 7,193	$ 138,846	$ 574,653	$ 79,024	$ 1,543	$ 801,259
Brazil-Real	301	111,279	209,855	—	901	322,336
Canada-Dollar	5,852	—	650,251	—	(297)	655,806
Chile-Peso	306	64,480	11,716	—	(16)	76,486
China-Yuan Renminbi	339	27,815	44,058	—	—	72,212
Columbia-Peso	17	79,600	5,181	—	(1)	84,797
Denmark-Krone	1,797	—	208,508	—	(910)	209,395
E.M.U.-Euro	6,687	—	3,206,483	3,238,622	(712)	6,451,080
Hong Kong-Dollar	5,163	—	794,597	—	(18)	799,742
India-Rupee	918	62,441	172,026	—	(459)	234,926
Indonesia-Rupiah	560	25,957	35,769	—	189	62,475
Japan-Yen	19,712	—	2,534,280	—	2,293	2,556,285
Mexico-Peso	185	75,913	75,227	—	666	151,991
New Taiwan-Dollar	1,637	—	215,094	—	(479)	216,252
Norway-Krone	1,133	—	81,012	—	143	82,288
Singapore-Dollar	1,200	—	173,838	—	(16)	175,022
South Korea-Won	4,709	—	377,693	—	2,617	385,019
Sweden-Krona	2,289	—	291,167	—	692	294,148
Switzerland-Franc	211	—	771,009	—	18	771,238
Thailand-Baht	2,336	—	66,760	—	12	69,108
Turkey-Lira	373	—	76,332	—	578	77,283
United Kingdom-Pound	8,713	—	2,048,422	—	(95)	2,057,040
Other	1,737	69,879	224,389	—	(1,554)	294,451
Total	$ 73,368	$ 656,210	$ 12,848,320	$ 3,317,646	$ 5,095	$ 16,900,639

8. Derivatives

Pension trust funds are authorized to utilize 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. At June 30, 2018, the pension trust 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 Statement of Revenues, Expenses, and Changes in Net Position in the period of change. The derivative instruments are considered investment derivatives and 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 pension trust funds and a specific counterparty. This would typically be referred to as an over the counter (OTC) contract, such as forward and total return swap contracts. Alternatively, a derivative instrument, such as futures, could be listed and traded on an exchange and referred to as "exchange traded."

Inherent in the use of OTC derivatives, the pension trust funds are exposed to counterparty credit risk on all open OTC positions. Counterparty credit risk is the risk that a derivative counterparty may fail to meet its payment obligation under the derivative contract. As of June 30, 2018, the pension trust funds counterparty risk was approximately $19.0 million. The majority of the counterparties (58 percent) held a credit rating of A1 on Moody's rating scale.

All counterparties held investment grade credit ratings of Baa2 and above.

Futures contracts are standardized, exchange-traded contracts to purchase or sell a specific financial instrument at a predetermined price. As such, gains and losses on futures contracts are settled daily based on a notional (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 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. Derivatives, which are exchange traded, are not subject to credit risk.

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 in the future. These forward commitments are not standardized and carry counterparty credit risk due to the possible nonperformance by a counterparty. 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 loss is remote.

At June 30, 2018, the pension trust funds had outstanding forward currency contracts with a net unrealized gain of $5.0 million. The aggregate forward currency exchange contracts receivable and payable were $1.93 billion and $1.93 billion, respectively. The contracts have varying maturity dates ranging from July 2, 2018, to October 11, 2018.

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 pension trust funds swap total bond market index returns for total equity index returns as the reference asset in emerging markets. The open swap contracts have varying maturity dates ranging from July 2, 2018, to July 3, 2018. The values of these contracts are highly sensitive to interest rate changes.

At June 30, 2018, the pension trust funds' fixed income portfolio held derivative securities consisting of collateralized mortgage obligations with a fair value of $101.4 million. Domestic and foreign commingled investment trust fund managers may also utilize various derivative securities to manage exposure to risk and increase portfolio returns. Information on the extent of use and holdings of derivative securities by these funds is unavailable.

The following schedule presents the significant terms for derivatives held as investments by the pension trust funds:

Pension Trust Funds
Derivative Investments
June 30, 2018
(expressed in thousands)

	Changes in Fair Value - Included in Investment Income (Loss) Amount	Fair Value - Investment Derivative Amount	Notional
Futures Contracts:			
Bond index futures	$ (27,253)	$ 5,248	$ 1,092,600
Equity index futures	78,278	(2,002)	54,950
Total	$ 51,025	$ 3,246	$ 1,147,550
Forward Currency Contracts	$ (5,207)	$ 5,033	$ 1,940,859
Total Return Swap Contracts:			
Total Return Swap Contracts:	$ (7,201)	$ (97)	$ 25,042
Total return swaps bond	8,177	(2,937)	(84,600)
Total	$ 976	$ (3,034)	$ (59,558)

C. INVESTMENTS - WORKERS' COMPENSATION FUND

1. Summary of Investment Policies

Under RCW 43.33A.030, trusteeship of the Workers' Compensation Fund investments is vested in the voting members of the Washington State Investment Board (WSIB). The Legislature established a standard of care for investment of these funds in RCW 43.33A.140. Additionally, the WSIB and its staff must comply with other state laws, such as the Ethics in Public Service Act, chapter 42.52 RCW, in making investment decisions and seeking to meet investment objectives.

The Workers' Compensation Fund consists of contributions from employers and their employees participating in the state workers' compensation program and related earnings on those contributions. The workers' compensation program provides medical, time-loss, and disability benefit payments to qualifying individuals sustaining work-related injuries.

In accordance with state laws, the Workers' Compensation Fund investments are managed to limit fluctuations in the industrial insurance premiums and, subject to this purpose, achieve a maximum return at a prudent level of risk. Based on this requirement, the order of the objectives is:

- Maintain the solvency of the funds.
- Maintain premium rate stability.
- Ensure sufficient assets are available to fund the expected liability payments.
- Subject to the objectives above, achieve a maximum return at a prudent level of risk.

Eligible Investments. Eligible investments are securities and deposits that are in accordance with the WSIB's investment policy and chapter 43.33A RCW. Eligible investments include:

- U.S. equities.
- International equities.
- U.S. treasuries and government agencies.
- Credit bonds.
- Mortgage-backed securities rated investment grade, as defined by Bloomberg Barclays Family of Fixed Income Indices.
- Asset-backed securities rated investment grade, as defined by Bloomberg Barclays Family of Fixed Income Indices.
- Commercial mortgage-backed securities rated investment grade, as defined by Bloomberg Barclays Family of Fixed Income Indices.
- Investment grade non-U.S. dollar bonds.
- Real estate.

Investment Policies and Restrictions. To meet stated objectives, investments of the Workers' Compensation Fund are subject to the following constraints:

- All assets under the management of the WSIB are to be invested to maximize return at a prudent level of risk in accordance with RCW 43.33A.110 and RCW 43.33A.140.
- No corporate fixed income issue cost shall exceed 3 percent of the fund's fair value at the time of purchase, nor shall its fair value exceed 6 percent of the fund's fair value at any time.
- Asset allocations are to be reviewed every four years or sooner if there are significant changes in funding levels or the liability durations.
- Assets are to be rebalanced across asset classes when the fair value of the assets falls outside the policy ranges. The timing of any rebalancing will be based on market opportunities, cash flows, and the consideration of transaction costs; therefore, they need not occur immediately.

The WSIB has elected a gradual implementation plan to reach the strategic asset allocation. During this implementation period, if real estate is above or below its target due to timing or illiquidity, fixed income will be used to offset the balance.

Equity. The benchmark and structure for global equities will be the Morgan Stanley Capital International (MSCI) All Country World Investable Market Index net with USA gross. The global equity portfolio will be passively managed in commingled index funds. The commingled fund managers may use futures for hedging or establishing a long position.

Fixed Income. It is the goal of the fixed income portfolios to match the target durations. The fixed income portfolios' required duration targets are to be reviewed every three years or sooner if there are significant changes in the funding levels or the liability durations.

Sector allocation of fixed income investments must be managed within the ranges presented below. Deviations may occur in the short term as a result of interim market conditions. However, if a range is exceeded, the portfolios must be rebalanced to the target allocations as soon as it is practical.

Target allocations for the Fixed Income Sectors:	
U.S. treasuries and government agencies	5% - 25%
Credit bonds	20% - 80%
Asset-backed securities	0% - 10%
Commercial mortgage-backed securities	0% - 10%
Mortgage-backed securities	0% - 25%

Total market value of below investment grade credit bonds (as defined by Bloomberg Barclays Family of Fixed Income Indices) shall not exceed 5 percent of the total market value of the funds. Although below investment grade mortgage-backed, asset-backed, and commercial mortgage-backed securities may not be purchased, portfolio holdings that are downgraded to those levels or are no longer rated may continue to be held. Total market value of below investment grade mortgage-backed, asset-backed, and commercial mortgage-backed securities shall not exceed 5 percent of total market value of the funds.

Real Estate. The objectives and characteristics of the real estate portfolio are as follows:

- To generate a 6 percent annual investment return over a rolling 10-year period.
- The return will be generated by current income, and the portfolio will be intentionally constructed to focus on yield rather than total return.
- The portfolio will be diversified across geography and property type.
- The benchmark for the portfolio is a total net return of 6 percent measured over a rolling 10-year period.
- No more than 15 percent of the real estate portfolio will be invested in a single property after the program's build-out period.

2. Valuation of Investments

The Workers' Compensation Fund reports investments at fair value and categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. Unrealized gains and losses are included in the Statement of Revenues, Expenses, and Changes in Net Position. The following table presents fair value measurements as of June 30, 2018:

Workers' Compensation Fund
Investments Measured at Fair Value
June 30, 2018
(expressed in thousands)

Investments by fair value level	**Fair Value**	**Fair Value Measurements Using: Level 1 Inputs**	**Level 2 Inputs**	**Level 3 Inputs**
Debt securities				
Mortgage and other asset-backed securities	$ 1,225,313	$ —	$ 1,225,313	$ —
Corporate bonds	9,813,569	—	9,813,569	—
U.S. and foreign government and agency securities	3,299,641	—	3,299,641	—
Total investments by fair value level	14,338,523	$ —	$ 14,338,523	$ —
Investments measured at net asset value (NAV)				
Commingled equity investment trusts	2,308,282			
Total investments measured at the NAV	2,308,282			
Total investments measured at fair value	$ 16,646,805			
Other assets (liabilities) measured at fair value				
Collateral held under securities lending agreements	$ 99,810	$ —	$ 99,810	$ —
Obligations under securities lending agreements	(99,810)	—	(99,810)	—
Total other assets (liabilities) measured at fair value	$ —	$ —	$ —	$ —

Investments classified as level 2. Investments classified as level 2 in the above table are comprised of publicly traded debt securities. Publicly traded debt securities are sourced from reputable pricing vendors using models that are market-based measurements representing their good faith opinion as to 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 measured at net asset value (NAV). The Workers' Compensation Fund invests in a single collective investment trust fund (fund). The fund is passively managed to track the investment of a broad, global equity index, the MSCI All Country World Investable Market Index. The fund determines a fair value by obtaining the values of underlying holdings using reputable pricing sources and computing an overall net asset value per share. The holdings are publicly traded equity securities.

The fund has daily openings, and contributions and withdrawals can be made on any business day. The fund manager, at their 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.

3. Securities Lending

State law and WSIB policy permit the Workers' Compensation Fund to participate in securities lending programs to augment investment income. The WSIB has entered into an agreement with State Street Corporation to act as agent for the Workers' Compensation Fund in securities lending transactions. As State Street Corporation is the custodian bank for the Workers' Compensation Fund, it is counterparty to securities lending transactions.

The fair value of the securities on loan at June 30, 2018, was approximately $348.0 million. The Workers' Compensation Fund reports securities on loan in the Statement of Net Position in their respective categories. At June 30, 2018, cash collateral received totaling $99.8 million is reported as a securities lending obligation, and the fair value of the reinvested cash collateral totaling $99.8 million is reported as security lending collateral in the Statement of Net Position. Securities received as collateral for which the Workers' Compensation Fund does not have the ability to pledge or sell unless the borrower defaults are not reported as assets and liabilities in the Statement of Net Position. Total securities received as collateral at June 30, 2018, was $254.2 million.

During fiscal year 2018, debt securities were loaned and collateralized by the Workers' Compensation Fund's agent with cash and U.S. government or U.S. agency securities including U.S. agency mortgage-backed securities (exclusive of letters of credit). When the loaned securities had collateral denominated in the same currency, the collateral requirement was 102 percent of the fair value, including accrued interest, of the securities loaned. All other securities were required to be collateralized at 105 percent of the fair value, including accrued interest, of the loaned securities.

The following table summarizes the securities held from reinvestment of cash collateral and securities received as collateral at June 30, 2018 (in millions):

Mortgage-backed securities	$	254.2
Yankee CD		33.6
Commercial paper		29.5
Repurchase agreements		23.4
Cash equivalents and other		13.3
Total collateral held	$	354.0

During fiscal year 2018, securities lending transactions could be terminated on demand by either the Workers' Compensation Fund or the borrower. As of June 30, 2018, the cash collateral held had an average duration of 16.2 days and an average weighted final maturity of 79.0 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. Non-cash collateral could not be pledged or sold absent borrower default. No more than 20 percent of the total on loan value can be held by a specific borrower. Collateral investment guidelines specifically prohibit European domiciled holdings. There are no restrictions on the amount of securities that can be lent.

Securities were lent with the agreement that they would be returned in the future for exchange of the collateral. State Street Corporation indemnified the Workers' Compensation Fund 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 thereon. State Street Corporation's responsibilities included performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral, and complying with applicable federal regulations concerning securities lending.

During fiscal year 2018, there were no significant violations of legal or contractual provisions, and no failures by any borrowers to return loaned securities or to pay distributions thereon. Further, the Workers' Compensation Fund incurred no losses during fiscal year 2018 resulting from a default by either the borrowers or the securities lending agents.

4. 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. While the Workers' Compensation Fund does not have a formal policy relating to interest rate risk, the risk is managed within the Workers' Compensation Fund portfolio 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. As of June 30, 2018, the Workers' Compensation Fund portfolio durations were within the prescribed duration targets.

The following two schedules provide information about the interest rate risks associated with the Workers' Compensation Fund investments as of June 30, 2018. 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, taking into account possible prepayments of principal.

Workers' Compensation Fund
Schedule of Maturities and Effective Duration
June 30, 2018
(expressed in thousands)

		Maturity				
Investment Type	**Total Fair Value**	**Less than 1 Year**	**1-5 Years**	**6-10 Years**	**More than 10 Years**	**Effective Duration (in years)***
Mortgage and other asset-backed securities	$ 1,225,313	$ 5,248	$ 773,103	$ 396,307	$ 50,655	4.9
Corporate bonds	9,813,569	739,884	4,386,772	2,076,622	2,610,291	6.2
U.S. government and agency securities	2,246,134	401,879	730,579	745,501	368,175	6.3
Foreign government and agencies	1,053,507	110,243	689,952	223,676	29,636	3.7
Total investments categorized	14,338,523	$ 1,257,254	$ 6,580,406	$ 3,442,106	$ 3,058,757	5.9
Investments not required to be categorized:						
Commingled investment trusts	2,308,282					
Cash and cash equivalents	122,653					
Total investments not categorized	2,430,935					
Total Investments	$ 16,769,458					

** Excludes cash and cash equivalents*

Investments with multiple credit ratings are presented using the Moody's rating scale as follows:

Workers' Compensation Fund
Investment Credit Ratings
June 30, 2018
(expressed in thousands)

	Investment Type			
Moody's Equivalent Credit Rating	**Mortgage and Other Asset-Backed Securities**	**Corporate Bonds**	**Foreign Government and Agencies**	**Total Fair Value**
Aaa	$ 1,225,313	$ 544,097	$ 325,511	$ 2,094,921
Aa1	—	160,421	84,051	244,472
Aa2	—	141,222	212,075	353,297
Aa3	—	1,052,769	244,498	1,297,267
A1	—	1,680,608	109,337	1,789,945
A2	—	1,304,262	—	1,304,262
A3	—	1,738,896	—	1,738,896
Baa1	—	1,161,472	22,906	1,184,378
Baa2	—	1,303,554	55,129	1,358,683
Baa3	—	464,451	—	464,451
Ba1 or lower	—	261,817	—	261,817
Total	$ 1,225,313	$ 9,813,569	$ 1,053,507	$ 12,092,389

5. Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Workers' Compensation Fund 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 rated debt investments of the Workers' Compensation Fund as of June 30, 2018, 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 Workers' Compensation Fund policy states that no corporate fixed income issues cost shall exceed 3 percent of the fund's fair value at the time of purchase, nor shall its fair value exceed 6 percent of the fund's fair value at any time. There was no concentration of credit risk as of June 30, 2018.

Custodial Credit Risk. Custodial credit risk is the risk that, in the event a depository institution or counterparty fails, the Workers' Compensation Fund would not be able to recover the value of its deposits, investments, or collateral securities. The Workers' Compensation Fund does not have a policy relating to custodial credit risk. The WSIB mitigates custodial credit risk by having its investment securities (excluding cash, cash equivalents, and repurchase agreements held as securities lending collateral) registered and held in the name of the WSIB for the benefit of the Workers' Compensation Fund.

6. 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 Workers' Compensation Fund does not have a formal policy to limit foreign currency risk. At June 30, 2018, the only securities held by the Workers' Compensation Fund with foreign currency exposure were $1.02 billion (excludes U.S. dollar denominated securities) invested in an international commingled equity index fund.

The following schedule presents the exposure of the Workers' Compensation Fund to foreign currency risk. The schedule is stated in U.S. dollars.

Workers' Compensation Fund
Foreign Currency Exposure by Country
June 30, 2018
(expressed in thousands)

Foreign Currency Denomination	Equity Securities
Australia-Dollar	$ 51,824
Brazil-Real	14,984
Canada-Dollar	71,829
Denmark-Krone	12,649
E.M.U.-Euro	230,410
Hong Kong-Dollar	81,985
Japan-Yen	185,463
Mexico-Peso	7,899
New Taiwan-Dollar	32,812
Russia-Ruble	7,102
Singapore-Dollar	9,754
South Africa-Rand	16,109
South Korea-Won	39,342
Sweden-Krona	21,781
Switzerland-Franc	53,980
United Kingdom-Pound	134,106
Miscellaneous Foreign Currencies	45,638
Total	$ 1,017,667

7. Derivatives

To manage its exposure to fluctuations in interest and currency rates while increasing portfolio returns, the Workers' Compensation Fund is authorized to utilize various derivative financial instruments including collateralized mortgage obligations, financial futures, forward contracts, interest rate and equity swaps, and options. Derivative transactions involve, to varying degrees, market and credit risk. The Workers' Compensation Fund mitigates market risks arising from derivative transactions by requiring collateral in cash and investments to be maintained equal to the securities positions outstanding, thereby prohibiting the use of leverage or speculation. Credit risks arising from derivative transactions are mitigated by selecting and monitoring creditworthy counterparties and collateral issuers.

Domestic and foreign passive equity index fund managers may also utilize various derivative securities to manage exposure to risk and increase portfolio returns. Information on the extent of use and holdings of derivative securities by passive equity index fund managers is unavailable.

At June 30, 2018, the only derivative securities held directly by the Workers' Compensation Fund were collateralized mortgage obligations of $683.3 million.

D. INVESTMENTS - LOCAL GOVERNMENT INVESTMENT POOL

1. Summary of Investment Policies

The Local Government Investment Pool (LGIP) is managed and operated by the Office of the State Treasurer (OST). The State Finance Committee is the administrator of the statute that created the pool and adopts appropriate rules. The State Treasurer is responsible for establishing the investment policy for the pool and reviews the policy annually. Any proposed changes are reviewed by the LGIP Advisory Committee. The terms of the policy are designed to ensure the safety and liquidity of the funds deposited in the LGIP.

The State Treasurer and designated investment officers shall adhere to all restrictions on the investment of funds established by law and by policy.

The LGIP portfolio is invested in a manner that meets the requirements set forth by the Governmental Accounting Standards Board for the maturity, quality, diversification and liquidity for external investment pools that elect to measure, for financial reporting purposes, all of its investments at amortized costs. The funds are limited to high quality obligations with regulated maximum and average maturities, the effect of which is to minimize both market and credit risk. The LGIP transacts with its participants at a stable net asset value per share of one dollar, which results in the amortized cost reported equaling the number of shares in the LGIP.

The OST prepares a stand-alone LGIP financial report. A copy of the report is available from the OST, PO Box 40200, Olympia, WA 98504-0200, online at: https://tre.wa.gov/partners/for-local-governments/local-government-investment-pool-lgip/lgip-comprehensive-annual-financial-report/, or phone number (360) 902-9000. TTY users dial 711 to be connected to the state TTY operator.

Investment Objectives. In priority order, the objectives of the LGIP investment policy are safety, liquidity, and return on investment.

Safety of principal is the primary objective. Investments shall be undertaken in a manner that seeks to ensure preservation of capital in the overall portfolio.

The investment portfolio will remain liquid to enable the State Treasurer to meet all cash requirements that might reasonably be anticipated.

The LGIP will be structured with the objective of attaining a market rate of return throughout budgetary and economic cycles, commensurate with the investment risk parameters and the cash flow characteristics of the pool.

Eligible Investments. Eligible investments are only those securities and deposits authorized by statute (chapters 39.58 and 39.59 RCW, and RCW 43.84.080). Eligible investments include:

- Obligations of the U.S. government.
- Obligations of U.S. government agencies or of corporations wholly owned by the U.S. government.
- Obligations of supranational institutions provided that, at the time of investment, the institution has the U.S. government as its largest shareholder.
- Obligations of government-sponsored corporations that are or may become eligible as collateral for advances to member banks as determined by the board of governors of the Federal Reserve.
- Certificates of deposit or demand deposits with financial institutions qualified by the Washington Public Deposit Protection Commission.

Investment Restrictions. To provide for safety and liquidity of funds, the LGIP policy places the following restrictions on the investment portfolio:

- Investments are restricted to fixed rate securities that mature in 397 days or less, except securities utilized in repurchase agreements and U.S. government and supranational floating or variable rate securities which may have a maximum maturity of 762 days, provided they have reset dates within one year and that on any reset date can reasonably be expected to have a market value that approximates their amortized cost.
- The weighted average maturity of the portfolio will not exceed 60 days.
- The weighted average life of the portfolio will not exceed 120 days.

- The purchase of investments in securities other than those issued by the U.S. government or its agencies will be limited.

- Cash generated through securities lending or reverse repurchase agreement transactions will not increase the dollar amount of specified investment types beyond stated limits.

Participant Transactions. The LGIP transacts with its participants at a stable net asset value per share of $1.00, the same method used for reporting. Participants of the LGIP may contribute and withdraw funds on a daily basis and must inform the OST of any contribution or withdrawal over one million dollars no later than 9:00 a.m. on the same day the transaction is made. Contributions or withdrawals for one million dollars or less can be requested at any time prior to 10:00 a.m. on the day of the transaction. However, participants may complete transactions greater than one million dollars when notification is made between 9:00 a.m. and 10:00 a.m., at the sole discretion of the OST. The LGIP does not impose liquidity fees or redemption gates on participant withdrawals.

2. Valuation of Investments

Investments are stated at amortized cost which approximates fair value. For bank deposits and repurchase agreements, the cost-based measure equals their carrying amount.

Monthly, the fair value net asset value per share is calculated and compared to the amortized cost net asset value per share to verify that the LGIP's shadow price does not deviate by more than one half of 1 percent from the amortized cost of the portfolio.

3. Securities Lending

State statutes permit the LGIP 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 LGIP has contracted with Northern Trust as a lending agent and receives a share of income earned from this activity. The lending agent lends 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. Cash collateral received from the lending of non-coupon-bearing securities shall not be valued at less than 102 percent of fair value, not to exceed par.

The cash is invested by the lending agent in accordance with investment guidelines approved by the LGIP. The securities held as collateral and the securities underlying the cash collateral are held by the LGIP's custodian. One option available to the lending agent is to invest cash collateral with the LGIP. Maturities of investments made with cash collateral are generally matched to maturities of securities loaned.

During fiscal year 2018, the LGIP lent U.S. agency and U.S. treasury securities while cash and other securities were received as collateral. At fiscal year end, the fair value of securities on loan was $1.42 billion and the fair value of securities received for collateral was $1.45 billion.

The LGIP investment policy requires that any securities on loan be made available by the lending agent for next day liquidity at the option of the LGIP. During fiscal year 2018, the LGIP had no credit risk exposure to borrowers because the amounts owed to the borrowers exceeded the amounts the borrowers owed the LGIP. Furthermore, contracts require the lending agent to indemnify the LGIP if the borrowers fail to return securities and if collateral is inadequate to replace the securities lent, or if the borrowers fail to pay the LGIP for income distribution by the securities' issuers while the securities are on loan.

The LGIP cannot pledge or sell collateral securities received unless the borrower defaults. The LGIP investment policy limits the amount of reverse repurchase agreements and securities lending to 30 percent of the total portfolio. There were no violations of legal or contractual provisions and no losses resulting from a default of a borrower or lending agent during the fiscal year.

4. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt instruments will adversely affect the fair value of an investment. To mitigate the effect of interest rate risk, the LGIP portfolio is invested in high quality, highly liquid obligations with limited maximum and average maturities. The LGIP's policy establishes weighted average maturity and weighted average life limits not to exceed 60 and 120 days, respectively. As of June 30, 2018, the LGIP had a weighted average maturity of 33 days and a weighted average life of 80 days.

The following schedule presents the LGIP investments and related maturities, and provides information about the associated interest rate risks as of June 30, 2018:

Local Government Investment Pool (LGIP)
Schedule of Maturities
June 30, 2018
(expressed in thousands)

Investment Type	Amortized Cost	Maturity: Less than 1 Year	1-5 Years
U.S. agency securities	$ 5,722,558	$ 4,678,670	$ 1,043,888
U.S. treasury securities	3,833,605	3,833,605	—
Supranational securities	828,094	778,148	49,946
Repurchase agreements	5,025,000	5,025,000	—
Interest bearing bank accounts	1,579,655	1,579,655	—
Certificates of deposit	177,395	177,395	—
Total Investments	$ 17,166,307	$ 16,072,473	$ 1,093,834

5. Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The LGIP investment policy limits the types of securities available for investment to obligations of the U.S. government or its agencies, obligations of supranational institutions, obligations of government-sponsored corporations, and deposits with qualified public depositories.

Custodial Credit Risk. Custodial credit risk is the risk that, in the event a depository institution or counterparty fails, the LGIP will not be able to recover the value of its deposits, investments, or collateral securities that are in the possession of an outside party. The LGIP investment policy requires that securities purchased be held by the master custodian, acting as an independent third party, in its safekeeping or trust department.

Securities utilized in repurchase agreements are subject to additional restrictions. These restrictions are designed to limit the LGIP's exposure to risk and ensure the safety of the investment. All securities utilized in repurchase agreements were rated Aaa by Moody's and AA+ by Standard & Poor's. The fair value of securities utilized in repurchase agreements must be at least 102 percent of the value of the repurchase agreement.

Concentration of Credit Risk. Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. The LGIP mitigates concentration of credit risk by limiting the purchase of securities of any one issuer, with the exception of U.S. treasury and U.S. agency securities, to no more than 5 percent of the portfolio.

Repurchase agreements comprise 29.3 percent of the total portfolio as of June 30, 2018. The LGIP limits the securities utilized in repurchase agreements to U.S. treasury and U.S. agency securities. The LGIP requires delivery of all securities utilized in repurchase agreements and the securities are priced daily.

As of June 30, 2018, U.S. treasury securities comprised 22.3 percent of the total portfolio. U.S. agency securities comprised 33.3 percent of the total portfolio, including Federal Home Loan Bank (21.4 percent) and Federal Farm Credit Bank (11.9 percent). Supranational securities comprised 4.8 percent of the total portfolio.

6. Repurchase Agreements

The fair value plus accrued income of securities utilized in repurchase agreements will be 102 percent of the value of the repurchase agreement plus accrued interest.

The securities utilized in repurchase agreements are limited to government securities, are priced daily, and are held by the LGIP's custodian in the state's name. As of June 30, 2018, repurchase agreements totaled $5.03 billion.

E. INVESTMENTS - HIGHER EDUCATION SPECIAL REVENUE, ENDOWMENT, AND STUDENT SERVICES FUNDS

1. Summary of Investment Policies

The investments of the University of Washington represent 78 percent of the total investments in Higher Education Special Revenue, Endowment, and Student Services Funds.

The University of Washington's Board of Regents is vested by statute with responsibility for the University's properties and investments, and for establishing investment policy. The University of Washington Investment Management Company (UWINCO), led by the chief investment officer, carries out the day-to-day activities of the investment portfolios. The UWINCO Board, which consists of both Board of Regents' members and external investment professionals, serves as an advisory board to UWINCO.

The majority of the University's investments are insured, registered, and held by the University's custodial bank as an agent for the University. Investments not held by the custodian include venture capital, private equity, opportunistic investments, marketable alternatives, mortgages, real assets, and miscellaneous investments.

The University combines most short-term cash balances in the Invested Funds Pool. At June 30, 2018, the Invested Funds Pool totaled $1.79 billion. The fund also owns units in the Consolidated Endowment Fund valued at $643.1 million on June 30, 2018.

By University policy, departments with qualifying funds in the Invested Funds Pool receive distributions based on their average balances and on the type of balance. Campus depositors received 0.75 percent in fiscal year 2018. University Advancement received 3 percent of the average balances in endowment operating and gift accounts in fiscal year 2018. The difference between the actual earnings of the Invested Funds Pool and the calculated distributions is used to support activities benefiting all University departments.

The majority of the endowed funds are invested in a pooled fund called the Consolidated Endowment Fund (CEF). Individual endowments purchase units in the pool on the basis of a per unit valuation of the CEF at fair value on the last business day of the calendar quarter. Income is distributed based on the number of units held. Chapter 24.55 RCW and the Uniform Prudent Management of Institutional Funds Act allow for total return expenditure in the CEF under comprehensive prudent standards.

Under the CEF spending policy approved by the Board of Regents, quarterly distributions to programs are based on an annual percentage rate of 4 percent applied to the five-year rolling average of the CEF's market valuation. Additionally, the policy allows for an administrative fee of 1 percent to support campus-wide fundraising and stewardship activities and to offset the internal cost of managing endowment assets.

The University records its permanent endowments at the lower of original gift value or current market value in the Restricted Nonexpendable Net Position category. Of the endowments that are recorded at current market value, the net deficiency from the original gift value is $398 thousand at June 30, 2018.

Net appreciation (depreciation) in the fair value of investments includes both realized and unrealized gains and losses on investments. The University realized net gains of $62.3 million in fiscal year 2018 from the sale of investments.

The calculation of realized gains and losses is independent of the net appreciation of the fair value of investments. Realized gains and losses on investments that have been held in more than one fiscal year and are sold in the current year include the net appreciation (depreciation) of these investments reported in the prior year(s). The net appreciation in the fair value of investments during the year ended June 30, 2018, was $299.5 million.

2. Valuation of Investments

The University reports investments at fair value and categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The University holds significant amounts of investments that are measured at fair value on a recurring basis.

The following schedule presents the fair value of the University's investments by type at June 30, 2018:

University of Washington
Investments Measured at Fair Value
June 30, 2018
(expressed in thousands)

		Fair Value Measurements Using		
Investments by fair value level	**Fair Value**	**Level 1 Inputs**	**Level 2 Inputs**	**Level 3 Inputs**
Fixed income securities				
U.S. treasury	$ 652,611	$ 3,967	$ 648,644	$ —
U.S. government agency	545,478	10,879	534,599	—
Mortgage-backed	231,974	—	231,974	—
Asset-backed	175,449	—	175,449	—
Corporate and other	495,926	72,390	423,536	—
Total fixed income securities	2,101,438	87,236	2,014,202	—
Equity securities				
Global equity investments	719,261	711,232	8,029	—
Private equity and venture capital funds	27,224	—	25,885	1,339
Real estate	10,097	5,016	—	5,081
Other	11,385	6,917	—	4,468
Total equity securities	767,967	723,165	33,914	10,888
Externally managed trusts	122,686	—	—	122,686
Total investments by fair value level	2,992,091	$ 810,401	$ 2,048,116	$ 133,574
Investments measured at net asset value (NAV)				
Global equity investments	1,311,637			
Absolute return strategy funds	622,479			
Private equity and venture capital funds	369,888			
Real asset funds	193,341			
Other	48,228			
Total investments measured at the NAV	2,545,573			
Total investments measured at fair value	5,537,664			
Cash equivalents at amortized cost	119,825			
Total Investments	$ 5,657,489			

Investments classified as level 1. Fixed income and equity securities classified in level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Investments classified as level 2. Fixed income and equity securities classified in level 2 are valued using observable inputs including quoted prices for similar securities and interest rates.

Investments classified as level 3. Private equity, real assets, and other investments classified in level 3 are valued using either discounted cash flow or market comparable techniques.

Investments measured at net asset value (NAV). The University's interests in certain non-readily marketable alternative investments, such as hedge funds and private equity limited partnerships, are stated at fair value based on net asset value (NAV) estimates used as a practical expedient and reported to the University by investment fund managers.

The information related to investments measured at the NAV per share (or its equivalent) is presented on the following table:

University of Washington
Investments Measured at the Net Asset Value
June 30, 2018
(expressed in thousands)

	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Global equity investments	$ 1,311,637	$ 22,308	Monthly to annually	15-180 days
Absolute return strategy funds	622,479	—	Quarterly to annually	30-60 days
Private equity and venture capital funds	369,888	347,263	n/a	—
Real asset funds	193,341	55,105	n/a	—
Other	48,228	850	Quarterly to annually	30-95 days
Total investments measured at the NAV	$ 2,545,573			

Global Equity. This investment category includes public equity investments in separately managed accounts, long-only comingled funds, unconstrained limited partnerships, and passive market indices. For 2018, approximately 72 percent of the value of the investments in this category can be redeemed within 90 days, and 92 percent can be redeemed within one year.

Absolute Return. This category includes investments in stable income and low-to-medium beta funds. Management of these funds seeks low correlation to broad equity markets by investing in assets that exhibit low volatility, deep discounts, and/or hedges against market downturns. Approximately 88 percent of the value of the investments in this category can be redeemed within one year.

Private Equity. This category includes buyout, venture, and special situations funds. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the majority of the underlying assets of the funds will be liquidated over the next seven to ten years.

Real assets. This category includes real estate, natural resources, and other hard assets. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the majority of the underlying assets of the funds will be liquidated over the next seven to ten years.

Other. This category consists of opportunistic investments and includes various types of non-investment grade and non-rated credit plus nominal equity exposure. Approximately 15 percent of the value of the investments in this category can be redeemed or anticipate distribution within one year. The remaining balance of these investments contains restrictions on redemption within one year or will be distributed as underlying investments are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 10 years.

3. Funding Commitments

The University enters into contracts with investment managers to fund alternative investments. As of June 30, 2018, the University had outstanding commitments to fund alternative investments in the amount of $425.5 million. These commitments are expected to be called over a multi-year timeframe. The University believes it has adequate liquidity and funding sources to meet these obligations.

4. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of fixed income securities. The University manages interest rate risk through its investment policies and the investment guidelines established with each manager. Each fixed income manager is assigned a maximum boundary for duration as compared to the manager's relevant benchmark index. The goal is to allow ample freedom for the manager to perform while controlling the interest rate risk in the portfolio.

Effective duration is a commonly used measure of interest rate risk. The longer the duration, the more sensitive the portfolio is to changes in interest rates. The weighted average effective duration of the University's fixed income portfolio was 1.74 years at June 30, 2018.

5. Credit Risk

Fixed income securities are subject to credit risk, which is the risk that the issuer or other counterparty to a financial instrument will not fulfill its obligations, or that negative perceptions of the issuer's ability to make these payments will cause prices to decline. The University's investment policies limit fixed income exposure to investment grade assets. The investment policy for the Invested Funds' cash pool requires each manager to maintain an average quality rating of AA as issued by a nationally recognized rating organization. The investment policy for the Invested Funds' liquidity pool requires each manager to maintain an average quality rating of A and to hold at least 25 percent of their portfolios in government and government agency issues.

The investment policy for the CEF reflects its long-term nature by specifying average quality rating levels by individual manager, but still restricting investments to investment grade credits.

Custodial Credit Risk. Custodial credit risk is the risk that, in the event of a failure of the counterparty to a transaction, the University will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. The University does not have a formal policy regarding custodial credit risk. However, all University investments in the CEF and the Invested Funds Pool are held in the name of the University and are not subject to custodial credit risk.

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 CEF investment policy limits concentration by manager, country (other than U.S.), and market sector. The University further mitigates concentration of credit risk through the due diligence of each manager and careful monitoring of asset concentrations.

Duration is a calculation of the number of years required to recover to the true cost of a bond. The duration presented below represents a broad average across all fixed income securities held in the CEF, Invested Funds Pool (IF or operating funds), and debt service reserve funds. The CEF and IF portfolios are managed to have a duration below their policy benchmarks to protect principal and provide liquidity to the overall portfolio.

The following schedule summarizes the composition of the fixed income securities along with credit quality and effective duration measures at June 30, 2018. The schedule excludes $16.3 million of fixed income securities held by component units. Fixed income held by externally managed trusts are also excluded. These amounts make up 0.77 percent of the University's fixed income investments.

University of Washington
Invested Funds Pool and Consolidated Endowment Fund
Fixed Income Credit Quality and Effective Duration
June 30, 2018
(expressed in thousands)

Investment Type	U.S. Government	Investment Grade*	Non-Investment Grade	Not Rated	Total	Effective Duration (in years)
U.S. treasuries	$ 648,644	$ —	$ —	$ —	$ 648,644	1.85
U.S. government agency	540,529	—	—	—	540,529	2.85
Mortgage-backed	—	164,675	42,247	25,052	231,974	1.99
Asset-backed	—	147,713	1,134	26,602	175,449	0.71
Corporate and other	—	368,800	31,830	87,938	488,568	1.14
Total	$ 1,189,173	$ 681,188	$ 75,211	$ 139,592	$ 2,085,164	1.74

* Investment grade securities are those that are rated BBB and higher by Standard and Poor's or Baa and higher by Moody's.

6. Foreign Currency Risk

Foreign currency risk is the risk that investments denominated in foreign currencies may lose value due to adverse fluctuations in the value of the U.S. dollar relative to foreign currencies. The University's investment policies permit investments in international equity and other asset classes that can include foreign currency exposure. To manage foreign currency exposure, the University also enters into foreign currency forward contracts, futures contracts, and options. The University held non-U.S. denominated securities at June 30, 2018, of $1.46 billion.

The following schedule, stated in U.S. dollars, details the market value of foreign denominated securities by currency type:

University of Washington
Consolidated Endowment Fund
Foreign Currency Risk
June 30, 2018
(expressed in thousands)

Foreign Currency	Amount
Brazil-Real	$ 78,752
Britain-Pound	78,660
Canada-Dollar	97,112
China-Renminbi	232,898
E.M.U.-Euro	161,709
Hong Kong-Dollar	55,290
India-Rupee	154,962
Japan-Yen	141,518
Mexico-Peso	33,643
Russia-Ruble	30,289
South Korea-Won	58,605
Switzerland-Franc	41,690
Taiwan-Dollar	33,151
Remaining currencies	259,854
Total	$ 1,458,133

7. Derivatives

The University's investment policies allow investing in various derivative instruments, including futures, swaps, and forwards, to manage exposures within or across the portfolio and to improve the portfolio's risk/return profile. Futures are financial contracts obligating the buyer to purchase an asset at a predetermined future date and price. Total return swaps involve commitments to pay interest in exchange for a market-linked return, both based on notional amounts. Derivative instruments are recorded on the contract date and are carried at fair value using listed price quotations or amounts that approximate fair value.

Credit exposure represents exposure to counterparties relating to financial instruments where gains exceed collateral held by the University or losses are less than the collateral posted by the University. There was no credit exposure as of June 30, 2018. The University had no hedging derivatives, only derivatives for investment purposes.

Details on foreign currency derivatives are disclosed under Foreign Currency Risk.

The following schedule presents the significant terms for derivatives held as investments by the University at June 30, 2018:

University of Washington
Derivative Investments
June 30, 2018
(expressed in thousands)

Description	Changes in Fair Value - Included in Investment Income (Loss) Amount	Fair Value - Investment Derivative Amount	Notional Amount
Options purchased - puts	$ (24)	$ 137	$ 161
Swaps fixed income - long	$ (797)	$ 119,010	$ 119,807
Swaps fixed income - short	$ 3,610	$ (115,391)	$ (119,001)
Futures on contracts - long	$ 52	$ 180,268	$ 180,216
Futures on contracts - short	$ (348)	$ (65,075)	$ (64,727)

F. INVESTMENTS - OFFICE OF THE STATE TREASURER CASH MANAGEMENT ACCOUNT

1. Summary of Investment Policies

The Office of the State Treasurer (OST) operates the state's Cash Management Account for investing Treasury/Trust funds in excess of daily requirements. Investment income earned is allocated based on average daily cash balance. Pursuant to state law, all earnings on investments of Treasury/Trust funds are credited to the General Fund except as specifically provided in RCW 43.79A.040 and RCW 43.84.092. In fiscal year 2018, a portion of the investment income reported by the General Fund was earned by other funds.

The State Treasurer and designated investment officers shall adhere to all restrictions on the investment of funds established by law and by policy.

Investment Objectives. All Treasury/Trust funds will be invested in conformance with federal, state, and other legal requirements. The primary objectives of the portfolio shall be 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 that 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. Eligible investments are only those securities and deposits authorized by statute (chapters 39.58, 43.250, and 43.84.080 RCW). Eligible investments include:

- Obligations of the U.S. government.
- Obligations of U.S. government agencies or of corporations wholly owned by the U.S. government.
- U.S. dollar denominated obligations of supranational institutions, provided that at the time of investment the institution has the U.S. government as its largest shareholder.
- Obligations of government-sponsored enterprises that are or may become eligible as collateral for advances to member banks as determined by the board of governors of the Federal Reserve.
- Commercial paper, provided that the OST adheres to policies and procedures of the Washington State Investment Board (WSIB) regarding commercial paper (RCW 43.84.080(5)).
- Corporate notes, provided that the OST adheres to the investment policies and procedures adopted by the WSIB, per RCW 39.58.080.
- 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.
- Local Government Investment Pool (LGIP).
- Obligations of the state of Washington or its political subdivisions.

Investment Restrictions. To provide for the safety and liquidity of Treasury/Trust funds, the Cash Management Account investment portfolio is subject to the minimum restrictions listed below. Certain investment instruments are subject to more restrictive limitations.

- The final maturity of any security will not exceed ten years.
- Purchase of collateralized mortgage obligations is not allowed.
- The allocation to investments subject to high price sensitivity or reduced marketability will not exceed 15 percent of the daily balance of the portfolio.

Additionally, investments in non-government securities, excluding collateral of repurchase agreements, must fall within prescribed limits.

Limitations and Restrictions on LGIP Participant Withdrawals. Participants of the LGIP may contribute and withdraw funds on a daily basis and must inform the OST of any contribution or withdrawal over one million dollars no later than 9:00 a.m. on the same day the transaction is made. Contributions or withdrawals for one million dollars or less can be requested at any time prior to 10:00 a.m. on the day of the transaction. However, participants may complete transactions greater than one million dollars when notification is made between 9:00 a.m. and 10:00 a.m., at the sole discretion of the OST. The LGIP does not impose liquidity fees or redemption gates on participant withdrawals.

2. Valuation of Investments

The OST reports investments at fair value and categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The following table presents fair value measurements as of June 30, 2018:

Office of the State Treasurer
Cash Management Account
Investments Measured at Fair Value
June 30, 2018
(expressed in thousands)

		Fair Value Measurements Using		
Investments by fair value level	**Fair Value**	**Level 1 Inputs**	**Level 2 Inputs**	**Level 3 Inputs**
Debt securities				
U.S. government securities	$ 1,361,309	$ —	$ 1,361,309	$ —
U.S. agency securities	1,323,125	—	1,323,125	—
Supranational securities	615,312	—	615,312	—
Corporate notes	121,436	—	121,436	—
Total investments measured at fair value	$ 3,421,182	$ —	$ 3,421,182	$ —

Investments classified as level 2. The debt securities classified as level 2 in the above table are valued using observable inputs including quoted prices for similar securities and interest rates.

3. Securities Lending

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 U.S. agency 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 2018, cash received as collateral was invested in the LGIP money market fund, which allows withdrawals each business day to cover maturing loans. There was no cash collateral from securities lending as of June 30, 2018.

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, 2018, the fair value of securities on loan totaled $355.8 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 2018, 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.

4. Interest Rate Risk

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.

The following schedules present the OST investments and related maturities, and provide information about the associated interest rate risks as of June 30, 2018:

Office of the State Treasurer
Cash Management Account
Schedule of Maturities and Effective Duration
June 30, 2018
(expressed in thousands)

		Maturity	
Investment Type	**Total Fair Value**	**Less than 1 Year**	**1-5 Years**
U.S. agency securities	$ 1,323,125	$ 294,770	$ 1,028,355
Supranational securities	685,073	140,193	544,880
Corporate notes	121,436	—	121,436
Investments with LGIP	4,416,333	4,416,333	—
Certificates of deposit	169,752	169,752	—
Interest bearing bank accounts	119,242	119,242	—
Total Investments	$ 6,834,961	$ 5,140,290	$ 1,694,671

Credit ratings of investments are presented using the Standard and Poor's (S&P) rating scale as follows:

Office of the State Treasurer
Cash Management Account
Investment Credit Ratings
June 30, 2018
(expressed in thousands)

	Investment Type		
S&P Credit Rating	**Corporate Notes**	**Supranationals**	**Total Fair Value**
AAA	$ 34,371	$ 685,073	$ 719,444
AA+	18,730	—	18,730
AA	41,159	—	41,159
A+	27,176	—	27,176
Total	$ 121,436	$ 685,073	$ 806,509

5. Credit Risk

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 depositaries. Investments in non-government securities may not exceed set percentages of the total daily portfolio size.

Custodial Credit Risk. The custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, a government will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. The OST investment policy requires that securities purchased by the office be held by the master custodian, acting as an independent third party, in its safekeeping or trust department. Securities utilized in repurchase agreements are subject to additional restrictions. These restrictions are designed to limit the OST's exposure to risk and ensure the safety of the investment.

Concentration of Credit Risk. 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.

Note 4
Receivables, Unearned, and Unavailable Revenues

A. GOVERNMENTAL FUNDS

Taxes Receivable
Taxes receivable at June 30, 2018, consisted of the following (expressed in thousands):

Taxes Receivable	General	Higher Education Special Revenue	Higher Education Endowment	Nonmajor Governmental Funds	Total
Property	$ 1,636,546	$ —	$ —	$ 98	$ 1,636,644
Sales	2,458,385	15	—	927	2,459,327
Business and occupation	972,886	—	—	39	972,925
Estate	1,566	21,066	—	—	22,632
Fuel	—	—	—	180,322	180,322
Beer and wine	—	—	—	5,322	5,322
Marijuana	—	—	—	36,304	36,304
Real estate excise	1,855	82	—	72	2,009
Public utilities	13,111	22	—	—	13,133
Hazardous substance	—	—	—	1,524	1,524
Syrup	5,836	—	—	—	5,836
Other	1,014	—	—	134	1,148
Subtotals	5,091,199	21,185	—	224,742	5,337,126
Less: Allowance for uncollectible receivables	524,459	6	—	2,654	527,119
Total Taxes Receivable	$ 4,566,740	$ 21,179	$ —	$ 222,088	$ 4,810,007

Receivables
Receivables at June 30, 2018, consisted of the following (expressed in thousands):

Receivables	General	Higher Education Special Revenue	Higher Education Endowment	Nonmajor Governmental Funds	Total
Public assistance [(1)]	$ 602,570	$ —	$ —	$ —	$ 602,570
Accounts receivable	696,186	554,961	1,347	342,934	1,595,428
Interest	9,418	11,210	4,520	9,453	34,601
Investment trades pending	9,908	610	9,860	4,348	24,726
Loans [(2)]	6,175	119,393	—	512,764	638,332
Long-term contracts [(3)]	4,310	—	16,143	115,705	136,158
Miscellaneous	11	228	—	28	267
Subtotals	1,328,578	686,402	31,870	985,232	3,032,082
Less: Allowance for uncollectible receivables	606,849	33,823	—	76,866	717,538
Total Receivables	$ 721,729	$ 652,579	$ 31,870	$ 908,366	$ 2,314,544

Notes:
(1) Public assistance receivables mainly represent amounts owed to the state as a part of the Support Enforcement Program at the Department of Social and Health Services for the amounts due from persons required to pay support for individuals currently on state assistance, and have a low realization expectation. Accordingly, the receivable is offset by a large allowance for uncollectible receivables.
(2) Significant long-term portions of loans receivable include $99.5 million in the Higher Education Special Revenue Fund for student loans and $503.7 million in Nonmajor Governmental Funds for low income housing, public works, and economic development/revitalization loans.
(3) Long-term contracts in Nonmajor Governmental Funds are for timber sales contracts.

Unearned Revenue

Unearned revenue at June 30, 2018, consisted of the following (expressed in thousands):

Unearned Revenue		General		Higher Education Special Revenue		Higher Education Endowment		Nonmajor Governmental Funds		Total
Other taxes	$	5,142	$	—	$	—	$	—	$	5,142
Charges for services		125,457		214,119		—		24,668		364,244
Donable goods		—		—		—		5,829		5,829
Grants and donations		4,660		3,429		—		12,257		20,346
Tolls		—		—		—		24,032		24,032
Transportation		—		—		—		10,659		10,659
Miscellaneous		6,290		15,045		—		9,862		31,197
Total Unearned Revenue	$	141,549	$	232,593	$	—	$	87,307	$	461,449

Unavailable Revenue

Unavailable revenue at June 30, 2018, consisted of the following (expressed in thousands):

Unavailable Revenue		General		Higher Education Special Revenue		Higher Education Endowment		Nonmajor Governmental Funds		Total
Property taxes	$	1,605,156	$	—	$	—	$	26	$	1,605,182
Other taxes		562,136		13,731		—		1,996		577,863
Timber sales		4,310		—		16,143		115,705		136,158
Transportation		—		—		—		15,905		15,905
Charges for services		—		—		—		6,780		6,780
Miscellaneous		4,659		—		—		26,123		30,782
Total Unavailable Revenue	$	2,176,261	$	13,731	$	16,143	$	166,535	$	2,372,670

B. PROPRIETARY FUNDS

Receivables

Receivables at June 30, 2018, consisted of the following (expressed in thousands):

	Business-Type Activities Enterprise Funds					Governmental Activities
Receivables	Workers' Compensation	Unemployment Compensation	Higher Education Student Services	Nonmajor Enterprise Funds	Total	Internal Service Funds
Accounts receivable	$ 952,133	$ 501,286	$ 411,246	$ 54,854	$ 1,919,519	$ 78,003
Interest	110,048	—	1,475	3,386	114,909	1,434
Investment trades pending	150,000	—	—	1,141	151,141	546
Miscellaneous	—	—	29	2	31	1
Subtotals	1,212,181	501,286	412,750	59,383	2,185,600	79,984
Less: Allowance for uncollectible receivables	167,310	109,509	21,537	58	298,414	821
Total Receivables	$ 1,044,871	$ 391,777	$ 391,213	$ 59,325	$ 1,887,186	$ 79,163

Unearned Revenue

Unearned revenue at June 30, 2018, consisted of the following (expressed in thousands):

	Business-Type Activities Enterprise Funds					Governmental Activities
Unearned Revenue	Workers' Compensation	Unemployment Compensation	Higher Education Student Services	Nonmajor Enterprise Funds	Total	Internal Service Funds
Charges for services	$ —	$ —	$ 54,117	$ 479	$ 54,596	$ 4,608
Grants and donations	5,300	—	—	—	5,300	25
Other taxes	454	—	—	—	454	—
Miscellaneous	1,893	—	339	1	2,233	—
Total Unearned Revenue	$ 7,647	$ —	$ 54,456	$ 480	$ 62,583	$ 4,633

Taxes Receivables

Taxes receivables at June 30, 2018, consisted of $40 thousand for petroleum products.

C. FIDUCIARY FUNDS

Other Receivables

Other receivables at June 30, 2018, consisted of $21.4 million for interest and other miscellaneous amounts.

Unearned Revenue

Unearned revenue at June 30, 2018, consisted of $673 thousand for service credit restorations reported in Pension and Other Employee Benefit Plans.

Note 5
Interfund Balances and Transfers

A. INTERFUND BALANCES

Interfund balances as reported in the financial statements at June 30, 2018, consisted of the following (expressed in thousands):

	Due From				
Due To	General	Higher Education Special Revenue	Higher Education Endowment	Nonmajor Governmental Funds	Workers' Compensation
General	$ —	$ 259,506	$ —	$ 181,731	$ 485
Higher Education Special Revenue	52,409	—	666,050	36,786	920
Higher Education Endowment	—	—	—	1,007	—
Nonmajor Governmental Funds	89,014	642	2,245	242,402	22
Workers' Compensation	11	573	—	16	—
Unemployment Compensation	1,167	1,179	—	906	5
Higher Education Student Services	184	2,091	—	889	84
Nonmajor Enterprise Funds	9,695	143	—	1,822	19
Internal Service Funds	44,383	1,451	—	23,629	6,615
Totals	$ 196,863	$ 265,585	$ 668,295	$ 489,188	$ 8,150

Except as noted below, interfund balances are expected to be paid within one year from the date of the financial statements. These balances resulted from the time lag between the dates that (1) interfund goods and services were provided and when the payments occurred and (2) interfund transfers were accrued and when the liquidations occurred.

Interfund balances include: (1) a $5.0 million loan from a nonmajor governmental fund to the General Fund which is expected to be paid over the next two years; (2) a $3.7 million loan between nonmajor governmental funds which is expected to be paid over the next four years, and (3) a $204.9 million revolving loan from the Higher Education Special Revenue Fund to the Higher Education Student Services Fund.

In addition to the interfund balances noted in the schedule above, there are interfund balances of $85.8 million within the state's Pension Trust Funds.

Due From					
Unemployment Compensation	Higher Education Student Services	Nonmajor Enterprise Funds	Internal Service Funds	Fiduciary Funds	Totals
$ 7	$ —	$ 103,443	$ 15,527	$ —	$ 560,699
—	263,026	4	17,493	—	1,036,688
—	—	—	—	—	1,007
1,269	5	776	12,018	—	348,393
—	—	—	—	—	600
—	—	30	61	—	3,348
—	—	49	14,266	—	17,563
4	8	369	130	—	12,190
—	105	524	16,314	80	93,101
$ 1,280	$ 263,144	$ 105,195	$ 75,809	$ 80	$ 2,073,589

B. INTERFUND TRANSFERS

Interfund transfers as reported in the financial statements for the year ended June 30, 2018, consisted of the following (expressed in thousands):

	Transferred To				
Transferred From	**General**	**Higher Education Special Revenue**	**Higher Education Endowment**	**Nonmajor Governmental Funds**	**Workers' Compensation**
General	$ —	$ —	$ 300	$ 1,332,142	$ —
Higher Education Special Revenue	68,359	—	36,158	245,608	—
Higher Education Endowment	—	176,372	—	39,786	—
Nonmajor Governmental Funds	446,757	196,039	796	1,501,938	—
Workers' Compensation	—	—	—	—	—
Unemployment Compensation	—	—	—	—	—
Higher Education Student Services	—	358,458	9	3,342	—
Nonmajor Enterprise Funds	170,972	—	—	19,023	—
Internal Service Funds	—	37,693	—	509	—
Totals	$ 686,088	$ 768,562	$ 37,263	$ 3,142,348	$ —

Except as noted below, transfers are used to (1) move revenues from the fund that statute requires to collect them to the fund that statute requires to expend them, (2) move receipts designated for debt service from the funds collecting the receipts to the debt service fund as debt service payments become due, (3) move unrestricted revenues collected in the General Fund to finance various programs accounted for in other funds in accordance with budgetary authorizations, (4) move profits from the Lottery Fund as required by law, and (5) transfer amounts to and from the General Fund as required by law.

On June 30, 2018, $216.4 million was transferred from the General Fund Basic Account to the Budget Stabilization Account (BSA) in accordance with the provisions of the Constitution. The Constitution details a limited number of circumstances under which funds can be appropriated from the BSA, one of which is a favorable vote of at least three-fifths of the members of each house of the Legislature. The BSA is reported as an Administrative Account within the General Fund.

In addition to the transfers noted in the schedule above, there were transfers of $11.2 million within the state's Pension Trust Funds.

Transferred To				
Unemployment Compensation	Higher Education Student Services	Nonmajor Enterprise Funds	Internal Service Funds	Totals
$ —	$ —	$ 398	$ 26,791	$ 1,359,631
—	399,464	—	26,201	775,790
—	—	—	—	216,158
—	431	—	4,587	2,150,548
—	—	—	—	—
—	—	—	—	—
—	—	—	256	362,065
—	—	13,717	—	203,712
—	231	—	4,387	42,820
$ —	$ 400,126	$ 14,115	$ 62,222	$ 5,110,724

Note 6
Capital Assets

Capital assets at June 30, 2018, are reported by the state of Washington within Governmental Activities and Business-Type Activities, as applicable.

A. GOVERNMENTAL CAPITAL ASSETS

The following is a summary of governmental capital asset activity for the year ended June 30, 2018 (expressed in thousands):

Capital Assets	Balances July 1, 2017	Additions	Deletions/ Adjustments	Balances June 30, 2018
Capital assets, not being depreciated:				
Land	$ 2,666,048	$ 136,910	$ (35,488)	$ 2,767,470
Transportation infrastructure	24,702,820	494,892	(208,764)	24,988,948
Intangible assets - indefinite lives	14,938	19,629	—	34,567
Art collections, library reserves, and museum and historical collections	120,727	2,274	(55)	122,946
Construction in progress	1,175,803	420,859	(564,203)	1,032,459
Total capital assets, not being depreciated	28,680,336			28,946,390
Capital assets, being depreciated:				
Buildings	14,105,259	616,575	(41,036)	14,680,798
Accumulated depreciation	(5,671,670)	(384,571)	24,047	(6,032,194)
Net buildings	8,433,589			8,648,604
Other improvements	1,585,644	21,379	(3,768)	1,603,255
Accumulated depreciation	(824,039)	(40,819)	8,708	(856,150)
Net other improvements	761,605			747,105
Furnishings, equipment, and intangible assets	5,436,495	431,008	(162,201)	5,705,302
Accumulated depreciation	(3,427,722)	(323,656)	133,677	(3,617,701)
Net furnishings, equipment, and intangible assets	2,008,773			2,087,601
Infrastructure	1,215,238	36,913	(5,540)	1,246,611
Accumulated depreciation	(586,540)	(47,248)	1,468	(632,320)
Net infrastructure	628,698			614,291
Total capital assets, being depreciated, net	11,832,665			12,097,601
Governmental Activities Capital Assets, Net	$ 40,513,001			$ 41,043,991

B. BUSINESS-TYPE CAPITAL ASSETS

The following is a summary of business-type capital asset activity for the year ended June 30, 2018 (expressed in thousands):

Capital Assets	Balances July 1, 2017	Additions	Deletions/ Adjustments	Balances June 30, 2018
Capital assets, not being depreciated:				
Land	$ 69,685	$ 89,756	$ (88,551)	$ 70,890
Intangible assets - indefinite lives	4,580	—	—	4,580
Art collections	75	—	(35)	40
Construction in progress	215,459	257,142	(16,040)	456,561
Total capital assets, not being depreciated	289,799			532,071
Capital assets, being depreciated:				
Buildings	3,795,098	147,563	(14,906)	3,927,755
Accumulated depreciation	(1,273,969)	(129,640)	8,878	(1,394,731)
Net buildings	2,521,129			2,533,024
Other improvements	104,696	5,985	(3,158)	107,523
Accumulated depreciation	(55,808)	(4,985)	38	(60,755)
Net other improvements	48,888			46,768
Furnishings, equipment, and intangible assets	1,009,341	38,513	(42,252)	1,005,602
Accumulated depreciation	(789,541)	(60,642)	40,428	(809,755)
Net furnishings, equipment, and intangible assets	219,800			195,847
Infrastructure	57,646	1,429	(56)	59,019
Accumulated depreciation	(29,225)	(2,051)	56	(31,220)
Net infrastructure	28,421			27,799
Total capital assets, being depreciated, net	2,818,238			2,803,438
Business-Type Activities Capital Assets, Net	$ 3,108,037			$ 3,335,509

C. DEPRECIATION

Depreciation expense for the year ended June 30, 2018, was charged by the primary government as follows (expressed in thousands):

		Amount
Governmental Activities:		
General government	$	98,599
Education - elementary and secondary (K-12)		4,287
Education - higher education		466,385
Human services		42,515
Adult corrections		25,638
Natural resources and recreation		47,208
Transportation		111,662
Total Depreciation Expense - Governmental Activities *	$	796,294
Business-Type Activities:		
Workers' compensation	$	8,499
Unemployment compensation		—
Higher education student services		185,991
Other		2,828
Total Depreciation Expense - Business-Type Activities	$	197,318

* Includes $98.3 million internal service fund depreciation that was allocated to governmental activities as a component of net internal service fund activity.

D. CONSTRUCTION IN PROGRESS

Major construction commitments of the state at June 30, 2018, are as follows (expressed in thousands):

Agency / Project Commitments	Construction In Progress June 30, 2018	Remaining Project Commitments
Office of the Secretary of State:		
Library-Archives building and other projects	$ 3,604	$ 95,144
Department of Revenue:		
Tax and Licensing System Replacement	8,294	20,189
Department of Enterprise Services:		
1063 Building project	92,977	1,982
Natural Resource building garage fire suppression and critical repair	7,714	363
Various projects	3,983	10,508
Washington State Patrol:		
Fire Training Academy aircraft rescue repairs, burn building, and dining hall	2,130	9,812
Various projects	963	6,255
Department of Social and Health Services:		
Residential housing unit renovations and other projects	22,149	64,007
State hospitals	33,290	78,796
Department of Corrections:		
Correctional center units security and safety improvements, and other projects	10,862	29,477
Department of Transportation:		
State ferry vessels and terminals, and other projects	355,105	264,559
Transportation infrastructure	—	1,287,344
Department of Fish and Wildlife:		
Soos Creek Hatchery, Fir Island Farm, Kalama Hatchery, and other projects	50,334	145,941
Employment Security Department:		
Paid Family Medical Leave system	4,901	32,612
University of Washington:		
Bill & Melinda Gates Computer Science, Population Health, and Life Science Building	277,286	78,527
Husky Stadium improvements and other projects	4,984	399
McCarty Hall, Stevens Court, and north campus student housing	150,622	17,325
UW Medical Center expansion and renovation projects	22,436	9,499
Washington biomedical research facility	129,268	15,711
Washington State University:		
Animal Health Research, Plant Science, Airport, and other facility projects	15,566	92,402
Athletics and other projects	380	1,469
Chief Joseph Village and other housing projects	15,041	21,284
Eastern Washington University:		
Engineering building, Pence Union Building, and other projects	40,513	65,530
Interdisciplinary Science Center renovation	5,885	178,956
Central Washington University:		
Bouillon Hall, new residence hall, old heat renovation, and other projects	22,053	4,169
Samuelson Communication & Technology Center	57,078	—
The Evergreen State College:		
Housing and other projects	6,062	16,579
Western Washington University:		
Multicultural student center, residence hall, and Carver Hall renovation	14,198	27,017
Science Building renovation and addition	1,776	84,265
Community and Technical Colleges:		
Bellevue student housing and success building	54,939	4,100
Big Bend Professional Technical building	3,365	43,507
Clover Park advanced manufacturing and loading dock	8,527	32,925
Edmonds Science, Engineering, and Technology building project	4,951	40,797
Whatcom student housing and learning commons	5,952	55,359
Other miscellaneous community college projects	33,663	61,704
Other Agency Projects:	18,169	10,776
Total Construction in Progress	$ 1,489,020	$ 2,909,289

Note 7
Long-Term Liabilities

A. BONDS PAYABLE

Bonds payable at June 30, 2018, are reported by the state of Washington within governmental activities and business-type activities, as applicable.

The State Constitution and enabling statutes authorize the incurrence of state general obligation debt, to which the state's full faith, credit, and taxing power are pledged, either by the Legislature or by a body designated by statute (presently the State Finance Committee).

Authorization arises in the following situations:

- From an affirmative vote of 60 percent of the members of each house of the Legislature, without voter approval, in which case the amount of such debt is generally subject to the constitutional debt limitation described below.

- When authorized by law for a distinct work or object and approved by a majority of the voters voting thereon at a general election or a special election called for that purpose, in which case the amount of the debt so approved is not subject to the constitutional debt limitations described below.

- By the State Finance Committee without limitation as to amount, and without approval of the Legislature or approval of the voters.

The State Finance Committee debt authorization does not require voter approval; however, it is limited to providing for: (1) meeting temporary deficiencies of the state treasury if such debt is discharged within 12 months of the date of incurrence and is incurred only to provide for appropriations already made by the Legislature; or (2) refunding of outstanding obligations of the state.

Legal Debt Limitation
The State Constitution limits the amount of state debt that may be incurred by restricting the amount of general state revenues which may be allocated to pay principal and interest on debt subject to these limitations. In November 2012, voters passed a constitutional amendment specifying that maximum annual payments of principal and interest on all debt subject to the limit may not exceed a percentage of the average of the prior six years' general state revenues; this percentage currently stands at 8.25 percent and will decline to 8.00 percent by July 1, 2034. This limitation restricts the incurrence of new debt and not the amount of debt service that may be paid by the state in future years.The State Constitution requires the State Treasurer to certify the debt service limitation for each fiscal year. In accordance with these provisions, the debt service limitation for fiscal year 2018 is $1.42 billion.

This computation excludes specific bond issues and types that are not secured by general state revenues. Of the $19.18 billion general obligation bond debt principal outstanding at June 30, 2018, $11.36 billion is subject to the limitation.

Based on the debt limitation calculation, the debt service requirements as of June 30, 2018, did not exceed the authorized debt service limitation.

For further information on the debt limit, refer to the Certification of the Debt Limitation of the state of Washington available from the Office of the State Treasurer at https://www.tre.wa.gov/wp-content/uploads/Debt-Limit-Certification-Complete.pdf or to Schedule 11 in the Statistical Section of this report.

Authorized But Unissued
The state had a total of $12.42 billion in general obligation bonds authorized but unissued as of June 30, 2018, for the purpose of capital construction, higher education, transportation, and various other projects throughout the state.

Interest Rates
Interest rates on fixed rate general obligation bonds range from 0.70 to 6.03 percent. Interest rates on revenue bonds range from 1.40 to 7.40 percent.

Debt Service Requirements to Maturity

General Obligations Bonds
General obligation bonds have been authorized and issued primarily to provide funds for the following purposes:

- Acquisition and construction of state and common school capital facilities.

- Transportation construction and improvement projects.

- Assistance to local governments for public works capital projects.

- Refunding of general obligation bonds outstanding.

Outstanding general obligation bonds are presented in the Washington State Treasurer's Annual Report. A copy of the report is available from the Office of the State Treasurer, PO Box 40200, Olympia, WA 98504-0200, phone number (360) 902-9000 or TTY 711, or by visiting their website at http://www.tre.wa.gov/about-us/resources/annual-reports.

Total debt service requirements to maturity for general obligation bonds as of June 30, 2018, are as follows (expressed in thousands):

	Governmental Activities		Business-Type Activities		Totals	
General Obligation Bonds	**Principal**	**Interest**	**Principal**	**Interest**	**Principal**	**Interest**
By Fiscal Year:						
2019	$ 986,729	$ 953,396	$ —	$ —	$ 986,729	$ 953,396
2020	982,907	918,871	—	—	982,907	918,871
2021	961,445	861,059	—	—	961,445	861,059
2022	968,712	797,961	—	—	968,712	797,961
2023	978,077	755,110	—	—	978,077	755,110
2024-2028	4,931,210	3,106,431	—	—	4,931,210	3,106,431
2029-2033	4,570,773	1,847,397	—	—	4,570,773	1,847,397
2034-2038	3,132,245	797,207	—	—	3,132,245	797,207
2039-2043	1,668,990	167,321	—	—	1,668,990	167,321
Total Debt Service Requirements	$ 19,181,088	$ 10,204,753	$ —	$ —	$ 19,181,088	$ 10,204,753

Revenue Bonds

Revenue bonds are authorized under current state statutes, which provide for the issuance of bonds that are not supported or not intended to be supported, by the full faith and credit of the state.

General Revenue

The University of Washington and Washington State University issue general revenue bonds that are payable from general revenues, including student tuition, grant indirect cost recovery, sales and services revenue, and investment income. General revenue bonds outstanding as of June 30, 2018, include $925.7 million in governmental activities and $1.74 billion in business-type activities.

Pledged Revenue

The remainder of the state's revenue bonds pledge income derived from acquired or constructed assets for retirement of the debt and payment of the related interest.

Total debt service requirements for revenue bonds to maturity as of June 30, 2018, are as follows (expressed in thousands):

	Governmental Activities		Business-Type Activities		Totals	
Revenue Bonds	**Principal**	**Interest**	**Principal**	**Interest**	**Principal**	**Interest**
By Fiscal Year:						
2019	$ 127,990	$ 104,417	$ 79,446	$ 100,427	$ 207,436	$ 204,844
2020	130,964	98,484	69,913	97,256	200,877	195,740
2021	136,883	92,094	73,508	94,013	210,391	186,107
2022	154,169	85,389	76,798	90,497	230,967	175,886
2023	161,019	77,767	77,290	138,236	238,309	216,003
2024-2028	474,457	294,685	398,642	361,291	873,099	655,976
2029-2033	352,744	213,453	415,209	263,544	767,953	476,997
2034-2038	313,945	133,725	410,994	168,950	724,939	302,675
2039-2043	233,854	63,217	398,060	69,888	631,914	133,105
2044-2048	146,796	27,445	138,689	10,136	285,485	37,581
2049-2053	64,274	7,099	2,425	97	66,699	7,196
Total Debt Service Requirements	$ 2,297,095	$ 1,197,775	$ 2,140,974	$ 1,394,335	$ 4,438,069	$ 2,592,110

Governmental activities include revenue bonds outstanding at June 30, 2018, of $178.5 million issued by the Tobacco Settlement Authority (TSA), which is a blended component unit of the state. In November 2002, the TSA issued $517.9 million in bonds and transferred $450.0 million to the state to be used for increased health care, long-term care, and other programs.

These bonds do not constitute either a legal or moral obligation of the state, nor does the state pledge its full faith, credit, or taxing power for payment of these bonds. The bonds are obligations of the TSA and are secured solely by the TSA's right to receive 29.2 percent of the state's tobacco settlement revenues, restricted investments of the TSA, undistributed TSA bond proceeds, and the earnings thereon held under the indenture authorizing the bonds. Total principal and interest remaining on the bonds is $244.9 million, payable through 2033. For the current year, both pledged revenue and debt service were $37.2 million.

Governmental activities include grant anticipation revenue bonds outstanding at June 30, 2018, of $589.0 million issued for the Washington State Department of Transportation. The bonds were issued to finance a portion of the cost of constructing the State Route 520 Floating Bridge and Eastside Project.

These bonds do not constitute either a legal or moral obligation of the state, nor does the state pledge its full faith, credit, or taxing power for payment of these bonds. The bonds are payable solely from Federal-Aid Highway Program funds, including federal reimbursements of debt service on the bonds and federal reimbursements to the state for projects or portions of projects not financed with bond proceeds. Total principal and interest remaining on the bonds is $697.3 million, payable through 2024. For the current year both pledged revenue and debt service were $100.0 million.

Governmental activities include the Transportation Infrastructure Finance and Innovation Act Bond (TIFIA Bond) outstanding at June 30, 2018, of $296.9 million. The bonds were issued to finance a portion of the State Route 520 Corridor Program.

The TIFIA Bond is payable solely from toll revenues and does not constitute either a legal or moral obligation of the state, nor does the state pledge its full faith, credit, or taxing power for payment of this bond. Total principal and interest remaining on the bond is $529.7 million, payable through 2051. For the current year both pledged revenue and debt service were $12.7 million.

Governmental activities include revenue bonds outstanding at June 30, 2018, of $38.1 million issued by the Tumwater Office Properties (TOP), which is a blended component unit of the state. The bonds, issued in 2004, are payable solely from the trust estate pledged under the indenture, including rental payments. The bonds were used to construct an office building in Tumwater, Washington which the state occupied beginning in fiscal year 2006.

The bonds are not a general obligation of the state, nor does the state pledge its full faith, credit, or taxing power for payment of these bonds. Total principal and interest remaining on the bonds is $48.9 million, payable through 2029. For the current year, both pledged revenue and debt service were $3.7 million.

Governmental activities include revenue bonds outstanding at June 30, 2018, of $266.8 million issued by FYI Properties, a blended component unit of the state. The bonds, issued in 2009, are payable solely from the trust estate pledged under the indenture, including rental payments. The bonds were used to construct an office building in Olympia, Washington which the state occupied beginning in fiscal year 2012.

The bonds are not a general obligation of the state, nor does the state pledge its full faith, credit, or taxing power for payment of these bonds. Total principal and interest remaining on the bonds is $452.5 million, payable through 2039. For the current year, both pledged revenue and debt service were $21.6 million.

Additionally, governmental activities include revenue bonds outstanding at June 30, 2018, of $2.1 million issued by the City of Aberdeen. The bonds were used to extend utilities to the state Department of Corrections Stafford Creek Corrections Center. The Department of Corrections entered into an agreement with the City of Aberdeen to pay a system development fee sufficient to pay the debt service on the bonds. The bonds were issued in 1998 and 2002, and refunded by the city in 2010, and are payable solely from current operating appropriations.

The bonds are not a general obligation of the state, nor does the state pledge its full faith, credit, or taxing power for payment of these bonds. Total principal and interest remaining on these bonds is $2.3 million payable through 2022. For the current year, both pledged revenue and debt service were $1.6 million.

The state's colleges and universities may also issue bonds for the purpose of housing, dining, parking, and student facilities construction. These bonds are reported within business-type activities and are secured by a pledge of specific revenues. These bonds are not a general obligation of the state, nor does the state pledge its full faith, credit, or taxing power for payment of these bonds.

Total pledged specific revenues for the state's colleges and universities to repay the principal and interest of revenue bonds as of June 30, 2018, are as follows (expressed in thousands):

Source of Revenue Pledged	Housing and Dining Revenues (Net of Operating Expenses)	Student Facilities Fees and Earnings on Invested Fees	Bookstore Revenues
Current revenue pledged	$ 46,225	$ 15,808	$ 332
Current year debt service	19,895	9,288	202
Total future revenues pledged *	420,053	102,142	3,236
Description of debt	Housing and dining bonds issued in 1998-2018	Student facilities bonds issued in 2004-2015	Student union and recreation center bonds issued in 2004
Purpose of debt	Construction and renovation of student housing and dining facilities	Construction and renovation of student activity and sports facilities	Construction of a new bookstore as part of a new student union and recreation building
Term of commitment	2026-2049	2032-2039	2034
Percentage of debt service to pledged revenues (current year)	43.04%	58.76%	61.00%

*Total future principal and interest payments.

B. CERTIFICATES OF PARTICIPATION

Certificates of participation at June 30, 2018, are reported by the state of Washington within governmental activities and business-type activities, as applicable.

Current state law authorizes the state to enter into long-term financing contracts for the acquisition of real or personal property and for the issuance of certificates of participation in the contracts. These certificates of participation do not fall under the general obligation debt limitations and are generally payable only from annual appropriations by the Legislature.

Other specific provisions could also affect the state's obligation under certain agreements. The certificates of participation are recorded for financial reporting purposes if the possibility of the state not meeting the terms of the agreements is considered remote.

Total debt service requirements for certificates of participation to maturity as of June 30, 2018, are as follows (expressed in thousands):

	Governmental Activities		Business-Type Activities		Totals	
Certificates of Participation	Principal	Interest	Principal	Interest	Principal	Interest
By Fiscal Year:						
2019	$ 155,175	$ 50,864	$ 5,375	$ 1,762	$ 160,550	$ 52,626
2020	73,586	26,257	12,925	4,612	86,511	30,869
2021	61,505	22,945	10,804	4,030	72,309	26,975
2022	56,249	20,065	9,880	3,525	66,129	23,590
2023	48,830	17,399	8,577	3,056	57,407	20,455
2024-2028	169,793	58,512	29,825	10,278	199,618	68,790
2029-2033	99,919	26,814	17,551	4,710	117,470	31,524
2034-2038	62,969	9,704	11,061	1,705	74,030	11,409
2039-2043	7,783	1,205	1,367	212	9,150	1,417
Total Debt Service Requirements	$ 735,809	$ 233,765	$ 107,365	$ 33,890	$ 843,174	$ 267,655

C. DEBT REFUNDINGS

When advantageous and permitted by statute and bond covenants, the State Finance Committee authorizes the refunding of outstanding bonds and certificates of participation. Colleges and universities may also refund revenue bonds.

When the state refunds outstanding bonds, the net proceeds of each refunding issue are used to purchase U.S. government securities that are placed in irrevocable trusts with escrow agents to provide for all future debt service payments on the refunded bonds.

As a result, the refunded bonds are considered defeased and the liability is removed from the government-wide statement of net position.

Current Year Defeasances

Bonds

Governmental Activities
On October 11, 2017, the state issued $27.3 million of various purpose general obligation refunding bonds with an average interest rate of 5 percent to refund $29.7 million of various purpose general obligation refunding bonds with an average interest rate of 5 percent. The refunding resulted in a $3.1 million gross debt service savings over the next five years and an economic gain of $3.0 million.

Also on October 11, 2017, the state issued $29.3 million of motor vehicle fuel tax general obligation refunding bonds with an average interest rate of 5 percent to refund $32.1 million of motor vehicle fuel tax general obligation refunding bonds with an average interest rate of 5 percent. The refunding resulted in a $3.5 million gross debt service savings over the next six years and an economic gain of $3.5 million.

On December 7, 2017, the state issued $742.6 million of various purpose general obligation refunding bonds with an average interest rate of 5 percent to refund $813.9 million of various purpose general obligation refunding bonds with an average interest rate of 5 percent. The refunding resulted in a $137.8 million gross debt service savings over the next 18 years and an economic gain of $107.8 million.

On December 20, 2017, the state issued $501.5 million of various purpose general obligation refunding bonds with an average interest rate of 5 percent to refund $536.2 million of various purpose general obligation refunding bonds with an average interest rate of 5 percent. The refunding resulted in a $69.2 million gross debt service savings over the next 18 years and an economic gain of $52.5 million.

On June 20, 2018, the Tobacco Settlement Authority (TSA) issued $43.6 million in TSA refunding bonds with an average interest rate of 3 percent to refund $47.5 million of TSA bonds with an average interest rate of 5 percent. The refunding resulted in $17.5 million gross debt service savings over the next five years and an economic gain of $8.7 million.

Business-Type Activities
On December 21, 2017, the Western Washington University issued $10.7 million in housing and dining revenue refunding bonds with an average interest rate of 3.8 percent to refund $12.2 million of housing and dining revenue bonds with an average interest rate of 7.0 percent. The refunding resulted in $2.3 million gross debt service savings over the next 15 years and an economic gain of $306 thousand.

Prior Year Defeasances

In prior years, the state defeased certain general obligation bonds, revenue bonds, and certificates of participation by placing the proceeds of new bonds and certificates of participation in an irrevocable trust to provide for all future debt service payments on the prior bonds and certificates of participation.

Accordingly, the trust account assets and the liability for the defeased bonds and certificates of participation are not included in the state's financial statements.

General Obligation Bond Debt
On June 30, 2018, $3.20 billion of general obligation bond debt outstanding is considered defeased.

Revenue Bond Debt
On June 30, 2018, $13.4 million of revenue bond debt outstanding is considered defeased.

Certificates of Participation Debt
On June 30, 2018, $60.2 million of certificates of participation debt outstanding is considered defeased.

D. LEASES

Leases at June 30, 2018, are reported by the state of Washington within governmental activities and business-type activities, as applicable.

The state leases land, office facilities, office and computer equipment, and other assets under a variety of agreements. Although lease terms vary, most leases are subject to appropriation from the Legislature to continue the obligation. If the possibility of receiving no funding from the Legislature is remote, leases are considered noncancelable for financial reporting purposes. Leases that represent acquisitions are classified as capital leases, and the related assets and liabilities are recorded in the financial records at the inception of the lease.

Other 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.

Land, buildings, and equipment under capital leases as of June 30, 2018, include the following (expressed in thousands):

	Governmental Activities	Business-Type Activities
Buildings	$ 6,680	$ 4,512
Equipment	5,502	13,762
Less: Accumulated Depreciation	(2,952)	(11,681)
Totals	$ 9,230	$ 6,593

The following schedule presents future minimum payments for capital and operating leases as of June 30, 2018, (expressed in thousands):

	Capital Leases		Operating Leases	
Capital and Operating Leases	**Governmental Activities**	**Business-Type Activities**	**Governmental Activities**	**Business-Type Activities**
By Fiscal Year:				
2019	$ 982	$ 2,680	$ 225,804	$ 49,713
2020	889	2,273	208,509	47,800
2021	722	1,943	184,817	38,399
2022	665	1,740	150,287	31,886
2023	658	1,046	138,911	27,031
2024-2028	1,046	—	412,954	58,857
2029-2033	1,153	—	40,471	49,588
2034-2038	1,433	—	24,284	56,219
2039-2043	2,334	—	14,173	63,904
2044-2048	—	—	1,687	75,102
Total Future Minimum Payments	9,882	9,682	1,401,897	498,499
Less: Executory Costs and Interest Costs	(154)	(616)	—	—
Net Present Value of Future Minimum Lease Payments	$ 9,728	$ 9,066	$ 1,401,897	$ 498,499

The total operating lease rental expense for fiscal year 2018 for governmental activities was $415.2 million, of which $145 thousand was for contingent rentals. The total operating lease rental expense for fiscal year 2018 for business-type activities was $43.5 million.

E. CLAIMS AND JUDGMENTS

Claims and judgments are materially related to three activities: workers' compensation, risk management, and health insurance. Workers' compensation is a business-type activity, and risk management and health insurance are governmental activities. A description of the risks to which the state is exposed by these activities, and the ways in which the state handles the risks, is presented in Note 1.E.

Workers' Compensation

At June 30, 2018, $39.12 billion of unpaid claims and claim adjustment expenses are presented at their net present and settlement value of $27.77 billion. These claims are discounted at assumed interest rates of 1.5 percent (non-pension and cost of living adjustments), 6.1 percent for all self-insured pension annuities and state fund pension annuities expected to be granted between July 1, 2018, and March 31, 2019, and 4.5 percent for the remaining state fund pension annuities to arrive at a settlement value.

The claims and claim adjustment liabilities of $27.77 billion as of June 30, 2018, include $14.02 billion for supplemental pension cost of living adjustments (COLAs) that by statute are not to be fully funded. These COLA payments are funded on a pay-as-you-go basis, and the workers' compensation actuaries have indicated that future premium payments will be sufficient to pay these claims as they come due.

The remaining claims liabilities of $13.75 billion are fully funded by long-term investments, net of obligations under securities lending agreements.

Changes in the balances of workers' compensation claims liabilities during fiscal years 2017 and 2018 were as follows (expressed in thousands):

Workers' Compensation Fund	Balances Beginning of Fiscal Year	Incurred Claims and Changes in Estimates	Claim Payments	Balances End of Fiscal Year
2017	$ 25,852,326	3,030,714	(2,242,502)	$ 26,640,538
2018	$ 26,640,538	3,445,361	(2,311,596)	$ 27,774,303

Risk Management

The Risk Management Fund administers tort and sundry claims filed against Washington state agencies, except the University of Washington and the Department of Transportation Ferries Division. The fund reports a tort liability when it becomes probable that a loss has occurred and the amount of that loss can be reasonably estimated. Liabilities include an actuarially determined amount for tort claims that have been incurred but not reported. It also includes an actuarial estimate of loss adjustment expenses for tort defense.

Because actual liabilities depend on such complex factors as inflation, changes in legal doctrines, and damage awards, it should be recognized that future loss emergence will likely deviate, perhaps materially, from the actuarial estimates. Liabilities are re-evaluated annually to take into consideration recently settled claims, the frequency of claims, and other economic or social factors.

The state is a defendant in a significant number of lawsuits pertaining to general and automobile liability matters.

As of June 30, 2018, outstanding and actuarially determined claims against the state and its agencies, with the exception of the University of Washington and the Department of Transportation Ferries Division, including actuarially projected defense costs were $614.9 million for which the state has recorded a liability. The state is restricted by law from accumulating funds in the Self Insurance Liability Program in excess of 50 percent of total outstanding and actuarially determined liabilities.

Changes in the balances of risk management claims liabilities during fiscal years 2017 and 2018 were as follows (expressed in thousands):

Risk Management Fund	Balances Beginning of Fiscal Year	Incurred Claims and Changes in Estimates	Claim Payments	Tort Defense Payments	Balances End of Fiscal Year
2017	$ 568,821	182,654	(128,620)	(19,828)	$ 603,027
2018	$ 603,027	119,033	(85,174)	(21,974)	$ 614,912

Health Insurance

The Health Insurance Fund establishes a liability when it becomes probable that a loss has occurred and the amount of that loss can be reasonably estimated. Liabilities include an actuarially determined amount for claims that have been incurred but not reported. Because actual claims liabilities depend on various complex factors, the process used in computing claims liabilities does not always result in an exact amount.

Claims liabilities are re-evaluated periodically to take into consideration recently settled claims, the frequency of claims, and other economic or social factors.

At June 30, 2018, health insurance claims liabilities totaling $92.4 million are fully funded with cash and investments, net of obligations under securities lending agreements.

Changes in the balances of health insurance claims liabilities during fiscal years 2017 and 2018 were as follows (expressed in thousands):

Health Insurance Fund	Balances Beginning of Fiscal Year	Incurred Claims and Changes in Estimates	Claim Payments	Balances End of Fiscal Year
2017	$ 87,370	1,086,732	(1,090,211)	$ 83,891
2018	$ 83,891	1,204,084	(1,195,596)	$ 92,379

F. POLLUTION REMEDIATION

The state reports pollution remediation obligations in accordance with GASB Statement No. 49. The liability reported involves estimates of financial responsibility and amounts recoverable as well as remediation costs.

The liability could change over time as new information becomes available and as a result of changes in remediation costs, technology, and regulations governing remediation efforts. Additionally, the responsibilities and liabilities discussed in this disclosure are intended to refer to obligations solely in the accounting context. This disclosure does not constitute an admission of any legal responsibility or liability. Further, it does not establish or affect the rights or obligations of any person under the law, nor does this disclosure impose upon the state any new mandatory duties or obligations.

The state and its agencies are participating as potentially responsible parties in numerous pollution remediation projects under the provisions of the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, generally referred to as Superfund) and the state Model Toxics Control Act.

There are 30 projects in progress for which the state has recorded a liability of $57.1 million.

The state has also voluntarily agreed to conduct certain remediation activities to the extent of funding paid to the state by third parties for such purposes. At June 30, 2018, the state has recorded a liability of $94.3 million for remaining project commitments.

Overall, the state has recorded a pollution remediation liability of $151.4 million, measured at its estimated amount, using the expected cash flow technique. The overall estimate is based on professional judgment, experience, and historical cost data. For some projects, the state can reasonably estimate the range of expected outlays early in the process because the site situation is common or similar to other sites with which the state has experience. In other cases, the estimates are limited to an amount specified in a settlement agreement, consent decree, or contract for remediation services.

The pollution remediation activity at some sites for which the state would otherwise have a reportable obligation is at a point where certain costs are not reasonably estimable. For example, a site assessment, remedial investigation, or feasibility study is in progress and the cleanup methodology has not yet been determined; consequently, associated future costs cannot be estimated.

The state's reported liability does not include remediation costs for future activities where costs are not yet reasonably estimable.

G. LONG-TERM LIABILITY ACTIVITY

Long-term liability activity at June 30, 2018, is reported by the state of Washington within governmental activities and business-type activities, as applicable.

Long-term liability activity for governmental activities for fiscal year 2018 is as follows (expressed in thousands):

Governmental Activities:	Beginning Balance July 1, 2017*	Additions	Reductions	Ending Balance June 30, 2018	Amounts Due Within One Year
Long-Term Debt:					
GO Bonds Payable:					
General obligation (GO) bonds	$ 18,779,990	$ 2,376,160	$ 2,333,780	$ 18,822,370	$ 935,340
GO - zero coupon bonds (principal)	412,247	—	53,529	358,718	51,389
Subtotal - GO bonds payable	19,192,237	2,376,160	2,387,309	19,181,088	986,729
Accreted interest - GO - zero coupon bonds	457,635	—	24,263	433,372	71,986
Revenue bonds payable	2,318,777	159,877	181,559	2,297,095	127,990
Plus: Unamortized premiums on bonds sold	1,391,058	446,226	106,468	1,730,816	—
Total Bonds Payable	23,359,707	2,982,263	2,699,599	23,642,371	1,186,705
Other Liabilities:					
Certificates of participation	730,725	79,283	74,199	735,809	155,175
Plus: Unamortized premiums on COPs sold	20,790	3,563	4,426	19,927	—
Claims and judgments payable	995,795	108,753	98,038	1,006,510	329,188
Installment contracts	1,591	—	137	1,454	137
Leases	3,256	6,995	523	9,728	930
Compensated absences	625,798	485,795	425,895	685,698	100,317
Net pension liability	4,999,552	884,614	1,840,034	4,044,132	11,994
OPEB liability	5,472,738	465,114	822,600	5,115,252	80,952
Pollution remediation obligations	150,853	7,228	6,667	151,414	—
Unclaimed property refunds	197,411	46,593	—	244,004	6,230
Other	505,821	114,509	290,702	329,628	27,078
Total Other Liabilities	13,704,330	2,202,447	3,563,221	12,343,556	712,001
Total Long-Term Debt	$ 37,064,037	$ 5,184,710	$ 6,262,820	$ 35,985,927	$ 1,898,706

* The beginning balance of net pension liability has been restated by $3.3 million as a result of a reclassification of the net pension liability between governmental activities and business type activities. The beginning balance of the OPEB liability has been restated by $2.60 billion as a result of implementing GASB Statement No. 75. The beginning balance of other liabilities has been restated by $55.4 million as a result of implementing GASB Statement No. 81.

For governmental activities, certificates of participation are being repaid approximately 26 percent from the General Fund, 36 percent from the Higher Education Special Revenue Fund, 16 percent from the Motor Vehicle Fund (a nonmajor special revenue fund), and the balance from various governmental funds. The compensated absences liability will be liquidated approximately 45 percent by the General Fund, 34 percent by the Higher Education Special Revenue Fund, and the balance by various other governmental funds. The claims and judgments liability will be liquidated approximately 61 percent by the Risk Management Fund (a nonmajor internal service fund), 12 percent by the Health Insurance Fund (a nonmajor internal service fund), and the balance by various other governmental funds. The other post employment benefits liability will be liquidated approximately 40 percent by the General Fund, 28 percent by the Higher Education Special Revenue Fund, and the balance by various other governmental funds. The net pension liability will be liquidated approximately 47 percent by the General Fund, 33 percent by the Higher Education Special Revenue Fund, and the balance by various other governmental funds. The pollution remediation liability will be liquidated approximately 81 percent by the Wildlife and Natural Resources Fund (a nonmajor governmental fund), and the balance by various other governmental funds. The unclaimed property refunds will be liquidated against future unclaimed property deposited to the General Fund. Leases, installment contract obligations, and other liabilities will be repaid from various other governmental funds.

Long-term liability activity for business-type activities for fiscal year 2018 is as follows (expressed in thousands):

Business-Type Activities	Beginning Balance July 1, 2017*	Additions	Reductions	Ending Balance June 30, 2018	Amounts Due Within One Year
Long-Term Debt:					
Revenue bonds payable	$ 2,125,264	$ 107,338	$ 91,628	$ 2,140,974	$ 79,446
Plus: Unamortized premiums on bonds sold	182,042	20,321	16,843	185,520	—
Total Bonds Payable	2,307,306	127,659	108,471	2,326,494	79,446
Other Liabilities:					
Certificates of participation	82,865	29,216	4,716	107,365	5,375
Plus: Unamortized premiums on COPs sold	8,984	4,301	499	12,786	—
Claims and judgments payable	26,659,065	2,327,112	1,194,882	27,791,295	2,231,085
Installment contracts	65,718	139	3,162	62,695	3,162
Lottery prize annuities payable	121,376	35,256	29,120	127,512	14,132
Tuition benefits payable	1,740,000	93,916	126,916	1,707,000	173,000
Leases	9,396	1,901	2,231	9,066	2,423
Compensated absences	83,731	34,836	33,419	85,148	52,170
Net pension liability	666,635	90,215	240,730	516,120	658
OPEB liability	765,652	59,503	118,455	706,700	11,183
Other	81,921	12,460	14,790	79,591	8,724
Total Other Liabilities	30,285,343	2,688,855	1,768,920	31,205,278	2,501,912
Total Long-Term Debt	$ 32,592,649	$ 2,816,514	$ 1,877,391	$ 33,531,772	$ 2,581,358

* The beginning balance of net pension liability has been restated by $3.3 million as a result of a reclassification of the net pension liability between governmental activities and business-type activities. The beginning balance of the OPEB liability has been restated by $447.2 million as a result of implementing GASB Statement No. 75.

Note 8
No Commitment Debt

The Washington State Housing Finance Commission, Washington Higher Education Facilities Authority, Washington Health Care Facilities Authority, and Washington Economic Development Finance Authority (financing authorities) were created by the Legislature. For financial reporting purposes, they are discretely presented as component units. These financing authorities issue bonds for the purpose of making loans to qualified borrowers for capital acquisitions, construction, and related improvements.

These bonds do not constitute either a legal or moral obligation of the state or these financing authorities, nor does the state or these financing authorities pledge their full faith and credit for the payment of such bonds.

Debt service on the bonds is payable solely from payments made by the borrowers pursuant to loan agreements. Due to their no commitment nature, the bonds issued by these financing authorities are excluded from the state's financial statements.

The schedule below presents the June 30, 2018, balances for the "No Commitment" debt of the state's financing authorities (expressed in thousands):

Financing Authorities	Principal Balance
Washington State Housing Finance Commission	$ 4,800,559
Washington Health Care Facilities Authority	5,832,545
Washington Higher Education Facilities Authority	624,856
Washington Economic Development Finance Authority	841,794
Total No Commitment Debt	$ 12,099,754

Note 9
Governmental Fund Balances

A. GOVERNMENTAL FUNDS

The state's governmental fund balances are reported according to the relative constraints that control how amounts can be spent. Classifications include nonspendable, restricted, committed, and assigned, which are further described in Note 1.D.9.

A summary of governmental fund balances at June 30, 2018, is as follows (expressed in thousands):

Fund Balances	General	Higher Education Special Revenue	Higher Education Endowment	Nonmajor Governmental Funds	Total
Nonspendable:					
Permanent funds	$ —	$ —	$ 2,466,357	$ 207,906	$ 2,674,263
Consumable inventories	13,461	29,046	—	48,766	91,273
Other receivables – long-term	31,939	16,246	—	—	48,185
Total Nonspendable Fund Balance	$ 45,400	$ 45,292	$ 2,466,357	$ 256,672	$ 2,813,721
Restricted for: *					
Higher education	$ —	$ 45,529	$ 1,659,874	$ 60,069	$ 1,765,472
Education	105,200	—	11,368	36,605	153,173
Transportation	—	—	—	1,359,304	1,359,304
Other purposes	—	—	—	5,889	5,889
Human services	—	—	1,521	553,258	554,779
Wildlife and natural resources	—	—	1	1,089,026	1,089,027
Local grants and loans	—	—	—	171	171
School construction	1,511	—	—	32,583	34,094
State facilities	—	—	—	274,454	274,454
Budget stabilization	1,369,438	—	—	—	1,369,438
Debt service	—	—	—	53,201	53,201
Pollution remediation	—	—	—	47,157	47,157
Operations and maintenance	—	—	—	9,654	9,654
Repair and replacement	—	—	—	20,404	20,404
Revenue stabilization	—	—	—	28,805	28,805
Deferred Sales Tax	—	—	—	1,000	1,000
Third tier debt service	—	—	—	6,827	6,827
Fourth tier debt service	—	—	—	1,843	1,843
Total Restricted Fund Balance	$ 1,476,149	$ 45,529	$ 1,672,764	$ 3,580,250	$ 6,774,692
Committed for:					
Higher education	$ 111,692	$ 2,745,732	$ —	$ 58,802	$ 2,916,226
Education	494	—	—	3,254	3,748
Transportation	—	—	—	415,476	415,476
Other purposes	255,527	—	—	326,828	582,355
Human services	—	—	—	769,907	769,907
Wildlife and natural resources	20,217	—	—	470,306	490,523
Local grants and loans	—	—	—	918,084	918,084
State facilities	—	—	—	12,911	12,911
Debt service	—	—	—	343,713	343,713
Total Committed Fund Balance	$ 387,930	$ 2,745,732	$ —	$ 3,319,281	$ 6,452,943
Assigned for:					
Working capital	$ 1,513,952	$ 18,300	$ —	$ —	$ 1,532,252
Total Assigned Fund Balance	$ 1,513,952	$ 18,300	$ —	$ —	$ 1,532,252

*Net position restricted as a result of enabling legislation totaled $8.2 million.

B. Budgetary Stabilization Account

In accordance with Article 7, Section 12 of the Washington State Constitution, the state maintains the Budget Stabilization Account ("Rainy Day Fund"). The Budget Stabilization Account is reported in the General Fund.

By June 30 of each fiscal year, an amount equal to 1 percent of the general state revenues for that fiscal year is transferred to the Budget Stabilization Account.

The Budget Stabilization Account balance can only be used as follows: (a) if the Governor declares a state of emergency resulting from a catastrophic event that necessitates government action to protect life or public safety, then for that fiscal year money may be withdrawn and appropriated from the Budget Stabilization Account, via separate legislation setting forth the nature of the emergency and containing an appropriation limited to the above-authorized purposes as contained in the declaration, by a favorable vote of a majority of the members elected to each house of the Legislature; (b) if the employment growth forecast for any fiscal year is estimated to be less than 1 percent, then for that fiscal year money may be withdrawn and appropriated from the Budget Stabilization Account by the favorable vote of a majority of the members elected to each house of the Legislature; (c) any amount may be withdrawn and appropriated from the Budget Stabilization Account at any time by the favorable vote of at least three-fifths of the members of each house of the Legislature.

When the balance in the Budget Stabilization Account, including investment earnings, equals more than 10 percent of the estimated general state revenues in that fiscal year, the Legislature by the favorable vote of a majority of the members elected to each house of the Legislature may withdraw and appropriate the balance to the extent that the balance exceeds 10 percent of the estimated general state revenues. These appropriations may be made solely for deposit to the Education Construction Fund.

At June 30, 2018, the Budget Stabilization Account had restricted fund balance of $1.37 billion.

Note 10
Deficit Net Position

Data Processing Revolving Fund

The Data Processing Revolving Fund, an internal service fund, had a deficit net position of $102.3 million at June 30, 2018. The Data Processing Revolving Fund is primarily used to account for and report activities such as data processing and communication services to other state agencies.

The Data Processing Revolving Fund is supported by user charges. Due to budgetary considerations, user rates are designed to cover cash outflows including debt service as opposed to the full cost of services which includes depreciation. Since the Data Processing Revolving Fund reports a debt-financed building, this funding approach has an impact on net position. Debt service allocates principal retirement on a straight-line basis. Depreciation on the fund's building is componentized, which accelerates expense in the early years of the building's life. As a result, the fund reports both an operating loss and a negative net investment in capital assets.

The following schedule details the change in net position for the Data Processing Revolving Fund during the fiscal year ended June 30, 2018 (expressed in thousands):

Data Processing Revolving Fund		Net Position
Balance, July 1, 2017, as restated	$	(111,515)
Fiscal year 2018 activity		9,253
Balance, June 30, 2018	$	(102,262)

Risk Management Fund

The Risk Management Fund, an internal service fund, had a deficit net position of $646.8 million at June 30, 2018. The Risk Management Fund is used to administer the Self-Insurance Liability Program (SILP). The SILP was initiated in 1990 and is intended to provide funds for the payment of all tort claims and defense expenses. The program investigates, processes, and adjudicates tort and sundry claims filed against Washington state agencies, with the exception of the University of Washington and the Department of Transportation Ferries Division.

The Risk Management Fund is supported by premium assessments to state agencies. The state is restricted by law from accumulating funds in the SILP in excess of 50 percent of total outstanding and actuarially determined claims. As a consequence, when outstanding and incurred but not reported claims are actuarially determined and accrued, the result is a deficit net position.

The following schedule details the change in net position for the Risk Management Fund during the fiscal year ended June 30, 2018 (expressed in thousands):

Risk Management Fund		Net Position
Balance, July 1, 2017, as restated	$	(603,701)
Fiscal year 2018 activity		(43,125)
Balance, June 30, 2018	$	(646,826)

Note 11
Retirement Plans

A. GENERAL

Washington's pension plans were created by statutes rather than through trust documents. With the exception of the supplemental defined benefit component of the higher education retirement plan, they are administered in a way equivalent to pension trust arrangements as defined by the GASB.

In accordance with Statement No. 68, the state has elected to use the prior fiscal year end as the measurement date for reporting net pension liabilities.

The state Legislature establishes and amends laws pertaining to the creation and administration of all state public retirement systems. Additionally, the state Legislature authorizes state agency participation in plans other than those administered by the state.

Basis of Accounting. Pension plans administered by the state are accounted for using the accrual basis of accounting. Under the accrual basis of accounting, employee and employer contributions are recognized in the period in which employee services are performed; investment gains and losses are recognized as incurred; and benefits and refunds are recognized when due and payable in accordance with the terms of the applicable plan. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense, information about the fiduciary net position of all plans, and additions to/deductions from all plan fiduciary net position have been determined in all material respects on the same basis as they are reported by the plans.

The following table represents the aggregate pension amounts for all plans for the state as an employer, for fiscal year 2018 (expressed in thousands):

Aggregate Pension Amounts - All Plans		
Pension liabilities	$	4,560,252
Pension assets	$	(1,879,613)
Deferred outflows of resources on pensions	$	1,101,529
Deferred inflows of resources on pensions	$	1,112,284
Pension expense/expenditures	$	190,935

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

Retirement funds are invested in the Commingled Trust Fund (CTF). Established on July 1, 1992, the CTF is a diversified pool of investments that invests in 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 written WSIB-adopted investment policies for the various asset classes.

Further information about the investment of pension funds by the WSIB, their valuation, classifications, concentrations, and maturities can be found in Note 3.B.

Department of Retirement Systems. As established in chapter 41.50 of the Revised Code of Washington (RCW), the Department of Retirement Systems (DRS) administers eight retirement systems covering eligible employees of the state and local governments. The Governor appoints the director of the DRS.

The DRS administered systems are comprised of 12 defined benefit pension plans and 3 defined benefit/defined contribution plans as follows:

- Public Employees' Retirement System (PERS)
  - Plan 1 - defined benefit
  - Plan 2 - defined benefit
  - Plan 3 - defined benefit/defined contribution
- Teachers' Retirement System (TRS)
  - 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
- Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF)
  - Plan 1 - defined benefit
  - Plan 2 - defined benefit
- Public Safety Employees' Retirement System (PSERS)
  - Plan 2 - defined benefit
- Washington State Patrol Retirement System (WSPRS)
  - Plan 1 - defined benefit
  - Plan 2 - defined benefit
- Judicial Retirement System (JRS)
  - Defined benefit plan
- Judges' Retirement Fund (Judges)
  - Defined benefit plan

Although some assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan in accordance with the terms of the plan.

Administration of the PERS, TRS, SERS, LEOFF, PSERS, and WSPRS systems and plans is funded by an employer rate of 0.18 percent of employee salaries. Administration of the JRS and Judges plans is funded by means of legislative appropriations.

Pursuant to RCW 41.50.770, the state offers its employees and employees of political subdivisions that elect to participate a deferred compensation program 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. This deferred compensation plan is administered by the DRS.

The DRS prepares a stand-alone financial report that is compliant with the requirements of GASB Statement No. 67. Copies of the report may be obtained by contacting the Washington State Department of Retirement Systems, PO Box 48380, Olympia, WA 98504-8380 or online at http://www.drs.wa.gov/administration/annual-report.

State Board for Volunteer Fire Fighters and Reserve Officers. As established in chapter 41.24 RCW, the State Board for Volunteer Fire Fighters and Reserve Officers administers the Volunteer Fire Fighters' and Reserve Officers' Relief and Pension Fund (VFFRPF), a defined benefit plan. Administration of VFFRPF is funded through legislative appropriation.

Administrative Office of the Courts. As established in chapter 2.14 RCW, the Administrative Office of the Courts administers the Judicial Retirement Account (JRA), a defined contribution plan. Administration of JRA is funded through member fees.

Higher Education. As established in chapter 28B.10 RCW, eligible higher education state employees may participate in higher education retirement plans. These plans include a defined contribution plan administered by a third party with a supplemental defined benefit component (funded on a pay-as-you-go basis) which is administered by the state.

The state has elected to use the current fiscal year end as the measurement date for reporting net pension liabilities for the Higher Education Supplemental Retirement Plan.

B. STATE PARTICIPATION IN PLANS ADMINISTERED BY DRS

1. DRS Plans - Employer Disclosures

The state is not an employer in SERS Plan 2/3 nor LEOFF Plan 1.

Public Employees' Retirement System

Plan Description. The Legislature established the Public Employees' Retirement System (PERS) in 1947. PERS retirement benefit provisions are established in chapters 41.34 and 41.40 RCW and may be amended only by the Legislature. Membership in the system includes: elected officials; state employees; employees of the Supreme Court, Court of Appeals, and Superior Courts (other than judges currently in a judicial retirement system); employees of legislative committees; community and technical colleges, college and university employees not in national higher education retirement programs; judges of district and municipal courts; and employees of local governments.

PERS is a cost-sharing, multiple-employer retirement system comprised of three separate plans for membership purposes: Plans 1 and 2 are defined benefit plans and Plan 3 is a combination defined benefit/defined contribution plan. Although members can only be a member of either 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 this 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, as defined by the terms of the plan. Therefore, Plan 2/3 is considered a single defined benefit plan for reporting purposes. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

PERS members who joined the system by September 30, 1977, are Plan 1 members. Plan 1 is closed to new entrants. Those who joined on or after October 1, 1977, and by February 28, 2002, for state and higher education employees, or August 31, 2002, for local government employees, are Plan 2 members unless they exercised an option to transfer their membership to PERS Plan 3.

PERS participants joining the system on or after March 1, 2002, for state and higher education employees, or September 1, 2002, for local government employees, have the irrevocable option of choosing membership in either PERS Plan 2 or PERS Plan 3. The option must be exercised within 90 days of employment. Employees who fail to choose within 90 days default to PERS Plan 3.

Refer to Note 11.E for a description of the defined contribution component of PERS Plan 3.

Benefits Provided. PERS plans provide retirement, disability, and death benefits to eligible members.

PERS Plan 1 members are vested after the completion of five years of eligible service. Plan 1 members are eligible for retirement after 30 years of service, or at the age of 60 with five years of service, or at the age of 55 with 25 years of service. The monthly benefit is 2 percent of the average final compensation (AFC) per year of service, capped at 60 percent. The AFC is the average of the member's 24 highest consecutive service months.

PERS Plan 1 members retiring from inactive status prior to the age of 65 may receive actuarially reduced benefits. Plan 1 members may elect to receive an optional cost of living allowance (COLA) that provides an automatic annual adjustment based on the Consumer Price Index. The adjustment is capped at 3 percent annually. To offset the cost of this annual adjustment, the benefit is reduced.

PERS Plan 2 members are vested after completing five years of eligible service. Plan 2 members are eligible for normal retirement at the age of 65 with five years of service. The monthly benefit is 2 percent of the AFC per year of service. There is no cap on years of service credit and a COLA is granted based on the Consumer Price Index, capped at 3 percent annually. The AFC is the average of the member's 60 highest paid consecutive months. PERS Plan 2 members have the option to retire early with reduced benefits.

The defined benefit portion of PERS Plan 3 provides members a monthly benefit that is 1 percent of the AFC per year of service. There is no cap on years of service credit. Plan 3 provides the same COLA as Plan 2. The AFC is the average of the member's 60 highest paid consecutive months.

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 are earned after age 44. PERS Plan 3 members have the option to retire early with reduced benefits.

PERS members meeting specific eligibility requirements have options available to enhance their retirement benefits. Some of these options are available to their survivors, with reduced benefits.

The Judicial Benefit Multiplier (JBM) Program began January 1, 2007. This program gave eligible justices and judges an option to increase the benefit multiplier used in their retirement benefit calculation for their judicial service periods of employment. Beginning January 1, 2007, any justice or judge who was in a judicial position at that time could choose to join JBM. Any justice or judge elected or appointed to office on or after January 1, 2007, who elects to join DRS membership will also be mandated into JBM. If they have already established membership in PERS or TRS Plan 1 they will rejoin that plan, but if they have never had membership they will be enrolled as a member of both PERS Plan 2 and JBM.

Contributions. PERS defined benefit retirement benefits are financed from a combination of investment earnings and employer and employee contributions.

Each biennium, the state Pension Funding Council adopts Plan 1 employer contribution rates, Plan 2 employer and employee contribution rates, and Plan 3 employer contribution rates. The methods used to determine contribution requirements are established under state statute.

Members in PERS Plan 1 and Plan 2 can elect to withdraw total employee contributions and interest thereon, in lieu of any retirement benefit, upon separation from PERS-covered employment.

PERS JBM members and employers pay increased contributions that, along with investment earnings, fund the increased retirement benefits of those justices and judges who participate in the program.

Required contribution rates for fiscal year 2018 are presented in the table in Note 11.B.3.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2017, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	3.75%
Investment rate of return	7.50%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary (OSA) applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which a best estimate of expected future rates of return (expected returns, net of pension plan investment expense, but including inflation) are developed for each major asset class by the WSIB. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs). The CMAs contain the following 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 Office of the State Actuary (OSA) selected a 7.50 percent long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns provided by the WSIB. Refer to the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional background on how this assumption was selected.

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, 2017, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed Income	20%	1.7%
Tangible Assets	5%	4.9%
Real Estate	15%	5.8%
Global Equity	37%	6.3%
Private Equity	23%	9.3%
Total	100%	

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

There were no material changes in assumptions, benefit terms, or methods for the reporting period.

Discount rate. The discount rate used to measure the total pension liability was 7.50 percent, the same as the prior measurement date. 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. Consistent with current law, the completed asset sufficiency test included an assumed 7.70 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a 7.50 percent future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates (including PERS Plan 2/3, PSERS Plan 2, and SERS Plan 2/3 employers whose rates include a component for the PERS Plan 1 liability). Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.50 percent on pension plan investments was applied to determine the total pension liability.

Collective Net Pension Liability/(Asset). At June 30, 2018, the state reported $1.99 billion for its proportionate share of the collective net pension liability for PERS Plan 1 and $1.74 billion for PERS Plan 2/3. The state's proportion for PERS Plan 1 was 41.88 percent, a decrease of 0.11 percent since the prior reporting period, and 50.20 percent for PERS Plan 2/3, an increase of 0.48 percent. The proportions are based on the state's contributions to the pension plan relative to the contributions of all participating employers.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the state as an employer, calculated using the discount rate of 7.50 percent, as well as what the net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (6.50 percent) or 1 percentage point higher (8.50 percent) than the current rate (expressed in thousands):

PERS Plan 1 Employer's proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	2,420,873
Current Discount Rate	$	1,987,268
1% Increase	$	1,611,674

PERS Plan 2/3 Employer's proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	4,698,698
Current Discount Rate	$	1,744,067
1% Increase	$	(676,816)

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state recognized a PERS Plan 1 pension expense of $118.1 million, and recognized a PERS Plan 2/3 pension expense of $258.8 million. At June 30, 2018, PERS Plan 1 and PERS Plan 2/3 reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

PERS Plan 1	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ —
Changes of assumptions	—	—
Net difference between projected and actual earnings on pension plan investments	—	74,159
Change in proportion	—	—
State contributions subsequent to the measurement date	283,181	—
Total	$ 283,181	$ 74,159

PERS Plan 2/3	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 176,715	$ 57,359
Changes of assumptions	18,525	—
Net difference between projected and actual earnings on pension plan investments	—	464,926
Change in proportion	33,878	2,190
State contributions subsequent to the measurement date	392,487	—
Total	$ 621,605	$ 524,475

For PERS Plan 1, $283.2 million, and for PERS Plan 2/3, $392.5 million, reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

PERS Plan 1		
2019	$	(50,127)
2020	$	15,826
2021	$	(3,675)
2022	$	(36,183)
2023	$	—
Thereafter	$	—

PERS Plan 2/3		
2019	$	(175,010)
2020	$	57,729
2021	$	(36,415)
2022	$	(184,209)
2023	$	18,499
Thereafter	$	24,049

Teachers' Retirement System

Plan Description. The Legislature established the Teachers' Retirement System (TRS) in 1938. TRS retirement benefit provisions are established in chapters 41.32 and 41.34 RCW and may be amended only by the Legislature. Eligibility for membership requires service as a certificated public school employee working in an instructional, administrative, or supervisory capacity. TRS is comprised principally of non-state agency employees.

TRS is a cost-sharing, multiple-employer retirement system comprised 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. Although members can only be a member of either 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 this 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, as defined by the terms of the plan. Therefore, Plan 2/3 is considered a single defined benefit plan for reporting purposes. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

TRS members who joined the system by September 30, 1977, are Plan 1 members. Plan 1 is closed to new entrants. Those who joined on or after October 1, 1977, and by June 30, 1996, are Plan 2 members unless they exercised an option to transfer their membership to Plan 3. TRS members joining the system on or after July 1, 1996, are members of TRS Plan 3.

Legislation passed in 2007 gives TRS members hired on or after July 1, 2007, 90 days to make an irrevocable choice to become a member of TRS Plan 2 or Plan 3. At the end of 90 days, any member who has not made a choice becomes a member of Plan 3.

Refer to Note 11.E for a description of the defined contribution component of TRS Plan 3.

Benefits Provided. TRS plans provide retirement, disability, and death benefits to eligible members.

TRS Plan 1 members are vested after the completion of five years of eligible service. Plan 1 members are eligible for retirement at any age after 30 years of service, or at the age of 60 with five years of service, or at the age of 55 with 25 years of service. The monthly benefit is 2 percent of the average final compensation (AFC) for each year of service credit, up to a maximum of 60 percent. The AFC is the total earnable compensation for the two consecutive highest-paid fiscal years, divided by two.

TRS Plan 1 members may elect to receive an optional cost of living allowance (COLA) amount based on the Consumer Price Index, capped at 3 percent annually. To offset the cost of this annual adjustment, the benefit is reduced.

TRS Plan 2 members are vested after completing five years of eligible service. Plan 2 members are eligible for normal retirement at the age of 65 with five years of service. The monthly benefit is 2 percent of the AFC per year of service. A COLA is granted based on the Consumer Price Index, capped at 3 percent annually. The AFC is the average of the member's 60 highest paid consecutive months.

TRS Plan 2 members have the option to retire early with reduced benefits.

The defined benefit portion of TRS Plan 3 provides members a monthly benefit that is 1 percent of the AFC per year of service. Plan 3 provides the same COLA as Plan 2. The AFC is the average of the member's 60 highest paid consecutive months.

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.

TRS Plan 3 members have the option to retire early with reduced benefits.

TRS members meeting specific eligibility requirements have options available to enhance their retirement benefits. Some of these options are available to their survivors, with reduced benefits.

The Judicial Benefit Multiplier (JBM) Program began January 1, 2007. This program gave eligible justices and judges an option to increase the benefit multiplier used in their retirement benefit calculation for their judicial service periods of employment. Beginning January 1, 2007, any justice or judge who was in a judicial position at that time could choose to join JBM. Any justice or judge elected or appointed to office on or after January 1, 2007, who elects to join DRS membership will also be mandated into JBM. If they have already established membership in PERS or TRS Plan 1 they will rejoin that plan, but if they have never had membership they will be enrolled as a member of both PERS Plan 2 and JBM.

Contributions. TRS defined benefit retirement benefits are financed from a combination of investment earnings and employer and employee contributions.

Each biennium, the state Pension Funding Council adopts Plan 1 employer contribution rates, Plan 2 employer and employee contribution rates, and Plan 3 employer contribution rates. The methods used to determine contribution requirements are established under state statute.

Members in TRS Plan 1 and Plan 2 can elect to withdraw total employee contributions and interest thereon, in lieu of any retirement benefit, upon separation from TRS-covered employment.

TRS JBM members and employers pay increased contributions that, along with investment earnings, fund the increased retirement benefits of those justices and judges who participate in the program.

Required contribution rates for fiscal year 2018 are presented in the table in Note 11.B.3.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2017, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	3.75%
Investment rate of return	7.50%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which a best estimate of expected future rates of return (expected returns, net of pension plan investment expense, but including inflation) are developed for each major asset class by the WSIB. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs). The CMAs contain the following 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 Office of the State Actuary (OSA) selected a 7.50 percent long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns provided by the WSIB. Refer to the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional background on how this assumption was selected.

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, 2017, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed Income	20%	1.7%
Tangible Assets	5%	4.9%
Real Estate	15%	5.8%
Global Equity	37%	6.3%
Private Equity	23%	9.3%
Total	100%	

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

There were no material changes in assumptions, benefit terms, or methods for the reporting period.

Discount Rate. The discount rate used to measure the total pension liability was 7.50 percent, the same as the prior measurement date. 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. Consistent with current law, the completed asset sufficiency test included an assumed 7.70 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a 7.50 percent future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates (including TRS Plan 2/3, whose rates include a component for the TRS Plan 1 liability). Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.50 percent on pension plan investments was applied to determine the total pension liability.

Collective Net Pension Liability/(Asset). At June 30, 2018, the state reported a liability of $31.2 million for its proportionate share of the collective net pension liability for TRS Plan 1 and $8.9 million for TRS Plan 2/3. The state's proportion for TRS Plan 1 was 1.03 percent, an increase of 0.06 percent since the prior reporting period, and 0.96 percent for TRS Plan 2/3, an increase of 0.09 percent. The proportions are based on the state's contributions to the pension plan relative to the contributions of all participating employers.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the state as an employer, calculated using the discount rate of 7.50 percent, as well as what the net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (6.50 percent) or 1 percentage point higher (8.50 percent) than the current rate (expressed in thousands):

TRS Plan 1 Employer's proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	38,762
Current Discount Rate	$	31,172
1% Increase	$	24,603

TRS Plan 2/3 Employer's proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	30,136
Current Discount Rate	$	8,873
1% Increase	$	(8,396)

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state recognized a TRS Plan 1 pension expense of $4.1 million, and recognized a TRS Plan 2/3 pension expense of $4.1 million. At June 30, 2018, TRS Plan 1 and TRS Plan 2/3 reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

TRS Plan 1	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ —
Changes of assumptions	—	—
Net difference between projected and actual earnings on pension plan investments	—	1,321
Change in proportion	—	—
State contributions subsequent to the measurement date	4,633	—
Total	$ 4,633	$ 1,321

TRS Plan 2/3	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 2,213	$ 453
Changes of assumptions	105	—
Net difference between projected and actual earnings on pension plan investments	—	3,211
Change in proportion	2,992	—
State contributions subsequent to the measurement date	4,717	—
Total	$ 10,027	$ 3,664

For TRS Plan 1, $4.6 million, and for TRS Plan 2/3, $4.7 million reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

TRS Plan 1		
2019	$	(970)
2020	$	363
2021	$	(32)
2022	$	(682)
2023	$	—
Thereafter	$	—

TRS Plan 2/3		
2019	$	(317)
2020	$	1,341
2021	$	338
2022	$	(1,045)
2023	$	277
Thereafter	$	1,052

Law Enforcement Officers' and Fire Fighters' Retirement System

Plan Description. The Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) was established in 1970 by the Legislature. LEOFF retirement benefit provisions are established in chapter 41.26 RCW and may be amended only by the Legislature. Membership includes all full-time, fully compensated, local law enforcement commissioned officers, fire fighters, and as of July 24, 2005, emergency medical technicians. LEOFF membership is comprised primarily of non-state employees, with Department of Fish and Wildlife enforcement officers who were first included effective July 27, 2003, being an exception.

LEOFF is a cost-sharing, multiple-employer retirement system comprised of two separate defined benefit plans. LEOFF members who joined the system by September 30, 1977, are Plan 1 members. Plan 1 is closed to new entrants. Those who joined on or after October 1, 1977, are Plan 2 members.

Effective July 1, 2003, the LEOFF Plan 2 Retirement Board was established by Initiative 790 to provide governance of LEOFF Plan 2. The Board's duties include adopting contribution rates and recommending policy changes to the Legislature.

Benefits Provided. LEOFF plans provide retirement, disability, and death benefits to eligible members.

LEOFF Plan 1 members are vested after the completion of five years of eligible service. Plan 1 members are eligible for retirement with five years of service at the age of 50. The benefit per year of service calculated as a percent of final average salary (FAS) is as follows:

Years of Service	Percent of FAS
20+	2.0%
10-19	1.5%
5-9	1.0%

A cost of living allowance (COLA) is granted based on the Consumer Price Index.

LEOFF Plan 2 members are vested after the completion of five years of eligible service. Plan 2 members are eligible for retirement at the age of 53 with five years of service, or at age 50 with 20 years of service. Plan 2 members receive a benefit of 2 percent of the FAS per year of service. FAS is based on the highest consecutive 60 months. A COLA is granted based on the Consumer Price Index, capped at 3 percent annually.

LEOFF members have the option to retire early with reduced benefits.

LEOFF members meeting specific eligibility requirements have options available to enhance their retirement benefits. Some of these options are available to their survivors, generally with reduced benefits.

Contributions. LEOFF retirement benefits are financed from a combination of investment earnings, employer and employee contributions, and a special funding situation in which the state pays through legislative appropriations.

Employer and employee contribution rates are developed by the Office of the State Actuary to fully fund the plans. Starting on July 1, 2000, Plan 1 employers and employees are not required to contribute as long as the plan remains fully funded. Plan 2 employers and employees are required to pay at the level adopted by the LEOFF Plan 2 Retirement Board. The methods used to determine contribution requirements are established under state statute.

Members in LEOFF Plan 1 and Plan 2 can elect to withdraw total employee contributions and interest thereon, in lieu of any retirement benefit, upon separation from LEOFF-covered employment.

The Legislature, by means of a special funding arrangement, appropriates money from the state General Fund to supplement the current service liability and fund the prior service costs of Plan 2 in accordance with the recommendations of the Pension Funding Council and the LEOFF Plan 2 Retirement Board. For fiscal year 2017, the state contributed $62.2 million to LEOFF Plan 2.

Beginning in 2011, when state General Fund revenues increase by at least 5 percent over the prior biennium's revenues, the State Treasurer will transfer, subject to legislative appropriation, specific amounts into a Local Public Safety Enhancement Account. Half of this transfer will be proportionately distributed to all jurisdictions with LEOFF Plan 2 members. The other half will be transferred to a LEOFF Retirement System Benefits Improvement Account to fund benefit enhancements for LEOFF Plan 2 members. However, this special funding situation is not mandated by the State Constitution and this funding requirement could be returned to the employers by a change of statute.

Required contribution rates for fiscal year 2018 are presented in the table in Note 11.B.3.

The state is not an employer for LEOFF Plan 1; however, the state is a nonemployer contributing entity for LEOFF Plan 1. For LEOFF Plan 2 the state is both an employer and a nonemployer contributing entity. Refer to Note 11.B.2 for nonemployer contributing entity disclosures.

Actuarial Assumptions. The total net pension asset was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2017, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	3.75%
Investment rate of return	7.50%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which a best estimate of expected future rates of return (expected returns, net of pension plan investment expense, but including inflation) are developed for each major asset class by the WSIB. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs). The CMAs contain the following 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 Office of the State Actuary (OSA) selected a 7.50 percent long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns provided by WSIB. Refer to the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional background on how this assumption was selected.

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, 2017, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed Income	20%	1.7%
Tangible Assets	5%	4.9%
Real Estate	15%	5.8%
Global Equity	37%	6.3%
Private Equity	23%	9.3%
Total	100%	

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

There were no material changes in assumptions, benefit terms, or methods for the reporting period.

Discount Rate. The discount rate used to measure the total pension liability was 7.50 percent, the same as the prior measurement date. 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. Consistent with current law, the completed asset sufficiency test included an assumed 7.70 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a 7.50 percent future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.50 percent on pension plan investments was applied to determine the total pension liability.

Collective Net Pension Liability/(Asset). At June 30, 2018, the state reported an asset of $11.8 million for its proportionate share of the collective net pension asset for LEOFF Plan 2. The state's proportion for LEOFF Plan 2 was 0.85 percent, a decrease of 0.03 percent since the prior reporting period. The proportions are based on the state's contributions to the pension plan relative to the contributions of all participating employers and the nonemployer contributing entity.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the state as an employer, calculated using the discount rate of 7.50 percent as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (6.50 percent) or 1 percentage point higher (8.50 percent) than the current rate (expressed in thousands):

LEOFF Plan 2 Employer's proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	2,558
Current Discount Rate	$	(11,823)
1% Increase	$	(23,540)

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state recognized a LEOFF Plan 2 pension expense of $(466) thousand. At June 30, 2018, LEOFF Plan 2 reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

LEOFF Plan 2	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 520	$ 448
Changes of assumptions	14	—
Net difference between projected and actual earnings on pension plan investments	—	2,655
Change in proportion	65	19
State contributions subsequent to the measurement date	1,486	—
Total	$ 2,085	$ 3,122

For LEOFF Plan 2, $1.5 million reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

LEOFF Plan 2		
2019	$	(1,219)
2020	$	277
2021	$	(183)
2022	$	(1,150)
2023	$	(44)
Thereafter	$	(204)

Public Safety Employees' Retirement System

Plan Description. The Public Safety Employees' Retirement System (PSERS) was created by the 2004 Legislature and became effective July 1, 2006. PSERS retirement benefit provisions are established in chapter 41.37 RCW and may be amended only by the Legislature. PSERS membership includes full-time employees meeting specific eligibility criteria that are employed by Department of Corrections, Department of Natural Resources, Gambling Commission, Liquor and Cannabis Board, Parks and Recreation Commission, Washington State Patrol, Washington state counties, corrections departments of Washington state cities except for Seattle, Tacoma, and Spokane, or correctional entities formed by PSERS employers under the Interlocal Cooperation Act.

PSERS is a cost-sharing, multiple-employer retirement system comprised of a single defined benefit plan, PSERS Plan 2.

Benefits Provided. PSERS provides retirement, disability, and death benefits to eligible members.

PSERS members are vested after an employee completes five years of eligible service. PSERS members may retire with a monthly benefit of 2 percent of the average final compensation (AFC) at the age of 65 with five years of service, or at the age of 60 with at least 10 years of PSERS service, or at age 53 with 20 years of service. A cost of living allowance (COLA) is granted based on the Consumer Price Index, capped at 3 percent annually. The AFC is the average of the member's 60 highest paid consecutive months.

PSERS members have the option to retire early with reduced benefits.

PSERS members meeting specific eligibility requirements have options available to enhance their retirement benefits. Some of these options are available to their survivors, generally with reduced benefits.

Contributions. PSERS defined benefit retirement benefits are financed from a combination of investment earnings and employer and employee contributions.

Each biennium, the state Pension Funding Council adopts Plan 2 employer and employee contribution rates. The employer and employee contribution rates for Plan 2 are developed by the Office of the State Actuary (OSA) to fully fund Plan 2. The methods used to determine contribution requirements are established under state statute.

Members in PSERS Plan 2 can elect to withdraw total employee contributions and interest thereon, in lieu of any retirement benefit, upon separation from PSERS-covered employment.

Required contribution rates for fiscal year 2018 are presented in the table in Note 11.B.3.

Actuarial Assumptions. The total net pension asset was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2017, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	3.75%
Investment rate of return	7.50%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetime.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which a best estimate of expected future rates of return (expected returns, net of pension plan investment expense, but including inflation) are developed for each major asset class by the WSIB. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs). The CMAs contain the following 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 OSA selected a 7.50 percent long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns provided by the WSIB. Refer to the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional background on how this assumption was selected.

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, 2017, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed Income	20%	1.7%
Tangible Assets	5%	4.9%
Real Estate	15%	5.8%
Global Equity	37%	6.3%
Private Equity	23%	9.3%
Total	100%	

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

There were no material changes in assumptions, benefit terms, or methods for the reporting period.

Discount Rate. The discount rate used to measure the total pension liability was 7.50 percent, the same as the prior measurement date. 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. Consistent with current law, the completed asset sufficiency test included an assumed 7.70 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a 7.50 percent future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates (including PERS Plan 2/3, PSERS Plan 2, and SERS Plan 2/3 employers whose rates include a component for the PERS Plan 1 liability). Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.50 percent on pension plan investments was applied to determine the total pension liability.

Collective Net Pension Liability/(Asset). At June 30, 2018, the state reported a liability of $9.6 million for its proportionate share of the collective net pension asset for PSERS Plan 2. The state's proportion for PSERS Plan 2 was 49.14 percent, an increase of 1.17 percent since the prior reporting period. The proportions are based on the state's contributions to the pension plan relative to the contributions of all participating employers.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the state as an employer, calculated using the discount rate of 7.50 percent, as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (6.50 percent) or 1 percentage point higher (8.50 percent) than the current rate (expressed in thousands):

PSERS Plan 2 Employer's proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	64,646
Current Discount Rate	$	9,628
1% Increase	$	(33,510)

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state recognized a PSERS Plan 2 pension expense of $13.3 million. At June 30, 2018, PSERS Plan 2 reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

PSERS Plan 2	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 5,694	$ 684
Changes of assumptions	82	—
Net difference between projected and actual earnings on pension plan investments	—	6,753
Change in proportion	216	13
State contributions subsequent to the measurement date	13,140	—
Total	$ 19,132	$ 7,450

For PSERS Plan 2, $13.1 million reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

PSERS Plan 2		
2019	$	(1,408)
2020	$	1,245
2021	$	367
2022	$	(1,380)
2023	$	(19)
Thereafter	$	(263)

Washington State Patrol Retirement System

Plan Description. The Washington State Patrol Retirement System (WSPRS) was established by the Legislature in 1947. WSPRS benefits are established in chapter 43.43 RCW and may be amended only by the Legislature. Any commissioned employee of the Washington State Patrol is eligible to participate.

WSPRS is a single-employer, defined benefit retirement system. WSPRS members who joined the system by December 31, 2002, are Plan 1 members. Plan 1 is closed to new entrants. Those who joined on or after January 1, 2003, are Plan 2 members. For financial reporting and investment purposes, however, both plans are accounted for in the same pension fund.

Effective June 7, 2012, those WSPRS members who have service credit within PERS Plan 2 have options to transfer their service credit earned as commercial vehicle enforcement officers or as communications officers into the WSPRS, provided the member pays the full actuarial cost of the transfer.

At retirement, these members also have the option of selecting an actuarially reduced benefit in order to provide for post-retirement survivor benefits.

For membership information refer to the table presented in Note 11.B.3.

Benefits Provided. WSPRS plans provide retirement, disability, and death benefits to eligible members.

There is no vesting requirement for active WSPRS members. Inactive WSPRS members are vested after the completion of five years of eligible service. Active members are eligible for retirement at the age of 55 with no minimum required service credit, or at any age with 25 years of service credit, and must retire at age 65. This mandatory requirement does not apply to the Chief of the Washington State Patrol.

The monthly benefit is 2 percent of the average final salary (AFS) per year of service, capped at 75 percent. A cost of living allowance is granted based on the Consumer Price Index, capped at 3 percent annually.

WSPRS members meeting specific eligibility requirements have options available to enhance their retirement benefits. Some of these options are available to their survivors, generally with reduced benefits.

Contributions. WSPRS retirement benefits are financed from a combination of investment earnings and employer and employee contributions.

Each biennium, the state Pension Funding Council adopts the employee and state contribution rates, subject to revision by the Legislature. The preliminary employee and state contribution rates are developed by the Office of the State Actuary to fully fund the plan. The methods used to determine contribution requirements are established under state statute.

Members in WSPRS Plan 1 and Plan 2 can elect to withdraw total employee contributions and interest thereon, in lieu of any retirement benefit, upon separation from WSPRS-covered employment.

Required contribution rates for fiscal year 2018 are presented in the table in Note 11.B.3.

Actuarial Assumptions. The total net pension asset was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2017, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	3.75%
Investment rate of return	7.50%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which a best estimate of expected future rates of return (expected returns, net of pension plan investment expense, but including inflation) are developed for each major asset class by the WSIB. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs). The CMAs contain the following 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 Office of the State Actuary (OSA) selected a 7.50 percent long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns provided by the WSIB. Refer to the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional background on how this assumption was selected.

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, 2017, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed Income	20%	1.7%
Tangible Assets	5%	4.9%
Real Estate	15%	5.8%
Global Equity	37%	6.3%
Private Equity	23%	9.3%
Total	100%	

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

There were no material changes in assumptions, benefit terms, or methods for the reporting period.

Discount Rate. The discount rate used to measure the total pension liability was 7.50 percent, the same as the prior measurement date. 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. Consistent with current law, the completed asset sufficiency test included an assumed 7.70 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a 7.50 percent future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.50 percent on pension plan investments was applied to determine the total pension liability.

Refer to the table in Note 11.B.3 for the change in net pension liability.

Net Pension Liability/(Asset). At June 30, 2018, the state reported a net pension liability of $58.3 million.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the state as an employer, calculated using the discount rate of 7.50 percent, as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (6.50 percent) or 1 percentage point higher (8.50 percent) than the current rate (expressed in thousands):

WSPRS Plan 1/2 Net Pension Liability/(Asset)		
1% Decrease	$	239,856
Current Discount Rate	$	58,270
1% Increase	$	(89,098)

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state recognized a WSPRS pension expense of $12.3 million. At June 30, 2018, the WSPRS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

WSPRS Plan 1/2	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 20,499	$ 4,295
Changes of assumptions	16,977	—
Net difference between projected and actual earnings on pension plan investments	—	30,624
Change in proportion	—	—
State contributions subsequent to the measurement date	14,203	—
Total	$ 51,679	$ 34,919

For WSPRS 1/2, $14.2 million reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

WSPRS Plan 1/2		
2019	$	(10,973)
2020	$	10,884
2021	$	5,715
2022	$	(5,595)
2023	$	2,526
Thereafter	$	—

Judges' Retirement Fund

Plan Description. The Judges' Retirement Fund was created by the Legislature on March 22, 1937, to provide retirement benefits to judges elected or appointed to the Supreme Court, Court of Appeals, and Superior Courts of the state of Washington. Judges' retirement benefit provisions are established in chapter 2.12 RCW and may be amended only by the Legislature.

The Judges' Retirement Fund is a single-employer, defined benefit retirement system. There are currently no active members in this plan. For membership information refer to the table presented in Note 11.B.3.

Benefits Provided. The Judges' Retirement Fund provides disability and retirement benefits to judges elected or appointed to the Supreme Court, Court of Appeals, and Superior Courts of the state of Washington. The system was closed to new entrants on August 8, 1971, with new judges joining the Judicial Retirement System.

Members are eligible to receive a full retirement allowance at age 70 with 10 years of credited service, or at any age with 18 years of credited service. Members are eligible to receive a partial retirement allowance after 12 years of credited service as a judge.

Contributions. There are no active members remaining in the Judges' Retirement Fund. Past contributions were made based on rates set in statute. By statute, employees were required to contribute 6.5 percent of covered payroll with an equal amount contributed by the state.

Retirement benefits are financed on a pay-as-you-go basis from a combination of investment earnings and employer contributions. Each biennium, the Legislature, through appropriations from the state General Fund, contributes amounts sufficient to meet benefit payment requirements. For fiscal year 2017, no such appropriations or contributions were made.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2017, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	N/A
Investment rate of return	3.58%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

There were no material changes in assumptions, benefit terms, or methods for the reporting period.

Discount Rate. Contributions are made to the Judges' Retirement Fund to ensure cash is available to make benefit payments. Since this plan is operated on a pay-as-you-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 3.58 percent for the June 30, 2017, measurement date.

Refer to the table in Note 11.B.3 for the change in net pension liability.

Net Pension Liability/(Asset). At June 30, 2018, the state reported a net pension liability of $2.2 million.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the state as an employer, calculated using the discount rate of 3.58 percent, as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (2.58 percent) or 1 percentage point higher (4.58 percent) than the current rate (expressed in thousands):

Judges' Net Pension Liability/(Asset)		
1% Decrease	$	2,273
Current Discount Rate	$	2,165
1% Increase	$	2,063

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state recognized a Judges' Retirement Fund pension expense of $149 thousand. At June 30, 2018, the Judges'

Retirement Fund reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

Judges'	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ —
Changes of assumptions	—	—
Net difference between projected and actual earnings on pension plan investments	38	—
Change in proportion	—	—
State contributions subsequent to the measurement date	500	—
Total	$ 538	$ —

For the Judges' Retirement Fund, $500 thousand reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

Judges'		
2019	$	18
2020	$	10
2021	$	6
2022	$	4
2023	$	—
Thereafter	$	—

Judicial Retirement System

Plan Description. The Judicial Retirement System (JRS) was established by the Legislature in 1971. JRS retirement benefit provisions are established in chapter 2.10 RCW and may be amended only by the Legislature. Membership includes judges elected or appointed to the Supreme Court, Court of Appeals, and Superior Courts on or after August 9, 1971.

JRS is a single-employer, defined benefit retirement system. There are no active members remaining in the Judicial Retirement System. For membership information refer to the table presented in Note 11.B.3.

Benefits Provided. JRS provides retirement, disability, and death benefits to eligible members.

JRS members are eligible for retirement at the age of 60 with 15 years of service, or at the age of 60 after 12 years of service (if the member left office involuntarily) with at least 15 years after beginning judicial service. The system was closed to new entrants on July 1, 1988, with new judges joining PERS.

The benefit per year of service calculated as a percent of final average salary (FAS) is shown in the table below. This benefit is capped at 75 percent of FAS, exclusive of cost-of-living increases.

Years of Service	Percent of FAS
15+	3.5%
10-14	3.0%

Contributions. JRS retirement benefits are financed on a pay-as-you-go basis from a combination of investment earnings, employer contributions, and employee contributions.

Past contributions were made based on rates set in statute. By statute, employees were required to contribute 7.5 percent of covered payroll with an equal amount contributed by the state. JRS member contributions to the plan are not refundable.

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 2017, the state contributed $9.3 million.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2017, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	N/A
Investment rate of return	3.58%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

There were no material changes in assumptions, benefit terms, or methods for the reporting period.

Discount Rate. Contributions are made to JRS to ensure cash is available to make benefit payments. Since this plan is operated on a pay-as-you-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 3.58 percent for the June 30, 2017, measurement date.

Refer to the table in Note 11.B.3 for the change in net pension liability.

Net Pension Liability/(Asset). At June 30, 2018, the state reported a net pension liability of $86.1 million.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the state as an employer, calculated using the discount rate of 3.58 percent, as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (2.58 percent) or 1 percentage point higher (4.58 percent) than the current rate (expressed in thousands):

JRS Net Pension Liability/(Asset)		
1% Decrease	$	94,558
Current Discount Rate	$	86,114
1% Increase	$	78,840

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state recognized a JRS pension expense of $(2.5) million. At June 30, 2018, JRS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

JRS	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ —
Changes of assumptions	—	—
Net difference between projected and actual earnings on pension plan investments	335	—
Change in proportion	—	—
State contributions subsequent to the measurement date	8,700	—
Total	$ 9,035	$ —

For JRS, $8.7 million reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

JRS		
2019	$	130
2020	$	99
2021	$	64
2022	$	42
2023	$	—
Thereafter	$	—

2. DRS Plans - Nonemployer Contributing Entity Disclosures

For fiscal year 2018, the state was considered a nonemployer contributing entity in special funding situations for two DRS-administered pension plans, LEOFF Plan 1 and LEOFF Plan 2. State contributions are required by statute to be made directly to these plans to fund pensions. Note 11.B.1 provides the detailed descriptions of these plans, their benefit terms, contribution requirements, significant assumptions used to measure pension liability and mortality, and the discount rate.

Basis for Nonemployer Contributing Entity Contributions. LEOFF Plan 1 has a net pension asset as of the June 30, 2017, measurement date. If needed, RCW 41.26.080 would require employer and employee contributions of 6 percent, and the remaining liabilities funded by the state pursuant to chapter 41.45 RCW. For fiscal year 2017, the nonemployer contributing entity's proportionate share of the net pension asset was considered substantial at 87.12 percent based on historical contributions to the plan.

LEOFF Plan 2 has a net pension asset as of the June 30, 2017, measurement date. In this plan, the state is an employer and a nonemployer contributing entity. RCW 41.26.725 limits the employee contributions to 50 percent, employer contributions to 30 percent, and the state contribution to 20 percent of the cost of benefits. In no instance shall the state contribution exceed 4 percent of payroll. For fiscal year 2017, the nonemployer contributing entity's proportionate share of the net pension asset was considered substantial at 39.35 percent based on total plan contributions received in fiscal year 2017.

Collective Net Pension Liability/(Asset). At June 30, 2018, the state as a nonemployer contributing entity reported a net pension asset of $1.32 billion and $546.0 million for its proportionate share of the collective net pension asset for LEOFF Plan 1 and LEOFF Plan 2, respectively. The nonemployer contributing entity's proportion for LEOFF Plan 1 was 87.12 percent, the same as the prior reporting period, and 39.35 percent for LEOFF Plan 2, a decrease of 0.11 percent. The proportion of the state nonemployer contributions related to LEOFF Plan 1 was based on historical contributions from the state and employers plus fiscal year 2017 retirement benefit payments. The proportion of the state nonemployer contributions related to LEOFF Plan 2 was based on the state's contributions to the pension plan relative to the total state contributions and all participating employers.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the nonemployer contributing entity calculated using the discount rate of 7.50 percent, as well as what the nonemployer contributing entity's net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (6.50 percent) or 1 percentage point higher (8.50 percent) than the current rate (expressed in thousands):

LEOFF Plan 1 Nonemployer contributing entity proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	(980,467)
Current Discount Rate	$	(1,321,802)
1% Increase	$	(1,614,931)

LEOFF Plan 2 Nonemployer contributing entity proportionate share of Net Pension Liability/(Asset)		
1% Decrease	$	118,151
Current Discount Rate	$	(545,988)
1% Increase	$	(1,087,100)

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended June 30, 2018, the state as a nonemployer contributing entity recognized $(210.2) million pension expense for LEOFF Plan 1 and $(21.5) million pension expense for LEOFF Plan 2.

At June 30, 2018, the state as a nonemployer contributing entity reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

LEOFF Plan 1	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ —
Changes of assumptions	—	—
Net difference between projected and actual earnings on pension plan investments	—	122,826
Change in proportion	—	—
State contributions subsequent to the measurement date	1	—
Total	$ 1	$ 122,826

LEOFF Plan 2	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 23,997	$ 20,705
Changes of assumptions	658	—
Net difference between projected and actual earnings on pension plan investments	—	122,578
Change in proportion and difference between state contributions and proportionate share of contributions	2,989	875
State contributions subsequent to the measurement date	68,647	—
Total	$ 96,291	$ 144,158

For LEOFF Plan 1, $1 thousand, and for LEOFF Plan 2, $68.6 million reported as deferred outflows of resources related to pensions resulting from state contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

LEOFF Plan 1		
2019	$	(77,084)
2020	$	20,789
2021	$	(8,301)
2022	$	(58,230)
2023	$	—
Thereafter	$	—

LEOFF Plan 2		
2019	$	(56,286)
2020	$	12,779
2021	$	(8,464)
2022	$	(53,124)
2023	$	(2,039)
Thereafter	$	(9,380)

3. Tables for Plans Administered by the Department of Retirement Services

TABLE 1: Single Employer Plan Membership

Membership of the single employer plans administered by the Department of Retirement Systems consisted of the following at June 30, 2016, the date of the latest actuarial valuation for all plans:

Number of Participating Members				
Plans	**Inactive Members (Or Beneficiaries) Currently Receiving Benefits**	**Inactive Members Entitled To But Not Yet Receiving Benefits**	**Active Members**	**Total Members**
WSPRS 1	1,114	73	446	1,633
WSPRS 2	—	33	546	579
JRS	99	—	—	99
Judges	11	—	—	11
Total	1,224	106	992	2,322

TABLE 2: Change in Net Pension Liability/(Asset)

The following table presents the change in net pension liability/(asset) of the single employer plans administered by the Department of Retirement Systems at June 30, 2016, the date of the latest actuarial valuation for all plans, with the results rolled forward to the June 30, 2017, measurement date (expressed in thousands):

Change in Net Pension Liability/(Asset)	**WSPRS**	**JRS**	**Judges**
TOTAL PENSION LIABILITY			
Service cost	$ 18,474	$ —	$ —
Interest	90,560	2,874	88
Changes of benefit terms	4,830	—	—
Differences between expected and actual experience	23,702	1,047	194
Changes of assumptions	20,921	(6,329)	(129)
Benefit payments, including refunds of member contributions	(56,821)	(8,723)	(402)
Net Change in Total Pension Liability	101,666	(11,131)	(249)
Total Pension Liability--Beginning	1,167,443	104,642	3,097
Total Pension Liability --Ending (a)	$ 1,269,109	$ 93,511	$ 2,848
PLAN FIDUCIARY NET POSITION			
Contributions--employer	$ 7,587	$ 9,300	$ 499
Contributions--employee	10,454	—	—
Net investment income	151,021	45	4
Benefit payments, including refunds of member contributions	(56,821)	(8,723)	(402)
Administrative expense	(53)	—	—
Other	524	—	—
Net Change in Plan Fiduciary Net Position	112,712	622	101
Plan Fiduciary Net Position--Beginning	1,098,127	6,775	582
Plan Fiduciary Net Position--Ending (b)	$ 1,210,839	$ 7,397	$ 683
Plan's Net Pension Liability (Asset)--Beginning	$ 69,316	$ 97,867	$ 2,515
Plan's Net Pension Liability (Asset)--Ending (a) - (b)	$ 58,270	$ 86,114	$ 2,165

TABLE 3: Required Contribution Rates

Required contribution rates (expressed as a percentage of current year covered payroll) for all retirement plans administered by the Department of Retirement Systems at the close of fiscal year 2018 were as follows:

Required Contribution Rates	Employer			Employee		
	Plan 1	Plan 2	Plan 3	Plan 1	Plan 2	Plan 3
PERS						
Employees Not Participating in JBM						
State agencies, local governmental units	7.49%	7.49%	7.49%	6.00%	7.38%	**
Administrative fee	0.18%	0.18%	0.18%			
PERS Plan 1 UAAL	5.03%	5.03%	5.03%			
Total	12.70%	12.70%	12.70% *			
State govt elected officials	13.75%	7.49%	7.49%	7.50%	7.38%	**
Administrative fee	0.18%	0.18%	0.18%			
PERS Plan 1 UAAL	5.03%	5.03%	5.03%			
Total	18.96%	12.70%	12.70% *			
Employees Participating in JBM						
State agencies	9.99%	9.99%	9.99%	9.76%	15.95%	7.50%***
Administrative fee	0.18%	0.18%	0.18%			
PERS Plan 1 UAAL	5.03%	5.03%	5.03%			
Total	15.20%	15.20%	15.20% *			
Local governmental units	7.49%	7.49%	7.49%	12.26%	18.45%	7.50%***
Administrative fee	0.18%	0.18%	0.18%			
PERS Plan 1 UAAL	5.03%	5.03%	5.03%			
Total	12.70%	12.70%	12.70% *			
TRS						
Employees Not Participating in JBM						
State agencies, local governmental units	7.83%	7.83%	7.83%	6.00%	7.06%	**
Administrative fee	0.18%	0.18%	0.18%			
TRS Plan 1 UAAL	7.19%	7.19%	7.19%			
Total	15.20%	15.20%	15.20% *			
State govt elected officials	7.83%	7.83%	7.83%	7.50%	7.06%	**
Administrative fee	0.18%	0.18%	0.18%			
TRS Plan 1 UAAL	7.19%	7.19%	7.19%			
Total	15.20%	15.20%	15.20% *			
Employees Participating in JBM						
State agencies	7.83%	N/A	N/A	9.76%	N/A	N/A
Administrative fee	0.18%	N/A	N/A			
TRS Plan 1 UAAL	7.19%	N/A	N/A			
Total	15.20%					
LEOFF						
Ports and universities	N/A	8.75%	N/A	N/A	8.75%	N/A
Administrative fee	N/A	0.18%	N/A			
Total		8.93%				
Local governmental units	N/A	5.25%	N/A	N/A	8.75%	N/A
Administrative fee	0.18%	0.18%	N/A			
Total	0.18%	5.43%				
State of Washington	N/A	3.50%	N/A	N/A	N/A	N/A
WSPRS						
State agencies	13.15%	13.15%	N/A	0.0768	0.0768	N/A
Administrative fee	0.18%	0.18%	N/A			
Total	13.33%	13.33%				
PSERS						
State agencies, local governmental units	N/A	6.74%	N/A	N/A	6.74%	N/A
Administrative fee	N/A	0.18%	N/A			
PSERS Plan 1 UAAL	N/A	5.03%	N/A			
Total		11.95%				

* Plan 3 defined benefit portion only.

** Variable from 5% to 15% based on rate selected by the member.

*** Minimum rate.

N/A indicates data not applicable.

C. PLAN ADMINISTERED BY THE STATE BOARD FOR VOLUNTEER FIRE FIGHTERS' AND RESERVE OFFICERS

Volunteer Fire Fighters' and Reserve Officers' Relief and Pension Fund

Plan Description. The Volunteer Fire Fighters' Relief Act was created by the Legislature in 1935, and the pension portion of the act was added in 1945. As established in chapter 41.24 RCW, the Volunteer Fire Fighters' and Reserve Officers' Relief and Pension Fund (VFFRPF) is a cost-sharing, multiple-employer defined benefit plan and is administered by the State Board for Volunteer Fire Fighters and Reserve Officers. The board is appointed by the Governor and is comprised of five members of fire departments covered by chapter 41.24 RCW. Administration costs of the VFFRPF are funded through legislative appropriation.

As of June 30, 2018, there were approximately 450 municipalities contributing to the plan. Additionally, the state, a nonemployer contributing entity, contributes 40 percent of the fire insurance premium tax.

Plan Members. Membership in the VFFRPF requires volunteer firefighter service with a fire department of an electing municipality of Washington state, emergency work as an emergency medical technician with an emergency medical service district, or work as a commissioned reserve law enforcement officer.

At June 30, 2017 (the date of the latest valuation), VFFRPF membership consisted of the following:

Plan Membership	
Inactive plan members or beneficiaries currently receiving benefits	4,446
Inactive plan members entitled to but not yet receiving benefits	6,120
Active plan members	9,223
Total membership	19,789

Benefits Provided. VFFRPF provides retirement, disability, and death benefits to eligible members. Benefits are established in chapter 41.24 RCW which may be amended only by the Legislature.

Since retirement benefits cover volunteer service, benefits are paid based on years of service, not salary. Municipalities consist of fire departments, emergency medical service districts, and law enforcement agencies. After 25 years of active membership, members having reached the age of 65 and who have paid their annual retirement fee for 25 years are entitled to receive a monthly benefit of $50 plus $10 per year of service. The maximum monthly benefit is $300. Reduced pensions are available for members under the age of 65 or with less than 25 years of service.

Members are vested after ten years of service. VFFRPF members earn no interest on contributions and may elect to withdraw their contributions upon termination.

Death and active duty disability benefits are provided at no cost to the member. Death benefits in the line of duty consist of a lump sum of $214 thousand. Funeral and burial expenses are also paid in a lump sum of $2 thousand for members on active duty. Members receiving disability benefits at the time of death shall be paid $500.

Effective June 7, 2012, at any time prior to retirement or at the time of retirement, a member of the VFFRPF may purchase retirement pension coverage for years of eligible service prior to the member's enrollment in the system or for years of service credit lost due to the withdrawal of the member's pension fee contributions. A member choosing to purchase such retirement pension coverage must contribute to the system and amount equal to the actuarial value of the resulting benefit increase.

There were no material changes in VFFRPF benefit provisions for the fiscal year ended June 30, 2017.

Contributions. VFFRPF retirement benefits are financed from a combination of investment earnings, member contributions, municipality contributions, and state contributions. In accordance with chapter 41.24 RCW, the state contribution is set at 40 percent of the fire insurance premium tax. The state is considered a nonemployer contributing entity; however, this is not considered a special funding situation. For fiscal year 2018, the fire insurance premium tax contribution was $7.2 million.

The municipality rate for emergency medical service districts (EMSD) and law enforcement agencies is set each year by the State Board for Volunteer Fire Fighters and Reserve Officers, based on the actual cost of participation as determined by the Office of the State Actuary (OSA). All other contribution rates are set by the Legislature. Municipalities may opt to pay the member's fee on their behalf.

The contribution rates set for 2018 were the following:

	Firefighters	EMSD & Reserve Officers
Member fee	$ 30	$ 30
Municipality fee	30	105
Total fee	$ 60	$ 135

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

Retirement funds are invested in the Commingled Trust Fund (CTF). Established on July 1, 1992, the CTF is a diversified pool of investments that invests in 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 written WSIB-adopted investment policies for the various asset classes in which the WSIB invests.

Further information about the investment of pension funds by the WSIB, their valuation, classifications, concentrations, and maturities can be found in Note 3.B.

The Office of the State Treasurer (OST) manages a small portion of the assets for the VFFRPF. By statute, balances in the accounts in the state treasury and in the custody of the treasurer may be pooled for banking and investment purposes.

The overall objective of the OST investment policy is to construct, from eligible investments noted below, an investment portfolio that is optimal or efficient. An optimal or efficient portfolio is one that provides the greatest expected return for a given expected level of risk, or the lowest expected risk for a given expected return. Eligible investments are only those securities and deposits authorized by statute.

Further information about the investment of pension funds by the OST, their valuation, classifications, concentrations, and maturities can be found in Note 3.F.

Rate of Return. For the year ended June 30, 2018, the annual money-weighted rate of return on VFFRPF investments, net of pension plan investment expense, was 8.84 percent. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of external cash flows.

Pension Liability/(Asset). The components of the net pension liability of the participating VFFRPF municipalities at June 30, 2018, were as follows (dollars expressed in thousands):

Pension Liability	
Total pension liability	$ 192,440
Plan fiduciary net position	245,284
Participating municipality net pension liability/(asset)	$ (52,844)
Plan fiduciary net position as a percentage of the total pension liability	127.46%

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation as of June 30, 2016, and rolled forward to June 30, 2017, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Inflation	2.5%
Salary increases	N/A
Investment rate of return	7.00%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2017, valuation were based on the results of the 2007-2012 Experience Studies. Additional assumptions for subsequent events and law changes are current as of the 2017 actuarial valuation report.

The Office of the State Actuary (OSA) selected a 7.40 percent long-term expected rate of return on pension plan investments using a building-block 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 provided by the WSIB.

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons. The WSIB's CMAs contain three pieces of information for each class of asset the WSIB currently invests in.

- Expected annual return.
- Standard deviation of the annual return.
- Correlations between annual returns of each asset class with every other 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, 2018, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed Income	20.00%	1.70%
Tangible Assets	7.00%	4.90%
Real Estate	18.00%	5.80%
Global Equity	32.00%	6.30%
Private Equity	23.00%	9.30%
Total	100.00%	

The inflation component used to create the above table is 2.20 percent, and represents 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 assumptions, refer to the 2017 Report on Financial Condition and Economic Experience Study on the OSA website. The selection of this assumption and economic experience studies are further detailed in the Actuarial Certification Letter.

In consultation with OST, OSA selected a 3.50 percent long-term investment rate of return on assets managed by OST. Based upon the investment portfolio, this assumption was calculated as 100 basis points above OSA's current inflation assumption of 2.50 percent for the United States National Comsumer Price Index.

As the VFFRPF has assets managed by both WSIB and OST, the long-term expected rate of return of 7.00 percent represents an approximate weighted-average of the assets managed by WSIB (7.40 percent expected return) and the assets managed by OST (3.50 percent expected return).

Discount Rate. The discount rate used to measure the total pension liability was 7.00 percent. 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. Consistent with current law, the completed asset sufficiency test included an assumed 7.00 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a 7.00 percent future investment rate of return on invested assets was assumed for the test. Contributions from plan members, municipalities, and the state will be made at the current contribution rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.00 percent on plan investments was applied to determine the total pension liability.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate. The following presents the net pension liability/(asset) of the municipalities calculated using the discount rate of 7.00 percent, as well as what the municipalities' net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (6.00 percent) or 1 percentage point higher (8.00 percent) than the current rate (expressed in thousands):

Municipalities' Net Pension Liability/(Asset)		
1% Decrease	$	(30,034)
Current Discount Rate	$	(52,844)
1% Increase	$	(73,191)

D. HIGHER EDUCATION RETIREMENT PLAN SUPPLEMENTAL DEFINED BENEFIT PLANS

Plan Description. The Higher Education Retirement Plans are privately administered single-employer defined contribution plans with a supplemental defined benefit plan component which guarantees a minimum retirement benefit based upon a one-time calculation at each employee's retirement date. The supplemental component is financed on a pay-as-you-go basis. State institutions of higher education make direct payments to qualifying retirees when the retirement benefits provided by the fund sponsors do not meet the benefit goals. No assets are accumulated in trusts or equivalent arrangements.

The state and regional universities, the state college, the state community and technical colleges, and the Student Achievement Council each participate in a separate plan. As authorized by chapter 28B.10 RCW, the plans cover faculty and other positions as designated by each participating employer.

RCW 28B.10.400, et. seq. assigns the authority to establish and amend benefit provisions to the board of regents of the state universities, the boards of trustees of the regional universities and the state college, the state board for community and technical colleges, and the Student Achievement Council.

The Higher Education Defined Contribution Retirement Plans are described in Note 11.E.

Benefits Provided. The Higher Education Supplemental Retirement Plans provide retirement, disability, and death benefits to eligible members.

As of July 1, 2011, all Higher Education Supplemental Retirement Plans were closed to new entrants.

Members are eligible to receive benefits under this plan at age 62 with 10 years of credited service. The supplemental benefit is a lifetime benefit equal to the amount a member's goal income exceeds their assumed income. The monthly goal income is one-twelfth of 2 percent of the member's average annual salary multiplied by the number of years of service (such product not to exceed one-twelfth of fifty percent of the member's average annual salary). The member's assumed income is an annuity benefit the retired member would receive from their defined contribution Retirement Plan benefit in the first month of retirement had they invested all employer and member contributions equally between a fixed income and variable income annuity investment.

Plan members have the option to retire early with reduced benefits.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation as of June 30, 2016, with the results rolled forward to the June 30, 2018, measurement date using the following actuarial assumptions, applied to all periods included in the measurement:

Salary increases	3.50%-4.25%
Fixed Income and Variable Income Investment Returns*	4.25%-6.25%

**Measurement reflects actual investment returns through June 30, 2018*

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

Most actuarial assumptions used in the June 30, 2016, valuation were based on the results of the April 2016 Supplemental Plan Experience Study. Additional assumptions related to the fixed income and variable income investments were based on feedback from financial administrators of the Higher Education Supplemental Retirement Plans.

Material assumption changes during the measurement period include the discount rate increase from 3.58 percent to 3.87 percent.

Discount Rate. 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 3.87 percent for the June 30, 2018, measurement date.

Pension Expense. For the year ended June 30, 2018, the Higher Education Supplemental Retirement Plans reported the following for pension expense (expressed in thousands):

Pension Expense		
Plans		
University of Washington (UW)	$	11,518
Washington State University (WSU)		1,257
Eastern Washington University (EWU)		842
Central Washington University (CWU)		(619)
The Evergreen State College (TESC)		70
Western Washington University (WWU)		67
State Board for Community and Technical Colleges (SBCTC)		1,483
Total	**$**	**14,618**

Plan Membership. Membership of the Higher Education Supplemental Retirement Plans consisted of the following at June 30, 2016, the date of the latest actuarial valuation for all plans:

Number of Participating Members				
Plans	**Inactive Members (Or Beneficiaries) Currently Receiving Benefits**	**Inactive Members Entitled To But Not Yet Receiving Benefits**	**Active Members**	**Total Members**
University of Washington (UW)	696	4	7,046	7,746
Washington State University (WSU)	277	24	2,210	2,511
Eastern Washington University (EWU)	34	32	450	516
Central Washington University (CWU)	61	—	124	185
The Evergreen State College (TESC)	20	5	231	256
Western Washington University (WWU)	48	1	646	695
State Board for Community and Technical Colleges (SBCTC)	173	22	6,171	6,366
Total	1,309	88	16,878	18,275

Change in Total Pension Liability/(Asset). The following table presents the change in total pension liability/(asset) of Higher Education Supplemental Retirement Plans at June 30, 2018 (expressed in thousands):

Change in Total Pension Liability/(Asset)	UW	WSU	CWU	EWU	TESC	WWU	SBCTC
TOTAL PENSION LIABILITY							
Service cost	$ 14,788	$ 2,763	$ 91	$ 477	$ 210	$ 737	$ 3,827
Interest	16,128	3,261	299	429	237	837	3,517
Changes of benefit terms	—	—	—	—	—	—	—
Differences between expected and actual experience	(33,953)	(7,171)	(466)	3,867	(565)	(2,233)	(10,402)
Changes of assumptions	(17,105)	(3,255)	(272)	(621)	(229)	(819)	(3,519)
Benefit payments	(6,130)	(2,181)	(412)	(202)	(183)	(380)	(1,300)
Other	—	—	—	—	—	—	—
Net Change in Total Pension Liability	(26,272)	(6,583)	(760)	3,950	(530)	(1,858)	(7,877)
Total Pension Liability--Beginning	438,753	89,414	8,477	11,601	6,510	22,820	95,050
Total Pension Liability --Ending	$ 412,481	$ 82,831	$ 7,717	$ 15,551	$ 5,980	$ 20,962	$ 87,173

Sensitivity of the Total Pension Liability/(Asset) to Changes in the Discount Rate. The following table presents the total pension liability/(asset), calculated using the discount rate of 3.87 percent, as well as what the employers' total pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (2.87 percent) or 1 percentage point higher (4.87 percent) than the current rate (expressed in thousands):

Total Pension Liability (Asset)			
Plans	**1% Decrease**	**Current Discount Rate**	**1% Increase**
University of Washington (UW)	$ 473,624	$ 412,481	$ 361,760
Washington State University (WSU)	94,146	82,831	73,380
Eastern Washington University (EWU)	17,703	15,551	13,757
Central Washington University (CWU)	8,593	7,717	6,976
The Evergreen State College (TESC)	6,768	5,980	5,321
Western Washington University (WWU)	23,761	20,962	18,618
State Board for Community and Technical Colleges (SBCTC)	99,428	87,173	76,980
Total	**$ 724,023**	**$ 632,695**	**$ 556,792**

Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions. At June 30, 2018, the Higher Education Supplemental Retirement Plans reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (expressed in thousands):

University of Washington (UW)	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ 85,844
Changes of assumptions	—	36,354
Transactions subsequent to the measurement date	—	—
Total	$ —	$ 122,198

Central Washington University (CWU)	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ 513
Changes of assumptions	—	282
Transactions subsequent to the measurement date	—	—
Total	$ —	$ 795

Washington State University (WSU)	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ 17,785
Changes of assumptions	—	7,461
Transactions subsequent to the measurement date	—	—
Total	$ —	$ 25,246

The Evergreen State College (TESC)	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ 1,398
Changes of assumptions	—	464
Transactions subsequent to the measurement date	—	—
Total	$ —	$ 1,862

Eastern Washington University (EWU)	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 3,322	$ 2,001
Changes of assumptions	—	988
Transactions subsequent to the measurement date	—	—
Total	$ 3,322	$ 2,989

Western Washington University (WWU)	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ 5,641
Changes of assumptions	—	2,203
Transactions subsequent to the measurement date	—	—
Total	$ —	$ 7,844

State Board for Community and Technical Colleges (SBCTC)	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ 27,771
Changes of assumptions	—	7,485
Transactions subsequent to the measurement date	—	—
Total	$ —	$ 35,256

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the fiscal years ended June 30 (expressed in thousands):

University of Washington (UW)		
2019	$	(19,397)
2020	$	(19,397)
2021	$	(19,397)
2022	$	(19,397)
2023	$	(19,397)
Thereafter	$	(25,213)

Central Washington University (CWU)		
2019	$	(436)
2020	$	(189)
2021	$	(170)
2022	$	—
2023	$	—
Thereafter	$	—

Eastern Washington University (EWU)		
2019	$	(65)
2020	$	(65)
2021	$	(65)
2022	$	(65)
2023	$	91
Thereafter	$	502

State Board for Community and Technical Colleges (SBCTC)		
2019	$	(5,861)
2020	$	(5,861)
2021	$	(5,861)
2022	$	(5,861)
2023	$	(5,861)
Thereafter	$	(5,951)

Washington State University (WSU)		
2019	$	(4,767)
2020	$	(4,767)
2021	$	(4,767)
2022	$	(4,767)
2023	$	(4,092)
Thereafter	$	(2,086)

The Evergreen State College (TESC)		
2019	$	(378)
2020	$	(378)
2021	$	(378)
2022	$	(378)
2023	$	(217)
Thereafter	$	(133)

Western Washington University (WWU)		
2019	$	(1,507)
2020	$	(1,507)
2021	$	(1,507)
2022	$	(1,507)
2023	$	(1,175)
Thereafter	$	(641)

E. DEFINED CONTRIBUTION PLANS

Public Employees' Retirement System Plan 3

The Public Employees' Retirement System (PERS) Plan 3 is a combination defined benefit/defined contribution plan administered by the state through the Department of Retirement Systems (DRS). Refer to Note 11.B for PERS Plan descriptions.

PERS Plan 3 has a dual benefit structure. Employer contributions finance a defined benefit component, and member contributions finance a defined contribution component. As established by chapter 41.34 RCW, employee contribution rates to the defined contribution component range from 5 to 15 percent of salaries, based on member choice. Members who do not choose a contribution rate default to a 5 percent rate. There are currently no requirements for employer contributions to the defined contribution component of PERS Plan 3.

PERS Plan 3 defined contribution retirement benefits are dependent on employee contributions and investment earnings on those contributions. Members may elect to self-direct the investment of their contributions. Any expenses incurred in conjunction with self-directed investments are paid by members. Absent a member's self-direction, PERS Plan 3 contributions are invested in the retirement strategy fund that assumes the member will retire at age 65.

Members in PERS Plan 3 are immediately vested in the defined contribution portion of their plan, and can elect to withdraw total employee contributions, adjusted by earnings and losses from investments of those contributions, upon separation from PERS-covered employment.

Teachers' Retirement System Plan 3

The Teachers' Retirement System (TRS) Plan 3 is a combination defined benefit/defined contribution plan administered by the state through the Department of Retirement Systems (DRS). Refer to Note 11.B for TRS Plan descriptions.

TRS Plan 3 has a dual benefit structure. Employer contributions finance a defined benefit component, and member contributions finance a defined contribution component. As established by chapter 41.34 RCW, employee contribution rates to the defined contribution component range from 5 to 15 percent of salaries, based on member choice. Members who do not choose a contribution rate default to a 5 percent rate. There are currently no requirements for employer contributions to the defined contribution component of TRS Plan 3.

TRS Plan 3 defined contribution retirement benefits are dependent on employee contributions and investment earnings on those contributions. Members may elect to self-direct the investment of their contributions. Any expenses incurred in conjunction with self-directed investments are paid by members. Absent a member's self-direction, TRS Plan 3 contributions are invested in the retirement strategy fund that assumes the member will retire at age 65.

Members in TRS Plan 3 are immediately vested in the defined contribution portion of their plan, and can elect to withdraw total employee contributions, adjusted by earnings and losses from investments of those contributions, upon separation from TRS-covered employment.

Judicial Retirement Account

The Judicial Retirement Account (JRA) Plan was established by the Legislature in 1988 to provide supplemental retirement benefits. It is a defined contribution plan administered by the state Administrative Office of the Courts (AOC), 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, and who are members of PERS for their services as a judge. Vesting is full and immediate. At June 30, 2018, there were two active members and 119 inactive members and one member receiving monthly benefits in JRA. The state, through the AOC, is the sole participating employer.

Beginning January 1, 2007, any justice or judge who was in a judicial position at that time and who chose to join the Judicial Benefit Multiplier (JBM) Program could no longer participate in JRA. Any justice or judge elected or appointed to office on or after January 1, 2007, who elects to join DRS membership will also be mandated into JBM. If they have already established membership in PERS or TRS Plan 1 they will rejoin that plan, but if they have never had membership, they will be enrolled as a member of both PERS Plan 2 and JBM.

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

A JRA member who separates from judicial service for any reason is entitled to receive a lump-sum distribution of the accumulated contributions. The administrator of JRA may adopt rules establishing other payment options. If a member dies, the amount of accumulated contributions standing to the member's credit at the time of the member's death is to be paid to the member's estate or such person or persons, trust or organization, as the member has nominated by written designation.

For fiscal year 2018, the state recognized pension expense for contributions of $13 thousand made to employee accounts. No plan refunds were made.

The administrator of JRA has entered an agreement with the DRS for accounting and reporting services, and the Washington State Investment Board (WSIB) for investment services. Under this agreement, the DRS is responsible for all record keeping, accounting, and reporting of member accounts and the 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.

Higher Education Retirement Plans

The Higher Education Retirement Plans are privately administered defined contribution plans with a supplemental defined benefit plan component. The state and regional universities, the state college, the state community and technical colleges, and the Student Achievement Council each participate in a plan. As authorized by chapter 28B.10 RCW, the plans cover faculty and other positions as designated by each participating employer.

Contributions to the plans are invested in annuity contracts or mutual fund accounts offered by one or more fund sponsors. Benefits from fund sponsors are available upon separation or retirement at the member's option. Employees have, at all times, a 100 percent vested interest in their accumulations.

RCW 28B.10.400, et. seq. assigns the authority to establish and amend benefit provisions to the board of regents of the state universities, the boards of trustees of the regional universities and the state college, the state board for community and technical colleges, and the Student Achievement Council.

Employee contribution rates, based on age, range from 7.43 percent to 8.67 percent of salary. The employers match the employee contributions. The employer and employee obligations to contribute are established per chapter 28B.10 RCW.

For fiscal year 2018, employer and employee contributions were $249.3 and $218.1 million, respectively, for a total of $467.4 million.

Note 12
Other Postemployment Benefits

General Information
The state implemented Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* for fiscal year 2018 financial reporting. In addition to pension benefits as described in Note 11, the state, through the Health Care Authority (HCA), administers af single-employer defined benefit other postemployment benefit (OPEB) plan.

Plan Description. Per RCW 41.05.065, the Public Employees' Benefits Board (PEBB), created within the HCA, is authorized to design benefits and determine the terms and conditions of employee and retired employee participation and coverage. PEBB establishes eligibility criteria for both active employees and retirees. Benefits purchased by PEBB include medical, dental, life, and long-term disability.

The relationship between the PEBB OPEB plan and its member employers, their employees, and retirees is not formalized in a contract or plan document. Rather, the benefits are provided in accordance with a substantive plan in effect at the time of each valuation. A substantive plan is one in which the plan terms are understood by the employers and plan members. This understanding is based on communications between the HCA, employers, and plan members, and the historical pattern of practice with regard to the sharing of benefit costs. The understanding by the employer and plan members is that there is no contractual obligation to continue the substantive plan as an employee benefit on an ongoing basis. Nevertheless, the actuarial assumption used in valuations presented in this footnote assume that this substantive plan will be carried forward into the future.

The PEBB OPEB plan is funded on a pay-as-you-go basis and is reported in governmental funds using the modified accrual basis and the current financial resources measurement focus. For all proprietary and fiduciary funds, the OPEB plan is reported using the economic resources measurement focus and the accrual basis of accounting. The PEBB OPEB plan has no assets and does not issue a publicly available financial report.

Employees Covered by Benefit Terms. Employers participating in the PEBB plan for the state include general government agencies, higher education institutions, and component units. Additionally, there are 76 of the state's K-12 schools and educational service districts (ESDs), and 249 political subdivisions and tribal governments not included in the state's financial reporting that participate in the PEBB plan. The plan is also available to the retirees of the remaining 227 K-12 schools, charter schools, and ESDs.

Membership in the PEBB plan for the state consisted of the following:

Summary of Plan Participants
As of June 30, 2017

Active employees	123,379
Retirees receiving benefits*	46,180
Retirees not receiving benefits**	6,000
Total active employees and retirees	175,559

*Enrollment data for June 2017 from Report 1: PEBB Total Member Enrollment for June 2017 Coverage report. PEBB Retirees only.

**This is an estimate of the number of retirees that may be eligible to join a post-retirement PEBB program in the future.

The PEBB retiree OPEB plan is available to employees who elect at the time they retire to continue coverage and pay the administratively established premiums under the provisions of the retirement system to which they belong. Retirees' access to the PEBB plan depends on the retirement eligibility of their respective retirement system. PEBB members are covered in the following retirement systems: PERS, PSERS, TRS, SERS, WSPRS, Higher Education, Judicial, and LEOFF 2. However, not all employers who participate in these plans offer PEBB to retirees.

Benefits Provided. Per RCW 41.05.022, retirees who are not yet eligible for Medicare benefits may continue participation in the state's non-Medicare community-rated health insurance risk pool on a self-pay basis. Retirees in the non-Medicare risk pool receive an implicit subsidy. The implicit subsidy exists because retired members pay a premium based on a claims experience for active employees and other non-Medicare retirees. The subsidy is valued using the difference between the age-based claims costs and the premium. In calendar year 2016, the average weighted implicit subsidy was valued at $304 per adult unit per month, and in calendar year 2017, the average weighted implicit subsidy was valued at $327 per adult unit per month. In calendar year 2018, the average weighted implicit subsidy is projected to be $348 per adult unit per month.

Retirees who are enrolled in both Parts A and B of Medicare may participate in the state's Medicare community-rated health insurance risk pool. Medicare retirees receive an explicit subsidy in the form of reduced premiums. Annually, the HCA administrator recommends an amount for the next calendar year's explicit subsidy for inclusion in the Governor's budget. The final amount is approved by the state Legislature. In calendar year 2016, the explicit subsidy was up to $150 per member per month, and it remained up to $150 per member per month in calendar years 2017 and 2018. This will increase in calendar year 2019 up to $168 per member per month.

Contribution Information. Administrative costs as well as implicit and explicit subsidies are funded by required contributions (RCW 41.05.050) from participating employers. The subsidies provide monetary assistance for medical benefits.

Contributions are set each biennium as part of the budget process. The benefits are funded on a pay-as-you-go basis.

The estimated monthly cost for PEBB benefits for the reporting period for each active employee (average across all plans and tiers) is as follows (expressed in dollars):

Required Premium*		
Medical	$	1,071
Dental		80
Life		4
Long-term disability		2
Total	$	1,157
Employer contribution	$	1,001
Employee contribution		156
Total	$	1,157

*Per 2018 PEBB Financial Projection Model 4.0. Per capita cost based on subscribers; includes non-Medicare risk pool only. Figures based on CY2018 which includes projected claims cost at the time of this reporting.

Each participating employer in the plan is required to disclose additional information with regard to funding policy, the employer's annual OPEB costs and contributions made, the funded status and funding progress of the employer's individual plan, and actuarial methods and assumptions used.

For information on the results of an actuarial valuation of the employer provided subsidies associated with the PEBB plan, refer to: http://leg.wa.gov/osa/additional services/Pages/OPEB.aspx.

Actuarial Assumptions. The total OPEB liability was determined using the following methodologies:

Actuarial valuation date	1/1/2017
Actuarial measurement date	6/30/2017
Actuarial cost method	Entry Age
Amortization method	The recognition period for the experience and assumption changes is 9 years. This is equal to the average expected remaining service lives of all active and inactive members.
Asset valuation method	N/A - No Assets

In order to calculate the beginning total OPEB liability balance under GASB Statement No. 75, the January 1, 2017, actuarial valuation was projected backwards to the measurement date of June 30, 2016, while the ending balance was determined by projecting the January 1, 2017, valuation forward to June 30, 2017. Both the forward and backward projections reflect the plan's assumed service cost, assumed interest, and expected benefit payments.

Projections of benefits for financial reporting purposes are based on the terms of the substantive plan (the plan as understood by the employer and the plan members), and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members (active employees and retirees) to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities, consistent with the long-term perspective of the calculations.

The total OPEB liability was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation rate	3%
Projected salary changes	3.75% plus service-based salary increases
Health care trend rates	Trend rate assumptions vary slightly by medical plan. Initial rate is approximately 7%, reaching an ultimate rate of approximately 5% in 2080.
Post-retirement participation percentage	65%
Percentage with spouse coverage	45%

In projecting the growth of the explicit subsidy, the cap is assumed to remain constant until 2019, at which time the explicit subsidy cap is assumed to grow at the health care trend rates. The Legislature determines the value of the cap and no future increases are guaranteed; however, based on historical growth patterns, future increases to the cap are assumed.

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries. The Office of the State Actuary applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetime.

Most demographic actuarial assumptions, including mortality and when members are expected to terminate and retire, were based on the results of the 2007-2012 Experience Study Report. The post-retirement participation percentage and percentage with spouse coverage, were reviewed in 2017. Economic assumptions, including inflation and salary increases, were based on the results of the 2015 Economic Experience Study.

Discount Rate. Since OPEB benefits are funded on a pay-as-you-go basis, the discount rate used to measure the total OPEB liability was set equal to the Bond Buyer General Obligation 20-Bond Municipal Bond Index, or 2.85 percent for the June 30, 2016, measurement date and 3.58 percent for the June 30, 2017, measurement date.

Changes in assumptions resulted from an increase in the Bond Buyer General Obligation 20-Bond Municipal Bond Index discount rate resulting in an overall decrease in total OPEB liability for the measurement date of June 30, 2017.

Additional detail on assumptions and methods can be found on the Office of State Actuary's website: http://leg.wa.gov/osa/additional services/Pages/OPEB.aspx.

Total OPEB Liability. As of June 30, 2018, the state reported a total OPEB liability of $5.83 billion.

Changes in Total OPEB Liability

The following table presents the change in the total OPEB liability as of the June 30, 2018, reporting date (expressed in thousands):

Changes in Total OPEB Liability	State	Component Units	Total
Total OPEB Liability - Beginning	$ 6,238,681	$ 3,896	$ 6,242,577
Changes for the year:			
Service cost	394,709	246	394,955
Interest	184,884	115	184,999
Difference between expected and actual experience	—	—	—
Changes in benefit terms	—	—	—
Change in assumptions*	(901,867)	(563)	(902,430)
Benefit payments	(94,220)	(59)	(94,279)
Other	—	—	—
Net Changes in Total OPEB Liability	(416,494)	(261)	(416,755)
Total OPEB liability - Ending	$ 5,822,187	$ 3,635	$ 5,825,822

*The recognition period for these changes is nine years. This is equal to the average expected remaining service lives of all active and inactive members.

Note: Figures may not total due to rounding.

Sensitivity of the Total Liability to Changes in the Discount Rate. The following presents the total OPEB liability of the state as an employer calculated using the discount rate of 3.58 percent, as well as what the total OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.58 percent) or 1 percentage point higher (4.58 percent) than the current rate (expressed in thousands):

	State	Component Units	Total
1% Decrease	$ 7,103,786	$ 4,437	$ 7,108,223
Current Discount Rate	$ 5,822,187	$ 3,635	$ 5,825,822
1% Increase	$ 4,830,434	$ 3,017	$ 4,833,451

Sensitivity of Total OPEB Liability to Changes in the Health Care Cost Trend Rates. The following represents the total OPEB liability of the state as an employer, calculated using the health care trend rates of 7.00 percent decreasing to 5.00 percent, as well as what the total OPEB liability would be if it were calculated using health care trend rates that are 1 percentage point lower (6.00 percent decreasing to 4.00 percent) or 1 percentage point higher (8.00 percent decreasing to 6.00 percent) than the current rate (expressed in thousands):

	State	Component Units	Total
1% Decrease	$ 4,703,526	$ 2,937	$ 4,706,463
Current Health Care Cost Trend Rate	$ 5,822,187	$ 3,635	$ 5,825,822
1% Increase	$ 7,323,530	$ 4,573	$ 7,328,103

OPEB Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to OPEB. For the year ending June 30, 2018, the state recognized OPEB expense of $479.7 million.

On June 30, 2018, the state reported deferred outflows of resources and deferred inflows of resources related to OPEB for the state, including component units, from the following sources (expressed in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ —
Changes of assumptions	—	802,160
Transactions subsequent to the measurement date	92,197	—
Total	$ 92,197	$ 802,160

Deferred outflows of resources and deferred inflows of resources related to OPEB for component units as of the June 30, 2018, reporting date were as follows (expressed in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ —	$ —
Changes of assumptions	—	500
Transactions subsequent to the measurement date	58	—
Total	$ 58	$ 500

Amounts reported as deferred outflows of resources related to OPEB resulting from transactions subsequent to the measurement date will be recognized as a reduction of the total OPEB liability in the year ended June 30, 2019.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB for the state and component units will be recognized in OPEB expense in the fiscal years ended June 30 as follows (expressed in thousands):

Subsequent Years		
2019	$	(100,270)
2020	$	(100,270)
2021	$	(100,270)
2022	$	(100,270)
2023	$	(100,270)
Thereafter	$	(300,810)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB for component units will be recognized in OPEB expense in the fiscal years ended June 30 as follows (expressed in thousands):

Subsequent Years		
2019	$	(63)
2020	$	(63)
2021	$	(63)
2022	$	(63)
2023	$	(63)
Thereafter	$	(185)

Note 13
Derivative Instruments

Hedging Derivatives

In addition to investment derivatives as described in Note 3, the state, through the Washington State Department of Transportation Ferries Division (WSF) entered into commodity swap agreements to hedge a portion of WSF diesel fuel consumption.

The following table presents the hedging derivative instruments as of June 30, 2018 (expressed in thousands):

	Changes in Fair Value			Fair Value at June 30, 2018			Notional amount
	Classification		Amount	Classification		Amount	(in gallons)
Governmental Activities							
Cash Flow Hedges:							
Commodity Swaps	Deferred Inflow	$	(4,242)	Accounts Receivable	$	3,869	9,072

The commodity swaps noted above were reviewed for hedge accounting and were deemed effective using the regression analysis method.

Objective

The objective for the hedge transaction is to minimize the volatility of the price of diesel fuel and therefore stabilize the percentage of the WSF operating budget represented by fuel purchases. To accomplish this, a strategy of active hedging has been implemented by WSF to control the uncertain costs of fuel and allow for more accurate budget estimates.

Significant Terms

The significant terms of active hedges WSF entered into during fiscal year 2018 are presented in the table below:

Type	Counterparty	Contract price per gallon	Variable rate received	Trade date	Settlement period	Monthly notional amount (in gallons)
Commodity Swap	Cargill	1.72	NYMEX ULSD Heating Oil	2/15/2017	7/2017 - 6/2018	42,000 - 294,000
Commodity Swap	BofA - Merrill Lynch	1.31	NYMEX ULSD Heating Oil	1/15/2016	7/2017 - 6/2018	252,000
Commodity Swap	BofA - Merrill Lynch	1.61	NYMEX ULSD Heating Oil	1/15/2016	7/2017 - 6/2018	252,000
Commodity Swap	BofA - Merrill Lynch	1.56	NYMEX ULSD Heating Oil	8/12/2016	7/2017 - 6/2018	252,000
Commodity Swap	BofA - Merrill Lynch	1.58	NYMEX ULSD Heating Oil	11/10/2016	7/2017 - 6/2018	252,000
Commodity Swap	BofA - Merrill Lynch	1.42	NYMEX ULSD Heating Oil	1/15/2016	7/2018 - 6/2019	252,000
Commodity Swap	BofA - Merrill Lynch	1.73	NYMEX ULSD Heating Oil	6/7/2016	7/2018 - 6/2019	252,000
Commodity Swap	BofA - Merrill Lynch	1.57	NYMEX ULSD Heating Oil	5/3/2017	7/2018 - 6/2019	252,000

The hedging strategy consists of a reference to futures contracts of New York Mercantile Exchange (NYMEX) Ultra Low Sulfur Diesel (ULSD) Heating Oil. This commodity remains highly correlated to the diesel fuel type being used by WSF. These fuel hedges require no initial cash investment and provide monthly settlements.

The monthly settlements are based on the daily prices of the respective commodities whereby WSF will either receive a payment or make a payment to the counterparty, depending on the average monthly prices of the commodities in relation to the contract prices.

Fair Value

The state reports its hedging derivative instruments at fair value as either accounts payable - liability (negative fair value amount) or as other receivables - asset (positive fair value amount). The fair value represents the current price to settle swap assets or liabilities in the market place if a swap were to be terminated. The changes in fair value for hedging derivatives represent the unrealized gain or loss on the contracts and are reported as deferred inflows or deferred outflows of resources, respectively. At fiscal year end, the state reports the fair value and changes in fair value related to hedging derivative instruments on the Balance Sheet for Non-major Governmental Funds and the Government-wide Statement of Net Position.

Risks

The following risks are generally associated with commodity swap agreements:

Basis risk. Basis risk is the risk that arises when variable rates or prices of a hedging derivative instrument and a hedged item are based on different reference rates.

Statistically, the relationship between heating oil prices and diesel fuel prices has been quite stable over the past five years with a 98 percent correlation. This means that the heating oil futures price explains 98 percent of the variance in the price that WSF pays for its diesel fuel, making it highly reliable. In order to mitigate basis risk, WSF continually monitors the relationship between futures prices and the price of diesel fuel delivered.

Termination Risk. Termination risk is the risk that there will be a mandatory early termination of the commodity swap that would result in WSF either paying or receiving a termination payment. Mandatory terminations generally result when a counterparty suffers degraded credit quality or fails to perform. Upon termination, payment may be required by either party, reflecting fair value at the time of termination.

Credit Risk. Credit risk is the risk that the counterparty fails to make the required payments or otherwise comply with the terms of the swap agreement. WSF is exposed to credit risk in the amount of the derivative's fair value. When the fair value of any derivative has a positive market value, then WSF is exposed to the actual risk that the counterparty will not fulfill its obligation. To mitigate credit risk, WSF monitors the credit ratings of the counterparties. At June 30, 2018, credit ratings of the state's counterparty were as follows:

Counterparty	Moody's	Standard & Poor's	Fitch
Cargill	A2	A	A
Bank of America Merrill Lynch International Limited	-	A+	A+

Note 14
Tax Abatements

The state of Washington provides tax abatements through 11 programs, 7 of which are only available to businesses in the aerospace industry. Only tax abatement programs with greater than $5 million in taxes abated during fiscal year 2018 are disclosed. All tax abatement programs for the aerospace industry are disclosed.

Data Center Server Equipment and Power Infrastructure Sales and Use Tax Exemption

Per Revised Codes of Washington (RCWs) 82.08.986 and 82.12.986, the purchase or use of server equipment and power infrastructure in data centers within Washington, along with certain related labor and services charges, may be exempt from sales and use tax to encourage immediate investments in technology facilities. The Department of Revenue (DOR) will issue an exemption certificate, which the buyer must present to the seller at the time of the sale in order to make eligible tax-exempt purchases.

Within six years of the date that the exemption certificate is issued, the certificate holder must establish that net employment at the computer data center has increased by a minimum of 35 family wage positions or 3 family wage employment positions for each 20,000 square feet or less of space. Family wage employment positions are new permanent employment positions requiring 40 hours of weekly work, or their equivalent, at the eligible computer data center, and receiving a wage equivalent to or greater than 150 percent of the per capita personal income of the county in which the data center is located. All previously exempted sales and use tax are immediately due and payable for a qualifying business or tenant that does not meet these requirements.

High Unemployment County Sales & Use Tax Deferral for Manufacturing Facilities

To encourage public and private investment in low-income areas with high rates of unemployment, sales and use tax arising from certain construction and equipment purchases for new and expanding manufacturers, persons conditioning vegetable seeds, research and development, and commercial testing for manufacturers in a Community Empowerment Zone (CEZ) may be permanently deferred if the project meets specific criteria per chapter 82.60 RCW. To qualify for deferral, the business must submit an application to DOR prior to completion of construction or the business taking possession of the machinery and equipment. Approved applicants will receive a sales and use tax deferral certificate, which allows vendors and contractors to sell to the approved applicant without charging sales tax.

Deferred taxes need not be repaid if the business fills at least one permanent full-time position for each $750,000 investment with a resident of the CEZ by the end of the second calendar year following the year in which the project is certified as operationally complete. Failure to meet the employment requirement causes all deferred taxes to become immediately due. Each recipient of a deferral of taxes must file a complete annual survey with DOR for eight years following the year in which the project is operationally complete. If DOR finds that the project does not qualify for the deferral, all deferred taxes become immediately due.

High-Technology Sales and Use Tax Deferral

Chapter 82.63 RCW provides a deferral and ultimate waiver of sales and use tax to encourage the creation of high-wage, high-skilled jobs in Washington. The deferral applies to sales and use tax arising from the construction or expansion of a qualified research and development facility or a pilot scale manufacturing facility used in the fields of advanced computing, advanced materials, biotechnology, electronic device technology, or environmental technology.

Businesses must apply for a deferral certificate prior to being issued a building permit for the project(s) or before taking possession of machinery and equipment. Eligible projects will receive a sales and use tax deferral certificate issued by DOR, which allows vendors and contractors to sell to the approved business without charging sales tax. An annual survey must be filed by May 31 of the year in which the project is certified and for the following seven years. If the investment project is used for any other purpose at any time during the calendar year in which the investment is certified as operationally complete, or during the next seven calendar years, a portion of the deferred taxes must be repaid immediately. The portion due is determined by a sliding scale ranging from 100 percent recapture in the year the project is operationally complete to 12.5 percent recapture in year eight.

Multi-Unit Urban Housing Property Tax Exemption

RCW 84.14.020 allows for a property tax exemption to improve residential opportunities, including affordable housing opportunities, in urban centers. In order to qualify for the exemption, the new or rehabilitated multiple-housing unit must be located in a targeted residential area designated by the city or county, provide for a minimum of 50 percent of the space for permanent residential occupancy, meet all construction and development regulations of the city, and be completed within three years from the date of approval of the application. To qualify as a rehabilitated unit, the property must also fail to comply with one or more standards of the applicable state or local building or housing codes on or after July 23, 1995.

The property owner must apply for the exemption certificate with the city where the property is located before beginning construction. If the city approves the application, the exemption certificate will be issued after the owner certifies all requirements have been met upon completion of the project. If the application for a tax exemption certificate was submitted before July 22, 2007, the property is exempt for ten years. If the application for a tax exemption certificate was submitted on or after July 22, 2007, the property is exempt for eight years, unless the applicant commits to renting or selling at least 20 percent of the units as affordable housing units to low and moderate-income households, making it exempt for 12 years. Each tax exemption certificate recipient must submit an annual report to the city. If the city determines that a portion of the property no longer meets the exemption requirements, the tax exemption is canceled and a lien will be placed on the land for the additional real property tax on the value of the non-qualifying improvements plus a 20 percent penalty and interest.

Aerospace Incentives

The state of Washington provides seven tax abatement and incentive programs to the aerospace industry to encourage the industry's continued presence in the state of Washington.

RCWs 82.04.260(11), 82.04.290(3), and 82.04.250(3) allow for a reduced business and occupation (B&O) tax for manufacturers and processors for hire of commercial airplanes, component parts of commercial airplanes, or tooling designed for use in manufacturing commercial airplanes or components; non-manufacturers engaged in the business of aerospace product development; and certificated Federal Acquisition Regulation (FAR) repair stations making retail sales.

The purchase of goods and services, including labor, for the construction of new buildings used to manufacture commercial airplanes or fuselages or wings of commercial airplanes are exempt from sales and use tax per RCWs 82.08.980 and 82.12.980. The exemption also applies to new buildings or parts of new buildings used for storing raw materials or finished products used to manufacture commercial airplanes and certain commercial airplane parts. Port districts, political subdivisions, or municipal corporations may also use the sales and use tax exemption when constructing new facilities to lease to these manufacturers. The eligible purchaser must present a Buyers' Retail Sales Tax Exemption Certificate to the seller at the time of purchase. Per RCW 82.32.330(2), the amount of sales and use tax abated from this exemption cannot be disclosed because there are fewer than three taxpayers that received the exemption in fiscal year 2018.

RCW 82.04.4461 allows a B&O tax credit equal to 1.5 percent of expenditures on aerospace product development performed within Washington. A business claiming the credit must file an annual report with DOR.

Per RCW 82.04.4463, manufacturers and processors for hire of commercial airplanes or their component parts and aerospace tooling manufacturers are eligible for a B&O tax credit equal to the property and leasehold taxes paid on certain buildings, land, and the increased value from certain building renovations or expansions, as well as a portion of property taxes paid on certain machinery and equipment. The credit for machinery and equipment is equal to the amount of property taxes paid on the machinery and equipment multiplied by a fraction as prescribed in the RCW. Eligibility for the credit requires the building, land, and/or machinery and equipment be used exclusively in manufacturing commercial airplanes or their components or in manufacturing tooling specifically designed for use in manufacturing commercial airplanes or their components. A business claiming the credit must file an annual report with DOR.

Non-manufacturers engaged in the business of aerospace product development and certificated FAR repair stations making retail sales are eligible for a B&O tax credit equal to property and leasehold taxes on certain buildings, land, and the increased value of renovated buildings, and qualifying computer equipment and peripherals under RCW 82.04.4463. Eligibility for the credit requires the building, land, and/or computer equipment and peripherals be used exclusively in aerospace product development or in providing aerospace services. A business claiming the credit must file an annual report with DOR.

The purchase and use of computer hardware, software, or peripherals, including installation charges, is exempt from sales and use tax per RCWs 82.08.975 and 82.12.975 if the buyer uses the purchased item primarily in developing, designing, and engineering aerospace products. The purchaser must present a Buyers' Retail Sales Tax Exemption Certificate to the seller at the time of purchase.

Leasehold interests in port district facilities used by a manufacturer of superefficient airplanes are exempt from leasehold excise tax per RCW 82.29A.137. In addition, all buildings, machinery, equipment, and other personal property of a lessee of a port district used exclusively in manufacturing superefficient airplanes is exempt from property tax per RCW 84.36.655. No taxpayers were eligible for either of these exemptions during fiscal year 2018.

The following table shows the amount of taxes abated by the state of Washington during fiscal year 2018 (expressed in thousands):

Tax Abatement Program		**Amount of Taxes Abated**
Data center server equipment and power infrastructure sales and use tax exemption	$	29,112
High unemployment county sales & use tax deferral for manufacturing facilities		7,249
High-technology sales and use tax deferral		60,833
Multi-unit urban housing property tax exemption		11,351
Aerospace incentives:		
Reduced B&O tax rate		107,089
Credit for preproduction development expenditures		85,446
Credit for property and leasehold taxes paid on aerospace business facilities		38,161
Computer hardware, software, and peripherals sales and use tax exemption		3,882
TOTAL	$	343,123

Note 15
Commitments and Contingencies

A. CAPITAL COMMITMENTS

Outstanding commitments related to state infrastructure and facility construction, improvement, and/or renovation totaled $2.91 billion at June 30, 2018.

B. ENCUMBRANCES

Encumbrances, which represent commitments related to unperformed contracts for goods or services, are included in restricted, committed, or assigned fund balance, as appropriate. Operating encumbrances lapse at the end of the applicable appropriation period. Capital outlay encumbrances lapse at the end of the biennium unless reappropriated by the Legislature in the ensuing biennium. Encumbrances outstanding against continuing appropriations at the end of fiscal year 2018 are (expressed in thousands):

General Fund	101,292
Higher Education Special Revenue Fund	5,179
Nonmajor Governmental Funds	910,532

C. SUMMARY OF SIGNIFICANT LITIGATION

Pending Litigation

The state and its agencies are parties to numerous routine legal proceedings that normally occur in governmental operations. In addition, at any given point, there may be numerous lawsuits involving the implementation, reduction, or elimination of specific state programs that could significantly impact expenditures and revenues, and potentially have future budgetary impact. This summary considers significant litigation not covered by tort insurance. Tort case liabilities are disclosed in Note 7.E, Claims and Judgments, Risk Management.

The state is the defendant in a number of cases alleging inadequate funding of state programs or services. Claims include inadequate funding for the provision of daily personal care and medical and mental health services to children, the elderly, and the disabled. Collective claims in these programmatic and service cases exceed $35 million. In addition, adverse rulings in some of these cases could result in significant future costs.

The Department of Revenue routinely has claims for refunds or exemptions in various stages of administrative and legal review. Cases involving such claims total approximately $152 million, though an adverse ruling could result in additional claims being brought by similarly situated taxpayers.

The Department of Retirement Systems is a defendant in a number of lawsuits alleging denial or miscalculation of benefits. Claims in this category total approximately $55 million.

The state is contesting these lawsuits and the outcomes are uncertain at this time.

Tobacco Settlement

In November 1998, Washington joined 45 other states in a Master Settlement Agreement (MSA) with the nation's largest tobacco manufacturers to provide restitution for monies spent under health care programs for the treatment of smoking-related illnesses.

The annual payments to each state under the MSA are subject to a number of adjustments, including the nonparticipating manufacturer (NPM) adjustment. The NPM adjustment is a downward adjustment that is applicable to any state found by an arbitration panel not to have diligently enforced the qualifying statute. The amount of the available adjustment is calculated every year by Price Waterhouse Coopers and is typically $1.25 billion. States found not diligent share the costs of that downward adjustment and the adjustment is applied against the next annual MSA payment. No state can lose more than its entire annual payment.

For every annual MSA payment cycle since 2006, the participating manufacturers have withheld the amount of the available NPM adjustment from their MSA payments claiming all of the states were not diligent, depositing the amount of the available adjustment into a Disputed Payments Account. For Washington, the amount withheld from each payment has been approximately $14 million. The states are required to sue the participating manufacturers to recover the withheld amounts.

The withholding in 2006 challenged the states' diligence for calendar year 2003. That challenge marked the first time the NPM adjustment procedure was involved and led to diligent enforcement arbitrations. The arbitration involves all 54 MSA jurisdictions and the participating manufacturers and occurs in two stages: a national hearing on "common issues" and then each state's specific case.

During the 2003 NPM adjustment dispute, 22 states settled their dispute. The participating manufacturers agreed to a 54 percent reduction in their annual MSA payments and to additional NPM enforcement obligations. On September 11, 2013, the arbitration panel issued a decision in Washington's favor, unanimously concluding that Washington proved that it diligently enforced the qualifying statute during calendar year 2003 and therefore, for that calendar year, is not subject to an NPM adjustment under the MSA. As a result of that decision, in fiscal year 2014, Washington received approximately $14 million more than it would have otherwise received.

The 2004 NPM adjustment dispute is currently underway. The common issues trial was completed in June 2017 and Washington's state-specific hearing was completed in April 2018. The final state's hearing is set for April 2019. All diligence determinations are embargoed until decisions for all states are made and all decisions are released simultaneously. Determinations are expected in the fall of 2019 and any NPM adjustments are applied to the April 2020 MSA payment. Washington faces a potential downward NPM adjustment in its 2020 MSA payment between $0 and $137 million for the year 2004. If Washington wins the 2004 dispute, then the state will receive its full 2020 MSA payment plus the $14 million that was withheld in 2007 and the earnings on that amount from the Disputed Payments Account.

D. FEDERAL ASSISTANCE

The state has received federal financial assistance for specific purposes that are generally subject to review or audit by the grantor agencies.

Entitlement to this assistance is generally conditional upon compliance with the terms and conditions of grant agreements and applicable federal regulations, including the expenditure of assistance for allowable purposes. Any disallowance resulting from a review or audit may become a liability of the state.

The state estimates and recognizes claims and judgments liabilities for disallowances when determined by the grantor agency or for probable disallowances based on experience pertaining to these grants; however, these recognized liabilities and any unrecognized disallowances are considered immaterial to the state's overall financial condition.

E. ARBITRAGE REBATE

Rebatable arbitrage is defined by the Internal Revenue Service Code Section 148 as earnings on investments purchased from the gross proceeds of a bond issue that are in excess of the amount that would have been earned if the investments were invested at a yield equal to the yield on the bond issue.

The rebatable arbitrage must be paid to the federal government. The state estimates that rebatable arbitrage liability, if any, will be immaterial to its overall financial condition.

F. FINANCIAL GUARANTEES

School District Credit Enhancement Program

In accordance with chapter 39.98 RCW (School District Credit Enhancement Program), the state has guaranteed outstanding voter-approved general obligation bonds of school districts within the state in the amount of $12.98 billion at June 30, 2018. The guarantees extend through the life of the bonds, with a final maturity date of the longest series in 2043.

In the event that a school district has insufficient funds to make a required debt service payment on a guaranteed bond, the state is required to transfer sufficient funds to make the payment. School districts for which the state has made all or part of a debt service payment shall reimburse the state for all money drawn on their behalf, as well as interest and penalties. The state has not paid debt service on any school debt since the inception of the program in 2000.

G. COLUMBIA RIVER CROSSING

The Washington State Department of Transportation (WSDOT) and the Oregon Department of Transportation (ODOT) worked together, along with federal and local agencies, on the Columbia River Crossing (CRC) project. The CRC project was a bridge, transit, highway, bicycle, and pedestrian improvement project intended to replace the existing two highway spans on Interstate 5 (I-5) across the Columbia River, along with new interchanges on both the Washington and Oregon sides of the river. It also included extension of light rail public transit into Vancouver, Washington.

In 2014, the CRC project was shut down due to lack of funding by both the Washington and Oregon legislatures. During the project, WSDOT expended approximately $54 million in federal funds, of which $15 million was jointly awarded to Washington and Oregon.

Under Federal Highway Administration (FHWA) policy, failure to advance a project to the construction phase within 10 years of the initial obligation of funds could trigger a requirement to repay federal funds used on the project. FHWA has granted Washington and Oregon an extension to September 30, 2019. WSDOT and ODOT continue discussions with FHWA regarding the I-5 bridge replacement and the necessity and timing of repayment of federal funds.

Substitute Senate Bill (SSB) 5806, effective July 23, 2017, provides $350,000 for the purpose of conducting a planning inventory to document existing planning data related to the construction of a new I-5 bridge over the Columbia River. SSB 6106 provided an additional $350,000 for implementation of SSB 5806. On December 1, 2017, WSDOT submitted a report to the Legislature that details the findings of the inventory of the existing planning work. In addition, SSB 5806 invited the Legislature of Oregon to participate in a joint legislative action committee. This committee is tasked with beginning a process toward project development and providing a report of findings and recommendations by December 15, 2018.

H. GUARANTEED EDUCATION TUITION LOSS CONTINGENCY

Engrossed Second Substitute Senate Bill 5954 was signed into law by the Governor on July 6, 2015, establishing the College Affordability Program. It reduced tuition at all public institutions of higher education during the 2015-16 and 2016-17 academic years and limits tuition growth in future years. During the 2018 legislative session, the Legislature enacted Senate Bill 6087, which provides new account options and additional benefits for Guaranteed Education Tuition (GET) customers who purchased units before July 1, 2015.

From June 15, 2018, to September 12, 2018, GET account holders have the option to roll funds over to the new DreamAhead College Investment Plan (Washington 529 plan) at a special payout value of $143 per unit, request a refund, or roll over funds to an out-of-state 529 plan. The GET Committee will make two account adjustments for customers who choose to stay in GET. The first adjustment will add units to all GET accounts with an average unit purchase price higher than $117.82. The second adjustment will depend on the GET program's funded status after the first adjustment. If the funded status is higher than 125 percent, all customers with unredeemed units purchased prior to July 1, 2015, will receive more units.

I. OTHER COMMITMENTS AND CONTINGENCIES

Local Option Capital Asset Lending Program

On September 1, 1998, the state lease-purchase program was extended to local governments seeking low cost financing of essential equipment and in the year 2000 for real estate. The Local Option Capital Assets Lending (LOCAL) program allows local governments to pool their financing requests together with Washington state agencies in Certificates of Participation (COPs). Refer to Note 7.B for the state's COP disclosure.

These COPs do not constitute a debt or pledge of the full faith and credit of the state; rather, local governments pledge their full faith and credit in a general obligation pledge.

In the event that any local government fails to make any payment, the state is obligated to withhold an amount sufficient to make such payment from the local government's share, if any, of state revenues or other amounts authorized or required by law to be distributed by the state to such local government, if otherwise legally permissible.

Upon failure of any local government to make a payment, the state is further obligated, to the extent of legally available appropriated funds to make such payment on behalf of such local government. The local government remains obligated to make all COP payments and reimburse the state for any conditional payments.

As of June 30, 2018, outstanding COP notes totaled $67.6 million for 138 local governments participating in LOCAL. The state estimates that the LOCAL program liability, if any, will be immaterial to its overall financial condition.

Note 16
Subsequent Events

A. BOND ISSUES

In August 2018, the state issued:

- $262.5 million in general obligation bonds to provide funds to pay and reimburse for various state capital projects.
- $93.6 million in motor vehicle fuel tax general obligation bonds to provide funds to pay and reimburse for construction of selected projects that are identified as transportation 2003 or 2005 projects.
- $145.7 million in taxable general obligation bonds to provide funds to pay and reimburse for various non-transportation capital projects.

B. CERTIFICATES OF PARTICIPATION

In August 2018, the state issued $47.2 million in Certificates of Participation (COP) of which $1.4 million were refundings.