Note 6: PENSION PLANS

General Information

The Washington State Department of Retirement Systems (DRS), a department within the primary government of the state of Washington, prepares a stand-alone comprehensive annual financial report (CAFR) that includes financial statements and required supplementary information for each pension plan. The pension plan's basic financial statement is accounted for using the accrual basis of accounting. The measurement date of the pension plans is June 30. Benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

For the purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of pension plans administered by DRS and additions to/deductions from the plans' net position have been determined on the same basis as they are reported by the plans.

Detailed information about the pension plans' fiduciary net position is available in the separately issued DRS CAFR. Copies of the report may be obtained by contacting the Washington State Department of Retirement Systems, P.O. Box 48380, Olympia, WA 98504-8380; or online at http://www.drs.wa.gov./administrations/annual-report.

Membership Participation

Substantially all of the ESD full-time and qualifying part-time employees participate in one of the following three contributory, multi-employer, cost-sharing statewide retirement systems managed by DRS: Teachers' Retirement System (TRS), Public Employees' Retirement System (PERS) and School Employees' Retirement System (SERS).

Plan	Retirees and Beneficiaries Receiving Benefits	Inactive Plan Members Entitled to but not yet Receiving Benefits	Active Plan Members
PERS 1	45,792	401	1,535
SERS 2	10,072	6,175	28,494
SERS 3	10,007	8,983	35,746
TRS 1	32,645	120	349
TRS 2	5,874	2,779	21,788
TRS 3	13,745	8,675	55,733
PERS 2 and 3 f	or WSIPC		
PERS 2	55,161	29,139	121,968
PERS 3	5,709	6,381	37,545

Membership participation by retirement plan as of June 30, 2019, was as follows:

Membership & Plan Benefits

Certificated employees are members of TRS. Classified employees are members of PERS (if Plan 1) or SERS. Plan 1 under the TRS and PERS programs are defined benefit pension plans whose members joined the system on or before September 30, 1977. TRS 1 and PERS 1 are closed to new entrants.

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. TRS eligibility for membership requires service as a certificated public school employee working in an instructional, administrative or supervisory capacity.

TRS is comprised of three separate plans for accounting purposes: Plan 1, Plan 2/3, and Plan 3. Plan 1 accounts for the defined benefits of Plan 1 members. Plan 2/3 accounts for the defined benefits of Plan 2 members and the defined benefit portion of benefits for Plan 3 members. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members. Although members can 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 to be a single plan for accounting purposes.

TRS Plan 1 provides retirement, disability and death benefits. TRS 1 members were vested after the completion of five years of eligible service. Retirement benefits are determined as two percent of the average final compensation (AFC), for each year of service credit, up to a maximum of 60 percent, divided by twelve. The AFC is the total earnable compensation for the two consecutive highest-paid fiscal years, divided by two. 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. Other benefits include temporary and permanent disability payments, an optional cost-of-living adjustment (COLA), and a one-time duty-related death benefit, if found eligible by the Department of Labor and Industries.

TRS Plan 2/3 provides retirement, disability and death benefits. Retirement benefits are determined as two percent of the average final compensation (AFC) per year of service for Plan 2 members and one percent of AFC for Plan 3 members. The AFC is the monthly average of the 60 consecutive highest-paid service credit months. There is no cap on years of service credit. Members are eligible for normal retirement at the age of 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. TRS Plan 2/3 members, who have at least 20 years of service credit and are 55 years of age or older, are eligible for early retirement with a reduced benefit.

The benefit is reduced by a factor that varies according to age, for each year before age 65. TRS Plan 2/3 members who have 30 or more years of service credit, were hired prior to May 1, 2013, and are at least 55 years old, can retire under one of two provisions: With a benefit that is reduced by three percent for each year before age 65; or with a benefit that has a smaller (or no) reduction (depending on age) that imposes stricter return-to-work rules.

TRS Plan 2/3 members hired on or after May 1, 2013, have the option to retire early by accepting a reduction of five percent for each year of retirement before age 65. This option is available only to those who are age 55 or older and have at least 30 years of service.

TRS Plan 2/3 retirement benefits are also actuarially reduced to reflect the choice of a survivor benefit.

Other benefits include duty and non-duty disability payments, a cost-of-living allowance (based on the Consumer Price Index), capped at three percent annually and a one-time duty-related death benefit, if found eligible by the Department of Labor and Industries. PERS Plan 1 provides retirement, disability and death benefits. PERS 1 members were vested after the completion of five years of eligible service. Retirement benefits are determined as two percent of the member's average final compensation (AFC) times the member's years of service. The AFC is the average of the member's 24 highest consecutive service months. Members are eligible for retirement from active status at any age with at least 30 years of service, at age 55 with at least 25 years of service, or at age 60 with at least five years of service.

Members retiring from inactive status prior to the age of 65 may receive actuarially reduced benefits. PERS Plan 1 retirement benefits are actuarially reduced to reflect the choice of a survivor benefit. Other benefits include duty and non-duty disability payments, an optional cost-of-living adjustment (COLA), and a one-time duty-related death benefit, if found eligible by the Department of Labor and Industries.

SERS is a cost-sharing multiple-employer retirement system comprised of two separate plans for membership purposes. SERS Plan 2 is a defined benefit plan and SERS Plan 3 is a defined benefit plan with a defined contribution component. SERS members include classified employees of school districts and educational service districts.

SERS is reported as two separate plans for accounting purposes: Plan 2/3 and Plan 3. Plan 2/3 accounts for the defined benefits of Plan 2 members and the defined benefit portion of benefits for Plan 3 members. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

Although members can 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. Therefore, Plan 2/3 is considered to be a single plan for accounting purposes.

SERS provides retirement, disability and death benefits. Retirement benefits are determined as two percent of the member's average final compensation (AFC) times the member's years of service for Plan 2 and one percent of AFC for Plan 3. The AFC is the monthly average of the member's 60 highest-paid consecutive service months before retirement, termination or death. There is no cap on years of service credit. Members are eligible for retirement with a full benefit at 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. SERS members, who have at least 20 years of service credit and are 55 years of age or older, are eligible for early retirement with a reduced benefit.

The benefit is reduced by a factor that varies according to age, for each year before age 65. SERS members who have 30 or more years of service credit and are at least 55 years old can retire under one of two provisions, if hired prior to May 2, 2013: With a benefit that is reduced by three percent for each year before age 65; or with a benefit that has a smaller (or no) reduction (depending on age) that imposes stricter return-to-work rules.

SERS members hired on or after May 1, 2013, have the option to retire early by accepting a reduction of five percent for each year of retirement before age 65. This option is available only to those who are age 55 or older and have at least 30 years of service. SERS retirement benefits are also actuarially reduced to reflect the choice of a survivor benefit. Other benefits include duty and non-duty disability payments, a cost- of-living allowance (based on the Consumer Price Index), capped at three percent annually and a one-time duty-related death benefit, if found eligible by the Department of Labor and Industries.

Plan Contributions

The employer contribution rates for PERS, TRS, and SERS (Plans 1, 2, and 3) and the TRS and SERS Plan 2 employee contribution rates are established by the Pension Funding Council based upon the rates set by the Legislature. The methods used to determine the contribution requirements are established under chapters 41.40, 41.32, and 41.35 RCW for PERS, TRS and SERS respectively. Employers do not contribute to the defined contribution portions of TRS Plan 3 or SERS Plan 3. Under current law the employer must contribute 100 percent of the employer-required contribution. The employee contribution rate for Plan 1 in PERS and TRS is set by statute at six percent and does not vary from year to year.

The employer and employee contribution rates for the various plans are effective as of the dates shown in the table. The pension plan contribution rates (expressed as a percentage of covered payroll) for 2018 and 2019 are listed below:

	Pension Rates		
	7/1/19 Rate	9/1/18 Rate	
PERS 1			
Member Contribution Rate	6.00%	6.00%	
Employer Contribution Rate	12.86%	12.83%	
PERS 2 (for WSIPC only)			
Member Contribution Rate	7.90%	7.41%	
Employer Contribution Rate	12.86%	12.83%	
PERS 3 (for WSIPC only)			
Member Contribution Rate	varies*	varies*	
Employer Contribution Rate	12.86%	12.83%	
	Pension Rates		
	9/1/19 Rate	9/1/18 Rate	
TRS 1			
Member Contribution Rate	6.00%	6.00%	
Employer Contribution Rate	15.51%	15.41%	
TRS 2			
Member Contribution Rate	7.77%	7.06%	
Employer Contribution Rate	15.51%	15.41%	
TRS 3			
Member Contribution Rate	varies*	varies*	
Employer Contribution Rate	15.51%	15.41%	**
SERS 2			
Member Contribution Rate	8.25%	7.27%	
Employer Contribution Rate	13.19%	13.58%	

Pension Rates					
SERS 3					
Member Contribution Rate	varies*	varies*			
Employer Contribution Rate	13.19%	13.58%	**		
Note: The DRS administrative rate of .0018 is	Note: The DRS administrative rate of .0018 is included in the employer rate.				
* = Variable from 5% to 15% based on rate selected by the member.					
** = Defined benefit portion only.					

The Collective Net Pension Liability

The collective net pension liabilities for the pension plans the ESDs participated in are reported in the following tables.

The Net Pension Liability as of June 30, 2019:					
Dollars in Thousands	PERS 1	SERS 2/3	TRS 1	TRS 2/3	PERS 2/3 WSIPC
Total Pension Liability	\$11,696,634	\$6,352,843	\$8,355,496	\$16,545,194	\$43,503,168
Plan fiduciary net position	(\$7,851,279)	(\$6,118,345)	(\$5,879,693)	(\$15,942,660)	(\$42,531,828)
Participating employers' net pension liability	\$3,845,355	\$234,498	\$2,475,803	\$602,534	\$971,340
Plan fiduciary net position as a percentage of the total pension liability	67.12%	96.31%	70.37%	96.36%	97.77%

The ESD's Proportionate Share of the Net Pension Liability (NPL)

At June 30, 2019, the ESD reported a total liability of \$______ for its proportionate shares of the individual plans' collective net pension liability. The district's proportionate share of the collective net pension liability is based on annual contributions for each of the employers participating in the DRS administered plans. At June 30, 2019, the district's proportionate share of each plan's net pension liability is reported below:

June 30, 2019	PERS 1	SERS 2/3	TRS 1	TRS 2/3	PERS 2/3 WSIPC
District's					
Annual					
Contributions					
Proportionate					
Share of the					
Net Pension					
Liability					

At June 30, 2019, the ESD' percentage of the proportionate share of the collective net pension liability was as follows and the change in the allocation percentage from the prior year is illustrated below:

Allocation Percentages	PERS 1	SERS 2/3	TRS 1	TRS 2/3	PERS 2/3 WSIPC
Current year proportionate share of the Net Pension Liability					
Prior year proportionate share of the Net Pension Liability					
Net difference percentage					

Actuarial Assumptions

Capital Market Assumptions (CMAs) and expected rates of return by asset class provided by the Washington State Investment Board. The Office of the State Actuary relied on the CMAs in the selection of the long-term expected rate of return for reporting purposes.

The total pension liabilities for TRS 1, TRS 2/3, PERS 1 and SERS 2/3 were determined by actuarial valuation as of June 30, 2018, with the results rolled forward to June 30, 2019, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Inflation	2.75% total economic inflation, 3.50% salary inflation
Salary increases	In addition to the base 3.50% salary inflation assumption, salaries are also expected to grow by promotions and longevity.
Investment rate of return	7.40%

Mortality Rates

Mortality rates used in the plans 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, 2018 valuation were based on the results of the 2007–2012 Experience Study Report and the 2017 Economic Experience Study. Additional assumptions for subsequent events and law changes are current as of the 2018 actuarial valuation report.

Long-term Expected Rate of Return

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 Washington State Investment Board (WSIB). Those expected returns

make up one component of WSIB's CMAs. The CMAs contain three pieces of information for each class of assets the WSIB currently invest in:

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

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

The long-term expected rate of return of 7.40% percent approximately equals the median of the simulated investment returns over a fifty-year time horizon, increased slightly to remove WSIB's implicit and small short-term downward adjustment due to assumed mean reversion. WSIB's implicit short-term adjustment, while small and appropriate over a ten to fifteen-year period, becomes amplified over a fifty-year measurement period.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plans' target asset allocation as of June 30, 2019, are summarized in the following table:

TRS 1, TRS 2/3, PERS 1, and SERS 2/3				
Asset Class	Target Long-term Expected			
	Allocation	Real Rate of Return		
Fixed Income	20.00%	2.20%		
Tangible Assets	7.00%	5.10%		
Real Estate	18.00%	5.80%		
Global Equity	32.00%	6.30%		
Private Equity	23.00%	9.30%		

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

Discount Rate

The discount rate used to measure the total pension liability was 7.40 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 7.50 percent long-term discount rate to determine funding liabilities for calculating future contributions rate requirements. Consistent with the long-term expected rate of return, a 7.40 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 7.40 percent on pension plan investments was applied to determine the total pension liability.

Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The Pension Plans reported collective Deferred Outflows of Resources and collective Deferred Inflows of Resources related to the individual plans. At August 31, 2018, the ESD reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

Plan Name	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experiences	\$	\$
Net difference between projected and actual earnings on pension plan investments	\$	\$
Changes in assumptions or other inputs	\$	\$
Changes in proportion and differences between contributions and proportionate share of contributions	\$	\$
Contributions subsequent to the measurement date	\$	\$
TOTAL	\$	\$

Plan Name	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experiences	\$	\$
Net difference between projected and actual earnings on pension plan investments	\$	\$
Changes in assumptions or other inputs	\$	\$
Changes in proportion and differences between contributions and proportionate share of contributions	\$	\$
Contributions subsequent to the measurement date	\$	\$
TOTAL	\$	\$

Plan Name	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experiences	\$	\$
Net difference between projected and actual earnings on pension plan investments	\$	\$
Changes in assumptions or other inputs	\$	\$

Plan Name	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in proportion and differences between contributions and proportionate share of contributions	\$	\$
Contributions subsequent to the measurement date	\$	\$
TOTAL	\$	\$

Plan Name	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experiences	\$	\$
Net difference between projected and actual earnings on pension plan investments	\$	\$
Changes in assumptions or other inputs	\$	\$
Changes in proportion and differences between contributions and proportionate share of contributions	\$	\$
Contributions subsequent to the measurement date	\$	\$
TOTAL	\$	\$

\$______ reported as Deferred Outflows of Resources related to pensions resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended August 31, 2019.

Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in pension expense as follows:

Year ended August 31	PERS 1	SERS 2/3	TRS 1	TRS 2/3
2019				
2020				
2021				
2022				
2023				
Thereafter				

Pension Expense

The ESD recognizes a pension expense for its proportionate share of the collective pension expense. This is determined by using the district's proportionate share of the collective net pension liability. For the year ending August 31, 2018, the ESD recognized a total pension expense as follows:

	Pension Expense
PERS 1	\$
SERS 2/3	\$
TRS 1	\$
TRS 2/3	\$
TOTAL	\$

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

The table below presents the ESD's proportionate share of the net pension liability calculated using the discount rate of 7.40%, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.40%) or one percentage point higher (8.40%) than the current rate. Amounts are calculated by plan using the ESD's allocation percentage.

	1% Decrease (6.40%)	Current Discount Rate (7.40%)	1% Increase (8.40%)		
PERS 1 NPL	\$4,815,609,000	\$3,845,355,000	\$3,003,532,000		
Allocation Percentage					
Proportionate Share of Collective NPL					
SERS 2/3 NPL	\$1,141,883,000	\$234,498,000	(\$513,722,000)		
Allocation Percentage					
Proportionate Share of Collective NPL					
TRS 1 NPL	\$3,164,358,000	\$2,475,803,000	\$1,878,531,000		
Allocation Percentage					
Proportionate Share of Collective NPL					
TRS 2/3 NPL	\$3,283,747,000	\$602,534,000	(\$1,577,475,000)		
Allocation Percentage					
Proportionate Share of Collective NPL					
PERS 2/3 for WSIPC Only					
PERS 2/3 NPL	\$7,449,792,000	\$971,340,000	(\$4,344,658,000)		
Allocation Percentage					
Proportionate Share of Collective NPL					

Schedules of Required Supplementary Information

Note to Preparer: RSI schedules are include here for reference but they should be displayed in a separate RSI document. Do not include these RSI Schedules in the Notes to the Financial Statements.

The required supplementary information identified below is presented separately for each plan the ESD participates in. The amounts reported in the Schedules of the Districts Proportionate Share of the Net Pension Liability are determined as of the June 30 measurement date of the collective net pension liability. (*Prepare a separate table for each plan*.)

SCHEDULE OF THE DISTRICT'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY					
	(Plan	Name)			
Last 10 Fiscal Years* (Dollar amounts in thousands)					
	2019	2018	2017	2016	2015*
District's proportion of the net pension liability (percentage)					
District's proportionate share of the net pension liability (amount)					
District's covered-employee payroll					
District's proportionate share of the net pension liability (amount) as a percentage of its covered payroll					
Plan fiduciary net position as a percentage of the total pension liability					

*This schedule is to be built prospectively until it contains ten years of data.

The information identified below is the Schedule of District Contributions, by Plan. The amounts reported in the Schedules of District Contributions are determined as of the district's fiscal year ending August 31. (*Prepare a separate table for each plan*.)

SCHEDULE OF DISTRICT CONTRIBUTIONS					
(Plan Name)					
Last 10 Fiscal Years* (Dollar amounts in thousands)					
	2019	2018	2017	2016	2015*
Contractually required contribution					
Contributions in relation to the contractually required contributions					
Contribution deficiency (excess)					
District's covered-employee payroll					
Contribution as a percentage of covered-employee payroll					

*This schedule is to be built prospectively until it contains ten years of data.