# Note x: 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.

The school district is reporting the net pension liability in the notes and on the Schedule of Long-term Liabilities calculated as the district’s proportionate allocation percentage multiplied by the total plan collective net pension liability.

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 school district 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).

Membership participation by retirement plan as of June 30, 2018, was as follows:

| Plan | Retirees and BeneficiariesReceiving Benefits | Inactive Plan Members Entitled to but not yet Receiving Benefits | Active Plan Members  |
| --- | --- | --- | --- |
| PERS 1 | 47,037 | 539 | 1,986 |
| SERS 2 | 9,171 | 6,050 | 27,786 |
| SERS 3 | 8,866 | 8,678 | 34,930 |
| TRS 1 | 33,460 | 147 | 497 |
| TRS 2 | 5,453 | 2,617 | 20,518 |
| TRS 3 | 11,960 | 8,735 | 55,117 |

**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 41.34 and 41.40 RCW for PERS, 41.34 and 41.35 RCW for SERS, and 41.32 and 41.34 RCW for TRS. 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 2017 and 2018 are listed below:

| **Pension Rates** |
| --- |
|  | 9/1/18 Rate | 7/1/17 Rate |  |
| **PERS 1** |
| Member Contribution Rate | 6.00% | 6.00% |  |
| Employer Contribution Rate | 12.83% | 12.70% |  |
| **Pension Rates** |
|  | 9/1/18 Rate | 9/1/17 Rate |  |
| **TRS 1** |
| Member Contribution Rate | 6.00% | 6.00% |  |
| Employer Contribution Rate | 15.41% | 15.20% |  |
| **TRS 2** |
| Member Contribution Rate | 7.06% | 7.06% |  |
| Employer Contribution Rate | 15.41% | 15.20% |  |
| **TRS 3** |
| Member Contribution Rate | varies\* | varies\* |  |
| Employer Contribution Rate | 15.41% | 15.20% | **\*\*** |
| **SERS 2** |
| Member Contribution Rate | 7.27% | 7.27% |  |
| Employer Contribution Rate | 13.58% | 13.48% |  |
| **SERS 3** |
| Member Contribution Rate | varies\* | varies\* |  |
| Employer Contribution Rate | 13.58% | 13.48% | **\*\*** |
| *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 districts participated in are reported in the following tables.

| The Net Pension Liability as of June 30, 2018: |
| --- |
| Dollars in Thousands | PERS 1 | SERS 2/3 | TRS 1 | TRS 2/3 |
| Total Pension Liability | $12,143,412  | $5,719,600  | $8,722,439  | $14,422,685  |
| Plan fiduciary net position | ($7,677,378) | ($5,420,538) | ($5,801,847) | ($13,972,571) |
| Participating employers’ net pension liability | $4,466,034  | $299,062  | $2,920,592  | $450,114  |
| Plan fiduciary net position as a percentage of the total pension liability | 63.22% | 94.77% | 66.52% | 96.88% |

**The School District’s Proportionate Share of the Net Pension Liability (NPL)**

At June 30, 2018, the District reported a total liability of $**\_\_\_\_\_\_\_\_\_** for its proportionate shares of the individual plans’ collective net pension liability. Proportion of net pension liability is based on annual contributions for each of the employers participating in the DRS administered plans. At June 30, 2018, the district’s proportionate share of each plan’s net pension liability is reported below:

| June 30, 2018 | PERS 1 | SERS 2/3 | TRS 1 | TRS 2/3 |
| --- | --- | --- | --- | --- |
| District’s Annual Contributions |  |  |  |  |
| Proportionate Share of the Net Pension Liability |  |  |  |  |

At **June 30,** 2018, the school district’s percentage of the proportionate share of the collective net pension liability was as follows and the change in the allocation percentage from the prior period is illustrated below.

| Allocation percentages | PERS 1 | SERS 2/3 | TRS 1 | TRS 2/3 |
| --- | --- | --- | --- | --- |
| 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, 2017, with the results rolled forward to June 30, 2018, 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, 2017 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 2017 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, 2018 are summarized in the following table:

| TRS 1, TRS 2/3, PERS 1, and SERS 2/3 |
| --- |
| 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% |

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.

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

The following table presents the \_\_\_\_\_\_\_\_\_\_\_\_ School District’s proportionate share of the collective net pension liability (NPL) calculated using the discount rate of 7.40 percent, 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 percent) or one percentage-point higher (8.40 percent) than the current rate. Amounts are calculated using the school district’s specific allocation percentage, by plan, to determine the proportionate share of the collective net pension liability.

|  | 1% Decrease (6.40%) | Current Discount Rate (7.40%) | 1% Increase (8.40%) |
| --- | --- | --- | --- |
| **PERS 1 NPL** | $5,488,477,000 | $4,466,034,000 | $3,580,392,000 |
| Allocation Percentage |  |  |  |
| Proportionate Share of Collective NPL  |  |  |  |
|    |
| **SERS 2/3 NPL** | $1,127,549,000 | $299,062,000 | ($383,817,000) |
| Allocation Percentage |  |  |  |
| Proportionate Share of Collective NPL  |  |  |  |
|    |
| **TRS 1 NPL** | $3,650,431,000 | $2,920,592,000 | $2,288,760,000 |
| Allocation Percentage |  |  |  |
| Proportionate Share of Collective NPL  |  |  |  |
|  |
| **TRS 2/3 NPL** | $2,805,439,000 | $450,114,000 | ($1,463,229,000) |
| Allocation Percentage |  |  |  |
| Proportionate Share of Collective NPL  |  |  |  |