

State of Alaska

Teachers' Retirement System

Information Required
Under Governmental
Accounting
Standards Board
Statement No. 68 as
of June 30, 2019

November 2019

BUCK



November 20, 2019

State of Alaska

The Alaska Retirement Management Board

The Department of Revenue, Treasury Division

The Department of Administration, Division of Retirement and Benefits

P.O. Box 110203

Juneau, AK 99811-0203

Re: GASB 68 Report as of June 30, 2019 for June 30, 2020 Reporting – TRS

Dear Members of The Alaska Retirement Management Board, The Department of Revenue, and The Department of Administration:

We have prepared the required accounting information for Governmental Accounting Standards Board (GASB) Statement No. 68 (GASB 68) for the State of Alaska Teachers' Retirement System (TRS) for June 30, 2020 reporting based on a measurement date of June 30, 2019. Under GASB 68, accounting information prepared under GASB 67 as of June 30, 2019 (as previously provided) serves as the basis for these disclosures. Please refer to the GASB 67 report dated September 30, 2019 for any supplemental information or documentation.

This report covers the pension portion of TRS. A separate GASB 75 report will be issued for the healthcare portion of TRS.

I certify that the information contained in this report has been prepared in accordance with generally accepted actuarial principles and practices. To the best of my knowledge, the information fairly presents the actuarial position of TRS in accordance with the requirements of GASB 68 as of the June 30, 2019 measurement date.

The Alaska Retirement Management Board (ARMB) and staff of the State of Alaska and its auditors may use this report for the review of the operation of TRS. The report may also be used in the preparation of State of Alaska's and participating employers' audited financial statements. Use of this report for any other purpose or by anyone other than the ARMB, the staff of the State of Alaska, or its auditors may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advanced review of any statement to be based on information contained in this report. Buck will accept no liability for any such statement made without its prior review.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, changes in assumptions, changes expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of

the potential range of such future differences is beyond the scope of this report, except for the GASB 68 required disclosure of the sensitivity of net pension liability to changes in the discount rate.

The information in this report was prepared based on the actuarial assumptions and methods used in the June 30, 2018 actuarial valuation of TRS, except as noted herein. We rolled forward the liabilities from that date to June 30, 2019, as GASB 68 permits. In my opinion, the actuarial assumptions used are appropriate for purposes of the valuation and are reasonably related to the experience of TRS and to reasonable long-term expectations.

In preparing the actuarial results, we have relied upon information provided by staff of the State of Alaska regarding TRS plan provisions, participants, assets, contributions, and other matters used in the June 30, 2018 actuarial valuation of TRS. Although we did not audit the data, we reviewed the data for reasonableness and consistency with the prior year's information. The accuracy of the results presented herein is dependent upon the accuracy of the data. We also reflected the information contained in the June 30, 2019 asset statements that were provided to us by staff of the State of Alaska on September 24, 2019.

Where presented, the "net pension liability" and "plan fiduciary net position as a percentage of the total pension liability" are measured on a market value of assets basis. These items presented may be appropriate for GASB 68 reporting but make no assessment regarding the cost to settle (i.e., purchase annuities) to cover any portion of the plan's liabilities.

This report was prepared under my supervision and in accordance with all applicable Actuarial Standards of Practice. I am a Fellow of the Society of Actuaries, an Enrolled Actuary, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

I am available to discuss this report with you at your convenience. I can be reached at (602) 803-6174.

Respectfully submitted,



David J. Kershner, FSA, EA, MAAA, FCA
Principal
Buck

Contents

Section 1 – GASB 68 Information	1
Section 2 – Actuarial Assumptions and Methods	4
Section 3 – Summary of Plan Provisions.....	12
Appendix.....	18
Schedule A – Employers’ Allocation of Net Pension Liability as of June 30, 2018	
Schedule B – Employers’ Allocation of Net Pension Liability as of June 30, 2019	
Schedule C – Employers’ Allocation of Pension Amounts as of June 30, 2019	
Schedule D – Employers’ Allocation of Recognition of Deferred Outflows/Inflows as of June 30, 2019	
Schedule E – Contribution History	
Schedule F – Present Value of Future State Assistance Contributions as of June 30, 2019	
Schedule G – Supplemental Schedule of Special Funding Amounts by Employer as of June 30, 2019	

Section 1 – GASB 68 Information

Pension Expense

Measurement Date	June 30, 2019	June 30, 2018
Reporting Date	June 30, 2020	June 30, 2019
Service cost	\$ 60,810,000	\$ 64,961,000
Interest cost	575,706,000	572,791,000
Expected return on assets	(396,435,000)	(416,675,000)
Current period effect of benefit changes	0	0
Current period difference between expected and actual experience	(84,450,000)	(77,112,941)
Current period effect of changes in assumptions	(22,039,375)	0
Current period difference between projected and actual investment earnings	16,292,600	(3,173,600)
Member contributions	(35,763,000)	(37,674,000)
Administrative expenses	3,018,000	3,050,000
Service purchases and plan transfers	0	0
Current period recognition of prior years' deferred outflows of resources	131,535,800	131,535,800
Current period recognition of prior years' deferred inflows of resources	(105,064,459)	(148,646,968)
Other additions less other deductions	<u>(32,000)</u>	<u>(183,000)</u>
Total	\$ 143,578,566	\$ 88,872,291

The employers' allocation of the pension expense for June 30, 2020 reporting is shown in Schedule C in the Appendix.

The difference between projected and actual investment earnings is recognized over 5 years.

The effects of changes in assumptions and differences between expected and actual experience are recognized over the average future working lifetime. This period is:

- 1.6 years as of June 30, 2018 (for the June 30, 2019 measurement date)
- 1.7 years as of June 30, 2017 (for the June 30, 2018 measurement date)

Actuarial Assumptions

The total pension liability as of the June 30, 2019 measurement date was determined by an actuarial valuation as of June 30, 2018, using the actuarial assumptions outlined in Section 2. The liabilities from the June 30, 2018 valuation were rolled forward to June 30, 2019.

The actuarial assumptions used in the June 30, 2018 actuarial valuation were based on the results of an actuarial experience study for the period from July 1, 2013 to June 30, 2017, resulting in changes in actuarial assumptions effective for the June 30, 2018 actuarial valuation adopted by the Alaska Retirement Management Board in January 2019 to better reflect expected future experience.

Actuarial Cost Method

Entry Age Normal – Level Percentage of Payroll

Asset Valuation Method

Invested assets are reported at fair value.

Allocation of Net Pension Liability

The employers' allocations of net pension liability as of the June 30, 2018 and June 30, 2019 measurement dates are shown in Schedule A and Schedule B, respectively, in the Appendix.

Allocation of Deferred Outflows/Inflows of Resources

The employers' allocation of deferred outflows/inflows of resources as of the June 30, 2019 measurement date is shown in Schedule C in the Appendix.

The chart below provides details of the deferred outflows/inflows as of the June 30, 2019 measurement date:

Date Created	Type	Original Amortization Period	Deferred Outflow/(Inflow) as of June 30, 2019
June 30, 2016	Asset Loss	5 years	\$ 88,167,800
June 30, 2017	Asset Gain	5 years	\$ (95,823,600)
June 30, 2018	Asset Gain	5 years	\$ (9,520,800)
June 30, 2019	Asset Loss	5 years	\$ 65,170,400
June 30, 2019	Liability Gain	1.6 years	\$ (50,670,000)
June 30, 2019	Change in Assumptions	1.6 years	\$ (13,223,625)

Allocation of Future Years' Recognition of Deferred Outflows/Inflows

The employers' allocation of recognition of the deferred outflows/inflows as of the June 30, 2019 measurement date for each of the next five fiscal years and thereafter is shown in Schedule D in the Appendix. These amounts include recognition of the deferred outflows/inflows from prior years.

Allocation Methodology

Amounts for the June 30, 2018 measurement date were allocated to employers based on the present value of contributions for FY2020-FY2039, as determined by projections based on the June 30, 2017 valuation.

Amounts for the June 30, 2019 measurement date were allocated to employers based on the present value of contributions for FY2021-FY2039, as determined by projections based on the June 30, 2018 valuation.

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

The table below shows the development of the net pension liability as of June 30, 2019 using the discount rate of 7.38%, as well as a discount rate that is one percentage point lower (6.38%) and one percentage point higher (8.38%) than the current rate (\$ in thousands).

FYE June 30, 2019	1.00% Decrease (6.38%)	Current Discount Rate (7.38%)	1.00% Increase (8.38%)
Service cost	\$ 76,059	\$ 60,810	\$ 49,484
Interest cost	562,466	575,706	584,282
Benefit payments	(472,717)	(472,717)	(472,717)
Net change to inflows/outflows	<u>(173,437)</u>	<u>(170,383)</u>	<u>(165,243)</u>
Net change in total pension liability	\$ (7,629)	\$ (6,584)	\$ (4,194)
Total pension liability - beginning	\$ 8,211,246	\$ 7,387,056	\$ 6,693,535
Total pension liability - ending (a)	\$ 8,203,617	\$ 7,380,472	\$ 6,689,341
Plan fiduciary net position - ending (b)	\$ 5,511,929	\$ 5,511,929	\$ 5,511,929
Plan's net pension liability (asset) - ending (a) - (b)	\$ 2,691,688	\$ 1,868,543	\$ 1,177,412

Section 2 – Actuarial Assumptions and Methods¹

The funding method used in this valuation was adopted by the Board in October 2006. Changes in methods were adopted by the Board in January 2019 based on the experience study for the period July 1, 2013 to June 30, 2017. The asset smoothing method used to determine valuation assets was changed effective June 30, 2014.

Benefits valued are those delineated in Alaska state statutes as of the valuation date. Changes in state statutes effective after the valuation date are not taken into consideration in setting the assumptions and methods.

Actuarial Method

Entry Age Normal Cost.

Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method.

Effective June 30, 2018, the Board adopted a layered UAAL amortization method: Layer #1 equals the sum of (i) the UAAL at June 30, 2018 based on the 2017 valuation, plus (ii) the FY18 experience gain/loss. Layer #1 is amortized over the remainder of the 25-year closed period that was originally established in 2014². Layer #2 equals the change in UAAL at June 30, 2018 due to the experience study. Layer #2 is amortized over a separate closed 25-year period starting in 2018. Future layers will be created each year based on the change in UAAL occurring that year and will be amortized over separate closed 25-year periods. The UAAL amortization continues to be on a level percent of pay basis. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined.

Projected pension benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

¹ Used to determine June 30, 2018 funding assets and liabilities, and contribution rates.

² Layer #1 is referred to as "initial amount" in Section 1.2 in the June 30, 2018 valuation report.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

Valuation of Assets

The actuarial asset value was reinitialized to equal Fair Value of Assets as of June 30, 2014. Beginning in FY15, the asset value method recognizes 20% of the gain or loss each year, for a period of 5 years. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP.

Changes in Methods Since the Prior Valuation

Prior to the June 30, 2018 valuation, the total UAAL was amortized over the remainder of the 25-year closed period that was established in 2014. There were no other changes in the asset or valuation methods since the prior valuation.

Actuarial Assumptions

The demographic and economic assumptions used in the June 30, 2018 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board in January 2019 based on the experience study for the period from July 1, 2013 to June 30, 2017.

Investment Return

7.38% per year, net of investment expenses.

Salary Scale

Salary scale rates based upon the 2013-2017 actual experience (see Table 1).

Inflation – 2.50% per year.

Productivity – 0.25% per year.

Payroll Growth

2.75% per year (inflation + productivity).

Total Inflation

Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 2.50% annually.

Mortality (Pre-Termination)

Mortality rates based upon the 2013-2017 actual experience.

100% of RP-2014 white-collar employee table with MP-2017 generational improvement.

Mortality (Post-Termination)

Mortality rates based upon the 2013-2017 actual experience.

93% of male and 90% of female rates of RP-2014 white-collar healthy annuitant table with MP-2017 generational improvement.

Deaths are assumed to result from occupational causes 15% of the time.

Turnover

Based upon the 2013-2017 actual experience (see Table 2).

Disability

Incidence rates based upon the 2013-2017 actual experience (see Table 3).

Post-disability mortality in accordance with the RP-2014 disabled table with MP-2017 generational improvement. Deaths are assumed to be from non-occupational causes 85% of the time.

Retirement

Retirement rates based upon the 2013-2017 actual experience (see Table 4).

Deferred vested members are assumed to retire at their earliest unreduced retirement date.

The modified cash refund annuity is valued as a three-year certain and life annuity.

Spouse Age Difference

Males are assumed to be three years older than their wives. Females are assumed to be two years younger than husbands.

Percent Married

85% of male members and 75% of female members are assumed to be married at termination from active service.

Contribution Refunds

0% of terminating members with vested benefits are assumed to have their contributions refunded.
100% of those with non-vested benefits are assumed to have their contributions refunded.

Alaska Cost-of-Living Adjustments (COLA)

Of those benefit recipients who are eligible for the Alaska COLA, 60% are assumed to remain in Alaska and receive the COLA.

Sick Leave

4.5 days of unused sick leave for each year of service are assumed to be available to be credited once the member is retired, terminates or dies.

Postretirement Pension Adjustment (PRPA)

50% and 75% of assumed inflation, or 1.25% and 1.875% respectively, is valued for the annual automatic PRPA as specified in the statute.

Expenses

The investment return assumption is net of investment expenses.

Part-Time Status

Part-time employees are assumed to earn 0.75 years of credited service per year.

Re-Employment Option

All re-employed retirees are assumed to return to work under the Standard Option.

Service

Total credited service is provided by the State. This service is assumed to be the only service that should be used to calculate benefits. Additionally, the State provides claimed service (including Bureau of Indian Affairs Service). Claimed service is used for vesting and eligibility purposes as described in Section 3.

Final Average Earnings

Final Average Earnings is provided on the data for active members. This amount is used as a minimum in the calculation of the average earnings in the future.

Changes in Assumptions Since the Prior Valuation

Effective for the June 30, 2018 valuation, the Board adopted changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the population experience from July 1, 2013 to June 30, 2017. The changes in assumptions were adopted at the January 2019 Board meeting.

Table 1: Salary Scale

Years of Service	Percent Increase
0	6.75%
1	6.25
2	5.75
3	5.25
4	4.75
5	4.25
6	3.75
7	3.65
8	3.55
9	3.45
10	3.35
11	3.25
12	3.15
13	3.05
14	2.95
15	2.85
16+	2.75

Table 2: Turnover Rates

Select Rates during the First 8 Years of Employment

Years of Service	Male	Female
0	20.4%	17.0%
1	20.4	17.0
2	16.8	14.0
3	14.4	12.0
4	12.0	10.0
5	10.8	9.0
6	9.0	7.5
7	7.2	6.0

Ultimate Rates after the First 8 Years of Employment

Age	Male	Female	Age	Male	Female
22	2.62%	3.79%	39	2.57%	3.74%
23	2.62	3.79	40	2.26	2.75
24	2.61	3.79	41	2.26	2.75
25	2.61	3.79	42	2.25	2.74
26	2.61	3.79	43	2.24	2.73
27	2.60	3.79	44	2.23	2.73
28	2.60	4.27	45	2.22	2.72
29	2.60	4.76	46	2.21	2.71
30	2.60	5.24	47	2.20	2.70
31	2.60	5.73	48	2.18	2.69
32	2.59	6.22	49	2.16	2.68
33	2.59	5.72	50	3.43	4.42
34	2.59	5.23	51	3.39	4.39
35	2.59	4.74	52	3.35	4.36
36	2.58	4.25	53	3.30	4.32
37	2.58	3.75	54	3.00	7.56
38	2.58	3.75	55+	2.00	5.00

Table 3: Disability Rates

Age	Male	Female
< 31	0.0337%	0.0612%
31	0.0337	0.0613
32	0.0337	0.0613
33	0.0342	0.0622
34	0.0347	0.0631
35	0.0353	0.0641
36	0.0357	0.0650
37	0.0362	0.0659
38	0.0371	0.0674
39	0.0379	0.0689
40	0.0387	0.0703
41	0.0395	0.0718
42	0.0403	0.0733
43	0.0423	0.0770
44	0.0443	0.0806
45	0.0464	0.0843
46	0.0483	0.0879
47	0.0504	0.0916
48	0.0536	0.0975
49	0.0569	0.1034
50	0.0601	0.1093
51	0.0634	0.1152
52	0.0666	0.1211
53	0.0746	0.1356
54	0.0826	0.1501

Table 4: Retirement Rates

Age	Reduced		Unreduced	
	Male	Female	Male	Female
< 45	N/A	N/A	3.0%	3.0%
45	N/A	N/A	5.0	5.0
46	N/A	N/A	5.0	8.0
47	N/A	N/A	5.0	8.0
48	N/A	N/A	5.0	8.0
49	N/A	N/A	5.0	8.0
50	10.0%	10.0%	5.0	14.0
51	10.0	10.0	8.0	13.0
52	10.0	10.0	15.0	13.0
53	10.0	12.0	15.0	14.0
54	10.0	12.0	15.0	15.0
55	15.0	8.0	20.0	17.0
56	10.0	8.0	17.0	17.0
57	10.0	8.0	15.0	17.0
58	10.0	8.0	20.0	17.0
59	10.0	8.0	20.0	23.0
60	N/A	N/A	25.0	23.0
61	N/A	N/A	18.0	23.0
62	N/A	N/A	18.0	21.0
63	N/A	N/A	18.0	21.0
64	N/A	N/A	18.0	26.0
65	N/A	N/A	30.0	21.0
66	N/A	N/A	25.0	21.0
67	N/A	N/A	25.0	21.0
68	N/A	N/A	25.0	26.0
69	N/A	N/A	35.0	26.0
70	N/A	N/A	30.0	26.0
71	N/A	N/A	30.0	37.0
72	N/A	N/A	30.0	37.0
73	N/A	N/A	30.0	37.0
74	N/A	N/A	30.0	37.0
75 – 79	N/A	N/A	50.0	50.0
80+	N/A	N/A	100.0	100.0

Section 3 – Summary of Plan Provisions

Effective Date

July 1, 1955, with amendments through June 30, 2018. Chapter 97, 1990 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under TRS before July 1, 1990 (Tier 1) are eligible for different benefits than members hired after June 30, 1990 (Tier 2). Chapter 9, 2005 Session Laws of Alaska, closed the plan to new members hired after June 30, 2006.

Administration of Plan

The Commissioner of Administration or the Commissioner's designee is the administrator of the system. The Attorney General of the state is the legal counsel for the system and shall advise the administrator and represent the system in legal proceedings.

Prior to June 30, 2005, the Teachers' Retirement Board prescribed policies and adopted regulations and performed other activities necessary to carry out the provisions of the system. The Alaska State Pension Investment Board, Department of Revenue, Treasury Division was responsible for investing TRS funds.

On July 27, 2005, Senate Bill 141, enacted as Chapter 9, 2005 Session laws of Alaska, replaced the Teachers' Retirement Board and the Alaska State Pension Investment Board with the Alaska Retirement Management Board.

Employers Included

Currently, there are 56 employers participating in TRS, including the State of Alaska, 52 school districts, and three other eligible organizations.

Membership

Membership in TRS is mandatory for the following employees hired before July 1, 2006:

- certificated full-time and part-time elementary and secondary teachers, certificated school nurses, and certificated employees in positions requiring teaching certificates;
- positions requiring a teaching certificate as a condition of employment in the Department of Education and Early Development and the Department of Labor and Workforce Development;
- University of Alaska full-time and part-time teachers, and full-time administrative employees in positions requiring academic standing if approved by the TRS administrator;
- certain full-time or part-time teachers of Alaska Native language or culture who have elected to be covered under TRS;
- members on approved sabbatical leave under AS 14.20.310;
- certain State legislators who have elected to be covered under TRS; and
- a teacher who has filed for worker's compensation benefits due to an on-the-job assault and who, as a result of the physical injury, is placed on leave without pay.

Employees participating in the University of Alaska's Optional Retirement Plan or other retirement plans funded by the State are not covered by TRS.

Employees who work half-time in TRS and Public Employees' Retirement System (PERS) simultaneously are eligible for half-time TRS and PERS credit.

Senate Bill 141, signed into law on July 27, 2005, closes the plan effective July 1, 2006 to new members first hired on or after July 1, 2006.

Credited Service

TRS members receive a year of membership credit if they work a minimum of 172 days during the school year (July 1 through June 30 of the following year). Fractional credit is determined based on the number of days worked. Part-time members who work at least 50% of full-time receive membership credit for each day in proportion to full-time service. Credit is granted for all Alaskan public school service.

Members may claim other types of service, including:

- Outside teaching service in out-of-state schools or Alaska private schools (not more than ten years may be claimed);
- Military service (not more than five years of military service or ten years of combined outside and military service may be claimed);
- Alaska Bureau of Indian Affairs (BIA) service;
- Retroactive Alaskan service that was not creditable at the time it occurred, but later became creditable because of legislative change;
- Unused sick leave credit after members retire; and
- Leave of absence without pay.

Except for retroactive Alaska service that occurred before July 1, 1955, and unused sick leave, contributions are required for all claimed service.

Members receiving TRS disability benefits continue to earn TRS credit while disabled.

Survivors who are receiving occupational death benefits continue to earn TRS service credit while occupational survivor benefits are being paid.

Employer Contributions

TRS employers contribute the amounts required, in addition to employees' contributions, to fund the benefits of the system.

The normal cost rate is a uniform rate for all participating employers (less the value of members' contributions).

The past service rate is a uniform rate for all participating employers to amortize the unfunded past service liability with payments that are a level percentage of payroll amount over a closed 25-year period starting June 30, 2014. Effective June 30, 2018, each future year's unfunded service liability is separately amortized on a level percent of pay basis over 25 years.

Employer rates cannot be less than the normal cost rate.

Additional State Contributions

Pursuant to AS14.25.070 effective July 1, 2008, the State shall contribute an amount (in addition to the State contribution as an employer) that when combined with the employer contribution (12.56%) will be sufficient to pay the total contribution rate adopted by The State of Alaska Retirement Management Board.

Member Contributions

Mandatory Contributions: Members are required to contribute 8.65% of their base salaries. Members' contributions are deducted from gross salaries before federal income taxes are withheld.

Contributions for Claimed Service: Member contributions are also required for most of the claimed service described above.

1% Supplemental Contributions: Members who joined the system before July 1, 1982 and elected to participate in the supplemental contributions provision are required to contribute an additional 1% of their salaries. Supplemental contributions are deducted from gross salaries after federal income taxes are withheld. Under the supplemental provision, an eligible spouse or dependent child will receive a survivor's allowance or spouse's pension if the member dies (see below). Supplemental contributions are only refundable upon death (see below).

Interest: Members' contributions earn 4.5% interest, compounded annually on June 30.

Refund of Contributions: Terminated members may receive refunds of their member contribution accounts which includes their mandatory contributions, indebtedness payments, and interest earned. Terminated members' accounts may be attached to satisfy claims under Alaska Statute 09.38.065, federal income tax levies, and valid Qualified Domestic Relations Orders.

Reinstatement of Contributions: Refunded accounts and the corresponding TRS service may be reinstated upon reemployment in TRS prior to July 1, 2010. Interest accrues on refunds until paid in full or members retire.

Retirement Benefits

Eligibility

- a. Members, including deferred vested members, are eligible for normal retirement at age 55 or early retirement at age 50 if they were hired before July 1, 1990 (Tier 1) and age 60 or early retirement at age 55 if they were hired on or after July 1, 1990 (Tier 2). Additionally, they must have at least:
 - (i) eight years of paid-up membership service;
 - (ii) 15 years of paid-up creditable service, the last five years of which are membership service, and they were first hired under TRS before July 1, 1975;
 - (iii) five years of paid-up membership service and three years of paid-up Alaska Bureau of Indian Affairs service;
 - (iv) 12 years of combined part-time and full-time paid-up membership service;
 - (v) two years of paid-up membership service if they are vested in PERS; or
 - (vi) one year of paid-up membership service if they are retired from PERS.

- b. Members may retire at any age when they have:
 - (i) 25 years of paid-up creditable service, the last five years of which are membership service;
 - (ii) 20 years of paid-up membership service;
 - (iii) 20 years of combined paid-up membership and Alaska Bureau of Indian Affairs service, the last five years of which are membership service; or
 - (iv) 20 years of combined paid-up part-time and full-time membership service.

Benefit Type

Lifetime benefits are paid to members. Eligible members may receive normal, unreduced benefits when they (1) reach normal retirement age and complete the service required; or (2) satisfy the minimum service requirements to retire at any age under (b) above. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

Members may select joint and survivor options and a last survivor option. Under those options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

Benefit Calculations

Retirement benefits are calculated by multiplying the average base salary (ABS) times the total TRS service times the percentage multiplier. The ABS is determined by averaging the salaries earned during the three highest school years. Members must earn at least 115 days of credit in a school year to include it in the ABS calculation. TRS pays a minimum benefit of \$25.00 per month for each year of service when the calculated benefit is less.

The percentage multipliers are 2% for the first 20 years and 2.5% for all remaining service. Service before July 1, 1990 is calculated at 2%.

Indebtedness

Members who terminate and refund their TRS contributions are not eligible to retire unless they return to TRS employment and pay back their refunds plus interest or accrue additional service which qualifies them for retirement. TRS refunds must be paid in full if the corresponding service is to count toward the minimum service requirements for retirement. Refunded TRS service is included in total service for the purpose of calculating retirement benefits. However, when refunds are not completely paid before retirement, benefits are actuarially reduced for life. Indebtedness balances may also be created when a member purchases qualified claimed service.

Reemployment of Retired Members

Retirees who return to work in a permanent full-time or part-time TRS position after a Normal Retirement are eligible to return under the Standard Option.

Under the Standard Option, retirement benefits are suspended while retired members are reemployed under TRS. During reemployment, members earn additional TRS service and contributions are withheld from their wages.

Members retired under the RIP who return to employment under TRS, PERS, Judicial Retirement System (JRS), or the University of Alaska's Optional Retirement Plan will:

- a. forfeit the three years of incentive credits that they received;
- b. owe TRS 110% of the benefits that they received under the RIP, which may include costs for health insurance, excluding amounts that they paid to participate; and
- c. be charged 7% interest from the date that they are reemployed until their indebtedness is paid in full or they retire again. If the indebtedness is not completely paid, future benefits will be actuarially reduced for life.

Employers make contributions to the unfunded liability of the plan on behalf of rehired retired members at the rate the employer is making contributions to the unfunded liability of the plan for other members.

Disability Benefits

Monthly disability benefits are paid to permanently disabled members until they die, recover, or become eligible for normal retirement. To be eligible, members must have at least five years of paid-up membership service.

Disability benefits are equal to 50% of the member's base salary at the time of disability. The benefit is increased by 10% of the base salary for each minor child, up to a maximum of 40%. Members continue to earn TRS service until eligible for normal retirement.

Members are appointed to normal retirement on the first of the month after they become eligible.

Death Benefits

Monthly death benefits may be paid to a spouse or dependent children upon the death of a member. If monthly benefits are not payable under the supplemental contributions provision or occupational and non-occupational death provisions, the designated beneficiary receives the lump sum benefit described below.

Occupational Death

When an active member dies from occupational causes, a monthly survivor's pension may be paid to the spouse, unless benefits are payable under the supplemental contributions provision (below). The pension equals 40% of the member's base salary on the date of death or disability, if earlier. If there is no spouse, the pension may be paid to the member's dependent children. On the member's normal retirement date, the benefit converts to a normal retirement benefit. The normal benefit is based on the member's average base salary on the date of death and service, including service accumulated from the date of the member's death to the normal retirement date.

Non-Occupational Death

When a vested member dies from non-occupational causes, the surviving spouse may elect to receive a monthly 50% joint and survivor benefit or a lump sum benefit, unless benefits are payable under the supplemental contributions provision (below). The monthly benefit is calculated on the member's average base salary and TRS service accrued at the time of death.

Lump Sum Benefit

Upon the death of an active member who has less than one year of service or an inactive member who is not vested, the designated beneficiary receives the member's contribution account, which includes mandatory contributions, indebtedness payments, and interest earned. Any supplemental contributions will also be refunded. If the member has more than one year of TRS service or is vested, the beneficiary also receives \$1,000 and \$100 for each year of TRS service, up to a maximum of \$3,000. An additional \$500 may be payable if the member is survived by dependent children.

Supplemental Contributions Provision: Members are eligible for supplemental coverage if they joined TRS before July 1, 1982, elected to participate in the supplemental provision, and made the required contributions. A survivor's allowance or spouse's pension (below) may be payable if the member made supplemental contributions for at least one year and dies while in membership service or while disabled under TRS. In addition, the allowance and pension may be payable if the member dies while retired or in deferred vested status if supplemental contributions were made for at least five years.

- a. **Survivor's Allowance:** If the member is survived by dependent children, the surviving spouse and dependent children are entitled to a survivor's allowance. The allowance for the spouse is equal to 35% of the member's base salary at the time of death or disability, plus 10% for each dependent child up to a maximum of 40%. The allowance terminates and a spouse's pension becomes payable when there is no longer an eligible dependent child.
- b. **Spouse's Pension:** The spouse's pension is equal to 50% of the retirement benefit that the deceased member was receiving or the unreduced retirement benefit that the deceased member would have received if retired at the time of death. The spouse's pension begins on the first of the month after the member's death or termination of the survivor's allowance.
- c. **Death After Retirement:** If a joint and survivor option was selected at retirement, the eligible spouse receives continuing, lifetime monthly benefits after the member dies. A survivor's allowance or spouse's pension may be payable if the member participated in the supplemental contributions provision. If a joint and survivor option was not selected and benefits are not payable under the supplemental contributions provision, the designated beneficiary receives the member's contribution account, less any benefits already paid and the member's last benefit check.

Postretirement Pension Adjustments

Postretirement pension adjustments (PRPAs) are granted annually to eligible benefit recipients when the consumer price index (CPI) for urban wage earners and clerical workers for Anchorage increases during the preceding calendar year. PRPAs are calculated by multiplying the recipient's base benefit, including past PRPAs, excluding the Alaska COLA, times:

- a. 75% of the CPI increase in the preceding calendar year or 9%, whichever is less, if the recipient is at least age 65 or on TRS disability; or
- b. 50% of the CPI increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60, or under age 60 if the recipient has been receiving benefits for at least eight years.

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who were first hired before July 1, 1990 (Tier 1) if the CPI increases and the funded ratio is at least 105%.

In a year where an ad hoc PRPA is granted, eligible recipients will receive the higher of the two calculations.

Alaska Cost of Living Allowance (COLA)

Eligible benefit recipients who reside in Alaska receive an Alaska COLA equal to 10% of their base benefits. The following benefit recipients are eligible:

- a. members who were first hired under TRS before July 1, 1990 (Tier 1) and their survivors;
- b. members who were first hired under TRS after June 30, 1990 (Tier 2) and their survivors if they are at least age 65; and
- c. all disabled members.

Changes in Benefit Provisions since the Prior Valuation

There have been no changes in benefit provisions since the prior valuation.

Appendix

State of Alaska Teachers' Retirement System
Schedule A - Employers' Allocation of Net Pension Liability as of 6/30/2018

Employer Number	Employer Name	FY2018 Present Value of Future Contributions	Employer Proportion	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Total Deferred Outflows	Total Deferred Inflows	Plan Fiduciary Net Position as % of Total Pension Liability	Covered Payroll	Net Pension Liability as % of Covered Payroll	Net Pension Liability 1% Decrease in Discount Rate (7.00%)	Net Pension Liability 1% Increase in Discount Rate (9.00%)
701	ANCHORAGE SD	254,202,000	13.88626%	1,025,785,744	759,957,057	265,828,687	15,483,030	(7,495,672)				380,277,902	169,524,633
704	CORDOVA CITY SD	2,142,000	0.11701%	8,643,650	6,403,679	2,239,971	280,643	(63,161)				3,204,362	1,428,477
705	CRAIG CITY SD	2,375,000	0.12974%	9,583,879	7,100,251	2,483,628	246,748	(70,032)				3,552,923	1,583,862
706	FAIRBANKS NORTH STAR BOROUGH SD	71,052,000	3.88135%	286,717,369	212,415,594	74,301,775	4,365,803	(2,095,115)				106,291,475	47,383,829
707	HAINES BOROUGH SD	1,616,000	0.08839%	6,529,143	4,837,139	1,692,004	101,749	(47,710)				2,420,475	1,079,027
708	HOONAH CITY SD	593,000	0.03239%	2,392,943	1,772,821	620,123	20,487	(175,290)				897,109	395,465
709	HYDABURG CITY SD	625,000	0.03414%	2,522,073	1,868,487	653,586	45,177	(18,429)				934,980	416,806
710	JUNEAU BOROUGH SD	26,973,000	1.47345%	108,844,615	80,637,925	28,206,691	1,351,794	(795,355)				40,350,728	17,988,009
712	KAKE CITY SD	716,000	0.03911%	2,899,287	2,140,539	748,748	24,748	(128,751)				1,071,113	477,493
714	KETCHIKAN GATEWAY BOROUGH SD	14,034,000	0.76663%	56,631,644	41,955,757	14,675,887	967,217	(413,822)				20,994,406	9,359,127
717	KLAWOCK CITY SD	1,235,000	0.06746%	4,983,617	3,692,131	1,291,486	113,863	(36,417)				1,847,520	823,608
718	KODIAK ISLAND BOROUGH SD	14,515,000	0.79291%	58,572,632	43,393,745	15,178,887	1,326,459	(428,005)				21,713,967	9,679,900
719	NENANA CITY SD	2,124,000	0.11603%	8,571,014	6,349,867	2,221,147	159,558	(62,631)				3,177,435	1,416,473
720	NOME CITY SD	3,900,000	0.21304%	15,737,738	11,659,360	4,078,378	134,802	(128,898)				5,834,273	2,600,869
722	MATANUSKA-SUSITNA BOROUGH SD	94,658,000	5.17087%	381,975,071	282,987,605	98,987,466	6,086,874	(2,791,187)				141,605,281	63,126,422
723	PELICAN CITY SD	64,000	0.00350%	258,260	191,333	66,927	3,436	(1,887)				95,742	42,681
724	PETERSBURG CITY SD	3,125,000	0.17071%	12,610,367	9,342,436	3,267,931	169,949	(92,147)				4,674,898	2,084,030
727	SITKA BOROUGH SD	8,504,000	0.46455%	34,316,339	25,423,383	8,892,956	482,470	(250,758)				12,721,707	5,671,228
728	SKAGWAY CITY SD	866,000	0.04731%	3,494,585	2,588,976	905,609	37,037	(25,536)				1,295,508	577,526
729	UNALASKA CITY SD	2,470,000	0.13493%	9,967,234	7,384,261	2,582,973	116,910	(72,833)				3,695,039	1,647,217
730	VALDEZ CITY SD	5,004,000	0.27335%	20,192,728	14,959,855	5,232,873	478,172	(147,553)				7,485,821	3,337,115
731	WRANGELL PUBLIC SD	1,671,000	0.09128%	6,743,015	4,995,587	1,747,428	57,575	(63,754)				2,499,762	1,114,372
732	YAKUTAT SD	486,000	0.02855%	1,961,164	1,452,936	508,229	16,798	(16,325)				727,040	324,108
733	UNIVERSITY OF ALASKA	30,663,000	1.67502%	123,734,936	91,669,472	32,065,464	1,346,077	(904,162)				45,870,848	20,448,831
735	GALENA CITY SD	5,570,000	0.30427%	22,476,718	16,651,957	5,824,761	478,960	(164,243)				8,332,538	3,714,574
736	NORTH SLOPE BOROUGH SD	14,137,000	0.77226%	57,047,282	42,263,684	14,783,598	1,203,051	(416,859)				21,148,491	9,427,816
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	12,247,000	0.66902%	49,420,532	36,613,379	12,807,153	423,311	(382,106)				18,321,113	8,167,395
742	BRISTOL BAY BOROUGH SD	626,000	0.03420%	2,526,109	1,871,477	654,632	38,008	(18,459)				936,476	417,473
743	SOUTHEAST REGIONAL RESOURCE CENTER	650,000	0.03551%	2,622,956	1,943,227	679,730	22,467	(30,153)				972,379	433,478
744	DILLINGHAM CITY SD	3,067,000	0.16754%	12,376,318	9,169,040	3,207,278	106,009	(158,777)				4,588,132	2,045,350
746	KENAI PENINSULA BOROUGH SD	47,873,000	2.61515%	193,182,748	143,120,134	50,062,615	3,052,765	(1,411,634)				71,616,447	31,925,999
748	SAINT MARY'S SD	1,272,000	0.06949%	5,132,924	3,802,745	1,330,179	148,534	(37,508)				1,902,871	848,283
751	NORTHWEST ARCTIC BOROUGH SD	13,796,000	0.75363%	55,671,238	41,244,237	14,427,001	942,434	(406,804)				20,638,366	9,200,407
752	BERING STRAIT SD	16,254,000	0.89791%	65,590,048	48,592,623	16,997,425	1,575,498	(479,283)				24,315,454	10,839,621
753	LOWER YUKON SD	12,913,000	0.70540%	52,108,053	38,604,439	13,503,615	1,172,610	(380,767)				19,317,427	8,611,543
754	LOWER KUSKOKWIM SD	26,676,000	1.45723%	107,646,126	79,750,020	27,896,106	1,854,446	(786,597)				39,906,426	17,789,943
755	KUSPUK SD	2,584,000	0.14116%	10,427,260	7,725,073	2,702,187	89,315	(128,822)				3,865,580	1,723,242
756	SOUTHWEST REGION SD	5,154,000	0.28155%	20,798,026	15,408,292	5,389,734	703,243	(151,976)				7,710,216	3,437,148
757	LAKE AND PENINSULA BOROUGH SD	3,703,000	0.20228%	14,942,780	11,070,412	3,872,368	391,816	(109,191)				5,539,567	2,469,492
758	ALEUTIAN REGION SD	330,000	0.01803%	1,331,655	986,561	345,094	23,734	(9,731)				493,669	220,074
759	PRIBILOF SD	569,000	0.03108%	2,296,096	1,701,071	595,025	81,180	(66,778)				851,205	379,460
761	IDITAROD AREA SD	1,427,000	0.07795%	5,758,398	4,266,130	1,492,268	116,909	(42,078)				2,134,745	951,651
762	YUKON / KOYUKUK SD	4,332,000	0.23664%	17,480,995	12,950,858	4,530,137	337,713	(127,738)				6,480,531	2,888,965
763	YUKON FLATS SD	2,055,000	0.11226%	8,292,577	6,143,586	2,148,992	184,947	(60,596)				3,074,213	1,370,458
764	DENALI BOROUGH SD	2,269,000	0.12395%	9,156,135	6,783,356	2,372,779	169,785	(66,956)				3,394,350	1,513,172
765	DELTA/GREELY SD	3,960,000	0.21632%	15,979,857	11,838,734	4,141,122	250,189	(116,769)				5,924,031	2,640,882
766	ALASKA GATEWAY SD	2,581,000	0.14099%	10,415,154	7,716,104	2,699,050	223,042	(76,106)				3,861,092	1,721,242
767	COPPER RIVER SD	1,614,000	0.08817%	6,513,002	4,825,181	1,687,821	55,787	(100,971)				2,414,491	1,076,360
768	CHATHAM SD	1,172,000	0.06402%	4,729,392	3,503,787	1,225,605	40,510	(62,757)				1,753,274	781,594
769	SOUTHEAST ISLAND SD	1,654,000	0.09035%	6,674,415	4,944,764	1,729,651	142,625	(48,772)				2,474,330	1,103,035
770	ANNETTE ISLAND SD	2,002,000	0.10936%	8,078,705	5,985,138	2,093,567	69,854	(59,033)				2,994,927	1,335,113
771	CHUGACH SD	1,349,000	0.07369%	5,443,643	4,032,943	1,410,701	57,792	(39,778)				2,018,060	899,634
775	TANANA SD	277,000	0.01513%	1,117,783	828,113	289,669	9,574	(66,189)				414,383	184,728
777	KASHUNAMIUT SD	1,740,000	0.09505%	7,021,452	5,201,868	1,819,584	60,142	(63,348)				2,602,963	1,160,368
778	YUPIIT SD	3,005,000	0.16415%	12,136,129	8,983,686	3,142,443	467,728	(88,609)				4,495,382	2,004,083
779	SPECIAL EDUCATION SERVICE AGENCY	846,000	0.04621%	3,413,878	2,629,184	884,694	51,277	(24,946)				1,265,588	564,198
780	ALEUTIANS EAST BOROUGH SD	2,175,000	0.11881%	8,776,815	6,502,335	2,274,480	136,090	(64,134)				3,253,729	1,450,485
Subtotal		743,494,000	40.61475%	3,000,234,247	2,222,734,330	777,499,917	48,098,912	(22,523,845)				1,112,242,776	495,828,306
Nonemployer:													
999	STATE OF ALASKA	1,087,107,000	59.38525%	4,386,821,753	3,249,992,670	1,136,829,083	37,575,305	(53,855,631)				1,626,276,618	724,980,192
Total		1,830,601,000	100.00000%	7,387,056,000	5,472,727,000	1,914,329,000	85,674,217	(76,379,476)	74.09%	425,841,000	449.54%	2,738,519,394	1,220,808,498

All amounts are determined without rounding. Rounded amounts are displayed.

State of Alaska Teachers' Retirement System
 Schedule B - Employers' Allocation of Net Pension Liability as of 6/30/2019

Employer Number	Employer Name	FY2019 Present Value of Future Contributions	Employer Proportion	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Total Deferred Outflows	Total Deferred Inflows	Plan Fiduciary Net Position as % of Total Pension Liability	Covered Payroll	Net Pension Liability as % of Covered Payroll	Net Pension Liability 1% Decrease in Discount Rate (6.38%)	Net Pension Liability 1% Increase in Discount Rate (8.38%)
701	ANCHORAGE SD	236,382,000	13.79279%	1,017,972,675	760,248,546	257,724,129	6,619,682	(12,944,923)				371,258,753	162,397,912
704	CORDOVA CITY SD	2,143,000	0.12504%	9,228,771	6,892,287	2,336,484	84,675	(79,895)				3,365,770	1,472,273
705	CRAIG CITY SD	1,878,000	0.10958%	8,087,556	6,039,998	2,047,558	52,592	(238,430)				2,949,564	1,290,214
706	FAIRBANKS NORTH STAR BOROUGH SD	68,618,000	4.00383%	295,501,557	220,688,270	74,813,286	1,921,590	(2,748,870)				107,770,613	47,141,576
707	HAINES BOROUGH SD	1,302,000	0.07597%	5,607,028	4,187,475	1,419,553	36,461	(169,710)				2,044,906	894,493
708	HOONAH CITY SD	555,000	0.03238%	2,390,092	1,784,983	605,109	15,542	(30,440)				871,676	381,293
709	HYDABURG CITY SD	449,000	0.02620%	1,933,606	1,444,068	489,539	12,574	(85,556)				705,194	308,470
710	JUNEAU BOROUGH SD	25,991,000	1.51656%	111,929,537	83,591,898	28,337,639	727,896	(1,044,939)				40,821,155	17,856,199
712	KAKE CITY SD	855,000	0.04989%	3,682,034	2,749,839	932,195	932,195	(31,876)				1,342,853	587,398
714	KETCHIKAN GATEWAY BOROUGH SD	12,831,000	0.74868%	55,256,354	41,266,886	13,989,467	359,322	(757,470)				20,152,216	8,815,086
717	KLAWOOCK CITY SD	1,140,000	0.06652%	4,909,379	3,666,452	1,242,927	31,925	(62,480)				1,790,470	783,197
718	KODIAK ISLAND BOROUGH SD	12,238,000	0.71408%	52,702,615	39,359,688	13,342,927	342,715	(1,240,298)				19,220,857	8,407,686
719	NENANA CITY SD	2,105,000	0.12283%	9,065,125	6,770,072	2,295,053	67,968	(78,478)				3,306,088	1,446,166
720	NOME CITY SD	3,166,000	0.18473%	13,634,293	10,182,446	3,451,847	88,661	(391,548)				4,972,482	2,175,089
722	MATANUSKA-SUSITNA BOROUGH SD	88,123,000	5.14194%	379,499,311	283,419,984	96,079,327	2,467,812	(4,789,302)				138,404,934	60,541,798
723	PELICAN CITY SD	62,000	0.00362%	267,001	199,404	67,598	1,736	(3,799)				97,376	42,595
724	PETERSBURG CITY SD	2,977,000	0.17371%	12,820,370	9,574,587	3,245,783	83,368	(124,297)				4,675,641	2,045,243
727	SITKA BOROUGH SD	8,733,000	0.50957%	37,608,428	28,086,955	9,521,473	416,259	(325,581)				13,715,946	5,999,699
728	SKAGWAY CITY SD	896,000	0.05228%	3,858,600	2,881,703	976,897	41,568	(33,404)				1,407,247	615,565
729	UNALASKA CITY SD	2,265,000	0.13216%	9,754,161	7,294,662	2,469,499	63,429	(158,370)				3,557,382	1,556,088
730	VALDEZ CITY SD	3,592,000	0.20659%	15,468,851	11,552,541	3,916,309	100,591	(626,397)				5,641,552	2,467,757
731	WRANGELL PUBLIC SD	1,519,000	0.08863%	6,541,532	4,885,387	1,656,145	42,538	(102,234)				2,385,723	1,043,575
732	YAKUTAT SD	398,000	0.02322%	1,713,976	1,280,042	433,934	11,146	(44,747)				625,094	273,432
733	UNIVERSITY OF ALASKA	27,471,000	1.60292%	118,303,117	88,351,853	29,951,263	769,303	(1,839,955)				43,145,625	18,872,981
735	GALENA CITY SD	4,898,000	0.28580%	21,093,104	15,752,880	5,340,224	137,164	(407,296)				7,692,740	3,364,998
736	NORTH SLOPE BOROUGH SD	15,882,000	0.92671%	68,395,402	51,079,471	17,315,932	1,221,085	(592,107)				24,944,080	10,911,168
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	11,408,000	0.66565%	49,128,243	36,690,253	12,437,990	319,472	(448,304)				17,917,269	7,837,464
742	BRISTOL BAY BOROUGH SD	742,000	0.04330%	3,195,403	2,386,410	808,993	69,158	(27,663)				1,165,376	509,765
743	SOUTHEAST REGIONAL RESOURCE CENTER	385,000	0.02130%	1,571,863	1,173,908	397,955	10,222	(122,206)				573,265	250,760
744	DILLINGHAM CITY SD	3,027,000	0.17662%	13,035,693	9,735,396	3,300,298	84,769	(125,748)				4,754,170	2,079,594
746	KENAI PENINSULA BOROUGH SD	45,953,000	2.68134%	197,895,349	147,793,408	50,101,940	1,286,876	(2,001,574)				72,173,234	31,570,387
748	SAINT MARY'S SD	1,130,000	0.06594%	4,866,314	3,634,291	1,232,024	31,645	(64,637)				1,774,765	776,327
751	NORTHWEST ARCTIC BOROUGH SD	14,372,000	0.83860%	61,892,628	46,223,029	15,669,599	642,610	(535,812)				22,572,492	9,873,775
752	BERING STRAIT SD	13,657,000	0.79688%	58,813,500	43,923,456	14,890,044	382,453	(1,497,932)				21,449,522	9,382,560
753	LOWER YUKON SD	11,494,000	0.67067%	49,498,599	36,966,845	12,531,754	321,880	(894,854)				18,052,339	7,896,547
754	LOWER KUSKOKWIM SD	24,548,000	1.43236%	105,715,297	78,950,941	26,764,356	687,446	(1,628,610)				38,554,796	16,864,837
755	KUSPUK SD	2,524,000	0.14727%	10,869,538	8,117,654	2,751,883	70,683	(112,489)				3,964,164	1,734,025
756	SOUTHWEST REGION SD	4,964,000	0.28965%	21,377,331	15,965,149	5,412,183	139,013	(246,284)				7,796,399	3,410,341
757	LAKE AND PENINSULA BOROUGH SD	3,482,000	0.20317%	14,995,139	11,198,761	3,796,378	97,511	(230,953)				5,468,788	2,382,185
758	ALEUTIAN REGION SD	316,000	0.01844%	1,360,845	1,016,315	344,531	8,849	(15,785)				496,306	217,097
759	PRIIBILOF SD	474,000	0.02766%	2,041,268	1,524,472	516,796	13,274	(55,719)				744,459	325,645
761	IDITAROD AREA SD	1,436,000	0.08379%	6,184,095	4,618,444	1,565,652	47,550	(53,536)				2,255,364	986,553
762	YUKON / KOYUKUK SD	4,511,000	0.26321%	19,426,499	14,508,216	4,918,283	223,125	(168,178)				7,084,923	3,099,123
763	YUKON FLATS SD	2,129,000	0.12423%	9,168,481	6,847,261	2,321,220	94,797	(79,373)				3,343,782	1,462,654
764	DENALI BOROUGH SD	2,276,000	0.13280%	9,801,532	7,320,040	2,481,492	86,530	(84,853)				3,574,658	1,563,645
765	DELTA/GREELY SD	3,715,000	0.21677%	15,998,547	11,948,132	4,050,415	104,035	(204,674)				5,834,735	2,562,260
766	ALASKA GATEWAY SD	2,495,000	0.14558%	10,744,650	8,024,385	2,720,265	69,870	(118,755)				3,918,617	1,714,102
767	COPPER RIVER SD	1,710,000	0.09978%	7,364,069	5,499,679	1,864,390	87,065	(63,752)				2,685,706	1,174,795
768	CHATHAM SD	1,133,000	0.06611%	4,879,234	3,643,939	1,235,295	31,729	(61,877)				1,779,476	778,388
769	SOUTHEAST ISLAND SD	1,606,000	0.09371%	6,916,195	5,165,195	1,751,000	44,975	(76,601)				2,522,364	1,103,346
770	ANNETTE ISLAND SD	2,202,000	0.12849%	9,482,853	7,082,042	2,400,811	146,155	(82,094)				3,458,435	1,512,806
771	CHUGACH SD	1,361,000	0.07941%	5,861,110	4,377,230	1,483,880	64,628	(50,740)				2,137,570	935,027
775	TANANA SD	384,000	0.02241%	1,653,686	1,235,016	418,670	53,371	(14,316)				603,106	263,814
777	KASHUNAMIUT SD	1,517,000	0.08852%	6,532,919	4,878,955	1,653,965	42,482	(141,614)				2,382,582	1,042,201
778	YUPIIT SD	2,753,000	0.16064%	11,855,720	8,854,161	3,001,559	77,095	(186,408)				4,323,829	1,891,352
779	SPECIAL EDUCATION SERVICE AGENCY	851,000	0.04966%	3,664,808	2,736,975	927,834	31,749	(31,727)				1,336,570	584,650
780	ALEUTIANS EAST BOROUGH SD	2,014,000	0.11752%	8,673,236	6,477,399	2,195,837	56,400	(126,832)				3,163,164	1,383,648
Subtotal		697,018,000	40.67069%	3,001,689,122	2,241,739,732	759,949,390	21,221,949	(38,525,299)				1,094,728,168	478,861,622
Nonemployer: 999	STATE OF ALASKA	1,016,791,000	59.32931%	4,378,782,878	3,270,189,268	1,108,593,610	39,311,170	(37,907,645)				1,596,959,832	698,550,378
Total		1,713,809,000	100.00000%	7,380,472,000	5,511,929,000	1,868,543,000	60,533,119	(76,432,944)	74.68%	392,609,000	475.93%	2,691,688,000	1,177,412,000

All amounts are determined without rounding. Rounded amounts are displayed.

State of Alaska Teachers' Retirement System
Schedule C - Employers' Allocation of Pension Amounts as of 6/30/2019

Employer Number	Employer Name	Net Pension Liability	Employer Proportion	Deferred Outflows of Resources					Deferred Inflows of Resources				
				Difference Between Expected and Actual Experience	Changes in Assumptions	Changes in Benefits	Difference Between Projected and Actual Investment Earnings	Changes in Proportion and Differences Between Employer Contributions	Total Deferred Outflows	Difference Between Expected and Actual Experience	Changes in Assumptions	Changes in Benefits	Difference Between Projected and Actual Investment Earnings
701	ANCHORAGE SD	257,724,129	13.79279%	-	-	-	6,619,682	-	6,619,682	(6,988,804)	(1,823,906)	-	-
704	CORDOVA CITY SD	2,336,484	0.12504%	-	-	-	60,013	24,662	84,675	(63,359)	(16,535)	-	-
705	CRAIG CITY SD	2,047,558	0.10958%	-	-	-	52,592	-	52,592	(55,524)	(14,491)	-	-
706	FAIRBANKS NORTH STAR BOROUGH SD	74,813,286	4.00383%	-	-	-	1,921,590	-	1,921,590	(2,028,741)	(529,451)	-	-
707	HAINES BOROUGH SD	1,419,553	0.07597%	-	-	-	36,461	-	36,461	(38,495)	(10,046)	-	-
708	HOONAH CITY SD	605,109	0.03238%	-	-	-	15,542	-	15,542	(16,409)	(4,282)	-	-
709	HYDABURG CITY SD	489,539	0.02620%	-	-	-	12,574	-	12,574	(13,275)	(3,464)	-	-
710	JUNEAU BOROUGH SD	28,337,639	1.51656%	-	-	-	727,856	-	727,856	(768,443)	(200,546)	-	-
712	KAKE CITY SD	932,195	0.04989%	-	-	-	23,944	53,026	76,970	(25,279)	(6,597)	-	-
714	KETCHIKAN GATEWAY BOROUGH SD	13,989,467	0.74868%	-	-	-	359,322	-	359,322	(379,358)	(99,003)	-	-
717	KLAWOCK CITY SD	1,242,927	0.06652%	-	-	-	31,925	-	31,925	(33,705)	(8,796)	-	-
718	KODIAK ISLAND BOROUGH SD	13,342,927	0.71408%	-	-	-	342,715	-	342,715	(361,825)	(94,428)	-	-
719	NENANA CITY SD	2,295,053	0.12283%	-	-	-	58,949	9,019	67,968	(62,236)	(16,242)	-	-
720	NOME CITY SD	3,451,847	0.18473%	-	-	-	88,661	-	88,661	(93,605)	(24,429)	-	-
722	MATANUSKA-SUSITNA BOROUGH SD	96,079,327	5.14194%	-	-	-	2,467,812	-	2,467,812	(2,605,420)	(679,951)	-	-
723	PELICAN CITY SD	67,598	0.00362%	-	-	-	1,736	-	1,736	(1,833)	(478)	-	-
724	PETERSBURG CITY SD	3,245,783	0.17371%	-	-	-	83,368	-	83,368	(88,017)	(22,970)	-	-
727	SITKA BOROUGH SD	9,521,473	0.50957%	-	-	-	244,560	171,698	416,259	(258,197)	(67,383)	-	-
728	SKAGWAY CITY SD	976,897	0.05228%	-	-	-	25,092	16,476	41,568	(26,491)	(6,913)	-	-
729	UNALASKA CITY SD	2,469,499	0.13216%	-	-	-	63,429	-	63,429	(66,966)	(17,477)	-	-
730	VALDEZ CITY SD	3,916,309	0.20959%	-	-	-	100,591	-	100,591	(106,200)	(27,716)	-	-
731	WRANGELL PUBLIC SD	1,656,145	0.08863%	-	-	-	42,538	-	42,538	(44,910)	(11,720)	-	-
732	YAKUTAT SD	433,934	0.02322%	-	-	-	11,146	-	11,146	(11,767)	(3,071)	-	-
733	UNIVERSITY OF ALASKA	29,951,263	1.60292%	-	-	-	769,303	-	769,303	(812,200)	(211,964)	-	-
735	GALENA CITY SD	5,340,224	0.28580%	-	-	-	137,164	-	137,164	(144,813)	(37,793)	-	-
736	NORTH SLOPE BOROUGH SD	17,315,932	0.92671%	-	-	-	444,762	776,323	1,221,085	(469,563)	(122,544)	-	-
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	12,437,990	0.66565%	-	-	-	319,472	-	319,472	(337,286)	(88,023)	-	-
742	BRISTOL BAY BOROUGH SD	808,993	0.04330%	-	-	-	20,779	48,379	69,158	(21,938)	(5,725)	-	-
743	SOUTHEAST REGIONAL RESOURCE CENTER	397,955	0.02130%	-	-	-	10,222	-	10,222	(10,791)	(2,816)	-	-
744	DILLINGHAM CITY SD	3,300,298	0.17662%	-	-	-	84,769	-	84,769	(89,495)	(23,356)	-	-
746	KENAI PENINSULA BOROUGH SD	50,101,940	2.68134%	-	-	-	1,286,876	-	1,286,876	(1,358,634)	(354,570)	-	-
748	SAINT MARY'S SD	1,232,024	0.06594%	-	-	-	31,645	-	31,645	(33,409)	(8,719)	-	-
751	NORTHWEST ARCTIC BOROUGH SD	15,669,599	0.83860%	-	-	-	402,476	240,134	642,610	(424,919)	(110,893)	-	-
752	BERING STRAIT SD	14,890,044	0.79688%	-	-	-	382,453	-	382,453	(403,779)	(105,376)	-	-
753	LOWER YUKON SD	12,531,754	0.67067%	-	-	-	321,880	-	321,880	(339,828)	(88,687)	-	-
754	LOWER KUSKOKWIM SD	26,764,356	1.43236%	-	-	-	687,446	-	687,446	(725,779)	(189,411)	-	-
755	KUSPUK SD	2,751,883	0.14727%	-	-	-	70,683	-	70,683	(74,624)	(19,475)	-	-
756	SOUTHWEST REGION SD	5,412,183	0.28965%	-	-	-	139,013	-	139,013	(146,764)	(38,302)	-	-
757	LAKE AND PENINSULA BOROUGH SD	3,796,378	0.20317%	-	-	-	97,511	-	97,511	(102,948)	(26,867)	-	-
758	ALEUTIAN REGION SD	344,531	0.01844%	-	-	-	8,849	-	8,849	(9,343)	(2,438)	-	-
759	PRIBILOF SD	516,796	0.02766%	-	-	-	13,274	-	13,274	(14,014)	(3,657)	-	-
761	IDITAROD AREA SD	1,565,652	0.08379%	-	-	-	40,214	7,336	47,550	(42,456)	(11,080)	-	-
762	YUKON / KOYUKUK SD	4,918,283	0.26321%	-	-	-	126,327	96,798	223,125	(133,371)	(34,807)	-	-
763	YUKON FLATS SD	2,321,220	0.12423%	-	-	-	59,621	35,176	94,797	(62,945)	(16,427)	-	-
764	DENALI BOROUGH SD	2,481,492	0.13280%	-	-	-	63,737	22,792	86,530	(67,292)	(17,561)	-	-
765	DELTA/GREELY SD	4,050,415	0.21677%	-	-	-	104,035	-	104,035	(109,837)	(28,665)	-	-
766	ALASKA GATEWAY SD	2,720,265	0.14558%	-	-	-	69,870	-	69,870	(73,766)	(19,251)	-	-
767	COPPER RIVER SD	1,864,390	0.09978%	-	-	-	47,887	39,178	87,065	(50,557)	(13,194)	-	-
768	CHATHAM SD	1,235,295	0.06611%	-	-	-	31,729	-	31,729	(33,498)	(8,742)	-	-
769	SOUTHEAST ISLAND SD	1,751,000	0.09371%	-	-	-	44,975	-	44,975	(47,483)	(12,392)	-	-
770	ANNETTE ISLAND SD	2,400,811	0.12849%	-	-	-	61,665	84,490	146,155	(65,104)	(16,990)	-	-
771	CHUGACH SD	1,483,880	0.07941%	-	-	-	38,114	26,515	64,628	(40,239)	(10,501)	-	-
775	TANANA SD	418,670	0.02241%	-	-	-	10,754	42,618	53,371	(11,353)	(2,963)	-	-
777	KASHUNAMIUT SD	1,653,965	0.08852%	-	-	-	42,482	-	42,482	(44,851)	(11,705)	-	-
778	YUPIIT SD	3,001,559	0.16064%	-	-	-	77,095	-	77,095	(81,394)	(21,242)	-	-
779	SPECIAL EDUCATION SERVICE AGENCY	927,834	0.04966%	-	-	-	23,832	7,918	31,749	(25,160)	(6,566)	-	-
780	ALEUTIANS EAST BOROUGH SD	2,195,837	0.11752%	-	-	-	56,400	-	56,400	(59,545)	(15,540)	-	-
Subtotal		759,949,390	40.67069%	-	-	-	19,519,411	1,702,538	21,221,949	(20,607,840)	(5,378,140)	-	-
Nonemployer: 999	STATE OF ALASKA	1,108,593,610	59.32931%	-	-	-	28,474,389	10,836,781	39,311,170	(30,062,160)	(7,845,485)	-	-

State of Alaska Teachers' Retirement System
Schedule C - Employers' Allocation of Pension Amounts as of 6/30/2019

Employer Number	Employer Name	as		Pension Expense Recognized		
		Changes in Proportionate Differences Between Employer Contributions	Total Deferred Inflows	Proportionate Share of Pension Plan Expense	Net Amortization of Deferred Amounts from Changes in Proportionate Differences Between Employer Contributions	Total
701	ANCHORAGE SD	(4,132,213)	(12,944,923)	19,803,484	(190,355)	19,613,129
704	CORDOVA CITY SD	-	(79,895)	179,535	247,709	427,244
705	CRAIG CITY SD	(168,415)	(238,430)	157,334	(116,035)	41,299
706	FAIRBANKS NORTH STAR BOROUGH SD	(190,678)	(2,748,870)	5,748,642	1,592,131	7,340,772
707	HAINES BOROUGH SD	(121,169)	(169,710)	109,078	(156,125)	(47,047)
708	HOONAH CITY SD	(9,749)	(30,440)	46,496	(174,051)	(127,555)
709	HYDABURG CITY SD	(68,817)	(85,556)	37,616	(91,121)	(53,505)
710	JUNEAU BOROUGH SD	(75,952)	(1,044,939)	2,177,460	292,900	2,470,360
712	KAKE CITY SD	-	(31,876)	71,630	(19,261)	52,369
714	KETCHIKAN GATEWAY BOROUGH SD	(279,109)	(757,470)	1,074,949	16,957	1,091,905
717	KLAWOCK CITY SD	(19,979)	(62,480)	95,506	37,877	133,383
718	KODIAK ISLAND BOROUGH SD	(784,045)	(1,240,298)	1,025,269	(481,987)	543,281
719	NENANA CITY SD	-	(78,478)	176,352	101,174	277,526
720	NOME CITY SD	(273,514)	(391,548)	265,239	(469,756)	(204,517)
722	MATANUSKA-SUSITNA BOROUGH SD	(1,503,931)	(4,789,302)	7,382,721	308,517	7,691,238
723	PELICAN CITY SD	(1,488)	(3,799)	5,194	(1,255)	3,939
724	PETERSBURG CITY SD	(13,309)	(124,297)	249,406	39,752	289,158
727	SITKA BOROUGH SD	-	(325,581)	731,629	474,697	1,206,325
728	SKAGWAY CITY SD	-	(33,404)	75,065	34,565	109,630
729	UNALASKA CITY SD	(73,927)	(158,370)	189,756	(91,676)	98,080
730	VALDEZ CITY SD	(491,481)	(625,397)	300,929	(513,924)	(212,995)
731	WRANGELL PUBLIC SD	(45,603)	(102,234)	127,258	(90,486)	36,772
732	YAKUTAT SD	(29,908)	(44,747)	33,343	(51,842)	(18,499)
733	UNIVERSITY OF ALASKA	(815,790)	(1,839,955)	2,301,451	(1,073,424)	1,228,026
735	GALENA CITY SD	(224,690)	(407,296)	410,342	(88,048)	322,294
736	NORTH SLOPE BOROUGH SD	-	(592,107)	1,330,554	2,008,283	3,338,837
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	(22,995)	(448,304)	955,733	(59,302)	896,431
742	BRISTOL BAY BOROUGH SD	-	(27,663)	62,163	97,003	159,166
743	SOUTHEAST REGIONAL RESOURCE CENTER	(108,598)	(122,206)	30,579	(191,983)	(161,404)
744	DILLINGHAM CITY SD	(12,896)	(125,748)	253,594	(89,834)	163,760
746	KENAI PENINSULA BOROUGH SD	(288,370)	(2,001,574)	3,849,826	917,442	4,767,267
748	SAINT MARY'S SD	(42,509)	(84,637)	94,669	33,720	128,389
751	NORTHWEST ARCTIC BOROUGH SD	-	(535,812)	1,204,050	865,806	2,069,856
752	BERING STRAIT SD	(988,776)	(1,497,932)	1,144,149	(634,274)	509,875
753	LOWER YUKON SD	(466,339)	(894,854)	962,938	(50,952)	911,986
754	LOWER KUSKOKWIM SD	(713,420)	(1,628,610)	2,056,569	(256,629)	1,799,940
755	KUSPUK SD	(18,390)	(112,489)	211,454	(83,277)	128,177
756	SOUTHWEST REGION SD	(61,218)	(246,284)	415,871	423,068	838,939
757	LAKE AND PENINSULA BOROUGH SD	(101,138)	(230,953)	291,713	95,260	386,973
758	ALEUTIAN REGION SD	(4,004)	(15,785)	26,474	5,654	32,128
759	PRIBILOF SD	(38,048)	(55,719)	39,711	(1,900)	37,811
761	IDITAROD AREA SD	-	(53,536)	120,304	79,811	200,116
762	YUKON / KOYUKUK SD	-	(168,178)	377,920	349,310	727,231
763	YUKON FLATS SD	-	(79,373)	178,362	172,543	350,905
764	DENALI BOROUGH SD	-	(84,853)	190,678	129,345	320,022
765	DELTA/GREELY SD	(66,173)	(204,674)	311,233	3,026	314,259
766	ALASKA GATEWAY SD	(25,738)	(118,755)	209,025	90,935	299,960
767	COPPER RIVER SD	-	(63,752)	143,259	11,918	155,177
768	CHATHAM SD	(19,637)	(61,877)	94,920	(60,926)	33,994
769	SOUTHEAST ISLAND SD	(16,727)	(76,601)	134,547	57,577	192,124
770	ANNETTE ISLAND SD	-	(82,094)	184,478	141,473	325,951
771	CHUGACH SD	-	(50,740)	114,021	55,355	169,376
775	TANANA SD	-	(14,316)	32,171	13,009	45,179
777	KASHUNAMIUT SD	(85,057)	(141,614)	127,090	(153,803)	(26,713)
778	YUPIIT SD	(83,772)	(186,408)	230,639	224,242	454,882
779	SPECIAL EDUCATION SERVICE AGENCY	-	(31,727)	71,295	35,232	106,526
780	ALEUTIANS EAST BOROUGH SD	(51,747)	(126,832)	168,728	(25,332)	143,395
Subtotal		(12,539,319)	(38,525,299)	58,394,398	3,738,730	62,133,128
Nonemployer:						
999	STATE OF ALASKA	-	(37,907,645)	85,184,168	(3,738,730)	81,445,438

State of Alaska Teachers' Retirement System
 Schedule C - Employers' Allocation of Pension Amounts as of 6/30/2019

Employer Number	Employer Name	Net Pension Liability	Employer Proportion	Deferred Outflows of Resources					Deferred Inflows of Resources				
				Difference Between Expected and Actual Experience	Changes in Assumptions	Changes in Benefits	Difference Between Projected and Actual Investment Earnings	Changes in Proportion and Differences Between Employer Contributions	Total Deferred Outflows	Difference Between Expected and Actual Experience	Changes in Assumptions	Changes in Benefits	Difference Between Projected and Actual Investment Earnings
Total		1,868,543,000	100.00000%	-	-	-	47,993,800	12,539,319	60,533,119	(50,670,000)	(13,223,625)	-	-

All amounts are determined without rounding. Rounded amounts are displayed.

State of Alaska Teachers' Retirement System
 Schedule C - Employers' Allocation of Pension Amounts as of 6/30/2019

Employer Number	Employer Name	as		Pension Expense Recognized		
		Changes in Proportion and Differences Between Employer Contributions	Total Deferred Inflows	Proportionate Share of Pension Plan Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions	Total
Total		(12,539,319)	(76,432,944)	143,578,566	(0)	143,578,566

All amounts are determined without rounding. Rounded amounts are displayed.

State of Alaska Teachers' Retirement System
Schedule D - Employers' Allocation of Recognition of Deferred Outflows/Inflows as of 6/30/2019

Employer Number	Employer Name	FY2020	FY2021	FY2022	FY2023	FY2024	Thereafter
701	ANCHORAGE SD	(5,583,024)	(4,798,896)	1,809,476	2,247,203	-	-
704	CORDOVA CITY SD	11,509	(43,506)	16,404	20,373	-	-
705	CRAIG CITY SD	(179,942)	(38,126)	14,376	17,854	-	-
706	FAIRBANKS NORTH STAR BOROUGH SD	(611,826)	(1,393,045)	525,262	652,328	-	-
707	HAINES BOROUGH SD	(129,160)	(26,432)	9,967	12,378	-	-
708	HOONAH CITY SD	(13,155)	(11,267)	4,248	5,276	-	-
709	HYDABURG CITY SD	(71,573)	(9,115)	3,437	4,268	-	-
710	JUNEAU BOROUGH SD	(235,473)	(527,655)	198,958	247,088	-	-
712	KAKE CITY SD	47,779	(17,358)	6,545	8,128	-	-
714	KETCHIKAN GATEWAY BOROUGH SD	(357,860)	(260,488)	98,220	121,980	-	-
717	KLAWOCK CITY SD	(26,976)	(23,144)	8,727	10,838	-	-
718	KODIAK ISLAND BOROUGH SD	(859,157)	(248,449)	93,680	116,343	-	-
719	NENANA CITY SD	(3,901)	(42,735)	16,114	20,012	-	-
720	NOME CITY SD	(292,946)	(64,274)	24,235	30,098	-	-
722	MATANUSKA-SUSITNA BOROUGH SD	(2,044,792)	(1,789,024)	674,571	837,755	-	-
723	PELICAN CITY SD	(1,868)	(1,259)	475	589	-	-
724	PETERSBURG CITY SD	(31,581)	(60,437)	22,789	28,301	-	-
727	SITKA BOROUGH SD	118,099	(177,293)	66,850	83,022	-	-
728	SKAGWAY CITY SD	10,977	(18,190)	6,859	8,518	-	-
729	UNALASKA CITY SD	(87,829)	(45,983)	17,338	21,533	-	-
730	VALDEZ CITY SD	(513,527)	(72,923)	27,496	34,148	-	-
731	WRANGELL PUBLIC SD	(54,926)	(30,838)	11,628	14,441	-	-
732	YAKUTAT SD	(32,351)	(8,080)	3,047	3,784	-	-
733	UNIVERSITY OF ALASKA	(984,396)	(557,701)	210,287	261,157	-	-
735	GALENA CITY SD	(254,752)	(99,436)	37,494	46,564	-	-
736	NORTH SLOPE BOROUGH SD	678,846	(322,428)	121,575	150,985	-	-
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	(93,012)	(231,599)	87,327	108,452	-	-
742	BRISTOL BAY BOROUGH SD	43,825	(15,064)	5,680	7,054	-	-
743	SOUTHEAST REGIONAL RESOURCE CENTER	(110,838)	(7,410)	2,794	3,470	-	-
744	DILLINGHAM CITY SD	(31,475)	(61,452)	23,171	28,777	-	-
746	KENAI PENINSULA BOROUGH SD	(570,410)	(932,912)	351,765	436,860	-	-
748	SAINT MARY'S SD	(49,444)	(22,941)	8,650	10,743	-	-
751	NORTHWEST ARCTIC BOROUGH SD	151,925	(291,772)	110,016	136,630	-	-
752	BERING STRAIT SD	(1,072,597)	(277,257)	104,543	129,832	-	-
753	LOWER YUKON SD	(536,884)	(233,345)	87,985	109,270	-	-
754	LOWER KUSKOKWIM SD	(864,085)	(498,360)	187,912	233,369	-	-
755	KUSPUK SD	(33,881)	(51,241)	19,321	23,995	-	-
756	SOUTHWEST REGION SD	(91,685)	(100,776)	37,999	47,191	-	-
757	LAKE AND PENINSULA BOROUGH SD	(122,509)	(70,690)	26,654	33,102	-	-
758	ALEUTIAN REGION SD	(5,944)	(6,415)	2,419	3,004	-	-
759	PRIBILOF SD	(40,957)	(9,623)	3,628	4,506	-	-
761	IDITAROD AREA SD	(1,478)	(29,153)	10,992	13,652	-	-
762	YUKON / KOYUKUK SD	69,112	(91,580)	34,531	42,885	-	-
763	YUKON FLATS SD	22,109	(43,222)	16,297	20,240	-	-

State of Alaska Teachers' Retirement System
 Schedule D - Employers' Allocation of Recognition of Deferred Outflows/Inflows as of 6/30/2019

Employer Number	Employer Name	FY2020	FY2021	FY2022	FY2023	FY2024	Thereafter
764	DENALI BOROUGH SD	8,823	(46,206)	17,423	21,637	-	-
765	DELTA/GREELY SD	(88,974)	(75,420)	28,438	35,317	-	-
766	ALASKA GATEWAY SD	(41,051)	(50,652)	19,099	23,719	-	-
767	COPPER RIVER SD	28,682	(34,715)	13,090	16,256	-	-
768	CHATHAM SD	(26,591)	(23,002)	8,673	10,771	-	-
769	SOUTHEAST ISLAND SD	(26,584)	(32,604)	12,294	15,268	-	-
770	ANNETTE ISLAND SD	70,975	(44,704)	16,856	20,934	-	-
771	CHUGACH SD	18,161	(27,630)	10,418	12,939	-	-
775	TANANA SD	40,261	(7,796)	2,939	3,651	-	-
777	KASHUNAMIUT SD	(94,368)	(30,797)	11,612	14,422	-	-
778	YUPIIT SD	(100,668)	(55,890)	21,074	26,172	-	-
779	SPECIAL EDUCATION SERVICE AGENCY	2,695	(17,277)	6,514	8,090	-	-
780	ALEUTIANS EAST BOROUGH SD	(64,108)	(40,887)	15,417	19,146	-	-
Subtotal		(15,114,779)	(14,150,473)	5,335,588	6,626,313	-	-
Nonemployer:							
999	STATE OF ALASKA	4,596,154	(20,642,327)	7,783,412	9,666,287	-	-
Total		(10,518,625)	(34,792,800)	13,119,000	16,292,600	-	-
All amounts are determined without rounding. Rounded amounts are displayed.							
		(10,518,625)	(34,792,800)	13,119,000	16,292,600	-	-
		-	-	-	-	-	-

State of Alaska Teachers' Retirement System
 Schedule E - Contribution History

Employer Number	Employer Name	FY2019	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013
701	ANCHORAGE SD	13,405,087.32	13,953,833.79	12,990,980.15	11,850,582.30	12,824,988.74	12,944,265.05	12,967,146.96
704	CORDOVA CITY SD	118,029.15	136,707.51	110,356.31	96,779.88	93,120.75	114,056.49	134,509.15
705	CRAIG CITY SD	114,813.85	141,152.03	122,462.27	104,267.87	110,761.75	113,631.46	106,528.43
706	FAIRBANKS NORTH STAR BOROUGH SD	3,731,293.59	4,017,542.60	3,813,656.10	3,539,896.52	3,876,399.16	3,910,652.78	3,920,578.38
707	HAINES BOROUGH SD	38,117.21	60,119.21	65,342.91	46,280.70	67,345.72	78,746.93	84,746.36
708	HOONAH CITY SD	27,353.72	21,574.63	39,307.21	44,647.71	46,108.75	52,512.11	51,599.68
709	HYDABURG CITY SD	10,812.74	45,017.13	28,580.79	16,965.60	3,661.09	22,352.49	25,019.04
710	JUNEAU BOROUGH SD	1,465,889.68	1,535,688.95	1,428,279.01	1,339,264.79	1,401,567.10	1,395,436.86	1,388,404.23
712	KAKE CITY SD	18,019.19	40,686.18	38,986.47	33,982.63	34,224.50	34,293.75	27,714.89
714	KETCHIKAN GATEWAY BOROUGH SD	826,781.34	765,271.99	728,834.65	646,878.19	737,815.48	681,583.56	656,885.26
717	KLAWOCK CITY SD	73,940.90	73,149.40	64,678.50	55,503.68	57,146.15	68,293.97	74,984.47
718	KODIAK ISLAND BOROUGH SD	583,203.79	665,867.02	610,298.27	543,048.16	647,632.39	736,576.50	785,788.06
719	NENANA CITY SD	96,182.86	140,642.34	108,599.95	105,733.21	91,496.71	105,890.03	106,618.13
720	NOME CITY SD	113,224.03	219,436.82	200,341.30	180,778.20	196,990.87	205,072.74	195,169.00
722	MATANUSKA-SUSITNA BOROUGH SD	4,982,200.34	5,272,972.61	4,891,947.35	4,448,917.08	4,732,180.64	4,601,861.36	4,409,181.16
723	PELICAN CITY SD	(343.41)	821.02	608.50	76.62	56.78	3,589.51	3,981.63
724	PETERSBURG CITY SD	192,575.71	252,001.66	144,371.57	173,758.53	178,211.83	180,274.61	169,338.09
727	SITKA BOROUGH SD	436,774.78	508,567.70	456,554.22	409,791.72	458,336.30	484,459.11	473,074.95
728	SKAGWAY CITY SD	35,004.26	42,709.72	44,914.04	35,596.03	36,740.10	34,126.76	36,943.54
729	UNALASKA CITY SD	72,536.08	149,368.32	133,597.79	122,560.66	123,108.89	133,745.23	127,900.55
730	VALDEZ CITY SD	248,143.40	303,737.10	299,120.88	257,196.19	289,734.26	275,478.92	261,914.70
731	WRANGELL PUBLIC SD	74,356.12	89,137.78	79,313.66	78,637.34	74,800.77	104,691.78	99,330.78
732	YAKUTAT SD	21,722.02	27,948.30	31,855.13	49,446.62	35,975.53	47,318.00	45,659.99
733	UNIVERSITY OF ALASKA	1,829,659.37	1,986,247.25	2,003,497.77	1,973,801.21	2,314,144.86	2,385,214.75	2,390,342.26
735	GALENA CITY SD	221,982.28	310,877.09	281,796.14	251,851.54	266,991.31	287,316.68	260,063.00
736	NORTH SLOPE BOROUGH SD	649,288.85	620,262.14	588,274.37	537,956.23	591,144.30	674,449.67	676,595.46
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	1,095,527.19	1,004,123.17	1,021,449.29	924,799.69	12,499,595.78	1,950,888.39	1,835,361.68
742	BRISTOL BAY BOROUGH SD	26,751.36	30,208.30	20,636.04	18,408.57	27,110.92	27,876.63	34,751.67
743	SOUTHEAST REGIONAL RESOURCE CENTER	16,071.85	24,560.78	20,947.30	17,531.74	22,454.25	22,918.33	27,895.11
744	DILLINGHAM CITY SD	82,530.18	132,016.94	107,310.86	114,435.18	148,548.89	173,274.14	178,455.39
746	KENAI PENINSULA BOROUGH SD	2,372,112.28	2,570,793.23	2,404,195.88	2,256,776.91	2,407,075.35	2,496,327.70	2,417,499.71
748	SAINT MARY'S SD	62,524.91	69,718.82	60,148.20	46,770.29	44,151.15	50,155.46	46,615.58
751	NORTHWEST ARCTIC BOROUGH SD	398,426.29	723,017.63	527,859.50	451,722.60	492,081.43	590,282.99	577,278.97
752	BERING STRAIT SD	405,561.97	696,009.77	522,908.85	387,570.48	436,529.41	598,504.58	626,717.90
753	LOWER YUKON SD	519,028.81	521,774.24	474,846.31	400,163.68	393,486.39	462,619.38	424,090.91
754	LOWER KUSKOKWIM SD	922,678.73	1,244,221.67	1,163,146.26	1,002,614.58	1,109,994.99	1,243,560.52	1,264,987.87
755	KUSPUK SD	76,181.80	142,685.53	106,665.67	98,039.16	121,708.95	111,898.63	123,148.02
756	SOUTHWEST REGION SD	157,951.36	175,810.60	149,932.92	141,065.85	145,378.20	190,830.66	185,196.37
757	LAKE AND PENINSULA BOROUGH SD	46,895.92	184,495.34	108,447.69	77,482.72	94,679.59	130,806.45	127,255.05
758	ALEUTIAN REGION SD	11,751.32	12,436.75	10,584.56	7,850.15	14,119.00	16,854.59	13,201.59
759	PRIBILOF SD	9,192.01	18,914.17	17,771.92	14,521.38	16,079.31	19,331.86	15,736.51
761	IDITAROD AREA SD	45,914.79	68,892.30	45,347.99	21,794.20	51,062.10	67,432.41	52,557.27
762	YUKON / KOYUKUK SD	184,057.07	229,624.93	177,044.19	159,466.25	154,570.86	187,901.58	182,490.96
763	YUKON FLATS SD	69,749.88	93,554.96	77,228.68	65,702.65	83,976.89	101,768.55	103,279.70
764	DENALI BOROUGH SD	110,107.22	133,593.02	94,971.62	84,272.06	83,803.92	80,803.37	103,544.58
765	DELTA/GREELY SD	170,906.92	216,893.64	184,543.20	156,301.76	162,564.80	165,181.36	180,110.48
766	ALASKA GATEWAY SD	82,923.25	147,900.96	115,656.94	124,560.43	127,792.49	128,419.54	124,349.06
767	COPPER RIVER SD	47,104.55	98,120.80	94,597.33	105,461.10	115,656.27	121,758.26	132,304.75
768	CHATHAM SD	16,403.40	62,596.87	42,347.93	47,878.93	48,982.02	60,291.65	63,121.28

State of Alaska Teachers' Retirement System
 Schedule E - Contribution History

Employer Number	Employer Name	FY2019	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013
769	SOUTHEAST ISLAND SD	45,294.86	71,915.04	54,174.58	67,931.90	74,096.35	77,776.57	71,859.89
770	ANNETTE ISLAND SD	71,947.46	64,185.19	67,476.91	70,300.50	81,025.75	82,384.77	85,821.49
771	CHUGACH SD	92,071.24	90,177.20	85,760.23	74,674.62	75,164.66	72,052.02	82,653.26
775	TANANA SD	11,847.68	10,038.01	17,017.84	12,662.15	10,393.95	12,850.77	10,744.46
777	KASHUNAMIUT SD	42,981.17	78,103.67	62,184.10	40,883.20	31,482.25	38,671.83	45,023.45
778	YUPIIT SD	107,333.46	107,493.96	95,205.56	68,270.32	65,344.19	89,913.58	120,550.86
779	SPECIAL EDUCATION SERVICE AGENCY	37,078.19	32,604.40	30,286.61	30,638.78	39,682.45	41,387.48	46,164.58
780	ALEUTIANS EAST BOROUGH SD	79,651.06	112,451.50	86,295.82	75,751.86	87,302.23	99,826.48	97,141.58
Subtotal		36,805,207.35	40,550,273.68	37,353,546.09	34,110,502.90	48,556,579.52	39,190,441.63	38,879,928.13
Nonemployer:								
999	STATE OF ALASKA	127,364,762.39	111,042,260.53	115,980,240.01	89,957,454.13	1,650,517,011.02	207,270,949.96	195,434,950.61
Total		164,169,969.74	151,592,534.21	153,333,786.10	124,067,957.03	1,699,073,590.54	246,461,391.59	234,314,878.74

**State of Alaska Teachers' Retirement System
Schedule E - Contribution History - Historical**

		FY2012	FY2011	FY2010
Total	Total Plan Contributions	195,576,000	142,147,000	134,275,000

State of Alaska Teachers' Retirement System
 Schedule F - Present Value of Future State Assistance Contributions as of 6/30/2019

Employer Number	Employer Name	Present Value of Future State Assistance Contributions	Employer Proportion
701	ANCHORAGE SD	350,573,000	34.47837%
704	CORDOVA CITY SD	3,179,000	0.31265%
705	CRAIG CITY SD	2,785,000	0.27390%
706	FAIRBANKS NORTH STAR BOROUGH SD	101,769,000	10.00884%
707	HAINES BOROUGH SD	1,931,000	0.18991%
708	HOONAH CITY SD	817,000	0.08035%
709	HYDABURG CITY SD	661,000	0.06501%
710	JUNEAU BOROUGH SD	38,549,000	3.79124%
712	KAKE CITY SD	1,270,000	0.12490%
714	KETCHIKAN GATEWAY BOROUGH SD	19,025,000	1.87108%
717	KLAWOCK CITY SD	1,688,000	0.16601%
718	KODIAK ISLAND BOROUGH SD	18,152,000	1.78522%
719	NENANA CITY SD	3,123,000	0.30714%
720	NOME CITY SD	4,696,000	0.46185%
722	MATANUSKA-SUSITNA BOROUGH SD	130,690,000	12.85318%
723	PELICAN CITY SD	94,000	0.00924%
724	PETERSBURG CITY SD	4,418,000	0.43450%
727	SITKA BOROUGH SD	12,948,000	1.27342%
728	SKAGWAY CITY SD	1,327,000	0.13051%
729	UNALASKA CITY SD	3,358,000	0.33025%
730	VALDEZ CITY SD	5,323,000	0.52351%
731	WRANGELL PUBLIC SD	2,254,000	0.22168%
732	YAKUTAT SD	590,000	0.05803%
733	UNIVERSITY OF ALASKA	40,743,000	4.00702%
735	GALENA CITY SD	7,264,000	0.71440%
736	NORTH SLOPE BOROUGH SD	23,555,000	2.31660%
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	-	0.00000%
742	BRISTOL BAY BOROUGH SD	1,099,000	0.10809%
743	SOUTHEAST REGIONAL RESOURCE CENTER	544,000	0.05350%
744	DILLINGHAM CITY SD	4,483,000	0.44090%
746	KENAI PENINSULA BOROUGH SD	68,151,000	6.70256%
748	SAINT MARY'S SD	1,676,000	0.16483%
751	NORTHWEST ARCTIC BOROUGH SD	21,312,000	2.09601%
752	BERING STRAIT SD	20,255,000	1.99205%
753	LOWER YUKON SD	17,042,000	1.67606%
754	LOWER KUSKOKWIM SD	36,407,000	3.58058%
755	KUSPUK SD	3,737,000	0.36753%
756	SOUTHWEST REGION SD	7,362,000	0.72404%
757	LAKE AND PENINSULA BOROUGH SD	5,169,000	0.50836%
758	ALEUTIAN REGION SD	469,000	0.04613%
759	PRIBILOF SD	702,000	0.06904%
761	IDITAROD AREA SD	2,132,000	0.20968%
762	YUKON / KOYUKUK SD	6,692,000	0.65815%
763	YUKON FLATS SD	3,154,000	0.31019%
764	DENALI BOROUGH SD	3,378,000	0.33222%
765	DELTA/GREELY SD	5,511,000	0.54200%
766	ALASKA GATEWAY SD	3,700,000	0.36389%
767	COPPER RIVER SD	2,532,000	0.24902%
768	CHATHAM SD	1,680,000	0.16523%
769	SOUTHEAST ISLAND SD	2,384,000	0.23446%
770	ANNETTE ISLAND SD	3,269,000	0.32150%
771	CHUGACH SD	2,019,000	0.19857%
775	TANANA SD	573,000	0.05635%
777	KASHUNAMIUT SD	2,252,000	0.22148%
778	YUPIIT SD	4,081,000	0.40136%
779	SPECIAL EDUCATION SERVICE AGENCY	1,259,000	0.12382%
780	ALEUTIANS EAST BOROUGH SD	2,985,000	0.29357%
Total		1,016,791,000	100.00000%

All amounts are determined without rounding. Rounded amounts are displayed.

State of Alaska Teachers' Retirement System
 Schedule G - Supplemental Schedule of Special Funding Amounts by Employer as of 6/30/2019

Employer Number	Employer Name	State Proportionate Share of Net Pension Liability Attributable to Employer	Proportionate Share of Pension Plan Expense
701	ANCHORAGE SD	382,225,046.75	29,370,115.70
704	CORDOVA CITY SD	3,466,021.12	266,328.55
705	CRAIG CITY SD	3,036,448.20	233,320.23
706	FAIRBANKS NORTH STAR BOROUGH SD	110,957,377.73	8,525,948.39
707	HAINES BOROUGH SD	2,105,343.44	161,774.28
708	HOONAH CITY SD	890,764.16	68,446.19
709	HYDABURG CITY SD	720,679.45	55,376.90
710	JUNEAU BOROUGH SD	42,029,458.42	3,229,537.33
712	KAKE CITY SD	1,384,663.99	106,397.37
714	KETCHIKAN GATEWAY BOROUGH SD	20,742,702.70	1,593,866.19
717	KLAWOCK CITY SD	1,840,403.79	141,416.35
718	KODIAK ISLAND BOROUGH SD	19,790,882.49	1,520,728.47
719	NENANA CITY SD	3,404,965.07	261,637.01
720	NOME CITY SD	5,119,985.91	393,418.96
722	MATANUSKA-SUSITNA BOROUGH SD	142,489,556.70	10,948,876.33
723	PELICAN CITY SD	102,486.94	7,875.08
724	PETERSBURG CITY SD	4,816,886.23	370,128.82
727	SITKA BOROUGH SD	14,117,030.99	1,084,750.56
728	SKAGWAY CITY SD	1,446,810.33	111,172.69
729	UNALASKA CITY SD	3,661,182.43	281,324.71
730	VALDEZ CITY SD	5,803,595.61	445,947.42
731	WRANGELL PUBLIC SD	2,457,506.01	188,834.40
732	YAKUTAT SD	643,269.10	49,428.70
733	UNIVERSITY OF ALASKA	44,421,547.24	3,413,345.08
735	GALENA CITY SD	7,919,841.91	608,559.47
736	NORTH SLOPE BOROUGH SD	25,681,701.03	1,973,378.08
737	STATE OF ALASKA (EMPLOYER AND NONEMPLOYER)	-	-
742	BRISTOL BAY BOROUGH SD	1,198,224.98	92,071.43
743	SOUTHEAST REGIONAL RESOURCE CENTER	593,115.91	45,574.94
744	DILLINGHAM CITY SD	4,887,754.86	375,574.36
746	KENAI PENINSULA BOROUGH SD	74,304,122.57	5,709,517.72
748	SAINT MARY'S SD	1,827,320.35	140,411.02
751	NORTHWEST ARCTIC BOROUGH SD	23,236,188.17	1,785,465.24
752	BERING STRAIT SD	22,083,755.23	1,696,912.46
753	LOWER YUKON SD	18,580,664.36	1,427,735.48
754	LOWER KUSKOKWIM SD	39,694,064.51	3,050,086.01
755	KUSPUK SD	4,074,401.05	313,076.37
756	SOUTHWEST REGION SD	8,026,690.00	616,769.67
757	LAKE AND PENINSULA BOROUGH SD	5,635,691.47	433,045.69
758	ALEUTIAN REGION SD	511,344.42	39,291.63
759	PRIBILOF SD	765,381.20	58,811.78
761	IDITAROD AREA SD	2,324,491.05	178,613.55
762	YUKON / KOYUKUK SD	7,296,197.98	560,638.77
763	YUKON FLATS SD	3,438,763.96	264,234.11
764	DENALI BOROUGH SD	3,682,988.16	283,000.26
765	DELTA/GREELY SD	6,008,569.49	461,697.59
766	ALASKA GATEWAY SD	4,034,060.45	309,976.60
767	COPPER RIVER SD	2,760,605.69	212,124.53
768	CHATHAM SD	1,831,681.50	140,746.13
769	SOUTHEAST ISLAND SD	2,599,243.27	199,725.47
770	ANNETTE ISLAND SD	3,564,146.92	273,868.52
771	CHUGACH SD	2,201,288.66	169,146.69
775	TANANA SD	624,734.23	48,004.48
777	KASHUNAMIUT SD	2,455,325.44	188,666.84
778	YUPIIT SD	4,449,459.64	341,895.82
779	SPECIAL EDUCATION SERVICE AGENCY	1,372,670.84	105,475.82
780	ALEUTIANS EAST BOROUGH SD	3,254,505.52	250,075.72
Total		1,108,593,609.62	85,184,167.96

All amounts are determined without rounding. Rounded amounts are displayed.