



State of Alaska
Teachers' Retirement System
Defined Contribution Retirement Plan

For Occupational Death and Disability
And Retiree Medical Benefits

Actuarial Valuation Report
As of June 30, 2013

August 2014

buckconsultants®

Submitted By:
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State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

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August 22, 2014

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

Certification of Actuarial Valuation

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

This report summarizes the annual actuarial valuation results of the State of Alaska Teachers' Retirement System Defined Contribution Retirement (TRS DCR) Plan as of June 30, 2013 performed by Buck Consultants, LLC.

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP and member data provided by the Division of Retirement and Benefits and summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2013. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under the Plan were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable. Buck Consultants, LLC is solely responsible for the actuarial data and actuarial results presented in this report. This report fully and fairly discloses the actuarial position of the Plan.

The State of Alaska Teachers' Retirement System DCR Plan is funded by Employer Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board). The funding objective for the State of Alaska Teachers' Retirement System DCR Plan is to pay required contributions that remain level as a percent of TRS DCR Compensation. The Board has also established a funding policy objective that the required contributions be sufficient to pay the Normal Costs of active plan members, Plan expenses, and amortize the Unfunded Actuarial Accrued Liability as a level percent of TRS DCR Compensation over a closed 25-year period. This objective is currently being met and is projected to continue to be met.

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In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the Plan and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the Plan. The actuary performs an analysis of Plan experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed in 2010. A review of the healthcare assumptions was performed for last year's actuarial valuation and changes were made to the healthcare cost trend rates and the per capita claims cost rates, effective June 30, 2012, to better reflect expected future healthcare experience. Changes were also made to expected healthcare benefit participation, lower initial relative values of DCR healthcare, and increased employer sharing of medical cost trend as a result of recent plan decision discussions. Based on updated experience, these assumptions are still reasonable. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 5 beginning on page 32.

The assumptions and methods used to determine the Annual Required Contributions (ARC) of the Employers to the State of Alaska Teachers' Retirement System DCR Plan as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statements No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Based on member data and asset information provided by the Division of Retirement and Benefits, we have prepared the Schedule of Funding Progress, Schedule of Employer Contributions, and trend data schedules under GASB Nos. 25 and 43 that are included in the Financial Section of the CAFR. We have also prepared the member data tables shown in Section 4 of this report for the Statistical Section of the CAFR, and the summary of actuarial assumptions and solvency test for the Actuarial Section of the CAFR.

The undersigned is an Enrolled Actuary, an Associate of the Society of Actuaries and Member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,

BUCK CONSULTANTS, LLC



David H. Sliskinsky, ASA, EA, MAAA
Principal, Consulting Actuary

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of Administration

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The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and hereby affirms her qualification to render opinions in such matters, in accordance with the qualification standards of the American Academy of Actuaries.



Melissa Bissett, FSA, MAAA
Senior Consultant, Health & Productivity

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

EXECUTIVE SUMMARY

Overview

The State of Alaska Teachers' Retirement System DCR Plan provides occupational death & disability and retiree medical benefits to teachers and other eligible members hired after June 30, 2006 or who have elected participation in this plan. The Commissioner of the Department of Administration is responsible for administering the Plan. The Alaska Retirement Management Board has fiduciary responsibility over the assets of the Plan. This report presents the results of the actuarial valuation of the Plan benefits as of the valuation date of June 30, 2013.

Purpose

An actuarial valuation is performed on the retirement plan annually as of the beginning of the fiscal year. The main purposes of the actuarial valuation detailed in this report are:

1. To determine the Employer contribution necessary to meet the Board's funding policy for the Plan;
2. To disclose the funding assets and liability measures as of the valuation date;
3. To disclose the accounting measures for the Plan required by GASB Nos. 25 and 43 as of the end of the last fiscal year;
4. To review the current funded status of the Plan;
5. To compare actual and expected experience under the Plan during the last fiscal year;
6. And to report trends in contributions, assets, liabilities, and funded status over the last several years.

The actuarial valuation provides a "snapshot" of the funded position of the TRS DCR Plan based on the plan provisions, membership, assets, and actuarial assumptions as of the valuation date.

Future actuarial valuation measurements and projections may differ from the current measurements presented in this report due to such factors as: plan experience different from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Executive Summary (cont'd)

Funding Status

The funding status is a measure of the progress that has been made in funding the plan as of the valuation date. It is determined as a ratio of the value of assets using either the actuarial or fair value of assets divided by the total actuarial accrued liability on the valuation date. A ratio of over 100% represents a plan that is ahead in funding, and a ratio of less than 100% represents a plan that is behind in funding on the valuation date. A comparative summary of the funding ratio from the prior and current actuarial valuations follows:

Funding Status as of June 30 ¹	2012	2013
(a) Accrued Liability ²	\$ 16,874	\$ 22,138
(b) Valuation Assets ²	<u>9,285</u>	<u>11,146</u>
(c) Unfunded Accrued Liability ² , (a) – (b)	\$ 7,589	\$ 10,992
(d) Funding Ratio based on Valuation Assets, (b) ÷ (a)	55.0%	50.3%
(e) Fair Value of Assets ²	\$ 9,123	\$ 11,374
(f) Funding Ratio based on Fair Value of Assets, (e) ÷ (a)	54.1%	51.4%

¹ Includes occupational death & disability and retiree medical benefits.

² In thousands.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Executive Summary (cont'd)

As shown previously, the funding ratio based on valuation assets as of June 30, 2013 has decreased from 55.0% to 50.3%, a decrease of 4.7%. The total calculated employer contribution rate has not changed from 2.04% of payroll for FY15 to 2.04% for FY16. The reasons for the change in the funded status is explained below.

(1) Retiree Medical Costs and Assumptions

Please refer to the State of Alaska Teachers' Retirement System Defined Benefit Plan Actuarial Valuation Report as of June 30, 2013 for a full description of the assumptions and costs of the retiree medical plan. Adjustments from these costs and assumptions are described in this report.

Due to the lack of experience for the DCR Plan only, base claims costs are based on those described in the actuarial valuation as of June 30, 2013 for TRS with some adjustments to reflect the differences between the DCR medical plan and the DB medical plan. These differences include different coverage levels and an indexing of the retiree out-of-pocket dollar amounts. To account for anticipated plan design features, including network steering, higher initial copays, deductibles and out-of-pocket limits, FY13 claims costs were reduced 11.9% for medical and 7.1% for prescription drugs. Retiree out-of-pocket amounts were indexed 0.2% each year to reflect the effect of the deductible leveraging on trend, putting the annual projected trend closer to the ultimate trend rate. Participation rates reflect the proportion of retirees expected to have access to alternative options in the Medicare market as well as the time from retirement to Medicare-eligibility where a member pays full cost.

(2) Investment Experience

The approximate FY13 investment return based on fair value was 11.9% compared to the expected investment return of 8.00%. This resulted in a gain of approximately \$377 thousand to the Plan from investment experience. The asset valuation method recognizes 20 percent of this gain (\$76 thousand) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY09 investment loss, 20 percent of the FY10 investment loss, 20 percent of the FY11 investment gain and 20 percent of the FY12 investment loss were recognized this year. The approximate FY13 asset return based on actuarial value was 7.7% compared to the expected asset return of 8.00%.

(3) Salary Increase

During the period from June 30, 2012 to June 30, 2013, salary increases for continuing active members were slightly less than anticipated in the valuation assumptions.

(4) Demographic Experience

The number of active members increased 7.03% from 3,057 at June 30, 2012 to 3,272 at June 30, 2013 due to the opening of the DCR Plan to new entrants as of July 1, 2006. The average age of active members increased from 37.61 to 38.10 and average credited service increased from 3.00 to 3.52 years.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Executive Summary (cont'd)

(5) Changes in Methods Since the Prior Valuation

There have been no changes in the asset or valuation methods since the prior valuation.

(6) Changes in Assumptions Since the Prior Valuation

There have been no changes in assumptions since the prior valuation.

(7) Changes in Benefit Provisions Since the Prior Valuation

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

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Comparative Summary of Key Actuarial Valuation Results

Total Employer Contribution Rates for Occupational Death & Disability for Fiscal Year Ending:	2015	2016
(a) Employer Normal Cost Rate	0.05%	0.05%
(b) Past Service Cost Rate	<u>(0.05)%</u>	<u>(0.05)%</u>
(c) Total Employer Contribution Rate, (a) + (b), not less than 0%	0.00%	0.00%

Total Employer Contribution Rates for Retiree Medical for Fiscal Year Ending:	2015	2016
(a) Employer Normal Cost Rate	1.72%	1.63%
(b) Past Service Cost Rate	<u>0.32%</u>	<u>0.41%</u>
(c) Total Employer Contribution Rate, (a) + (b), not less than 0%	2.04%	2.04%

Total Employer Contribution Rates for Fiscal Year Ending:	2015	2016
(a) Total Employer Contribution Rate	2.04%	2.04%
(b) Board Adopted Total Employer Contribution Rate	2.04%	2.04%

The exhibit below shows the historical Board adopted employer contribution rates for the DCR Plan.

Valuation Date	Fiscal Year	Total Employer Contribution Rate		
		Occupational Death & Disability	Retiree Medical	Total
N/A	FY07	N/A	1.75%	1.75%
N/A	FY08	0.56%	0.99%	1.55%
N/A	FY09	0.62%	0.99%	1.61%
June 30, 2007	FY10	0.32%	1.03%	1.35%
June 30, 2008	FY11	0.28%	0.68%	0.96%
June 30, 2009	FY12	0.00%	0.58%	0.58%
June 30, 2010	FY13	0.00%	0.49%	0.49%
June 30, 2011	FY14	0.00%	0.47%	0.47%
June 30, 2012	FY15	0.00%	2.04%	2.04%
June 30, 2013	FY16	0.00%	2.04%	2.04%

Contribution rates are based on salary for DCR Plan members only.

The rates shown above are for funding purposes which differ from the Annual Required Contribution for GASB No. 43 reporting purposes. Under GASB No. 43, retiree medical liabilities are gross of the retiree drug subsidy and based on a discount rate in accordance with GASB parameters.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Comparative Summary of Key Actuarial Valuation Results (cont'd)

Summary of Actuarial Gain/(Loss)

The following table shows the gain/(loss) on total accrued liability (in thousands):

	Occupational Death & Disability	Retiree Medical	Total	% of Expected
- Retirement Experience	\$ 0	\$ 0	\$ 0	0.00%
- Termination Experience	3	1,407	1,410	6.46%
- Active Mortality Experience	41	(17)	24	0.11%
- Inactive Mortality Experience	0	0	0	0.00%
- Disability Experience	51	(11)	40	0.18%
- New Entrants	(4)	(932)	(936)	(4.29)%
- Rehires	(2)	(802)	(804)	(3.68)%
- Other Demographic Experience	2	(1,069)	(1,067)	(4.88)%
- Salary Increases	0	N/A	0	0.00%
- Medical Claims Costs	N/A	1,038	1,038	4.75%
- Total	\$ 91	\$ (386)	\$ (295)	(1.35)%

A gain on total accrued liability is favorable to the Plan. A loss is unfavorable.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1

Actuarial Funding Results

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1.1

Actuarial Liabilities and Normal Cost (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
Active Members		
Occupational Death Benefits	\$ 461	\$ 38
Occupational Disability Benefits	537	42
Medical and Prescription Drug Benefits	51,621	25,152
Medicare Part D Subsidy	(6,317)	(3,094)
Subtotal	\$ 46,302	\$ 22,138
Benefit Recipients		
Survivor Benefits	\$ 0	\$ 0
Disability Benefits	0	0
Medical and Prescription Drug Benefits	0	0
Medicare Part D Subsidy	0	0
Subtotal	\$ 0	\$ 0
Total	\$ 46,302	\$ 22,138
Total Occupational Death & Disability	\$ 998	\$ 80
Total Retiree Medical, Net of Part D Subsidy	\$ 45,304	\$ 22,058
Total Retiree Medical, Gross of Part D Subsidy	\$ 51,621	\$ 25,152
As of June 30, 2013		Normal Cost
Active Members		
Occupational Death Benefits		\$ 48
Occupational Disability Benefits		56
Medical and Prescription Drug Benefits		3,903
Medicare Part D Subsidy		(480)
Subtotal		\$ 3,527
Total		\$ 3,527
Total Occupational Death & Disability		\$ 104
Total Retiree Medical, Net of Part D Subsidy		\$ 3,423
Total Retiree Medical, Gross of Part D Subsidy		\$ 3,903

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1.2

Actuarial Contributions – FY16 (\$'s in 000's)

Normal Cost Rate	Occupational Death & Disability	Retiree Medical	Total
(1) Total Normal Cost	\$ 104	\$ 3,423	\$ 3,527
(2) DCR Plan Member Salaries Projected for FY14	210,004	210,004	210,004
(3) Employer Normal Cost Rate, (1) / (2)	0.05%	1.63%	1.68%
Past Service Rate			
(1) Accrued Liability	\$ 80	\$ 22,058	\$ 22,138
(2) Valuation Assets	<u>2,532</u>	<u>8,614</u>	<u>11,146</u>
(3) Total Unfunded Liability, (1) – (2)	\$ (2,452)	\$ 13,444	\$ 10,992
(4) Funded Ratio based on Valuation Assets	3,165.0%	39.1%	50.3%
(5) Past Service Cost Amortization Payment	(104)*	851	747
(6) DCR Plan Member Salaries Projected for FY14	210,004	210,004	210,004
(7) Past Service Cost Rate, (5) / (6)	(0.05)%*	0.41%	0.36%
Total Employer Contribution Rate, not less than 0%	0.00%	2.04%	2.04%

The table below shows the total employer contribution rate based on total DB and DCR Plan payroll for informational purposes.

Total Employer Contribution Rate as Percent of Total Payroll

(1) Total Normal Cost	\$ 104	\$ 3,423	\$ 3,527
(2) Total DB and DCR Plan Member Salaries Projected for FY14	737,478	737,478	737,478
(3) Employer Normal Cost Rate, (1) / (2)	0.01%	0.47%	0.48%
(4) Past Service Cost Amortization Payment	\$ (104)*	\$ 851	\$ 747
(5) Past Service Cost Rate, (4) / (2)	(0.01)%	0.12%	0.11%
(6) Total Employer Contribution Rate, (3) + (5)	0.00%	0.59%	0.59%

*Adjusted to offset normal cost, so employer contribution is not less than \$0.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1.2 (cont'd)

Actuarial Contributions – FY16 (\$'s in 000's)

Schedule of Past Service Cost Amortizations – Occupational Death & Disability

Charge	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
Initial Unfunded Liability	06/30/2007	19	\$ 16	\$ 16	\$ 1
FY08 Gain	06/30/2008	20	(392)	(410)	(30)
Change in Assumptions	06/30/2009	21	(82)	(84)	(6)
FY09 Gain	06/30/2009	21	(594)	(619)	(43)
Change in Assumptions	06/30/2010	22	(7)	(8)	(1)
FY10 Gain	06/30/2010	22	(479)	(495)	(34)
FY11 Gain	06/30/2011	23	(560)	(572)	(38)
FY12 Gain	06/30/2012	24	(129)	(131)	(8)
FY13 Gain	06/30/2013	25	(149)	(149)	(9)
Total				\$ (2,452)	\$ (168)

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1.2 (cont'd)

Actuarial Contributions – FY16 (\$'s in 000's)

Schedule of Past Service Cost Amortizations – Retiree Medical

Charge	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
Initial Unfunded Liability	06/30/2007	19	\$ (239)	\$ (252)	\$ (19)
Change in Assumptions	06/30/2008	20	84	91	7
FY08 Gain	06/30/2008	20	(393)	(410)	(30)
Change in Assumptions	06/30/2009	21	(69)	(70)	(5)
FY09 Gain	06/30/2009	21	(281)	(294)	(21)
Change in Assumptions ³	06/30/2010	22	0	0	0
FY10 Gain	06/30/2010	22	(545)	(562)	(38)
FY11 Gain	06/30/2011	23	(94)	(96)	(6)
Change in Assumptions	06/30/2012	24	11,518	11,658	751
FY12 Gain	06/30/2012	24	(60)	(60)	(4)
FY13 Loss	06/30/2013	25	3,439	3,439	216
Total				\$ 13,444	\$ 851

³ The net effect of changing assumptions is less than \$1,000. The demographic assumption changes decreased liability by \$133 thousand and the economic assumption changes increased the liability by \$133 thousand. Therefore, the net effect of all assumption changes is \$0 for amortization purposes.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1.2 (cont'd)

Actuarial Contributions – FY16 (\$'s in 000's)

Schedule of Past Service Cost Amortizations – Total

Charge	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
Initial Unfunded Liability	06/30/2007	19	\$ (223)	\$ (236)	\$ (18)
Change in Assumptions	06/30/2008	20	84	91	7
FY08 Gain	06/30/2008	20	(785)	(820)	(60)
Change in Assumptions	06/30/2009	21	(151)	(154)	(11)
FY09 Gain	06/30/2009	21	(875)	(913)	(64)
Change in Assumptions	06/30/2010	22	(7)	(8)	(1)
FY10 Gain	06/30/2010	22	(1,024)	(1,057)	(72)
FY11 Gain	06/30/2011	23	(654)	(668)	(44)
Change in Assumptions	06/30/2012	24	11,518	11,658	751
FY12 Gain	06/30/2012	24	(189)	(191)	(12)
FY13 Loss	06/30/2013	25	3,290	3,290	207
Total				\$ 10,992	\$ 683

The amortization factor for 25 years is 15.898717. The weighted average amortization factor is 16.093704. The amortization method is level percentage of pay.

The equivalent single amortization period is 26.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1.3

Actuarial Gain/(Loss) for FY13 (\$'s in 000's)

	Occupational Death & Disability	Retiree Medical	Total
(1) Expected Actuarial Accrued Liability			
(a) Accrued Liability, June 30, 2012	\$ 63	\$ 16,811	\$ 16,874
(b) Normal Cost for FY13	95	3,256	3,351
(c) Interest on (a) and (b) at 8.00%	13	1,605	1,618
(d) Benefit Payments for FY13	0	0	0
(e) Interest on (d) at 8.00% for one-half year	0	0	0
(f) Expected Accrued Liability as of June 30, 2013 (a) + (b) + (c) - (d) - (e)	\$ 171	\$ 21,672	\$ 21,843
(2) Actual Accrued Liability, June 30, 2013	80	22,058	22,138
(3) Liability Gain/(Loss), (1)(f) - (2)	\$ 91	\$ (386)	\$ (295)
(4) Expected Actuarial Asset Value			
(a) Actuarial Asset Value, June 30, 2012	\$ 2,348	\$ 6,937	\$ 9,285
(b) Interest on (a) at 8.00%	188	555	743
(c) Employer Contributions for FY13	0	1,101	1,101
(d) Interest on (c) at 8.00% for one-half year	0	43	43
(e) Benefit Payments for FY13	0	0	0
(f) Interest on (e) at 8.00% for one-half year	0	0	0
(g) Expected Actuarial Asset Value, June 30, 2013 (a) + (b) + (c) + (d) - (e) - (f)	\$ 2,536	\$ 8,636	\$ 11,172
(5) Actuarial Asset Value, June 30, 2013	2,532	8,614	11,146
(6) Actuarial Asset Gain/(Loss), (5) - (4)(g)	\$ (4)	\$ (22)	\$ (26)
(7) Actuarial Gain/(Loss), (3) + (6)	\$ 87	\$ (408)	\$ (321)
(8) Effect of the 2-Year Delay on Contributions	\$ 62	\$ (3,031)	\$ (2,969)
(9) FY13 Gain/(Loss) to be Amortized, (7) + (8)	\$ 149	\$ (3,439)	\$ (3,290)

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 1.4

History of UAAL and Funded Ratio (\$'s in 000's)

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)
June 30, 2007	\$ 374	\$ 597	159.7%	\$ (223)
June 30, 2008	\$ 801	\$ 1,728	215.7%	\$ (927)
June 30, 2009	\$ 1,460	\$ 3,424	234.5%	\$ (1,964)
June 30, 2010	\$ 2,448	\$ 5,472	223.5%	\$ (3,024)
June 30, 2011	\$ 3,858	\$ 7,566	196.1%	\$ (3,708)
June 30, 2012	\$ 16,874	\$ 9,285	55.0%	\$ 7,589
June 30, 2013	\$ 22,138	\$ 11,146	50.3%	\$ 10,992

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 2

Plan Assets

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 2.1

Summary of Fair Value of Assets (\$'s in 000's)

As of June 30, 2013	Occupational Death & Disability	Retiree Medical	Total Fair Value	Allocation Percent
Cash and Short-Term Investments				
- Cash and Cash Equivalents	\$ 46	\$ 306	\$ 352	3.1%
- Subtotal	\$ 46	\$ 306	\$ 352	3.1%
Fixed Income Investments				
- Domestic Fixed Income Pool	\$ 196	\$ 647	\$ 843	7.5%
- International Fixed Income Pool	51	167	218	1.9%
- High Yield Pool	72	240	312	2.8%
- Treasury Inflation Protection Pool	1	4	5	0.0%
- Emerging Debt Pool	<u>22</u>	<u>71</u>	<u>93</u>	<u>0.8%</u>
- Subtotal	\$ 342	\$ 1,129	\$ 1,471	13.0%
Equity Investments				
- Domestic Equity Pool	\$ 841	\$ 2,774	\$ 3,615	32.0%
- International Equity Pool	501	1,652	2,153	19.0%
- Private Equity Pool	231	762	993	8.8%
- Emerging Markets Equity Pool	<u>76</u>	<u>250</u>	<u>326</u>	<u>2.9%</u>
- Subtotal	\$ 1,649	\$ 5,438	\$ 7,087	62.7%
Other Investments				
- Real Estate Pool	\$ 236	\$ 779	\$ 1,015	9.0%
- Other Investments Pool	208	684	892	7.9%
- Absolute Return Pool	114	375	489	4.3%
- Other Assets	<u>0</u>	<u>0</u>	<u>0</u>	<u>0.0%</u>
- Subtotal	\$ 558	\$ 1,838	\$ 2,396	21.2%
Total Cash and Investments	\$ 2,595	\$ 8,711	\$ 11,306	100.0%
Net Accrued Receivables / (Payables)	<u>0</u>	<u>68</u>	<u>68</u>	
Net Assets	\$ 2,595	\$ 8,779	\$ 11,374	

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 2.2

Changes in Fair Value of Assets (\$'s in 000's)

Fiscal Year 2013 (in thousands)	Occupational Death & Disability	Retiree Medical	Total Fair Value
(1) Net Assets, June 30, 2012 (fair value)	\$ 2,311	\$ 6,812	\$ 9,123
(2) Additions:			
(a) Member Contributions	\$ 0	\$ 0	\$ 0
(b) Employer Contributions	0	1,101	1,101
(c) Interest and Dividend Income	44	138	182
(d) Net Appreciation (Depreciation) in Fair Value of Investments	240	731	971
(e) Other	0	0	0
(f) Total Additions	\$ 284	\$ 1,970	\$ 2,254
(3) Deductions:			
(a) Medical Benefits	\$ 0	\$ 0	\$ 0
(b) Death & Disability Benefits	0	0	0
(c) Investment Expenses	0	0	0
(d) Administrative Expenses	0	3	3
(e) Total Deductions	\$ 0	\$ 3	\$ 3
(4) Net Assets, June 30, 2013 (fair value)	\$ 2,595	\$ 8,779	\$ 11,374
Approximate Fair Value Investment Return Rate During FY13 Net of All Expenses	12.3%	11.7%	11.9%

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 2.3

Actuarial Value of Assets (\$'s in 000's)

Future investment gains and losses will be recognized 20% per year over 5 years. In no event may valuation assets be less than 80% or more than 120% of fair value as of the current valuation date.

In Thousands	Occupational Death & Disability	Retiree Medical	Total
(1) Deferral of Investment Return/(Loss) for FY13			
(a) Fair Value, June 30, 2012	\$ 2,311	\$ 6,812	\$ 9,123
(b) Contributions for FY13	0	1,101	1,101
(c) Benefit Payments for FY13	0	0	0
(d) Actual Investment Return (<i>net of expenses</i>)	284	866	1,150
(e) Expected Return Rate (<i>net of expenses</i>)	8.00%	8.00%	8.00%
(f) Expected Return	185	588	773
(g) Investment Gain/(Loss) for the Year (<i>d. - f.</i>)	99	278	377
(h) Deferred Investment Return/(Loss)	63	165	228
(2) Actuarial Value, June 30, 2013			
(a) Fair Value, June 30, 2013	\$ 2,595	\$ 8,779	\$ 11,374
(b) 2013 Deferred Investment Return/(Loss)	63	165	228
(c) Preliminary Actuarial Value, June 30, 2013 (<i>a. - b.</i>)	2,532	8,614	11,146
(d) Upper Limit: 120% of Fair Value, June 30, 2013	3,114	10,534	N/A
(e) Lower Limit: 80% of Fair Value, June 30, 2013	2,076	7,024	N/A
(f) Actuarial Value, June 30, 2013 (<i>c. limited by d. and e.</i>)	\$ 2,532	\$ 8,614	\$ 11,146
(g) Ratio of Actuarial Value of Assets to Fair Value of Assets	97.6%	98.1%	98.0%
(h) Approximate Actuarial Value Investment Return Rate During FY13 Net of All Expenses	7.8%	7.7%	7.7%

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 2.3 (cont'd)

Actuarial Value of Assets (\$'s in 000's)

The tables below show the development of gain/(loss) to be recognized in the current year.

Occupational Death & Disability

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2009	\$ (127)	\$ (101)	\$ (26)	\$ 0
6/30/2010	(14)	(9)	(3)	(2)
6/30/2011	190	76	38	76
6/30/2012	(150)	(30)	(30)	(90)
6/30/2013	99	0	20	79
Total	\$ (2)	\$ (64)	\$ (1)	\$ 63

Retiree Medical

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2009	\$ (369)	\$ (296)	\$ (73)	\$ 0
6/30/2010	(58)	(36)	(11)	(11)
6/30/2011	460	184	92	184
6/30/2012	(382)	(76)	(76)	(230)
6/30/2013	278	0	56	222
Total	\$ (71)	\$ (224)	\$ (12)	\$ 165

Total

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2009	\$ (496)	\$ (397)	\$ (99)	\$ 0
6/30/2010	(72)	(45)	(14)	(13)
6/30/2011	650	260	130	260
6/30/2012	(532)	(106)	(106)	(320)
6/30/2013	377	0	76	301
Total	\$ (73)	\$ (288)	\$ (13)	\$ 228

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 2.4

Historical Asset Rate of Return

Year Ending	Actuarial Value		Fair Value	
	Annual	Cumulative	Annual	Cumulative
June 30, 2008	6.4%	6.4%	(0.3)%	(0.3)%
June 30, 2009	3.2%	4.8%	(12.0)%	(6.3)%
June 30, 2010	4.2%	4.6%	6.4%	(2.3)%
June 30, 2011	7.4%	5.3%	18.9%	2.6%
June 30, 2012	6.9%	5.6%	1.6%	2.4%
June 30, 2013	7.7%	6.0%	11.9%	3.9%

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 3

Accounting Information

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 3.1

Schedule of Funding Progress (\$'s in 000's)

The exhibit below shows the death and disability plan disclosure under GASB No. 25.

	Actuarial Accrued Liabilities (AAL)	Actuarial Value of Assets	Funded Ratio	Unfunded AAL (UAAL)	Covered Payroll ¹	UAAL as a Percentage of Covered Payroll
June 30, 2013	\$ 80	\$ 2,532	3,165.0%	\$ (2,452)	\$ 206,771	(1.2)%
June 30, 2012	63	2,348	3,727.0%	(2,285)	200,043	(1.1)%
June 30, 2011	57	2,193	3,847.4%	(2,136)	170,606	(1.3)%
June 30, 2010	18	1,577	8,761.1%	(1,559)	118,813	(1.3)%
June 30, 2009	14	1,071	7,650.0%	(1,057)	89,708	(1.2)%
June 30, 2008	44	420	954.5%	(376)	56,369	(0.7)%
June 30, 2007	16	0	0.0%	16	28,410	0.1%

The exhibit below shows the retiree medical disclosure without regard to Medicare Part D under GASB No. 43.

	Actuarial Accrued Liabilities (AAL)	Actuarial Value of Assets	Funded Ratio	Unfunded AAL (UAAL)	Covered Payroll ¹	UAAL as a Percentage of Covered Payroll
June 30, 2013	\$ 25,152	\$ 8,614	34.2%	\$ 16,538	\$ 206,771	8.0%
June 30, 2012	19,427	6,937	35.7%	12,490	200,043	6.2%
June 30, 2011	4,386	5,373	122.5%	(987)	170,606	(0.6)%
June 30, 2010	2,809	3,895	138.7%	(1,086)	118,813	(0.9)%
June 30, 2009	1,690	2,353	139.2%	(663)	89,708	(0.7)%
June 30, 2008	899	1,308	145.5%	(409)	56,369	(0.7)%
June 30, 2007	403	597	148.1%	(194)	28,410	(0.7)%

¹Actual active member payroll has been based on information provided by KPMG, LLP.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 3.2

Schedule of Employer Contributions (\$'s in 000's)

The following shows the death and disability disclosure under GASB No. 25 for fiscal year ending 2007 and later.

Fiscal Year Ending	Annual Required Contribution (ARC)	Percentage of ARC Contributed
June 30, 2013	\$ 0	100%
June 30, 2012	\$ 0	100%
June 30, 2011	\$ 474	100%
June 30, 2010	\$ 442	100%
June 30, 2009	\$ 623	100%
June 30, 2008	\$ 408	100%
June 30, 2007	\$ 72	0%

The following shows the retiree medical disclosure without regard to Medicare Part D subsidy under GASB No. 43 for fiscal year ending 2007 and later.

Fiscal Year Ending	Annual Required Contribution (ARC)	Percentage of ARC Contributed
June 30, 2013	\$ 1,241	89%
June 30, 2012	\$ 1,420	82%
June 30, 2011	\$ 1,422	81%
June 30, 2010	\$ 1,628	87%
June 30, 2009	\$ 1,162	85%
June 30, 2008	\$ 763	85%
June 30, 2007	\$ 575	100%

The exhibit below shows the annual required contribution (ARC) as a percentage of pay.

Valuation Date	Fiscal Year	Total Employer Contribution Rate		
		Occupational Death & Disability	Retiree Medical	Total
N/A	FY07	N/A	1.75%	1.75%
N/A	FY08	0.56%	1.16%	1.72%
N/A	FY09	0.62%	1.16%	1.78%
June 30, 2007	FY10	0.32%	1.18%	1.50%
June 30, 2008	FY11	0.28%	0.84%	1.12%
June 30, 2009	FY12	0.00%	0.71%	0.71%
June 30, 2010	FY13	0.00%	0.60%	0.60%
June 30, 2011	FY14	0.00%	0.58%	0.58%
June 30, 2012	FY15	0.00%	2.39%	2.39%
June 30, 2013	FY16	0.00%	2.36%	2.36%

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 3.3

Notes to Trend Data

Actuarial Assumptions, Methods and Additional Information Under GASB

Valuation Date	June 30, 2013
Actuarial Cost Method	Entry Age Normal Level Percentage of Pay Normal Cost Basis for Occupational Death & Disability Level Dollar Normal Cost Basis for Retiree Medical
Amortization Method	Level Percent of Pay, closed with bases established annually
Equivalent Single Amortization Period	26 years
Asset Valuation Method	5-year smoothed market, 80% to 120% of fair value corridor
Actuarial Assumptions:	
Investment rate of return*	8.00%
Projected salary increases	6.11% for first 5 years of service grading down to 3.62% after 20 years. Inflation – 3.12% per year.
*Includes price inflation at	3.12%

GASB 43 requires that the discount rate used in the valuation be the estimated long-term yield on investments that are expected to finance postemployment benefits. Depending on the method by which a plan is financed, the relevant investments could be plan assets, employer assets or a combination of plan and employer assets. The investment return should reflect the nature and the mix of both current and expected investments and the basis used to determine the actuarial value of assets.

The State of Alaska Teachers' Retirement System DCR Plan's retiree medical benefits are fully funded. Therefore, the 8.00% discount rate used for GASB 25 reporting is also applied herein for GASB 43 reporting.

Based on GASB accounting rules, the retiree drug subsidy the State of Alaska receives under Medicare Part D has not been recognized for GASB 43 disclosure purposes.

Disregarding future Medicare Part D payments, the fiscal 2016 employer ARC for accounting purposes is 2.36% of pay for retiree medical benefits and 2.36% of pay for retiree medical and death and disability benefits combined.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 3.4

Solvency Test (\$'s in 000's)

The exhibit below shows the combined occupational death & disability and retiree medical solvency test for valuation dates June 30, 2010 and before.

Valuation Date	Aggregate Accrued Liability For:			Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2010 ¹	\$ 0	\$ 0	\$ 2,448	\$ 5,472	100.0%	100.0%	100.0%
June 30, 2009 ¹	0	0	1,460	3,424	100.0%	100.0%	100.0%
June 30, 2008 ¹	0	0	801	1,728	100.0%	100.0%	100.0%
June 30, 2007	0	0	374	597	100.0%	100.0%	100.0%
June 30, 2006	0	0	0	0	100.0%	100.0%	100.0%

Retiree medical liabilities are calculated using the funding assumptions (i.e., funding investment return and net of Medicare Part D subsidy).

¹ Change in Assumptions

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 3.4 (cont'd)

Solvency Test (\$'s in 000's)

The exhibit below shows the occupational death & disability solvency test for valuation dates June 30, 2006 and later.

Valuation Date	Occupational Death & Disability Aggregate Accrued Liability For:				Portion of Accrued Liabilities Covered by Assets		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer- Financed Portion)	Occupational Death & Disability Valuation Assets	(1)	(2)	(3)
June 30, 2013	\$ 0	\$ 0	\$ 80	\$ 2,532	100.0%	100.0%	100.0%
June 30, 2012	0	0	63	2,348	100.0%	100.0%	100.0%
June 30, 2011	0	0	57	2,193	100.0%	100.0%	100.0%
June 30, 2010 ¹	0	0	18	1,577	100.0%	100.0%	100.0%
June 30, 2009 ¹	0	0	14	1,071	100.0%	100.0%	100.0%
June 30, 2008	0	0	44	420	100.0%	100.0%	100.0%
June 30, 2007	0	0	16	0	100.0%	100.0%	0.0%
June 30, 2006	0	0	0	0	N/A	N/A	N/A

¹ Change in Assumptions

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 3.4 (cont'd)

Solvency Test (\$'s in 000's)

The exhibit below shows the retiree medical solvency test for valuation dates June 30, 2006 and later.

Valuation Date	Retiree Medical Aggregate Accrued Liability For:			Retiree Medical Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer- Financed Portion)		(1)	(2)	(3)
June 30, 2013	\$ 0	\$ 0	\$ 22,058	\$ 8,614	100.0%	100.0%	39.1%
June 30, 2012 ¹	0	0	16,811	6,937	100.0%	100.0%	41.3%
June 30, 2011	0	0	3,801	5,373	100.0%	100.0%	100.0%
June 30, 2010 ¹	0	0	2,430	3,895	100.0%	100.0%	100.0%
June 30, 2009 ¹	0	0	1,446	2,353	100.0%	100.0%	100.0%
June 30, 2008 ¹	0	0	757	1,308	100.0%	100.0%	100.0%
June 30, 2007	0	0	358	597	100.0%	100.0%	100.0%
June 30, 2006	0	0	0	0	N/A	N/A	N/A

Retiree medical liabilities are calculated using the funding assumptions (i.e., funding investment return and net of Medicare Part D subsidy).

¹ Change in Assumptions

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 4

Member Data

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 4.1

Summary of Members Included

As of June 30	2009	2010	2011	2012	2013
Active Members					
(1) Number	1,792	2,246	2,708	3,057	3,272
(2) Average Age	37.10	36.79	37.25	37.61	38.10
(3) Average Credited Service	1.68	2.07	2.62	3.00	3.52
(4) Average Entry Age	35.42	34.72	34.63	34.61	34.58
(5) Average Annual Earnings	\$ 50,061	\$ 52,900	\$ 55,860	\$ 58,476	\$ 60,496
Retirees, Disableds and Beneficiaries					
(1) Number	0	0	0	0	0
(2) Average Age	N/A	N/A	N/A	N/A	N/A
(3) Average Monthly Death & Disability Benefit	N/A	N/A	N/A	N/A	N/A
Inactive Members*					
(1) Number	4	4	4	68	133
Total Number of Members	1,796	2,250	2,732	3,125	3,405

*Inactive members who have balances in the defined contribution retirement plan and are not eligible for future occupational death & disability or retiree medical benefits.

Average annual earnings are the annualized earnings for the fiscal year ending on the valuation date.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 4.2

Age and Service Distribution of Active Members

Annual Earnings by Age				Annual Earnings by Credited Service			
Age	Number	Total Annual Earnings	Average Annual Earnings	Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0 – 19	0	\$ 0	\$ 0	0	97	\$ 4,866,583	\$ 50,171
20 – 24	101	5,000,179	49,507	1	615	33,756,811	54,889
25 – 29	774	42,372,332	54,745	2	531	31,407,633	59,148
30 – 34	771	45,267,697	58,713	3	522	31,254,699	59,875
35 – 39	422	26,218,068	62,128	4	486	29,994,610	61,717
40 – 44	378	23,626,387	62,504	0 – 4	2,251	131,280,336	58,321
45 – 49	279	18,365,691	65,827	5 – 9	1,019	66,475,903	65,236
50 – 54	263	17,213,264	65,450	10 – 14	2	187,581	93,790
55 – 59	171	11,885,032	69,503	15 – 19	0	0	0
60 – 64	90	6,253,311	69,481	20 – 24	0	0	0
65 – 69	21	1,611,481	76,737	25 – 29	0	0	0
70 – 74	2	130,378	65,189	30 – 34	0	0	0
75+	0	0	0	35 – 39	0	0	0
				40+	0	0	0
Total	3,272	\$ 197,943,820	\$ 60,496	Total	3,272	\$ 197,943,820	\$ 60,496

Years of Credited Service by Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	101	0	0	0	0	0	0	0	0	101
25 – 29	653	121	0	0	0	0	0	0	0	774
30 – 34	498	273	0	0	0	0	0	0	0	771
35 – 39	246	176	0	0	0	0	0	0	0	422
40 – 44	256	122	0	0	0	0	0	0	0	378
45 – 49	175	104	0	0	0	0	0	0	0	279
50 – 54	156	106	1	0	0	0	0	0	0	263
55 – 59	106	64	1	0	0	0	0	0	0	171
60 – 64	49	41	0	0	0	0	0	0	0	90
65 – 69	9	12	0	0	0	0	0	0	0	21
70 – 74	2	0	0	0	0	0	0	0	0	2
75+	0	0	0	0	0	0	0	0	0	0
Total	2,251	1,019	2	0	0	0	0	0	0	3,272

Total annual earnings are the annualized earnings for the fiscal year ending on the valuation date.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 4.3

Member Data Reconciliation

	Actives	Vested Inactive	Retired	Disabled	Beneficiary	Total
Total as of July 1, 2012	3,057	68	0	0	0	3,125
Vested Termination	(90)	90	0	0	0	0
Non-vested Termination	(387)	(3)	0	0	0	(390)
Refund of Contributions	(39)	(10)	0	0	0	(49)
Disabled	0	0	0	0	0	0
Retired	0	0	0	0	0	0
Deceased, No Beneficiary	(2)	0	0	0	0	(2)
Deceased, With Beneficiary	0	0	0	0	0	0
Return to Active	126	(17)	0	0	0	109
Data Adjustment	1	5	0	0	0	6
New Entrant	606	0	0	0	0	606
Total as of July 1, 2013	3,272	133	0	0	0	3,405

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 4.4

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Earnings (000's)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2013	3,272	\$ 197,944	\$ 60,496	3.5%	58
June 30, 2012	3,057	178,761	58,476	4.7%	58
June 30, 2011	2,708	151,269	55,860	5.6%	58
June 30, 2010	2,246	118,813	52,900	5.7%	58
June 30, 2009	1,792	89,708	50,061	6.4%	58
June 30, 2008	1,198	56,369	47,053	6.2%	58
June 30, 2007	641	28,410	44,322	0.0%	58

Annual earnings are the annualized earnings for the fiscal year ending on the valuation date.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5

Basis of the Actuarial Valuation

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.1

Summary of Plan Provisions and Changes in Plan Provisions

(1) Effective Date

July 1, 2006, with amendments through June 30, 2013.

(2) Administration of Plan

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

The Alaska Retirement Management Board prescribes policies, adopts regulations, invests the funds, and performs other activities necessary to carry out the provisions of the Plan.

(3) Employers Included

Currently there are 58 employers participating in the TRS DCR Plan, including the State of Alaska, 53 school districts, and four other eligible organizations.

(4) Membership

An employee of a participating employer who first enters service on or after July 1, 2006, or a member of the defined benefit plan who works for an employer who began participation on or after July 1, 2006, and meets the following criteria is a member in the Plan:

- Permanent full-time or part-time elementary or secondary teachers, school nurses, or a person in a position requiring a teaching certificate as a condition of hire in a public school of the State of Alaska, the Department of Education and Early Development or in the Department of Labor and Workforce Development.
- Full-time or part-time teachers at the University of Alaska or persons occupying full-time administrative positions requiring academic standing who are not in the University's Optional Retirement Plan.

Members can convert to the DCR Plan if they are an eligible nonvested member of the TRS defined benefit plan whose employer consents to transfers to the defined contribution plan and they elect to transfer his or her account balance to the TRS DCR Plan.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.1 (cont'd)

Summary of Plan Provisions and Changes in Plan Provisions

(5) Member Contributions

There are no member contributions for the occupational death & disability and retiree medical benefits.

(6) Retiree Medical

- Member must retire directly from the plan to be eligible for retiree medical coverage. Normal retirement eligibility is the earlier of a) 30 years of service or b) Medicare eligible and 10 years of service.
- No retiree medical benefits are provided until normal retirement eligibility. The member's premium is 100% until they are Medicare eligible.
- Coverage cannot be denied except for failure to pay premium.
- Members who are receiving disability benefits or survivors who are receiving monthly survivor benefits are not eligible until the member meets, or would have met if he/she had lived, the normal retirement eligibility requirements.
- The plan's coverage is supplemental to Medicare.
- The Medicare-eligible premium will be based on the member's years of service. The percentage of premium paid by the member is as follows:

Years of Service	Percent of Premium Paid by Member
Less than 15 years	30%
15 – 19	25%
20 – 24	20%
25 – 29	15%
30 years or more	10%

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.1 (cont'd)

Summary of Plan Provisions and Changes in Plan Provisions

(7) Occupational Disability Benefits

- Benefit is 40% of salary at date of disability.
- There is no increase in the benefit after commencement.
- Member earns service while on occupational disability.
- Benefits cease when the member becomes eligible for normal retirement at Medicare-eligible age and 10 years of service, or at any age with 30 years of service.
- No retiree medical benefits are provided until normal retirement eligibility. The member's premium is 100% until they are Medicare eligible. Medicare-eligible premiums follow the service-based schedule above.

(8) Occupational Death Benefits

- Benefit is 40% of salary.
- There is no increase in the benefit after commencement.
- Benefits cease when the member would have become eligible for normal retirement.
- The period during which the survivor is receiving benefits is counted as service credit toward retiree medical benefits.
- No retiree medical benefits are provided until the member would have been eligible for normal retirement. The surviving spouse's premium is 100% until the member would have been Medicare eligible. Medicare-eligible premiums follow the service-based schedule above.

Changes Since the Prior Valuation

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

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.2

Description of Actuarial Methods and Valuation Procedures

The funding method used in this valuation was adopted by the Board in October 2006. The asset smoothing method used to determine valuation assets was implemented effective June 30, 2006.

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.

Valuation of Liabilities

(A) Actuarial Method – Entry Age Actuarial Cost

Liabilities and contributions shown in the report are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 25 years as a level percentage of expected payroll. However, in keeping with GASB requirements, the net amortization period will not exceed 30 years.

Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for death and disability benefits (constant dollar amount for retiree medical benefits), from the assumed entry age to the last age with a future benefit 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 DCR Plan 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 beneficiaries and disabled members currently receiving benefits (if any) 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.

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.

(B) Valuation of Assets

Effective June 30, 2006, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method will be phased in over five years. Fair Value of Assets were \$0 as of June 30, 2006. 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. Valuation assets are constrained to a range of 80% to 120% of the fair value of assets.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.2 (cont'd)

Description of Actuarial Methods and Valuation Procedures

(C) Valuation of Retiree Medical Benefits

The methodology used for the valuation of the retiree medical benefits is described in Section 6.2(c) of the State of Alaska Teachers' Retirement System Defined Benefit Plan Actuarial Valuation Report as of June 30, 2013.

Due to the lack of experience for the DCR Plan only, base claims costs are based on those described in the actuarial valuation as of June 30, 2012 for TRS with some adjustments. The claims costs were adjusted to reflect the differences between the DCR medical plan and the DB medical plan. These differences include network steerage, different coverage levels and an indexing of the retiree out-of-pocket dollar amounts. To account for higher initial copays, deductibles and out-of-pocket limits, FY12 claims costs were reduced 11.9% for medical and 7.1% for prescription drugs. Retiree out-of-pocket amounts were indexed 0.2% each year to reflect the effect of the deductible leveraging on trend and other plan design features.

No implicit subsidies are assumed. Employees projected to retire with 30 years of service prior to Medicare are valued with commencement deferred to Medicare eligibility, as such members will be required to pay the full plan premium. Explicit subsidies for disabled and normal retirement are determined using the plan-defined percentages of total projected plan costs, again with no implicit subsidy assumed.

Healthcare Reform

Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact due to the following provisions; however, only the Patient Centered Outcomes Research Institute fee impact has been included in the valuation results as part of administrative fee.

Because the State plan is retiree-only, and was in effect at the time the legislation was enacted, not all provisions are required. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions. We did look at the impact of including these provisions, but there was no decision made to adopt them, and no requirement to do so.

The Plan will be subject to the high cost plan excise tax (Cadillac tax). Based upon guidance available at the time of disclosure Buck estimated the year in which the tax would potentially affect Alaska to be sufficiently far into the future to produce a minimal impact. Buck determined the impact to be immaterial based on a blend of pre-Medicare and Medicare retirees.

We have not identified any other specific provisions of healthcare reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.

Changes in Methods From the Prior Valuation

There have been no changes in methods since the prior valuation.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3

Summary of Actuarial Assumptions and Changes in Assumptions

The demographic and economic assumptions used in the June 30, 2013 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board in December 2010. These assumptions were the result of an experience study performed for the DB Plan as of June 30, 2009.

Investment Return / Discount Rate	8.00% per year (geometric), compounded annually, net of expenses.
Salary Scale	Inflation – 3.12% per year. Productivity – 0.5% per year. See Table 1 for salary scale rates.
Payroll Growth	3.62% per year.
Total Inflation	Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.12% annually.
Mortality (Pre-termination)*	Based upon the 2005-2009 actual experience of the TRS DB Plan. (See Table 2). 55% of the 1994 Group Annuity Mortality (GAM) Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for females and 45% for males. 15% of deaths are assumed to result from occupational causes.
Mortality (Post-termination)*	Based upon the 2005-2009 actual experience of the TRS DB Plan. (See Table 3). 3-year setback of the 1994 GAM Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for females and 4-year setback for males.
Turnover	Select rates were estimated and ultimate rates were set to the TRS DB Plan's rates loaded by 10%. (See Table 4).
Disability	Incidence rates based upon the 2005-2009 actual experience of the TRS DB Plan, in accordance with Table 5. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table. 15% of disabilities are assumed to result from occupational causes.
Retirement	Retirement rates were estimated in accordance with Table 6.
Marriage and Age Difference	Wives are assumed to be three years younger than husbands. 85% of male members and 75% of female members are assumed to be married.
Part-time Status	Part-time employees are assumed to earn 0.60 years of credited service per year.

*The mortality assumptions include an allowance for expected future mortality improvement. The mortality table used was set in 2010 with an Actual Deaths to Expected Deaths ratio of 117%.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Expenses	All expenses are net of the investment return assumption.	
Per Capita Claims Cost	Sample claims cost rates adjusted to age 65 for FY14 medical benefits are shown below:	
	Medical	Prescription Drugs
	Pre-Medicare	\$ 2,621
	Medicare Parts A & B	\$ 2,621
	Medicare Part B Only	\$ 2,621
	Medicare Part D	\$ 502
Third Party Administrator Fees	\$177.57 per person per year; assumed trend rate of 5% per year.	
Base Claims Cost Adjustments	Due to higher initial copays, deductibles, out-of-pocket limits and member cost sharing compared to the DB medical plan, the following cost adjustments are applied to the per capita claims cost rates above:	
	<ul style="list-style-type: none"> • 0.881 for the medical plan. • 0.929 for the prescription drug plan. • 0.998 for the annual indexing of member cost sharing. 	

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Health Cost Trend

The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 8.7% is applied to the FY14 pre-Medicare medical claims costs to get the FY15 medical claims costs.

	Medical Pre-65	Medical Post-65	Prescription Drugs
FY14	8.7%	6.4%	6.3%
FY15	8.5%	6.3%	6.2%
FY16	8.0%	6.3%	6.2%
FY17	7.5%	6.2%	6.1%
FY18	7.0%	6.1%	6.0%
FY19	6.6%	6.1%	5.8%
FY20	6.4%	6.0%	5.8%
FY25	6.0%	6.0%	5.8%
FY50	5.0%	5.0%	5.0%
FY100	4.5%	4.5%	4.5%

As of the June 30, 2012 valuation and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model effectively begins estimating trend amounts beginning in 2012 and projects out to 2100. The model has been adopted by the Society of Actuaries and has been populated with assumptions that are specific to the State of Alaska.

Aging Factors

Age	Medical	Prescription Drugs
0-44	2.0%	4.5%
45-54	2.5%	3.5%
55-64	3.5%	3.0%
65-73	4.0%	1.5%
74-83	1.5%	0.5%
84-93	0.5%	0.0%
94+	0.0%	0.0%

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Retiree Medical Participation

<u>Decrement Due to Disability</u>		<u>Decrement Due to Retirement</u>	
<u>Age</u>	<u>Percent Participation</u>	<u>Age</u>	<u>Percent Participation</u>
<56	73.00%	55	40.0%
56	77.50%	56	50.0%
57	79.75%	57	55.0%
58	82.00%	58	60.0%
59	84.25%	59	65.0%
60	86.50%	60	70.0%
61	88.75%	61	75.0%
62	91.00%	62	80.0%
63	93.25%	63	85.0%
64	95.50%	64	90.0%
65+	94.00%	65+	<u>Years of Svc</u>
			<15 70.5%
			15-19 75.2%
			20-24 79.9%
			25-29 89.3%
			30+ 94.0%

*Participation rates reflect the expected plan election rate that varies by reason for decrement, duration that a member may pay full cost prior to Medicare eligibility, and availability of alternative and/or lower cost options, particularly in the Medicare market.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Table 1
Alaska TRS DCR Plan
Salary Scale

<u>Year of Employment</u>	<u>Unisex Rate</u>
1-6	6.11%
7	5.94
8	5.78
9	5.61
10	5.44
11	5.28
12	5.11
13	4.94
14	4.78
15	4.61
16	4.45
17	4.28
18	4.11
19	3.95
20	3.78
21+	3.62

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Table 2
Alaska TRS DCR Plan
Mortality Table (Pre-termination)

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.017%	.012%
21	.018	.012
22	.019	.012
23	.021	.013
24	.024	.013
25	.026	.013
26	.030	.014
27	.032	.014
28	.033	.015
29	.034	.016
30	.035	.017
31	.036	.019
32	.037	.020
33	.037	.021
34	.037	.022
35	.037	.023
36	.038	.024
37	.039	.025
38	.041	.027
39	.042	.029
40	.045	.032
41	.047	.034
42	.050	.037
43	.053	.039
44	.056	.041
45	.060	.042
46	.064	.044
47	.069	.047
48	.075	.051
49	.081	.055
50	.088	.061
51	.097	.068
52	.106	.078
53	.118	.090
54	.131	.102
55	.149	.116
56	.170	.135
57	.195	.157
58	.224	.181
59	.253	.208
60	.284	.239
61	.326	.274
62	.368	.314
63	.425	.359
64	.479	.410

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Table 3
Alaska TRS DCR Plan
Mortality Table (Post-termination)

<u>Age</u>	<u>Male</u>	<u>Female</u>
50	.142%	.085%
51	.153	.092
52	.166	.100
53	.181	.111
54	.196	.124
55	.215	.143
56	.235	.163
57	.263	.185
58	.291	.212
59	.331	.246
60	.377	.285
61	.433	.328
62	.499	.378
63	.561	.434
64	.631	.498
65	.725	.570
66	.819	.653
67	.944	.745
68	1.064	.844
69	1.196	.948
70	1.362	1.052
71	1.512	1.150
72	1.634	1.242
73	1.787	1.342
74	1.915	1.434
75	2.094	1.583
76	2.298	1.726
77	2.518	1.918
78	2.748	2.094
79	3.061	2.338
80	3.361	2.669
81	3.788	2.985
82	4.292	3.327
83	4.868	3.707
84	5.510	4.136
85	6.214	4.625

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Table 4
Alaska TRS DCR Plan
Turnover Assumptions

Select Rates of Turnover During the First 5 Years of Employment

Year of Employment	Rate
0	18%
1	17%
2	14%
3	12%
4	10%

Ultimate Rates of Turnover After the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
15	4.9042%	4.8122%	40	4.7508%	4.6924%
16	4.8981	4.8085	41	4.7372	4.6815
17	4.8931	4.8061	42	4.7199	4.6706
18	4.8882	4.8049	43	4.7038	4.6609
19	4.8857	4.8037	44	4.6827	4.6488
20	4.8474	4.7686	45	4.6593	4.6343
21	4.8448	4.7686	46	4.6345	4.6210
22	4.8399	4.7674	47	4.6035	4.6028
23	4.8362	4.7674	48	4.5676	4.5823
24	4.8300	4.7662	49	4.5306	4.5617
25	4.8250	4.7662	50	4.4884	4.5375
26	4.8201	4.7650	51	4.4389	4.5097
27	4.8151	4.7638	52	4.3808	4.4770
28	4.8102	4.7601	53	4.3164	4.4383
29	4.8052	4.7565	54	4.2447	4.3971
30	4.8015	4.7529	55	4.1630	4.3475
31	4.7991	4.7505	56	4.0640	4.2834
32	4.7953	4.7456	57	3.9427	4.2011
33	4.7929	4.7420	58	3.8103	4.1080
34	4.7916	4.7372	59	3.6507	3.9894
35	4.7892	4.7323	60	3.4713	3.8551
36	4.7854	4.7251	61	3.2720	3.7050
37	4.7805	4.7190	62	3.0406	3.5344
38	4.7718	4.7105	63	2.7770	3.3396
39	4.7619	4.7021	64	2.4912	3.1279
			65+	4.9500	4.8400

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Table 5
Alaska TRS DCR Plan
Disability Table

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.022%	.020%
21	.022	.020
22	.023	.021
23	.023	.021
24	.024	.022
25	.024	.022
26	.024	.022
27	.025	.022
28	.026	.023
29	.026	.024
30	.027	.025
31	.027	.025
32	.028	.025
33	.029	.026
34	.030	.027
35	.030	.027
36	.032	.029
37	.033	.030
38	.034	.031
39	.035	.032
40	.037	.033
41	.038	.035
42	.041	.037
43	.043	.039
44	.047	.043
45	.052	.047
46	.056	.050
47	.061	.055
48	.066	.060
49	.071	.064
50	.077	.069
51	.083	.075
52	.091	.082
53	.102	.091
54	.114	.102
55	.128	.115
56	.147	.133
57	.171	.154
58	.195	.176
59	.230	.207
60	.270	.243
61	.312	.281
62	.362	.325
63	.418	.376
64	.477	.429

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Table 6
Alaska TRS DCR Plan
Retirement Table

Age	Rate
<55	2%
55-59	3%
60	5%
61	5%
62	10%
63	5%
64	5%
65	25%
66	25%
67	25%
68	20%
69	20%
70	100%

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Section 5.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Changes in Actuarial Assumptions Since the Prior Valuation

There have been no changes in assumptions since the prior valuation.

State of Alaska Teachers' Retirement System Defined Contribution Retirement Plan

Glossary of Terms

Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension plan for a group of plan members to the years of service that give rise to that cost.
Actuarial Present Value of Projected Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual Required Contribution	Disclosure measure of annual pension cost.
GASB 25 and 27	Governmental Accounting Standards Board Statement Number 25 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 27 which specifies Employer reporting of Pension Cost.
GASB 43 and 45	Governmental Accounting Standards Board Statement Number 43 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 45 which specifies Employer reporting of Other Post-Employment Benefit (OPEB) Cost.
Liquidity Factor	Is calculated as the average annual Fair Value of Assets divided by the total annual benefit payments. This measures the approximate number of years that assets will cover benefit payments without contributions or investment return. Trend shows solvency risk.
Maturity Ratio	The ratio of the actuarial accrued liability for members who are no longer active to the total actuarial accrued liability. A ratio of over 50% indicates a mature plan. The higher the maturity ratio, the more volatile the contribution rate will be from year to year given actuarial gains and losses.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual member or the plan as a whole.
Unfunded Actuarial Accrued Liability (UAAL)	The portion of the actuarial accrued liability not offset by plan assets.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.