

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, 2015

June 2016



©2015 Xerox Corporation and Buck Consultants, LLC. All rights reserved. Xerox® and Xerox and Design® are trademarks of Xerox Corporation in the United States and/or other countries. Buck Consultants® is a trademark of Buck Consultants, LLC in the United States and/or other countries.

Other company trademarks are also acknowledged.

Document Version: 1.0 (July 2014).



David J. Kershner
Principal, Retirement
David.Kershner@xerox.com
602.864.3507

Todd D. Kanaster
Senior Consultant
Todd.Kanaster@xerox.com
720.359.7762

Larry Langer
Principal, Retirement
Larry.Langer@xerox.com
312.846.3669

Melissa A. Bissett
Senior Consultant
Melissa.Bissett@xerox.com
720.359.7735

Buck Consultants, LLC.
5690 DTC Blvd.
Suite 400
Greenwood Village, CO 80011
Fax: 720.359.7701

June 27, 2016

State of Alaska
The Alaska Retirement Management Board
The Department of Revenue, Treasury Division
The Department of Administration, Division of Retirement and Benefits
Juneau, AK 99811-0203
P.O. Box 110203

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, 2015 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, 2015. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness. Valuation census data used for the retiree medical valuation utilized available retiree medical information. Certain pension data fields have been used to clarify the retiree medical data provided to us. Details regarding this information can be found in Section 5.2.c.

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 as of June 30, 2015.

TRS DCR is funded by Employer Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board). The funding objective for TRS DCR 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 layered 25-year period. This objective is currently being met and is projected to continue to be met as required by the Alaska state statutes.

The Board and staff of the State of Alaska may use this report for the review of the operations of TRS DCR. Use of this report, for any other purpose or by anyone other than the Board or staff of the State of Alaska may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, you should ask Buck to review any statement you wish to make on the results contained in this report. Buck will not accept any liability for any such statement made without the review by Buck.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing 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. In particular, retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. An analysis of the potential range of such future differences is beyond the scope of this valuation.

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 for the period July 1, 2009 to June 30, 2013. Based on that experience study, the Board adopted new assumptions effective for the June 30, 2014 valuation to better reflect expected future experience. Based on our annual analysis of recent claims experience, changes were made to the per capita claims cost rates effective June 30, 2015 to better reflect expected future healthcare experience. Based on recent experience, the healthcare cost trend assumptions are still reasonable and were not changed. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Sections 5.2 and 5.3.

The assumptions and methods used to determine the healthcare Actuarial Required Contributions (ARC) of the Employers to TRS DCR as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statement 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 trend data schedule under GASB No. 43 that is included in the Financial Section of the CAFR. We have also prepared the member data tables shown in Section 3 of this report for the Statistical Section of the CAFR, and the summary of actuarial assumptions, solvency test, and analysis of financial experience for the Actuarial Section of the CAFR.

David Kershner and Melissa Bissett are Fellows of the Society of Actuaries and Todd Kanaster and Larry Langer are Associates of the Society of Actuaries. All are Members 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. Mr. Kershner, Mr. Kanaster and Mr. Langer take professional responsibility for the overall appropriateness of the analysis, assumptions and results. 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,

A handwritten signature in black ink, appearing to read "D. J. Kershner".

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

A handwritten signature in black ink, appearing to read "Todd Kanaster".

Todd D. Kanaster, ASA, MAAA, FCA
Senior Consultant

A handwritten signature in blue ink, appearing to read "Larry Langer".

Larry Langer, ASA, EA, MAAA, FCA
Principal

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.

A handwritten signature in black ink, appearing to read "Melissa A. Bissett".

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

Table of Contents

Executive Summary.....	1
Section 1 Actuarial Funding Results	6
Section 1.1 Actuarial Liabilities and Normal Cost.....	6
Section 1.2 Actuarial Contributions for FY18	7
Section 1.3 Actuarial Gain/(Loss) for FY15.....	10
Section 1.4 History of Unfunded Liability and Funded Ratio	11
Section 2 Plan Assets	12
Section 2.1 Summary of Fair Value of Assets.....	12
Section 2.2 Changes in Fair Value of Assets During FY15	13
Section 2.3 Development of Actuarial Value of Assets	14
Section 2.4 Historical Asset Rates of Return	16
Section 3 Accounting Information	17
Section 3.1 Schedule of Funding Progress.....	17
Section 3.2 Schedule of Employer Contributions	18
Section 3.3 Notes to Trend Data	19
Section 3.4 Solvency Test	20
Section 4 Member Data	23
Section 4.1 Summary of Members Included	23
Section 4.2 Age and Service Distribution of Active Members	24
Section 4.3 Member Data Reconciliation	25
Section 4.4 Schedule of Active Member Valuation Data	26
Section 5 Basis of the Actuarial Valuation.....	27
Section 5.1 Summary of Plan Provisions.....	27
Section 5.2 Description of Actuarial Methods and Valuation Procedures	30
Section 5.3 Summary of Actuarial Assumptions	33
Glossary of Terms	43

Executive Summary

Overview

The State of Alaska Teachers' Retirement System DCR (TRS 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 as of the valuation date of June 30, 2015.

Purpose

An actuarial valuation is performed on the retirement plan annually as of the end 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 healthcare accounting measures for the Plan required by GASB No. 43 for the last fiscal year;
4. To review the current funded status of the Plan and assess the funded status as an appropriate measure for determining actuarially determined contributions;
5. To compare actual and expected experience under the Plan during the last fiscal year; and
6. 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 TRS DCR based on the plan provisions, membership, assets, and actuarial assumptions as of the valuation date.

Funded Status

The funded status is a snapshot measure of the funding of the plan as of the valuation date. It is determined as a ratio of the actuarial value of assets divided by the total actuarial accrued liability on the valuation date. As shown in the chart below, the funded ratio can differ depending on whether the market value of assets is used or the actuarial value of assets. Also, the funded ratios presented below are not necessarily appropriate to use for an assessment of the funded position in the event a settlement of the obligation was to be considered. A comparative summary of the funded ratio from the prior and current actuarial valuations follows:

Funded Status as of June 30 ¹ (\$'s in 000's)	2014	2015
a. Actuarial Accrued Liability	\$ 16,296	\$ 19,797
b. Valuation Assets	<u>13,611</u>	<u>20,847</u>
c. Unfunded Actuarial Accrued Liability, (a) – (b)	\$ 2,685	\$ (1,050)
d. Funded Ratio based on Valuation Assets, (b) ÷ (a)	83.5%	105.3%
e. Fair Value of Assets	\$ 14,712	\$ 20,919
f. Funded Ratio based on Fair Value of Assets, (e) ÷ (a)	90.3%	105.7%

As shown above, the funded ratio based on valuation assets as of June 30, 2015 has increased from 83.5% to 105.3%. The total calculated employer contribution rate has decreased from 1.05% of payroll for FY17 to 0.91% for FY18. The key reasons for the change in the funded status and calculated contribution rate are explained below.

The funded status for healthcare benefits is not necessarily an appropriate measure to confirm that assets are sufficient to settle health plan obligations as there are no available financial instruments for purchase. Future experience is likely to vary from assumptions thus a potential for actuarial gains or losses.

1. Retiree Medical Experience

Please refer to the State of Alaska Teachers' Retirement System Defined Benefit Plan Actuarial Valuation Report as of June 30, 2015 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.

The recent claims experience described in Section 5.2 of this report (Section 6.2 of the TRS report), created an actuarial gain of approximately \$2.0 million, resulting in a decrease in the contribution rate for FY18 of approximately 0.14%.

2. Investment Experience

The approximate FY15 investment return based on fair value was 3.1% compared to the expected investment return of 8.00% (net of investment and administrative expenses of approximately 0.30%). This resulted in a loss of approximately \$0.9 million to the Plan from investment experience. The asset valuation method recognizes 20 percent of this loss (\$173,000) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY11 investment gain, 20 percent of the FY12 investment loss, 20 percent of the FY13 investment gain and 20 percent of the FY14 investment gain were recognized this year. The approximate FY15 asset return based on actuarial value was 9.5% compared to the expected asset return of 8.00% (net of investment and administrative expenses).

¹ Includes occupational death & disability and retiree medical benefits.

3. Salary Increases

During the period from June 30, 2014 to June 30, 2015, salary increases for continuing active members were slightly less than anticipated in the valuation assumptions.

4. Demographic Experience

The number of active members increased 15.45% from 3,547 at June 30, 2014 to 4,095 at June 30, 2015. The number of active members is growing annually since the opening of TRS DCR to new entrants as of July 1, 2006. The average age of active members increased from 38.52 to 39.15 and average credited service increased from 3.90 to 4.19 years.

The demographic experience gains/losses are shown on page 5.

5. Changes in Methods Since the Prior Valuation

To reflect participants who terminate employment before the valuation date and are subsequently rehired after the valuation date, participants who are listed as terminated in the June 30 client data but active in the October 1 client records are updated to active status.

There have been no material changes in the asset or valuation methods since the prior valuation. To increase the efficiency of the data process, assumptions are used for individual data questions which are deemed to have an immaterial impact on liabilities and contributions rates. These data assumptions are described in Section 5.3.

6. Changes in Assumptions Since the Prior Valuation

There have been no changes in assumptions since the prior valuation. Healthcare claim costs are updated annually as described in Section 5.2.

7. Changes in Benefit Provisions Since the Prior Valuation

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

Comparative Summary of Key Actuarial Valuation Results

Total Employer Contribution Rates for Occupational Death & Disability for Fiscal Year:	2017	2018
a. Employer Normal Cost Rate	0.07%	0.07%
b. Past Service Cost Rate	<u>(0.07)%</u>	<u>(0.07)%</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:	2017	2018
a. Employer Normal Cost Rate	0.89%	0.85%
b. Past Service Cost Rate	<u>0.16%</u>	<u>0.06%</u>
c. Total Employer Contribution Rate, (a) + (b), not less than 0%	1.05%	0.91%
Total Employer Contribution Rates for Fiscal Year:	2017	2018
a. Total Employer Contribution Rate	1.05%	0.91%
b. Board Adopted Total Employer Contribution Rate	1.05%	TBD

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

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%
June 30, 2014	FY17	0.00%	1.05%	1.05%
June 30, 2015	FY18	TBD	TBD	TBD

Contribution rates are based on salary for TRS DCR 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 are based on a discount rate in accordance with GASB parameters. Under GASB No. 43, the amortization of the unfunded liabilities is calculated as a level dollar amount.

Summary of Actuarial Gain/(Loss)

The following table shows the FY15 gain/(loss) on total actuarial accrued liability as of June 30, 2015 (\$'s in 000's):

	Occupational Death & Disability	Retiree Medical	Total
Retirement Experience	\$ 0	\$ 0	\$ 0
Termination Experience	(2)	206	204
Active Mortality Experience	50	(17)	33
Inactive Mortality Experience	0	0	0
Disability Experience	133	(16)	117
New Entrants	(1)	(786)	(787)
Rehires	(1)	(1,313)	(1,314)
Other Demographic Experience	(1)	20	19
Salary Increases	0	N/A	0
Medical Claims Costs	N/A	1,955	1,955
Total	\$ 178	\$ 49	\$ 227

Section 1 Actuarial Funding Results

Section 1.1 Actuarial Liabilities and Normal Cost (\$'s in 000's)

As of June 30, 2015	Present Value of Projected Benefits	Actuarial Accrued (Past Service) Liability
Active Members		
Occupational Death Benefits	\$ 511	\$ 52
Occupational Disability Benefits	1,152	(23)
Medical and Prescription Drug Benefits	37,813	22,251
Medicare Part D Subsidy	<u>(4,194)</u>	<u>(2,483)</u>
Subtotal	\$ 35,282	\$ 19,797
Benefit Recipients		
Survivor Benefits	\$ 0	\$ 0
Disability Benefits	0	0
Medical and Prescription Drug Benefits	0	0
Medicare Part D Subsidy	<u>0</u>	<u>0</u>
Subtotal	\$ 0	\$ 0
Total	\$ 35,282	\$ 19,797
Total Occupational Death & Disability	\$ 1,663	\$ 29
Total Retiree Medical, Net of Part D Subsidy	\$ 33,619	\$ 19,768
Total Retiree Medical, Gross of Part D Subsidy	\$ 37,813	\$ 22,251

As of June 30, 2015	Normal Cost
Active Members	
Occupational Death Benefits	\$ 59
Occupational Disability Benefits	144
Medical and Prescription Drug Benefits	2,619
Medicare Part D Subsidy	<u>(293)</u>
Subtotal	\$ 2,529
Total	\$ 2,529
Total Occupational Death & Disability	\$ 203
Total Retiree Medical, Net of Part D Subsidy	\$ 2,326
Total Retiree Medical, Gross of Part D Subsidy	\$ 2,619

Section 1.2 Actuarial Contributions for FY18 (\$'s in 000's)

Normal Cost Rate	Occupational Death & Disability	Retiree Medical	Total
1. Total Normal Cost	\$ 203	\$ 2,326	\$ 2,529
2. DCR Plan Rate Payroll Projected for FY16	274,892	274,892	274,892
3. Employer Normal Cost Rate, (1) / (2)	0.07%	0.85%	0.92%
Past Service Rate			
1. Actuarial Accrued Liability	\$ 29	\$ 19,768	\$ 19,797
2. Valuation Assets	<u>3,114</u>	<u>17,733</u>	<u>20,847</u>
3. Total Unfunded Actuarial Accrued Liability, (1) – (2)	\$ (3,085)	\$ 2,035	\$ (1,050)
4. Funded Ratio based on Valuation Assets	10,737.9%	89.7%	105.3%
5. Past Service Cost Amortization Payment	(203)*	165	(38)
6. DCR Plan Rate Payroll Projected for FY16	274,892	274,892	274,892
7. Past Service Cost Rate, (5) / (6)	(0.07)%*	0.06%	(0.01)%
Total Employer Contribution Rate, not less than 0%	0.00%	0.91%	0.91%

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	Occupational Death & Disability	Retiree Medical	Total
1. Total Normal Cost	\$ 203	\$ 2,326	\$ 2,529
2. Total DB and DCR Plan Rate Payroll Projected for FY16	748,626	748,626	748,626
3. Employer Normal Cost Rate, (1) / (2)	0.03%	0.31%	0.34%
4. Past Service Cost Amortization Payment	\$ (203)*	\$ 165	\$ (38)
5. Past Service Cost Rate, (4) / (2)	(0.03)%	0.02%	(0.01)%
6. Total Employer Contribution Rate, (3) + (5)	0.00%	0.33%	0.33%

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

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	17	\$ 16	\$ 16	\$ 1
FY08 Gain	06/30/2008	18	(392)	(409)	(32)
Change in Assumptions	06/30/2009	19	(82)	(84)	(6)
FY09 Gain	06/30/2009	19	(594)	(623)	(46)
Change in Assumptions	06/30/2010	20	(7)	(8)	(1)
FY10 Gain	06/30/2010	20	(479)	(500)	(36)
FY11 Gain	06/30/2011	21	(560)	(581)	(41)
FY12 Gain	06/30/2012	22	(129)	(134)	(9)
FY13 Gain	06/30/2013	23	(149)	(152)	(10)
Change in Assumptions	06/30/2014	24	(50)	(51)	(3)
PRPA Modification	06/30/2014	24	(25)	(25)	(2)
FY14 Gain	06/30/2014	24	(255)	(258)	(17)
FY15 Gain	06/30/2015	25	(275)	(275)	(17)
Total				\$ (3,084)	\$ (219)

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	17	\$ (239)	\$ (252)	\$ (20)
Change in Assumptions	06/30/2008	18	84	91	7
FY08 Gain	06/30/2008	18	(393)	(409)	(32)
Change in Assumptions	06/30/2009	19	(69)	(70)	(5)
FY09 Gain	06/30/2009	19	(281)	(296)	(22)
Change in Assumptions ¹	06/30/2010	20	0	0	0
FY10 Gain	06/30/2010	20	(545)	(568)	(41)
FY11 Gain	06/30/2011	21	(94)	(97)	(7)
Change in Assumptions	06/30/2012	22	11,518	11,882	806
FY12 Gain	06/30/2012	22	(60)	(60)	(4)
FY13 Loss	06/30/2013	23	3,439	3,518	232
Change in Assumptions	06/30/2014	24	(9,736)	(9,854)	(635)
FY14 Loss	06/30/2014	24	1,616	1,635	105
FY15 Gain	06/30/2015	25	(3,485)	(3,485)	(219)
Total				\$ 2,035	\$ 165

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

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	17	\$ (223)	\$ (236)	\$ (19)
Change in Assumptions	06/30/2008	18	84	91	7
FY08 Gain	06/30/2008	18	(785)	(818)	(64)
Change in Assumptions	06/30/2009	19	(151)	(154)	(11)
FY09 Gain	06/30/2009	19	(875)	(919)	(68)
Change in Assumptions	06/30/2010	20	(7)	(8)	(1)
FY10 Gain	06/30/2010	20	(1,024)	(1,068)	(77)
FY11 Gain	06/30/2011	21	(654)	(678)	(48)
Change in Assumptions	06/30/2012	22	11,518	11,882	806
FY12 Gain	06/30/2012	22	(189)	(194)	(13)
FY13 Loss	06/30/2013	23	3,290	3,366	222
Change in Assumptions	06/30/2014	24	(9,786)	(9,905)	(638)
PRPA Modification	06/30/2014	24	(25)	(25)	(2)
FY14 Loss	06/30/2014	24	1,361	1,377	88
FY15 Gain	06/30/2015	25	(3,760)	(3,760)	(236)
Total				\$ (1,049)	\$ (54)

The amortization factor for 25 years is 15.898717. The weighted average amortization factor is 19.425926. The amortization method is level percentage of pay.

The equivalent single amortization period is 37.

Section 1.3 Actuarial Gain/(Loss) for FY15 (\$'s in 000's)

	Occupational Death & Disability	Retiree Medical	Total
1. Expected Actuarial Accrued Liability			
a. Actuarial Accrued Liability, June 30, 2014	\$ 23	\$ 16,273	\$ 16,296
b. Normal Cost for FY15	169	2,076	2,245
c. Interest on (a) and (b) at 8.00%	15	1,468	1,483
d. Benefit Payments for FY15	0	0	0
e. Interest on (d) at 8.00%, adjusted for timing	<u>0</u>	<u>0</u>	<u>0</u>
f. Expected Actuarial Accrued Liability as of June 30, 2015 (a) + (b) + (c) - (d) - (e)	\$ 207	\$ 19,817	\$ 20,024
2. Actual Actuarial Accrued Liability, June 30, 2015	<u>29</u>	<u>19,768</u>	<u>19,797</u>
3. Liability Gain/(Loss), (1)(f) - (2)	\$ 178	\$ 49	\$ 227
4. Expected Actuarial Asset Value			
a. Actuarial Asset Value, June 30, 2014	\$ 2,820	\$ 10,791	\$ 13,611
b. Interest on (a) at 8.00%	226	863	1,089
c. Employer Contributions for FY15	0	5,670	5,670
d. Interest on (c) at 8.00%, adjusted for timing	0	222	222
e. Benefit Payments for FY15	0	0	0
f. Interest on (e) at 8.00%, adjusted for timing	<u>0</u>	<u>0</u>	<u>0</u>
g. Expected Actuarial Asset Value, June 30, 2015 (a) + (b) + (c) + (d) - (e) - (f)	\$ 3,046	\$ 17,546	\$ 20,592
5. Actuarial Asset Value, June 30, 2015	<u>3,114</u>	<u>17,733</u>	<u>20,847</u>
6. Actuarial Asset Gain/(Loss), (5) - (4)(g)	\$ 68	\$ 187	\$ 255
7. Actuarial Gain/(Loss), (3) + (6)	\$ 246	\$ 236	\$ 482
8. Contribution Gain/(Loss)	\$ 29	\$ 3,249	\$ 3,278
9. FY15 Gain/(Loss), (7) + (8)	\$ 275	\$ 3,485	\$ 3,760

Section 1.4 History of Unfunded Liability and Funded Ratio (\$'s in 000's)

Valuation Date	Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)
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
June 30, 2014	\$ 16,296	\$ 13,611	83.5%	\$ 2,685
June 30, 2015	\$ 19,797	\$ 20,847	105.3%	\$ (1,050)

Section 2 Plan Assets

Section 2.1 Summary of Fair Value of Assets (\$'s in 000's)

As of June 30, 2015	Occupational Death & Disability	Retiree Medical	Total	Allocation Percent
Cash and Short-Term Investments				
- Cash and Cash Equivalents	\$ 74	\$ 562	\$ 636	3.1%
- Subtotal	\$ 74	\$ 562	\$ 636	3.1%
Fixed Income Investments				
- Domestic Fixed Income Pool	\$ 204	\$ 1,115	\$ 1,319	6.4%
- International Fixed Income Pool	51	277	328	1.6%
- Taxable Fixed Income Pool	16	88	104	0.5%
- Frontier Market Pool	1	4	5	0.0%
- High Yield Pool	82	448	530	2.6%
- Treasury Inflation Protection Pool	18	96	114	0.6%
- Emerging Debt Pool	<u>21</u>	<u>117</u>	<u>138</u>	<u>0.7%</u>
- Subtotal	\$ 393	\$ 2,145	\$ 2,538	12.4%
Equity Investments				
- Domestic Equity Pool	\$ 855	\$ 4,675	\$ 5,530	26.8%
- International Equity Pool	655	3,582	4,237	20.5%
- International Equity Small Cap Pool	43	234	277	1.3%
- Private Equity Pool	242	1,324	1,566	7.6%
- Emerging Markets Equity Pool	83	455	538	2.6%
- Alternative Equity	<u>117</u>	<u>640</u>	<u>757</u>	<u>3.7%</u>
- Subtotal	\$ 1,995	\$ 10,910	\$ 12,905	62.5%
Other Investments				
- Real Estate Pool	\$ 217	\$ 1,188	\$ 1,405	6.8%
- Other Investments Pool	307	1,679	1,986	9.6%
- Absolute Return Pool	179	979	1,158	5.6%
- Other Assets	<u>0</u>	<u>0</u>	<u>0</u>	<u>0.0%</u>
- Subtotal	\$ 703	\$ 3,846	\$ 4,549	22.0%
Total Cash and Investments	\$ 3,165	\$ 17,463	\$ 20,628	100.0%
Net Accrued Receivables	<u>(12)</u>	<u>303</u>	<u>291</u>	
Net Assets	\$ 3,153	\$ 17,766	\$ 20,919	

Section 2.2 Changes in Fair Value of Assets During FY15 (\$'s in 000's)

Fiscal Year 2015	Occupational Death & Disability	Retiree Medical	Total
1. Net Assets, June 30, 2014 (fair value)	\$ 3,075	\$ 11,637	\$ 14,712
2. Additions:			
a. Member Contributions	\$ 0	\$ 0	\$ 0
b. Employer Contributions	0	5,670	5,670
c. Interest and Dividend Income	57	250	307
d. Net Appreciation (Depreciation) in Fair Value of Investments	43	230	273
e. Other	<u>0</u>	<u>0</u>	<u>0</u>
f. Total Additions	\$ 100	\$ 6,150	\$ 6,250
3. Deductions:			
a. Medical Benefits	\$ 0	\$ 0	\$ 0
b. Death & Disability Benefits	0	0	0
c. Investment Expenses	1	3	4
d. Administrative Expenses	<u>21</u>	<u>18</u>	<u>39</u>
e. Total Deductions	\$ 22	\$ 21	\$ 43
4. Net Assets, June 30, 2015 (fair value)	\$ 3,153	\$ 17,766	\$ 20,919
Approximate Fair Value Investment Return Rate During FY15 Net of All Expenses	2.5%	3.2%	3.1%

Section 2.3 Development of Actuarial Value of Assets (\$'s in 000's)

The actuarial value of assets and the fair value were \$0 at June 30, 2006. Investment gains and losses are 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.

	Occupational Death & Disability	Retiree Medical	Total
1. Investment Gain/(Loss) for FY15			
a. Fair Value, June 30, 2014	\$ 3,075	\$ 11,637	\$ 14,712
b. Contributions for FY15	0	5,670	5,670
c. Benefit Payments for FY15	0	0	0
d. Actual Investment Return (<i>net of expenses</i>)	78	459	537
e. Expected Return Rate (<i>net of expenses</i>)	8.00%	8.00%	8.00%
f. Expected Return	246	1,153	1,399
g. Investment Gain/(Loss) for the Year (<i>d. – f.</i>)	(168)	(694)	(862)
2. Actuarial Value, June 30, 2015			
a. Fair Value, June 30, 2015	\$ 3,153	\$ 17,766	\$ 20,919
b. Deferred Investment Gain/(Loss) as of June 30, 2015	39	33	72
c. Preliminary Actuarial Value, June 30, 2015 (<i>a. - b.</i>)	\$ 3,114	\$ 17,733	\$ 20,847
d. Upper Limit: 120% of Fair Value, June 30, 2015	\$ 3,783	\$ 21,319	\$ 25,102
e. Lower Limit: 80% of Fair Value, June 30, 2015	\$ 2,523	\$ 14,213	\$ 16,736
f. Actuarial Value, June 30, 2015 (<i>c. limited by d. and e.</i>)	\$ 3,114	\$ 17,733	\$ 20,847
3. Ratio of Actuarial Value of Assets to Fair Value of Assets	98.8%	99.8%	99.7%
4. Approximate Actuarial Value Investment Return Rate During FY15 Net of All Expenses	10.4%	9.3%	9.5%

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

Occupational Death & Disability				
Fiscal Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2011	\$ 190	\$ 152	\$ 38	\$ 0
6/30/2012	(150)	(90)	(30)	(30)
6/30/2013	99	40	20	39
6/30/2014	272	54	54	164
6/30/2015	(168)	0	(34)	(134)
Total	\$ 243	\$ 156	\$ 48	\$ 39

Retiree Medical				
Fiscal Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2011	\$ 460	\$ 368	\$ 92	\$ 0
6/30/2012	(382)	(228)	(76)	(78)
6/30/2013	278	112	56	110
6/30/2014	928	186	186	556
6/30/2015	(694)	0	(139)	(555)
Total	\$ 590	\$ 438	\$ 119	\$ 33

Total				
Fiscal Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2011	\$ 650	\$ 520	\$ 130	\$ 0
6/30/2012	(532)	(318)	(106)	(108)
6/30/2013	377	152	76	149
6/30/2014	1,200	240	240	720
6/30/2015	(862)	0	(173)	(689)
Total	\$ 833	\$ 594	\$ 167	\$ 72

Section 2.4 Historical Asset Rates 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%
June 30, 2014	10.9%	6.6%	18.0%	5.8%
June 30, 2015	9.5%	7.0%	3.1%	5.5%

*Cumulative since FYE June 30, 2008.

Section 3 Accounting Information

Section 3.1 Schedule of Funding Progress (\$'s in 000's)

Schedule of Funding Progress

The exhibit below shows the death and disability plan disclosure under GASB No. 25 for fiscal years 2007 through 2013. Pension accounting figures for fiscal years after 2013 are subject to GASB 67. Per KPMG, the new accounting standards under GASB 67 are not applicable to the Occupational Death & Disability benefits under this Plan.

	Actuarial Accrued Liabilities (AAL)	Actuarial Value of Assets	Funded Ratio	Unfunded AAL (UAAL)	Covered Payroll	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%

Pension accounting figures for fiscal years after 2013 are subject to GASB 67. Per KPMG, the new accounting standards under GASB 67 are not applicable to the Occupational Death & Disability benefits under this Plan.

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	UAAL as a Percentage of Covered Payroll
June 30, 2015 ¹	\$ 42,743	\$ 17,733	41.5%	\$ 25,010	\$ 255,186	9.8%
June 30, 2014	18,290	10,791	59.0%	7,499	229,971	3.3%
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)%

¹ Based on the partially funded discount rate of 5.6%.

Section 3.2 Schedule of Employer Contributions (\$'s in 000's)

Schedule of Employer Contributions

The following shows the death and disability disclosure under GASB No. 25 for fiscal years ending 2007 through 2013. Pension accounting figures for fiscal years after 2013 are subject to GASB 67. Per KPMG, the new accounting standards under GASB 67 are not applicable to the Occupational Death & Disability benefits under this Plan.

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, 2015	\$ 6,099	93%
June 30, 2014	1,334	89%
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%
June 30, 2014	FY17	N/A*	N/A*	N/A*
June 30, 2015	FY18	N/A*	N/A*	N/A*

*GASB 74 accounting will be in effect beginning in FY17 and will be provided in a separate report.

GASB 43 ARC is based on DCR salary only and a level dollar basis to determine normal cost and amortization of the unfunded liability. These amounts are converted to percentage of pay. DCR salary is the same salary used for determination of employer contribution rates.

Section 3.3 Notes to Trend Data

Actuarial Assumptions, Methods and Additional Information Under GASB

Valuation Date	June 30, 2015
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 Percentage of Pay for Occupational Death & Disability, Level Dollar for Retiree Medical. Closed with bases established annually.
Equivalent Single Amortization Period	20 years to reflect Retiree Medical liabilities without regard to Medicare Part D.
Asset Valuation Method	5-year smoothed market, 80% to 120% of fair value corridor
Actuarial Assumptions:	
Investment rate of return*	8.00% for Occupational Death & Disability (net of expenses), 5.60% for Retiree Medical
Projected salary increases	8.11% for first year of service grading down to 3.87% after 22 years

*Includes 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.

GASB 43 outlines two reasonable methods of developing a blended discount rate when a plan is partially funded. These methods base the proportion of assumed plan and employer asset returns on 1) the funded ratio and 2) the percentage of the annual required contribution (ARC) actually being contributed to the plan. The State of Alaska has utilized the first methodology to develop a discount rate to be used for June 30, 2015 disclosure.

TRS DCR retiree medical benefits were 35.7% funded as of June 30, 2012 (beginning of FY13), so for fiscal year ending 2015 a partially funded discount rate is required for disclosure. Based upon the funded ratio, an 8.00% fully funded discount rate and a 4.25% unfunded discount rate, the partially funded rate used only for GASB 43 purposes is 5.60%.

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.

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	Actuarial Accrued Liability For:			Valuation Assets	Portion of Actuarial Accrued Liability 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

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

Valuation Date	Occupational Death & Disability Actuarial Accrued Liability For:			Occupational Death & Disability Valuation Assets	Portion of Actuarial Accrued Liability Covered by Assets		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2015	\$ 0	\$ 0	\$ 29	\$ 3,114	100.0%	100.0%	100.0%
June 30, 2014 ¹	0	0	23	2,820	100.0%	100.0%	100.0%
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

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

Valuation Date	Retiree Medical Actuarial Accrued Liability For:			Retiree Medical Valuation Assets	Portion of Actuarial Accrued Liability Covered by Assets		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2015	\$ 0	\$ 0	\$ 19,768	\$ 17,733	100.0%	100.0%	89.7%
June 30, 2014 ¹	0	0	16,273	10,791	100.0%	100.0%	66.3%
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

Section 4 Member Data

Section 4.1 Summary of Members Included

As of June 30	2011	2012	2013	2014	2015 ¹
Active Members					
1. Number	2,708	3,057	3,272	3,547	4,095
2. Average Age	37.25	37.61	38.10	38.52	39.15
3. Average Credited Service	2.62	3.00	3.52	3.90	4.19
4. Average Entry Age	34.63	34.61	34.58	34.62	34.96
5. Average Annual Earnings	\$ 55,860	\$ 58,476	\$ 60,496	\$ 61,940	\$ 63,635
Retirees, Disabilitants 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	24	68	133	262	294
Total Number of Members	2,732	3,125	3,405	3,809	4,389

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

Total and average annual earnings ("valuation pay") are the annualized earnings for the fiscal year ending on the valuation date.

¹ 161 members who were terminated before the valuation date were subsequently rehired, per client data as of October 1, 2015. These members were valued as active as of the valuation date.

Section 4.2 Age and Service Distribution of Active Members

Annual Earnings by Age

Age	Number	Total Annual Earnings	Average Annual Earnings
0 – 19	1	\$ 52,746	\$ 52,746
20 – 24	134	6,836,326	51,017
25 – 29	704	39,432,244	56,012
30 – 34	987	61,052,352	61,856
35 – 39	655	42,424,225	64,770
40 – 44	459	30,454,778	66,350
45 – 49	387	26,026,368	67,252
50 – 54	358	24,867,484	69,462
55 – 59	246	17,291,824	70,292
60 – 64	131	9,625,515	73,477
65 – 69	26	1,953,112	75,120
70 – 74	7	567,095	81,014
75+	0	0	0
Total	4,095	\$ 260,584,068	\$ 63,635

Annual Earnings by Credited Service

Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0	136	\$ 6,939,508	\$ 51,026
1	721	40,862,123	56,674
2	581	34,967,381	60,185
3	479	29,820,717	62,256
4	453	29,696,058	65,554
0 – 4	2,370	142,285,788	60,036
5 – 9	1,722	118,042,757	68,550
10 – 14	2	177,234	88,617
15 – 19	1	78,289	78,289
20 – 24	0	0	0
25 – 29	0	0	0
30 – 34	0	0	0
35 – 39	0	0	0
40+	0	0	0
Total	4,095	\$ 260,584,068	\$ 63,635

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	1	0	0	0	0	0	0	0	0	1
20 – 24	134	0	0	0	0	0	0	0	0	134
25 – 29	593	111	0	0	0	0	0	0	0	704
30 – 34	473	514	0	0	0	0	0	0	0	987
35 – 39	328	326	1	0	0	0	0	0	0	655
40 – 44	233	226	0	0	0	0	0	0	0	459
45 – 49	211	176	0	0	0	0	0	0	0	387
50 – 54	190	167	0	1	0	0	0	0	0	358
55 – 59	130	115	1	0	0	0	0	0	0	246
60 – 64	61	70	0	0	0	0	0	0	0	131
65 – 69	13	13	0	0	0	0	0	0	0	26
70 – 74	3	4	0	0	0	0	0	0	0	7
75+	0	0	0	0	0	0	0	0	0	0
Total	2,370	1,722	2	1	0	0	0	0	0	4,095

Total and average annual earnings (“valuation pay”) are the annualized earnings for the fiscal year ending on the valuation date.

Section 4.3 Member Data Reconciliation

	Actives	Vested Inactive*	Retired	Disabled	Beneficiary	Total
As of June 30, 2014	3,547	262	0	0	0	3,809
Vested Termination	(121)	121	0	0	0	0
Non-vested Termination	(263)	(6)	0	0	0	(269)
Refund of Contributions	(35)	(44)	0	0	0	(79)
Disabled	0	0	0	0	0	0
Retired	0	0	0	0	N/A	0
Deceased, No Beneficiary	0	0	0	0	0	0
Deceased, With Beneficiary	0	0	0	0	0	0
Return to Active	198	(41)	0	0	0	157
Data Adjustment	1	2	0	0	0	3
New Entrant	768	N/A	N/A	N/A	N/A	768
As of June 30, 2015	4,095	294	0	0	0	4,389

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

Total and average annual earnings ("valuation pay") are the annualized earnings for the fiscal year ending on the valuation date.

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, 2015	4,095	\$ 260,584	\$ 63,635	2.7%	58
June 30, 2014	3,547	219,701	61,940	2.4%	58
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

Total and average annual earnings ("valuation pay") are the annualized earnings for the fiscal year ending on the valuation date.

Section 5 Basis of the Actuarial Valuation

Section 5.1 Summary of Plan Provisions

1. Effective Date

July 1, 2006, with amendments through June 30, 2015.

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 TRS DCR, 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 TRS DCR 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 TRS DCR.

5. Member Contributions

Other than the member-paid premiums show on the next page, there are no member contributions for the occupational death & disability and retiree medical benefits.

6. Retiree Medical Benefits

- 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 the member is Medicare eligible. The member's premium for dependent coverage is 100% until both the member and dependent 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 following is an illustration of the potential medical benefits to be offered. The State Department of Administration has not yet established the provisions of the medical plan to be offered to TRS DCR retirees. An updated design is expected to be determined in 2016. The plan description below is used for valuation purposes and is based on prior communications with the Department of Administration.

Plan Feature	Member Cost Share (In-Network)	Member Cost Share (Out-of-Network)
Deductible(single/family)*	\$250/\$500	
Coinsurance **	20% after deductible	40% after deductible
Maximum Out-of-Pocket* (single/family)	\$2,500/\$5,000	\$5,000/\$10,000
Emergency Room Copay	\$100	\$100
Preventive Care	0%, benefit limited to \$2,000 /member/year	
Lifetime Max	\$3,000,000 with \$5,000 restore	

*Assumed to increase annually to mitigate impact of healthcare cost trend

**includes pharmacy benefits

- The plan's coverage is supplemental to Medicare.
- The premium for Medicare-eligible retirees or for Medicare-eligible dependents of Medicare-eligible retirees 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%

The premium for dependents who are not eligible for Medicare was assumed to be 100%, consistent with that of the retiree.

Members have a separate defined contribution Health Reimbursement Arrangement account that can be used to pay for premiums or other medical expenses.

- Coverage will continue for surviving spouses of covered retired members.

7. Occupational Disability Benefits

- Benefit is 40% of salary at date of disability.
- Disability Benefit Adjustment: The disability benefit is incurred by 75% of the cost of living increase in the preceding calendar year or 9%, whichever is less.
- 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.
- Survivor's Pension Adjustment: 50% of the cost of living increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60 on July 1, or under age 60 if the recipient has been receiving TRS benefits for at least 8 years as of July 1.
- 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.

9. Changes Since the Prior Valuation

There have been no changes since the prior valuation.

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.

a. Actuarial Method – Entry Age Normal

Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method. 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 in effect when the plan was adopted, the net amortization period will not exceed 30 years. These requirements are being amended. Under the new accounting standards that will become applicable to Postemployment Benefit Plans Other Than Pension Plans (GASB 74 and 75), the GASB requirements will not directly control amortization periods used for funding of the plan. Per KPMG, the new accounting standards under GASB 67 (and 68) are not applicable to the Occupational Death & Disability benefits under TRS DCR.

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 was \$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.

c. Valuation of Retiree Medical Benefits

The methodology used for the valuation of the retiree medical benefits is described in Section 6.2(d) of the State of Alaska Teachers' Retirement System Defined Benefit Plan Actuarial Valuation Report as of June 30, 2015.

Due to the lack of experience for TRS DCR only, base claims costs are based on those described in the actuarial valuation as of June 30, 2015 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, upcoming FY16 claims costs were reduced 11.9% for medical and 7.1% for prescription drugs. The health care trend rate was reduced 0.2% each year to reflect the fact that the medical benefit to be offered to members will have annual indexing of member cost sharing features such as deductibles and out-of-pocket amounts.

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.

We have prepared our valuation based on the participant census data that was readily available. Certain pension fields have been used to clarify the retiree medical data provided. This serves as a proxy until additional retiree medical data can be provided.

In accordance with actuarial standards, we note the following specific data sources and steps taken to value retiree medical benefits:

- The Division of Retirement and Benefits provided pension valuation census data. This pension census data included retiree medical enrollment information that indicated the retirement system and an indication regarding eligibility for system-paid benefits.
- Certain adjustments and assumptions were made to determine the number of people enrolled in retiree medical:
 - Where there is an indication of non-system paid health benefits, we reflected the coverage level (e.g. single vs. couple) indicated on the pension data in valuing the retiree medical plan.
 - Where system-paid health benefits coverage is indicated, the premium dollar amount indicated on the data is a composite rate that does not specify the number of people enrolled.
 - Buck understands that retiree medical coverage/eligibility is in place while a pension benefit is payable.
 - For individuals who are receiving a pension benefit, Buck references the pension benefit payment form (single life annuity, joint & survivor etc.) along with marital status to determine the number of people to value for medical purposes:
 - Where there is a single life-annuity indicated and the marital status is single, we valued one member for health coverage.
 - Where there is a single life-annuity indicated and the marital status is married, we valued two members until the retiree dies. Upon the retiree's death, medical coverage for the spouse is assumed to cease and that spouse is no longer valued.
 - Where there is a joint & survivor annuity, we assumed a member and spouse are covered and upon the retiree's death, health coverage is assumed to continue to the surviving spouse.

- For individuals included in the pension data expecting a future pension, we valued health benefits starting at the same point that the pension benefit is assumed to start.
- future retirees' level of coverage is estimated according to valuation assumptions regarding spousal coverage.
- Limitations on the use of the valuation results due to uncertainty about various aspects of the data: Since pension data is used to estimate health care coverage, the retiree medical liabilities and resultant figures regarding funded status and proposed employer contribution rates may be different if we had data that could directly determine the level of health coverage for each retiree.
- Unresolved matters: We have received retiree medical enrollment data, but we have not completed the reconciliation of retiree medical enrollment data to the retiree medical valuation census data. Based on information provided to us, it appears that our valuation may assume that a greater number of individuals are enrolled in the retiree medical coverage than are indicated in the enrollment statistics provided by the carrier. This is because our data assumptions for use of pension data as a proxy for individual retiree medical coverage conservatively include in the valuation any potential dependent. The carrier enrollment information with lower enrollment figures are conservatively used to develop per capita costs, resulting in higher per capita costs than if the counts from the proxy data were used.
- Potential uncertainty or bias: Until we complete the comparison between retiree medical enrollment and the proxy data, we cannot specify the magnitude of the difference. There is potential for bias and we believe there is conservatism in our methodology. That is, it is possible there are more people included in the valuation than are enrolled in the retiree medical plan.

d. 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 these 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, 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) and the value of the Health Reimbursement Account must be included along with projected plan costs. The excise tax was originally to be effective for 2018; recent legislation passed in December 2015 delayed it to 2020. Based upon guidance available at the time of disclosure, Buck determined the impact on plan liabilities to be immaterial (less than \$75,000 (0.4%)) based on a blend of projected pre-Medicare and Medicare retirees and related cost projections. Participants will be responsible for any tax to the extent they are reflected in retiree contributions.

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.

e. Changes in Methods From the Prior Valuation

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

Section 5.3 Summary of Actuarial Assumptions

The demographic and economic assumptions used in the June 30, 2015 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board in December 2014. These assumptions were the result of an experience study performed for the TRS defined benefit plan as of June 30, 2013.

Investment Return / Discount Rate	8.00% per year (geometric), compounded annually, net of expenses.
Salary Scale	Inflation – 3.12% per year. Productivity – 0.50% per year. See Table 1 for salary scale rates.
Payroll Growth	3.62% 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 3.12% annually.
Mortality (Pre-termination)*	Based upon the 2010-2013 actual experience. (See Table 2). 68% of male rates and 60% of female rates of post-termination mortality. Deaths are assumed to result from occupational causes 15% of the time.
Mortality (Post-termination)*	Based upon the 2010-2013 actual experience. (See Table 3). 94% of male and 97% of female rates of RP-2000, 2000 Base Year projected to 2018 with Projection Scale BB, with a 3-year setback for males and a 4-year setback for females. Disability Mortality in accordance with the RP-2000 Disabled Retiree Mortality Table, 2000 Base Year, projected to 2018 with Projection Scale BB.
Turnover	Select and ultimate rates based upon the 2010-2013 actual withdrawal experience. (See Table 4).
Disability	Incidence rates based upon the 2010-2013 actual experience, in accordance with Table 5. Disabilities are assumed to result from occupational causes 15% of the time.
Retirement	Retirement rates based upon the 2010 - 2013 actual experience in accordance with Table 6. Deferred vested members are assumed to retire at their earliest unreduced retirement date.
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 at termination from active service.

*The mortality assumptions include an allowance for expected future mortality improvement. The mortality table used was set in 2014 with an Actual Deaths to Expected Deaths ratio of 110%.

Per Capita Claims Cost

Sample claims cost rates (before base claims cost adjustments described below) adjusted to age 65 for FY16 medical benefits are shown below:

	Medical	Prescription Drugs
Pre-Medicare	\$ 11,724	\$ 2,753
Medicare Parts A & B	\$ 1,461	\$ 2,753
Medicare Part B Only	\$ 6,700	\$ 2,753
Medicare Part D	N/A	\$ 496

Members are assumed to attain Medicare eligibility at age 65.

Third Party Administrator Fees

\$194.18 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:

- 0.881 for the medical plan.
- 0.929 for the prescription drug plan.

Imputed Data

Data changes from the prior year which are deemed to have an immaterial impact on liabilities and contribution rates are assumed to be correct in the current year's client data. Nonvested terminations with appropriate refund dates are assumed to have received a full refund of contributions. Active members with missing salary and service are assumed to be terminated with status based on their vesting percentage.

Teacher Active Data Adjustment

To reflect participants who terminate employment before the valuation date and are subsequently rehired after the valuation date, participants who are listed as terminated on the June 30 client data but active in the October 1 client records are updated to active status.

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, 9.4% is applied to the FY16 pre-Medicare medical claims cost to get the FY17 medical claims cost.

	Medical Pre-65	Medical Post-65	Prescription Drugs
FY16	9.4%	5.9%	5.7%
FY17	8.8%	5.8%	5.4%
FY18	8.2%	5.7%	5.1%
FY19	7.6%	5.6%	4.8%
FY20	7.0%	5.6%	4.6%
FY21	6.5%	5.6%	4.4%
FY22	6.0%	5.6%	4.2%
FY25	5.6%	5.6%	4.0%
FY50	4.4%	4.0%	4.0%
FY100	4.4%	4.0%	4.0%

For the June 30, 2014 valuations 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 2014 and projects out to 2090. The model has been populated with assumptions that are specific to the State of Alaska.

Each of the above trend rates was reduced by 0.2% to reflect the fact that the medical benefit offered to members will have annual indexing of member cost sharing.

Aging Factors

	Medical	Prescription Drugs
Age		
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%

Retiree Medical Participation

Decrement Due to Disability

<u>Age</u>	<u>Percent Participation</u>
<56	73.00%
56	77.50%
57	79.75%
58	82.00%
59	84.25%
60	86.50%
61	88.75%
62	91.00%
63	93.25%
64	95.50%
65+	94.00%

Decrement Due to Retirement

<u>Age</u>	<u>Percent Participation</u>
55	40.0%
56	50.0%
57	55.0%
58	60.0%
59	65.0%
60	70.0%
61	75.0%
62	80.0%
63	85.0%
64	90.0%
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. This assumption is based on observed trend in participation from a range of other plans.

Table 1
Alaska TRS DCR Plan
Salary Scale

Years of service	Percent Increase
0	8.11%
1	7.51
2	6.91
3	6.41
4	6.11
5	6.11
6	5.90
7	5.69
8	5.55
9	5.40
10	5.26
11	5.11
12	4.96
13	4.84
14	4.72
15	4.60
16	4.49
17	4.37
18	4.27
19	4.17
20	4.07
21	3.97
22+	3.87

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

Age	Male	Female	Age	Male	Female
20	0.0182%	0.0098%	55	0.1615%	0.0985%
21	0.0191	0.0101	56	0.1766	0.1054
22	0.0200	0.0104	57	0.1901	0.1132
23	0.0209	0.0105	58	0.2117	0.1221
24	0.0216	0.0105	59	0.2409	0.1344
25	0.0222	0.0106	60	0.2643	0.1501
26	0.0226	0.0107	61	0.2917	0.1659
27	0.0228	0.0109	62	0.3229	0.1837
28	0.0228	0.0111	63	0.3599	0.2080
29	0.0229	0.0114	64	0.4021	0.2367
30	0.0231	0.0118	65	0.4504	0.2723
31	0.0238	0.0123	66	0.5057	0.3118
32	0.0249	0.0130	67	0.5594	0.3582
33	0.0269	0.0137	68	0.6202	0.4036
34	0.0302	0.0146	69	0.7017	0.4546
35	0.0340	0.0169	70	0.7828	0.5130
36	0.0382	0.0193	71	0.8702	0.5696
37	0.0425	0.0217	72	0.9643	0.6297
38	0.0468	0.0240	73	1.0813	0.6959
39	0.0509	0.0262	74	1.1964	0.7841
40	0.0547	0.0283	75	1.3285	0.8701
41	0.0584	0.0305	76	1.4797	0.9678
42	0.0618	0.0330	77	1.6508	1.0757
43	0.0653	0.0357	78	1.8423	1.1923
44	0.0692	0.0389	79	2.0534	1.3163
45	0.0736	0.0427	80	2.2841	1.4502
46	0.0787	0.0470	81	2.5382	1.5972
47	0.0846	0.0517	82	2.8208	1.7607
48	0.0913	0.0567	83	3.1344	1.9438
49	0.0979	0.0620	84	3.5081	2.1486
50	0.1050	0.0674	85	3.9193	2.3782
51	0.1126	0.0731			
52	0.1208	0.0791			
53	0.1295	0.0855			
54	0.1483	0.0908			

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

Age	Male	Female	Age	Male	Female
50	0.1544%	0.1124%	85	5.7637%	3.9636%
51	0.1656	0.1219	86	6.4248	4.3940
52	0.1777	0.1318	87	7.2770	4.8789
53	0.1904	0.1424	88	8.2264	5.4261
54	0.2181	0.1513	89	9.2884	6.0450
55	0.2375	0.1641	90	10.4794	6.8659
56	0.2597	0.1756	91	11.8129	7.7983
57	0.2795	0.1887	92	13.2941	8.8452
58	0.3113	0.2035	93	14.9196	10.0021
59	0.3543	0.2240	94	16.5479	11.2560
60	0.3887	0.2501	95	18.2705	12.5866
61	0.4289	0.2765	96	20.0693	13.9699
62	0.4749	0.3062	97	21.9249	15.3813
63	0.5293	0.3466	98	23.3940	16.4973
64	0.5913	0.3946	99	25.2821	17.8741
65	0.6624	0.4538	100	26.7022	18.8730
66	0.7436	0.5196	101	28.5888	20.1393
67	0.8227	0.5970	102	29.9408	20.9540
68	0.9121	0.6727	103	31.8102	22.0440
69	1.0318	0.7576	104	33.1094	22.6232
70	1.1511	0.8550	105	34.9384	23.7489
71	1.2798	0.9494	106	36.0058	24.6863
72	1.4180	1.0494	107	36.8483	25.8063
73	1.5902	1.1599	108	37.4013	27.0683
74	1.7595	1.3068	109	37.6000	28.4323
75	1.9536	1.4502	110	37.6000	29.8577
76	2.1760	1.6130	111	37.6000	31.3043
77	2.4276	1.7929	112	37.6000	32.7318
78	2.7093	1.9871	113	37.6000	34.0998
79	3.0198	2.1938	114	37.6000	35.3678
80	3.3590	2.4170	115	37.6000	36.4959
81	3.7326	2.6620	116	37.6000	37.4435
82	4.1482	2.9345	117	37.6000	38.1702
83	4.6095	3.2397	118	37.6000	38.6359
84	5.1589	3.5811	119	100.0000	100.0000

Table 4
Alaska TRS DCR Plan
Turnover Assumptions

Select Rates of Turnover During the First 5 Years of Employment

Service	Male	Female
0	20.70%	21.80%
1	19.55	18.70
2	16.10	15.40
3	13.80	13.20
4	11.50	11.00
5	7.32	8.05

Ultimate Rates of Turnover After the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
15	6.2959%	6.6811%	40	6.1753%	6.5647%
16	6.2959	6.6811	41	6.1604	6.5516
17	6.2959	6.6811	42	6.1455	6.5386
18	6.2959	6.6811	43	6.1081	6.5175
19	6.2959	6.6811	44	6.0706	6.4965
20	6.2959	6.6811	45	6.0332	6.4754
21	6.2959	6.6811	46	5.9957	6.4544
22	6.2959	6.6811	47	5.9583	6.4333
23	6.2903	6.6773	48	5.9053	6.3975
24	6.2847	6.6735	49	5.8522	6.3617
25	6.2791	6.6697	50	5.7992	6.3259
26	6.2735	6.6659	51	5.7461	6.2901
27	6.2679	6.6621	52	5.6931	6.2543
28	6.2623	6.6583	53	5.5800	6.1818
29	6.2567	6.6544	54	5.4670	6.1093
30	6.2512	6.6506	55	5.3539	6.0367
31	6.2456	6.6467	56	5.2409	5.9642
32	6.2400	6.6429	57	5.1278	5.8917
33	6.2360	6.6351	58	5.1711	6.0021
34	6.2320	6.6273	59	5.2144	6.1125
35	6.2280	6.6194	60	5.2578	6.2230
36	6.2240	6.6116	61	5.3011	6.3334
37	6.2200	6.6038	62	5.3444	6.4438
38	6.2051	6.5908	63	5.7296	6.6292
39	6.1902	6.5777	64	6.1148	6.8146
			65+	6.5000	7.0000

Table 5
Alaska TRS DCR Plan
Disability Table

Age	Unisex
< 19	0.0560%
20	0.0560
21	0.0563
22	0.0565
23	0.0574
24	0.0583
25	0.0593
26	0.0602
27	0.0611
28	0.0611
29	0.0612
30	0.0612
31	0.0613
32	0.0613
33	0.0622
34	0.0631
35	0.0641
36	0.0650
37	0.0659
38	0.0674
39	0.0689
40	0.0703
41	0.0718
42	0.0733
43	0.0770
44	0.0806
45	0.0843
46	0.0879
47	0.0916
48	0.0975
49	0.1034
50	0.1093
51	0.1152
52	0.1211
53	0.1356
54	0.1501

Table 6
Alaska TRS DCR Plan
Retirement Table

Age	Rate
< 54	2.0%
55	3.0
56	3.0
57	3.0
58	3.0
59	3.0
60	5.0
61	5.0
62	10.0
63	5.0
64	5.0
65	25.0
66	25.0
67	25.0
68	20.0
69	20.0
> 70	100.0

Glossary of Terms

Actuarial Accrued Liability	Total accumulated cost to fund pension or postemployment 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 or postemployment 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 or postemployment 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 (ARC)	Disclosure measure of annual pension or postretirement benefit cost under GASB 25, 27, 43 and 45.
GASB 25 and 27	Governmental Accounting Standards Board Statement Number 25, which specifies how the ARC was to have been 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 ARC is to be calculated, and Number 45, which specifies Employer reporting of Other Postemployment Benefit (OPEB) Cost.
GASB 67 and 68	<p>Governmental Accounting Standards Board Statement Number 67 amends Number 25 effective for the fiscal year beginning after June 15, 2013, and defines new financial reporting requirements for public pension plans.</p> <p>Governmental Accounting Standards Board Statement Number 68 amends Number 27 effective for fiscal years beginning after June 15, 2014 and defines new accounting and financial reporting requirements for employers sponsoring public pension plans.</p>

GASB 74 and 75

Governmental Accounting Standards Board Statement Number 74 amends Number 43 effective for the fiscal year beginning after June 15, 2016, and defines new financial reporting requirements for public postemployment benefit plans.

Governmental Accounting Standards Board Statement Number 75 amends Number 45 effective for fiscal years beginning after June 15, 2017, and defines new accounting and financial reporting requirements for employers sponsoring public postemployment benefit plans.

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 participant or the plan as a whole.

Rate Payroll

Members' earnings used to determine contribution rates.

Unfunded Actuarial Accrued Liability (UAAL)

The portion of the actuarial accrued liability not offset by plan assets.

Valuation Payroll

Members' earnings used to determine Normal Cost and Actuarial Accrued Liability.

Vested Benefits

Benefits which are unconditionally guaranteed regardless of employment.