



**State of Alaska**  
**Public Employees' 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

**buck**consultants®

Submitted By:  
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# State of Alaska Public Employees' 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 Public Employees' Retirement System Defined Contribution Retirement (PERS 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 Public Employees' 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 Public Employees' Retirement System DCR Plan is to pay required contributions that remain level as a percent of PERS 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 PERS DCR Compensation over a closed 25-year period. This objective is currently being met and is projected to continue to be met.

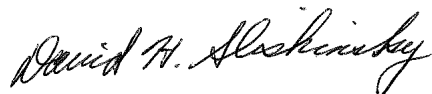
In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the Plan and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the Plan. The actuary performs an analysis of Plan experience periodically 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 40.

The assumptions and methods used to determine the Annual Required Contributions (ARC) of the Employers to the State of Alaska Public Employees' 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. Slishinsky, ASA, EA, MAAA, FCA  
Principal, Consulting Actuary

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 Public Employees' Retirement System Defined Contribution Retirement Plan

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## *Executive Summary*

### **Overview**

The State of Alaska Public Employees' Retirement System DCR Plan provides occupational death & disability and retiree medical benefits to eligible members hired after June 30, 2006. 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 PERS 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 Public Employees' Retirement System Defined Contribution Retirement Plan

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## 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 actuarial 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 <sup>1</sup>	2012	2013
(a) Accrued Liability <sup>2</sup>	\$ 46,921	\$ 63,885
(b) Valuation Assets <sup>2</sup>	<u>24,915</u>	<u>31,709</u>
(c) Unfunded Accrued Liability <sup>2</sup> , (a) – (b)	\$ 22,006	\$ 32,176
(d) Funding Ratio based on Valuation Assets, (b) ÷ (a)	53.1%	49.6%
(e) Fair Value of Assets <sup>2</sup>	\$ 24,553	\$ 32,397
(f) Funding Ratio based on Fair Value of Assets, (e) ÷ (a)	52.3%	50.7%

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<sup>1</sup> Includes occupational death & disability and retiree medical benefits.

<sup>2</sup> In thousands.

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## *Executive Summary (cont'd)*

As shown previously, the funding ratio based on valuation assets as of June 30, 2013 has decreased from 53.1% to 49.6%, a decrease of 3.5%. The total calculated Employer contribution rate has increased from 1.96% of payroll for FY15 to 1.98% for FY16, an increase of 0.02%. The reasons for the change in the funded status and calculated contribution rate are explained below.

### **(1) Retiree Medical Costs and Assumptions**

Please refer to the State of Alaska Public Employees' 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 PERS 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 steerage, 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 11.8% compared to the expected investment return of 8.00%. This resulted in a gain of approximately \$1,051 thousand to the Plan from investment experience. The asset valuation method recognizes 20 percent of this gain (\$210 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 7.9% 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 more than anticipated in the valuation assumptions.

### **(4) Demographic Experience**

The number of active members increased 13.65% from 12,597 at June 30, 2012 to 14,316 at June 30, 2013. The number of active members is growing annually since the opening of the DCR Plan to new entrants as of July 1, 2006. The average age of active members increased from 39.31 to 39.53 and average credited service increased from 2.36 to 2.59 years.



# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## *Executive Summary (cont'd)*

### **(5) Changes in Methods Since the Prior Valuation**

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

### **(6) Changes in Assumptions Since the Prior Valuation**

There have been no changes in actuarial 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 Public Employees' Retirement System Defined Contribution Retirement Plan

## *Comparative Summary of Key Actuarial Valuation Results*

<b>Total Employer Contribution Rates for Occupational Death &amp; Disability for Fiscal Year Ending:</b>			<b>2015</b>	<b>2016</b>
(a)	Employer Normal Cost Rate		0.37%	0.37%
(b)	Past Service Cost Rate		<u>(0.07)%</u>	<u>(0.07)%</u>
(c)	Total Employer Contribution Rate, (a) + (b), not less than 0%		0.30%	0.30%
<b>Total Employer Contribution Rates for Retiree Medical for Fiscal Year Ending:</b>			<b>2015</b>	<b>2016</b>
(a)	Employer Normal Cost Rate		1.39%	1.36%
(b)	Past Service Cost Rate		<u>0.27%</u>	<u>0.32%</u>
(c)	Total Employer Contribution Rate, (a) + (b), not less than 0%		1.66%	1.68%
<b>Total Employer Contribution Rates for Fiscal Year Ending:</b>			<b>2015</b>	<b>2016</b>
(a)	Total Employer Contribution Rate		1.96%	1.98%
(b)	Board Adopted Total Employer Contribution Rate		1.96%	1.98%

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

		<b>Total Employer Contribution Rate</b>		
<b>Valuation Date</b>	<b>Fiscal Year</b>	<b>Occupational Death &amp; Disability (PF / Others)</b>	<b>Retiree Medical</b>	<b>Total (PF / Others)</b>
N/A	FY07	0.40% / 0.30%	1.75%	2.15% / 2.05%
N/A	FY08	1.33% / 0.58%	0.99%	2.32% / 1.57%
N/A	FY09	1.33% / 0.58%	0.99%	2.32% / 1.57%
June 30, 2007	FY10	1.33% / 0.30%	0.83%	2.16% / 1.13%
June 30, 2008	FY11	1.18% / 0.31%	0.55%	1.73% / 0.86%
June 30, 2009	FY12	0.97% / 0.11%	0.51%	1.48% / 0.62%
June 30, 2010	FY13	0.99% / 0.14%	0.48%	1.47% / 0.62%
June 30, 2011	FY14	1.14% / 0.20%	0.48%	1.62% / 0.68%
June 30, 2012	FY15	1.06% / 0.22%	1.66%	2.72% / 1.88%
June 30, 2013	FY16	1.05% / 0.22%	1.68%	2.73% / 1.90%

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 Public Employees' 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):

	<u>Pension</u>	<u>Healthcare</u>	<u>Total</u>	<u>% of Expected</u>
- Retirement Experience	\$ 0	\$ 0	\$ 0	0.00%
- Termination Experience	27	(1,176)	(1,149)	(1.81%)
- Active Mortality Experience	978	3	981	1.54%
- Inactive Mortality Experience	0	0	0	0.00%
- Disability Experience	704	84	788	1.24%
- New Entrants	(140)	(2,326)	(2,466)	(3.89%)
- Rehires	(18)	(720)	(738)	(1.16%)
- Other Demographic Experience <sup>1</sup>	46	(834)	(788)	(1.24%)
- Salary Increases	(7)	N/A	(7)	(0.01%)
- Medical Claims Costs	N/A	2,887	2,887	4.55%
- Total	\$ 1,590	\$ (2,082)	\$ (492)	(0.78%)

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

<sup>1</sup> Reflects data and programming changes

# **State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan**

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## **Section 1**

### **Actuarial Funding Results**

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.1

### Actuarial Liabilities and Normal Cost – Peace Officer/Firefighter (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>Active Members</b>		
Occupational Death Benefits	\$ 1,645	\$ 52
Occupational Disability Benefits	9,419	2,003
Medical and Prescription Drug Benefits	16,087	6,274
Medicare Part D Subsidy	<u>(1,945)</u>	<u>(758)</u>
Subtotal	\$ 25,206	\$ 7,571
<b>Benefit Recipients</b>		
Survivor Benefits	\$ 164	\$ 164
Disability Benefits	196	196
Medical and Prescription Drug Benefits	31	31
Medicare Part D Subsidy	<u>(4)</u>	<u>(4)</u>
Subtotal	\$ 387	\$ 387
<b>Total</b>	<b>\$ 25,593</b>	<b>\$ 7,958</b>
<b>Total Occupational Death &amp; Disability</b>	<b>\$ 11,424</b>	<b>\$ 2,415</b>
<b>Total Retiree Medical, Net of Part D Subsidy</b>	<b>\$ 14,169</b>	<b>\$ 5,543</b>
<b>Total Retiree Medical, Gross of Part D Subsidy</b>	<b>\$ 16,118</b>	<b>\$ 6,305</b>

As of June 30, 2013	Normal Cost
<b>Active Members</b>	
Occupational Death Benefits	\$ 172
Occupational Disability Benefits	739
Medical and Prescription Drug Benefits	1,344
Medicare Part D Subsidy	<u>(164)</u>
Subtotal	\$ 2,091
<b>Total</b>	<b>\$ 2,091</b>
<b>Total Occupational Death &amp; Disability</b>	<b>\$ 911</b>
<b>Total Retiree Medical, Net of Part D Subsidy</b>	<b>\$ 1,180</b>
<b>Total Retiree Medical, Gross of Part D Subsidy</b>	<b>\$ 1,344</b>

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.1 (cont'd)

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

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>Active Members</b>		
Occupational Death Benefits	\$ 6,616	\$ 391
Occupational Disability Benefits	6,844	491
Medical and Prescription Drug Benefits	120,020	62,754
Medicare Part D Subsidy	<u>(15,437)</u>	<u>(8,089)</u>
Subtotal	\$ 118,043	\$ 55,547
<b>Benefit Recipients</b>		
Survivor Benefits	\$ 0	\$ 0
Disability Benefits	306	306
Medical and Prescription Drug Benefits	85	85
Medicare Part D Subsidy	<u>(11)</u>	<u>(11)</u>
Subtotal	\$ 380	\$ 380
<b>Total</b>	<b>\$ 118,423</b>	<b>\$ 55,927</b>
<b>Total Occupational Death &amp; Disability</b>	<b>\$ 13,766</b>	<b>\$ 1,188</b>
<b>Total Retiree Medical, Net of Part D Subsidy</b>	<b>\$ 104,657</b>	<b>\$ 54,739</b>
<b>Total Retiree Medical, Gross of Part D Subsidy</b>	<b>\$ 120,105</b>	<b>\$ 62,839</b>
<b>Normal Cost</b>		
As of June 30, 2013		
<b>Active Members</b>		
Occupational Death Benefits		\$ 1,009
Occupational Disability Benefits		1,043
Medical and Prescription Drug Benefits		11,213
Medicare Part D Subsidy		<u>(1,449)</u>
Subtotal		\$ 11,816
<b>Total</b>		<b>\$ 11,816</b>
<b>Total Occupational Death &amp; Disability</b>		<b>\$ 2,052</b>
<b>Total Retiree Medical, Net of Part D Subsidy</b>		<b>\$ 9,764</b>
<b>Total Retiree Medical, Gross of Part D Subsidy</b>		<b>\$ 11,213</b>

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.1 (cont'd)

### Actuarial Liabilities and Normal Cost – All Members (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>Active Members</b>		
Occupational Death Benefits	\$ 8,261	\$ 443
Occupational Disability Benefits	16,263	2,494
Medical and Prescription Drug Benefits	136,107	69,028
Medicare Part D Subsidy	<u>(17,382)</u>	<u>(8,847)</u>
Subtotal	\$ 143,249	\$ 63,118
<b>Benefit Recipients</b>		
Survivor Benefits	\$ 164	\$ 164
Disability Benefits	502	502
Medical and Prescription Drug Benefits	116	116
Medicare Part D Subsidy	<u>(15)</u>	<u>(15)</u>
Subtotal	\$ 767	\$ 767
<b>Total</b>	<b>\$ 144,016</b>	<b>\$ 63,885</b>
<b>Total Occupational Death &amp; Disability</b>	<b>\$ 25,190</b>	<b>\$ 3,603</b>
<b>Total Retiree Medical, Net of Part D Subsidy</b>	<b>\$ 118,826</b>	<b>\$ 60,282</b>
<b>Total Retiree Medical, Gross of Part D Subsidy</b>	<b>\$ 136,223</b>	<b>\$ 69,144</b>
<b>As of June 30, 2013</b>		<b>Normal Cost</b>
<b>Active Members</b>		
Occupational Death Benefits		\$ 1,181
Occupational Disability Benefits		1,782
Medical and Prescription Drug Benefits		12,557
Medicare Part D Subsidy		<u>(1,613)</u>
Subtotal		\$ 13,907
<b>Total</b>		<b>\$ 13,907</b>
<b>Total Occupational Death &amp; Disability</b>		<b>\$ 2,963</b>
<b>Total Retiree Medical, Net of Part D Subsidy</b>		<b>\$ 10,944</b>
<b>Total Retiree Medical, Gross of Part D Subsidy</b>		<b>\$ 12,557</b>

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State of Alaska  
Public Employees' Retirement System  
Defined Contribution Retirement Plan  
As of June 30, 2013

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2

### Actuarial Contributions - FY16 - Peace Officer/Firefighter (\$'s in 000's)

Normal Cost Rate	Occupational Death & Disability	Retiree Medical	Total
(1) Total Normal Cost	\$ 911	\$ 1,180	\$ 2,091
(2) DCR Plan Member Salaries Projected for FY14	80,152	80,152	80,152
(3) Employer Normal Cost Rate, (1) / (2)	1.14%	1.47%	2.61%
<b>Past Service Rate</b>			
(1) Accrued Liability	\$ 2,415	\$ 5,543	\$ 7,958
(2) Valuation Assets	3,471	1,870 <sup>1</sup>	5,341
(3) Total Unfunded Liability, (1) – (2)	\$ (1,056)	\$ 3,673	\$ 2,617
(4) Funded Ratio based on Valuation Assets	143.7%	33.7%	67.1%
(5) Past Service Cost Amortization Payment	\$ (73)	\$ 233	\$ 160
(6) DCR Plan Member Salaries Projected for FY14	80,152	80,152	80,152
(7) Past Service Cost Rate, (5) / (6)	(0.09)%	0.29%	0.20%
<b>Total Employer Contribution Rate, not less than 0%</b>	<b>1.05%</b>	<b>1.76%</b>	<b>2.81%</b>

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	\$ 911	\$ 1,180	\$ 2,091
(2) Total DB and DCR Plan Member Salaries Projected for FY14	285,899	285,899	285,899
(3) Employer Normal Cost Rate, (1) / (2)	0.32%	0.41%	0.73%
(4) Past Service Cost Amortization Payment	\$ (73)	\$ 233	\$ 160
(5) Past Service Cost Rate, (4) / (2)	(0.03)%	0.08%	0.05%
(6) Total Employer Contribution Rate, (3) + (5)	0.29%	0.49%	0.78%

<sup>1</sup> Allocated based on retiree medical accrued liability.



# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - Peace Officer/Firefighter (cont'd) (\$'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	\$ (100)	\$ (105)	\$ (8)
FY08 Gain	06/30/2008	20	(586)	(613)	(44)
Change in Assumptions	06/30/2009	21	(104)	(109)	(8)
FY09 Loss	06/30/2009	21	446	464	32
Change in Assumptions	06/30/2010	22	79	82	6
FY10 Gain	06/30/2010	22	(282)	(291)	(20)
FY11 Loss	06/30/2011	23	73	73	5
FY12 Gain	06/30/2012	24	(349)	(353)	(23)
FY13 Gain	06/30/2013	25	(204)	(204)	(13)
<b>Total</b>				<b>\$ (1,056)</b>	<b>\$ (73)</b>

#### 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	\$ (21)	\$ (23)	\$ (2)
Change in Assumptions	06/30/2008	20	17	17	1
FY08 Gain	06/30/2008	20	(62)	(66)	(5)
Change in Assumptions	06/30/2009	21	(8)	(8)	(1)
FY09 Gain	06/30/2009	21	(38)	(39)	(3)
Change in Assumptions	06/30/2010	22	41	41	3
FY10 Gain	06/30/2010	22	(46)	(46)	(3)
FY11 Loss	06/30/2011	23	70	71	5
Change in Assumptions	06/30/2012	24	3,085	3,122	201
FY12 Gain	06/30/2012	24	(273)	(276)	(18)
FY13 Loss	06/30/2013	25	880	880	55
<b>Total</b>				<b>\$ 3,673</b>	<b>\$ 233</b>

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - Peace Officer/Firefighter (cont'd) (\$'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	\$ (121)	\$ (128)	\$ (10)
Change in Assumptions	06/30/2008	20	17	17	1
FY08 Gain	06/30/2008	20	(648)	(679)	(49)
Change in Assumptions	06/30/2009	21	(112)	(117)	(9)
FY09 Loss	06/30/2009	21	408	425	29
Change in Assumptions	06/30/2010	22	120	123	9
FY10 Gain	06/30/2010	22	(328)	(337)	(23)
FY11 Loss	06/30/2011	23	143	144	10
Change in Assumptions	06/30/2012	24	3,085	3,122	201
FY12 Gain	06/30/2012	24	(622)	(629)	(41)
FY13 Loss	06/30/2013	25	676	676	42
<b>Total</b>				<b>\$ 2,617</b>	<b>\$ 160</b>

The amortization factor for 25 years is 15.898717. The weighted average amortization factor is 16.356250. The amortization method is level percentage of pay.

The equivalent single amortization period is 26.

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - Others (\$'s in 000's)

Normal Cost Rate	Occupational Death & Disability	Retiree Medical	Total
(1) Total Normal Cost	\$ 2,052	\$ 9,764	\$ 11,816
(2) DCR Plan Member Salaries Projected for FY14	722,493	722,493	722,493
(3) Employer Normal Cost Rate, (1) / (2)	0.28%	1.35%	1.63%
<b>Past Service Rate</b>			
(1) Accrued Liability	\$ 1,188	\$ 54,739	\$ 55,927
(2) Valuation Assets	7,902	18,466 <sup>1</sup>	26,368
(3) Total Unfunded Liability, (1) - (2)	\$ (6,714)	\$ 36,273	\$ 29,559
(4) Funded Ratio based on Valuation Assets	665.2%	33.7%	47.1%
(5) Past Service Cost Amortization Payment	\$ (449)	\$ 2,313	\$ 1,864
(6) DCR Plan Member Salaries Projected for FY14	722,493	722,493	722,493
(7) Past Service Cost Rate, (5) / (6)	(0.06)%	0.32%	0.26%
<b>Total Employer Contribution Rate</b>	<b>0.22%</b>	<b>1.67%</b>	<b>1.89%</b>

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	\$ 2,052	\$ 9,764	\$ 11,816
(2) Total DB and DCR Plan Member Salaries Projected for FY14	2,030,780	2,030,780	2,030,780
(3) Employer Normal Cost Rate, (1) / (2)	0.10%	0.48%	0.58%
(4) Past Service Cost Amortization Payment	\$ (449)	\$ 2,313	\$ 1,864
(5) Past Service Cost Rate, (4) / (2)	(0.02)%	0.11%	0.09%
(6) Total Employer Contribution Rate, (3) + (5)	0.08%	0.59%	0.67%

<sup>1</sup> Allocated based on retiree medical accrued liability.

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - Others (cont'd) (\$'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	\$ (40)	\$ (43)	\$ (3)
FY08 Gain	06/30/2008	20	(318)	(336)	(24)
Change in Assumptions	06/30/2009	21	(92)	(95)	(6)
FY09 Gain	06/30/2009	21	(1,924)	(2,002)	(139)
Change in Assumptions	06/30/2010	22	24	25	1
FY10 Gain	06/30/2010	22	(994)	(1,027)	(69)
FY11 Gain	06/30/2011	23	(1,184)	(1,209)	(80)
FY12 Gain	06/30/2012	24	(1,233)	(1,248)	(80)
FY13 Gain	06/30/2013	25	(779)	(779)	(49)
<b>Total</b>				<b>\$ (6,714)</b>	<b>\$ (449)</b>

#### 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	\$ (335)	\$ (353)	\$ (26)
Change in Assumptions	06/30/2008	20	165	174	13
FY08 Gain	06/30/2008	20	(702)	(735)	(53)
Change in Assumptions	06/30/2009	21	(122)	(127)	(8)
FY09 Gain	06/30/2009	21	(438)	(457)	(32)
Change in Assumptions	06/30/2010	22	(572)	(589)	(40)
FY10 Loss	06/30/2010	22	579	595	40
FY11 Loss	06/30/2011	23	820	839	55
Change in Assumptions	06/30/2012	24	25,180	25,484	1,641
FY12 Loss	06/30/2012	24	1,451	1,468	95
FY13 Loss	06/30/2013	25	9,974	9,974	628
<b>Total</b>				<b>\$ 36,273</b>	<b>\$ 2,313</b>

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - Others (cont'd) (\$'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	\$ (375)	\$ (396)	\$ (29)
Change in Assumptions	06/30/2008	20	165	174	13
FY08 Gain	06/30/2008	20	(1,020)	(1,071)	(77)
Change in Assumptions	06/30/2009	21	(214)	(222)	(14)
FY09 Gain	06/30/2009	21	(2,362)	(2,459)	(171)
Change in Assumptions	06/30/2010	22	(548)	(564)	(39)
FY10 Gain	06/30/2010	22	(415)	(432)	(29)
FY11 Gain	06/30/2011	23	(364)	(370)	(25)
Change in Assumptions	06/30/2012	24	25,180	25,484	1,641
FY12 Loss	06/30/2012	24	218	220	15
FY13 Loss	06/30/2013	25	9,195	9,195	579
<b>Total</b>				<b>\$ 29,559</b>	<b>\$ 1,864</b>

The amortization factor for 25 years is 15.898717. The weighted average amortization factor is 15.857833. The amortization method is level percentage of pay.

The equivalent single amortization period is 25.

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - All Members (\$'s in 000's)

Normal Cost Rate	Occupational Death & Disability	Retiree Medical	Total
(1) Total Normal Cost	\$ 2,963	\$ 10,944	\$ 13,907
(2) DCR Plan Member Salaries Projected for FY14	802,645	802,645	802,645
(3) Employer Normal Cost Rate, (1) / (2)	0.37%	1.36%	1.73%
<b>Past Service Rate</b>			
(1) Accrued Liability	\$ 3,603	\$ 60,282	\$ 63,885
(2) Valuation Assets	11,373	20,336	31,709
(3) Total Unfunded Liability, (1) - (2)	\$ (7,770)	\$ 39,946	\$ 32,176
(4) Funded Ratio based on Valuation Assets	315.7%	33.7%	49.6%
(5) Past Service Cost Amortization Payment	\$ (522)	\$ 2,546	\$ 2,024
(6) DCR Plan Member Salaries Projected for FY14	802,645	802,645	802,645
(7) Past Service Cost Rate, (5) / (6)	(0.07)%	0.32%	0.25%
<b>Total Employer Contribution Rate</b>	<b>0.30%</b>	<b>1.68%</b>	<b>1.98%</b>

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	\$ 2,963	\$ 10,944	\$ 13,907
(2) Total DB and DCR Plan Member Salaries Projected for FY14	2,316,679	2,316,679	2,316,679
(3) Employer Normal Cost Rate, (1) / (2)	0.13%	0.47%	0.60%
(4) Past Service Cost Amortization Payment	\$ (522)	\$ 2,546	\$ 2,024
(5) Past Service Cost Rate, (4) / (2)	(0.02)%	0.11%	0.09%
(6) Total Employer Contribution Rate, (3) + (5)	0.11%	0.58%	0.69%

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - All Members (cont'd) (\$'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	\$ (140)	\$ (148)	\$ (11)
FY08 Gain	06/30/2008	20	(904)	(949)	(68)
Change in Assumptions	06/30/2009	21	(196)	(204)	(14)
FY09 Gain	06/30/2009	21	(1,478)	(1,538)	(107)
Change in Assumptions	06/30/2010	22	103	107	7
FY10 Gain	06/30/2010	22	(1,276)	(1,318)	(89)
FY11 Gain	06/30/2011	23	(1,111)	(1,136)	(75)
FY12 Gain	06/30/2012	24	(1,582)	(1,601)	(103)
FY13 Gain	06/30/2013	25	(983)	(983)	(62)
<b>Total</b>				<b>\$ (7,770)</b>	<b>\$ (522)</b>

#### 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	\$ (356)	\$ (376)	\$ (28)
Change in Assumptions	06/30/2008	20	182	191	14
FY08 Gain	06/30/2008	20	(764)	(801)	(58)
Change in Assumptions	06/30/2009	21	(130)	(135)	(9)
FY09 Gain	06/30/2009	21	(476)	(496)	(35)
Change in Assumptions	06/30/2010	22	(531)	(548)	(37)
FY10 Loss	06/30/2010	22	533	549	37
FY11 Loss	06/30/2011	23	890	910	60
Change in Assumptions	06/30/2012	24	28,265	28,606	1,842
FY12 Loss	06/30/2012	24	1,178	1,192	77
FY13 Loss	06/30/2013	25	10,854	10,854	683
<b>Total</b>				<b>\$ 39,946</b>	<b>\$ 2,546</b>

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 1.2 (cont'd)

### Actuarial Contributions - FY16 - All Members (cont'd) (\$'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	\$ (496)	\$ (524)	\$ (39)
Change in Assumptions	06/30/2008	20	182	191	14
FY08 Gain	06/30/2008	20	(1,668)	(1,750)	(126)
Change in Assumptions	06/30/2009	21	(326)	(339)	(23)
FY09 Gain	06/30/2009	21	(1,954)	(2,034)	(142)
Change in Assumptions	06/30/2010	22	(428)	(441)	(30)
FY10 Gain	06/30/2010	22	(743)	(769)	(52)
FY11 Gain	06/30/2011	23	(221)	(226)	(15)
Change in Assumptions	06/30/2012	24	28,265	28,606	1,842
FY12 Gain	06/30/2012	24	(404)	(409)	(26)
FY13 Loss	06/30/2013	25	9,871	9,871	621
<b>Total</b>				<b>\$ 32,176</b>	<b>\$ 2,024</b>

The amortization factor for 25 years is 15.898717. The weighted average amortization factor is 15.897233. The amortization method is level percentage of pay.

The equivalent single amortization period is 25.



# State of Alaska Public Employees' 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	\$ 2,412	\$ 44,509	\$ 46,921
(b) Normal Cost for FY13	2,490	9,380	11,870
(c) Interest on (a) and (b) at 8.00%	392	4,311	4,703
(d) Benefit Payments for FY13	97	0	97
(e) Interest on (d) at 8.00% for One-half year	4	0	4
(f) Expected Accrued Liability as of June 30, 2013 (a) + (b) + (c) - (d) - (e)	\$ 5,193	\$ 58,200	\$ 63,393
(2) Actual Accrued Liability, June 30, 2013	3,603	60,282	63,885
<b>(3) Liability Gain/(Loss), (1)(f) - (2)</b>	<b>\$ 1,590</b>	<b>\$ (2,082)</b>	<b>\$ (492)</b>
(4) Expected Actuarial Asset Value			
(a) Actuarial Asset Value, June 30, 2012	\$ 9,142	\$ 15,773	\$ 24,915
(b) Interest on (a) at 8.00%	731	1,262	1,993
(c) Employer Contributions for FY13	1,549	3,195	4,744
(d) Interest on (c) at 8.00% for one-half year	61	125	186
(e) Benefit Payments for FY13	97	0	97
(f) Interest on (e) at 8.00% for one-half year	4	0	4
(g) Expected Actuarial Asset Value, June 30, 2013 (a) + (b) + (c) + (d) - (e) - (f)	\$ 11,382	\$ 20,355	\$ 31,737
(5) Actuarial Asset Value, June 30, 2013	11,373	20,336	31,709
<b>(6) Actuarial Asset Gain/(Loss), (5) - (4)(g)</b>	<b>\$ (9)</b>	<b>\$ (19)</b>	<b>\$ (28)</b>
<b>(7) Actuarial Gain/(Loss), (3) + (6)</b>	<b>\$ 1,581</b>	<b>\$ (2,101)</b>	<b>\$ (520)</b>
<b>(8) Effect of the 2-Year Delay on Contributions</b>	<b>\$ (598)</b>	<b>\$ (8,753)</b>	<b>\$ (9,351)</b>
<b>(9) FY13 Gain/(Loss) to be Amortized, (7) + (8)</b>	<b>\$ 983</b>	<b>\$ (10,854)</b>	<b>\$ (9,871)</b>

# State of Alaska Public Employees' 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	\$ 759	\$ 1,255	165.3%	\$ (496)
June 30, 2008	\$ 2,018	\$ 4,007	198.6%	\$ (1,989)
June 30, 2009	\$ 4,316	\$ 8,613	199.6%	\$ (4,297)
June 30, 2010	\$ 8,038	\$ 13,568	168.8%	\$ (5,530)
June 30, 2011	\$ 13,251	\$ 19,058	143.8%	\$ (5,807)
June 30, 2012	\$ 46,921	\$ 24,915	53.1%	\$ 22,006
June 30, 2013	\$ 63,885	\$ 31,709	49.6%	\$ 32,176

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 2

### Plan Assets

# State of Alaska Public Employees' 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	\$ 266	\$ 503	\$ 769	2.4%
- Subtotal	\$ 266	\$ 503	\$ 769	2.4%
Fixed Income Investments				
- Domestic Fixed Income Pool	\$ 867	\$ 1,541	\$ 2,408	7.6%
- International Fixed Income Pool	224	399	623	1.9%
- High Yield Pool	321	571	892	2.8%
- Treasury Inflation Protection Pool	5	10	15	0.0%
- Emerging Debt Pool	<u>96</u>	<u>170</u>	<u>266</u>	<u>0.8%</u>
- Subtotal	\$ 1,513	\$ 2,691	\$ 4,204	13.1%
Equity Investments				
- Domestic Equity Pool	\$ 3,718	\$ 6,611	\$ 10,329	32.3%
- International Equity Pool	2,215	3,937	6,152	19.2%
- Private Equity Pool	1,021	1,815	2,836	8.8%
- Emerging Markets Equity Pool	<u>334</u>	<u>595</u>	<u>929</u>	<u>2.9%</u>
- Subtotal	\$ 7,288	\$ 12,958	\$ 20,246	63.2%
Other Investments				
- Real Estate Pool	\$ 1,044	\$ 1,855	\$ 2,899	9.0%
- Other Investments Pool	917	1,630	2,547	7.9%
- Absolute Return Pool	503	894	1,397	4.4%
- Other Assets	<u>0</u>	<u>0</u>	<u>0</u>	<u>0.0%</u>
- Subtotal	\$ 2,464	\$ 4,379	\$ 6,843	21.3%
Total Cash and Investments	\$ 11,531	\$ 20,531	\$ 32,062	100.0%
Net Accrued Receivables / (Payables)	<u>90</u>	<u>245</u>	<u>335</u>	
Net Assets	\$ 11,621	\$ 20,776	\$ 32,397	
Peace Officer/Firefighter	\$ 3,547	N/A	N/A	
Others	<u>8,074</u>	<u>N/A</u>	<u>N/A</u>	
All Members	\$ 11,621	\$ 20,776	\$ 32,397	

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 2.2

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

Fiscal Year 2013	Occupational Death & Disability	Retiree Medical	Total Fair Value
(1) Net Assets, June 30, 2012 (fair value)	\$ 9,002	\$ 15,551	\$ 24,553
(2) Additions:			
(a) Member Contributions	\$ 8	\$ 0	\$ 8
(b) Employer Contributions	1,541	3,195	4,736
(c) Interest and Dividend Income	186	327	513
(d) Net Appreciation (Depreciation) in Fair Value of Investments	981	1,713	2,694
(e) Other	<u>0</u>	<u>0</u>	<u>0</u>
(f) Total Additions	\$ 2,716	\$ 5,235	\$ 7,951
(3) Deductions:			
(a) Medical Benefits	\$ 0	\$ 0	\$ 0
(b) Death & Disability Benefits	97	0	97
(c) Investment Expenses	0	0	0
(d) Administrative Expenses	<u>0</u>	<u>10</u>	<u>10</u>
(e) Total Deductions	\$ 97	\$ 10	\$ 107
(4) Net Assets, June 30, 2013 (fair value)	\$ 11,621	\$ 20,776	\$ 32,397
Approximate Fair Value Investment Return Rate During FY13 Net of All Expenses	11.9%	11.7%	11.8%

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 2.3

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

The actuarial value of assets and the fair value were \$0 at June 30, 2006. 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	\$ 9,002	\$ 15,551	\$ 24,553
(b) Contributions for FY13	1,549	3,195	4,744
(c) Benefit Payments for FY13	97	0	97
(d) Actual Investment Return ( <i>net of expenses</i> )	1,167	2,030	3,197
(e) Expected Return Rate ( <i>net of expenses</i> )	8.00%	8.00%	8.00%
(f) Expected Return	777	1,369	2,146
(g) Investment Gain/(Loss) for the Year ( <i>d. - f.</i> )	390	661	1,051
(h) Deferred Investment Return/(Loss)	248	440	688
(2) Actuarial Value, June 30, 2013			
(a) Fair Value, June 30, 2013	\$ 11,621	\$ 20,776	\$ 32,397
(b) 2013 Deferred Investment Return/(Loss)	248	440	688
(c) Preliminary Actuarial Value, June 30, 2013 ( <i>a. - b.</i> )	11,373	20,336	31,709
(d) Upper Limit: 120% of Fair Value, June 30, 2013	13,945	24,931	N/A
(e) Lower Limit: 80% of Fair Value, June 30, 2013	9,297	16,621	N/A
(f) Actuarial Value, June 30, 2013 ( <i>c. limited by d. and e.</i> )	\$ 11,373	\$ 20,336	\$ 31,709
(g) Ratio of Actuarial Value of Assets to Fair Value of Assets	97.9%	97.9%	97.9%
(h) Approximate Actuarial Value Investment Return Rate During FY13 Net of All Expenses	7.9%	7.9%	7.9%
(3) Actuarial Value Allocation*			
(a) Peace Officer/Firefighter	\$ 3,471	N/A	N/A
(b) Others	<u>7,902</u>	<u>N/A</u>	<u>N/A</u>
(c) All Members	\$ 11,373	\$ 20,336	\$ 31,709

\*Allocated using fair value of assets

# State of Alaska Public Employees' 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	\$ (441)	\$ (352)	\$ (89)	\$ 0	
6/30/2010	(47)	(27)	(10)	(10)	
6/30/2011	599	240	120	239	
6/30/2012	(487)	(97)	(97)	(293)	
6/30/2013	390	0	78	312	
<b>Total</b>	<b>\$ 14</b>	<b>\$ (236)</b>	<b>\$ 2</b>	<b>\$ 248</b>	

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	\$ (809)	\$ (648)	\$ (161)	\$ 0	
6/30/2010	(108)	(66)	(21)	(21)	
6/30/2011	1,073	430	215	428	
6/30/2012	(828)	(166)	(166)	(496)	
6/30/2013	661	0	132	529	
<b>Total</b>	<b>\$ (11)</b>	<b>\$ (450)</b>	<b>\$ (1)</b>	<b>\$ 440</b>	

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	\$ (1,250)	\$ (1,000)	\$ (250)	\$ 0	
6/30/2010	(155)	(93)	(31)	(31)	
6/30/2011	1,672	670	335	667	
6/30/2012	(1,315)	(263)	(263)	(789)	
6/30/2013	1,051	0	210	841	
<b>Total</b>	<b>\$ 3</b>	<b>\$ (686)</b>	<b>\$ 1</b>	<b>\$ 688</b>	

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 2.4

### Historical Asset Rate of Return

Year Ending	Actuarial Value		Fair Value	
	Annual	Cumulative	Annual	Cumulative
June 30, 2008	5.0%	5.0%	(7.1)%	(7.1)%
June 30, 2009	2.4%	3.7%	(13.0)%	(10.1)%
June 30, 2010	3.9%	3.8%	6.6%	(4.8)%
June 30, 2011	7.3%	4.6%	19.2%	0.7%
June 30, 2012	6.9%	5.1%	2.0%	0.9%
June 30, 2013	7.9%	5.5%	11.8%	2.6%



# **State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan**

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## **Section 3**

### **Accounting Information**

# State of Alaska Public Employees' 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 <sup>1</sup>	UAAL as a Percentage of Covered Payroll
June 30, 2013	\$ 3,603	\$ 11,373	315.7%	\$ (7,770)	\$ 590,380	(1.3)%
June 30, 2012	2,412	9,142	379.0%	(6,730)	558,760	(1.2)%
June 30, 2011	1,949	7,049	361.7%	(5,100)	459,521	(1.1)%
June 30, 2010	853	4,801	562.8%	(3,948)	421,187	(0.9)%
June 30, 2009	403	3,138	778.7%	(2,735)	314,118	(0.9)%
June 30, 2008	242	1,288	532.2%	(1,046)	203,955	(0.5)%
June 30, 2007	48	188	391.7%	(140)	105,611	(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 <sup>1</sup>	UAAL as a Percentage of Covered Payroll
June 30, 2013	\$ 69,144	\$ 20,336	29.4%	\$ 48,808	\$ 590,380	8.3%
June 30, 2012	51,798	15,773	30.5%	36,025	558,760	6.4%
June 30, 2011	13,142	12,009	91.4%	1,133	459,521	0.2%
June 30, 2010	8,370	8,767	104.7%	(397)	421,187	(0.1)%
June 30, 2009	4,594	5,475	119.2%	(881)	314,118	(0.3)%
June 30, 2008	2,123	2,719	128.1%	(596)	203,955	(0.3)%
June 30, 2007	803	1,067	132.9%	(264)	105,611	(0.2)%

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

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 3.2

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

The following shows the death and disability plan 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	\$ 1,328	116%
June 30, 2012	\$ 1,085	146%
June 30, 2011	\$ 1,852	100%
June 30, 2010	\$ 1,495	100%
June 30, 2009	\$ 1,787	100%
June 30, 2008	\$ 1,063	100%
June 30, 2007	\$ 181	100%

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	\$ 3,365	95%
June 30, 2012	\$ 3,464	82%
June 30, 2011	\$ 3,229	78%
June 30, 2010	\$ 3,469	87%
June 30, 2009	\$ 3,152	85%
June 30, 2008	\$ 1,845	85%
June 30, 2007	\$ 1,028	100%

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

Valuation Date	Fiscal Year	ARC (% of Pay)		
		Occupational Death & Disability (PF / Others)	Retiree Medical	Total (PF / Others)
N/A	FY07	0.40% / 0.30%	1.75%	2.15% / 2.05%
N/A	FY08	1.33% / 0.58%	1.17%	2.50% / 1.75%
N/A	FY09	1.33% / 0.58%	1.17%	2.50% / 1.75%
June 30, 2007	FY10	1.33% / 0.30%	0.95%	2.28% / 1.25%
June 30, 2008	FY11	1.18% / 0.31%	0.68%	1.86% / 0.99%
June 30, 2009	FY12	0.97% / 0.11%	0.62%	1.59% / 0.73%
June 30, 2010	FY13	0.99% / 0.14%	0.57%	1.56% / 0.71%
June 30, 2011	FY14	1.14% / 0.20%	0.58%	1.72% / 0.78%
June 30, 2012	FY15	1.06% / 0.22%	1.95%	3.01% / 2.17%
June 30, 2013	FY16	1.05% / 0.22%	1.95%	3.00% / 2.17%

# State of Alaska Public Employees' 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	25 years
Asset Valuation Method	5-year smoothed market, constrained to 80%-120% of fair value corridor
Actuarial Assumptions:	
Investment rate of return*	8.00%
Projected salary increases	Police Officer/Firefighter: Merit – 2.74% per year for the first 4 years of employment, grading down to 0.5% at 4 years and thereafter. Productivity – 0.5% per year. Inflation – 3.12% per year. Others: Merit – 5.98% per year grading down to 1.99% after 5 years; for more than 6 years of service, 1.49% grading down to 0%. Productivity – 0.5% per year. 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 Public Employees' 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 1.95% of pay for retiree medical benefits and 2.25% of pay for retiree medical and death & disability benefits combined.

# State of Alaska Public Employees' 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 <sup>1</sup>	\$ 0	\$ 0	\$ 8,038	\$ 13,568	100.0%	100.0%	100.0%
June 30, 2009 <sup>1</sup>	0	0	4,316	8,613	100.0%	100.0%	100.0%
June 30, 2008 <sup>1</sup>	0	0	2,018	4,007	100.0%	100.0%	100.0%
June 30, 2007	0	0	759	1,255	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).

<sup>1</sup> Change in Assumptions

# State of Alaska Public Employees' 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:			Occupational Death & Disability 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	\$ 3,603	\$ 11,373	100.0%	100.0%	100.0%
June 30, 2012	0	0	2,412	9,142	100.0%	100.0%	100.0%
June 30, 2011	0	0	1,949	7,049	100.0%	100.0%	100.0%
June 30, 2010 <sup>1</sup>	0	0	853	4,801	100.0%	100.0%	100.0%
June 30, 2009 <sup>1</sup>	0	0	403	3,138	100.0%	100.0%	100.0%
June 30, 2008	0	0	242	1,288	100.0%	100.0%	100.0%
June 30, 2007	0	0	48	188	100.0%	100.0%	100.0%
June 30, 2006	0	0	0	0	N/A	N/A	N/A

<sup>1</sup> Change in Assumptions

# State of Alaska Public Employees' 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	\$ 60,282	\$ 20,336	100.0%	100.0%	33.7%
June 30, 2012 <sup>1</sup>	0	0	44,509	\$ 15,773	100.0%	100.0%	35.4%
June 30, 2011	0	0	11,302	\$ 12,009	100.0%	100.0%	100.0%
June 30, 2010 <sup>1</sup>	0	0	7,185	\$ 8,767	100.0%	100.0%	100.0%
June 30, 2009 <sup>1</sup>	0	0	3,913	\$ 5,475	100.0%	100.0%	100.0%
June 30, 2008 <sup>1</sup>	0	0	1,776	\$ 2,719	100.0%	100.0%	100.0%
June 30, 2007	0	0	711	\$ 1,067	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).

<sup>1</sup> Change in Assumptions

# **State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan**

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## **Section 4**

### **Member Data**



# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 4.1

### Summary of Members Included

As of June 30	2009	2010	2011	2012	2013
<b>Peace Officer/Firefighter – Active Members</b>					
(1) Number	585	650	770	909	1,108
(2) Average Age	33.55	33.86	34.23	34.36	34.35
(3) Average Credited Service	1.42	2.12	2.54	2.91	3.07
(4) Average Entry Age	32.13	31.74	31.69	31.45	31.28
(5) Average Annual Earnings	\$ 56,617	\$ 60,467	\$ 65,769	\$ 68,440	\$ 68,197
<b>Others – Active Members</b>					
(1) Number	6,671	8,582	10,195	11,688	13,208
(2) Average Age	38.04	38.55	39.10	39.69	39.96
(3) Average Credited Service	1.28	1.64	1.98	2.32	2.55
(4) Average Entry Age	36.76	36.91	37.12	37.37	37.41
(5) Average Annual Earnings	\$ 42,122	\$ 44,498	\$ 46,439	\$ 48,504	\$ 50,961
<b>Total – Active Members</b>					
(1) Number	7,256	9,232	10,965	12,597	14,316
(2) Average Age	37.68	38.22	38.76	39.31	39.53
(3) Average Credited Service	1.29	1.67	2.02	2.36	2.59
(4) Average Entry Age	36.39	36.55	36.74	36.95	36.94
(5) Average Annual Earnings	\$ 43,291	\$ 45,622	\$ 47,796	\$ 49,943	\$ 52,295
<b>Retirees, Disableds and Beneficiaries</b>					
(1) Number	0	0	1	1	4
(2) Average Age	N/A	N/A	N/A	N/A	39.25
(3) Average Monthly Death & Disability Benefit	N/A	N/A	N/A	N/A	2,320
<b>Inactive Members*</b>					
(1) Number	3	7	4	36	118
<b>Total Number of Members</b>	<b>7,259</b>	<b>9,239</b>	<b>10,970</b>	<b>12,634</b>	<b>14,438</b>

\*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 Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 4.2

### Age and Service Distribution of Active Members – Total PERS

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	62	\$ 2,592,145	\$ 41,809	0	3,920	\$ 179,715,823	\$ 45,846
20 – 24	1,171	50,768,766	43,355	1	2,821	142,152,194	50,391
25 – 29	2,620	133,176,726	50,831	2	2,217	115,009,310	51,876
30 – 34	2,268	125,623,009	55,389	3	1,690	89,925,358	53,210
35 – 39	1,825	98,999,625	54,246	4	1,520	86,974,965	57,220
40 – 44	1,665	86,070,671	51,694	0 – 4	12,168	613,777,650	50,442
45 – 49	1,501	78,799,217	52,498	5 – 9	2,144	134,666,160	62,811
50 – 54	1,418	74,370,985	52,448	10 – 14	4	214,439	53,610
55 – 59	1,035	56,986,089	55,059	15 – 19	0	0	0
60 – 64	541	29,725,256	54,945	20 – 24	0	0	0
65 – 69	158	8,932,436	56,534	25 – 29	0	0	0
70 – 74	44	2,098,891	47,702	30 – 34	0	0	0
75+	8	514,433	64,304	35 – 39	0	0	0
				40+	0	0	0
Total	14,316	\$ 748,658,249	\$ 52,295	Total	14,316	\$ 748,658,249	\$ 52,295

### 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	62	0	0	0	0	0	0	0	0	62
20 – 24	1,162	9	0	0	0	0	0	0	0	1,171
25 – 29	2,377	243	0	0	0	0	0	0	0	2,620
30 – 34	1,872	396	0	0	0	0	0	0	0	2,268
35 – 39	1,486	339	0	0	0	0	0	0	0	1,825
40 – 44	1,379	286	0	0	0	0	0	0	0	1,665
45 – 49	1,232	269	0	0	0	0	0	0	0	1,501
50 – 54	1,153	264	1	0	0	0	0	0	0	1,418
55 – 59	844	188	3	0	0	0	0	0	0	1,035
60 – 64	436	105	0	0	0	0	0	0	0	541
65 – 69	121	37	0	0	0	0	0	0	0	158
70 – 74	36	8	0	0	0	0	0	0	0	44
75+	8	0	0	0	0	0	0	0	0	8
Total	12,168	2,144	4	0	0	0	0	0	0	14,316

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

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 4.3

### Member Data Reconciliation – Total PERS

	Actives	Vested Inactive	Retired	Disabled	Beneficiary	Total
Total as of July 1, 2012	12,597	36	0	0	1	12,634
Vested Termination	(98)	98	0	0	0	0
Non-vested Termination	(1,467)	(1)	0	0	0	(1,468)
Refund of Contributions	(595)	(10)	0	0	0	(605)
Disabled	(3)	0	0	3	0	0
Retired	0	0	0	0	0	0
Deceased, No Beneficiary	(16)	0	0	0	0	(16)
Deceased, With Beneficiary	0	0	0	0	0	0
Return to Active	251	(5)	0	0	0	246
Data Adjustment	167	0	0	0	0	167
New Entrant	3,480	0	0	0	0	3,480
Total as of July 1, 2013	14,316	118	0	3	1	14,438

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 4.4

### Schedule of Active Member Valuation Data – Total PERS

Valuation Date	Number	Annual Earnings (000's)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2013	14,316	\$ 748,658	\$ 52,295	4.7%	159
June 30, 2012	12,597	629,128	49,943	4.5%	160
June 30, 2011	10,965	524,088	47,796	4.8%	160
June 30, 2010	9,232	421,187	45,622	5.4%	160
June 30, 2009	7,256	314,118	43,291	7.2%	160
June 30, 2008	5,052	203,955	40,371	8.1%	159
June 30, 2006	2,827	105,611	37,358	0.0%	160

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

# **State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan**

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## **Section 5**

### **Basis of the Actuarial Valuation**

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## 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 159 employers participating in the PERS DCR Plan, including the State of Alaska, and 158 political subdivisions and public 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 employees of the State of Alaska, participating political subdivisions or public organizations. An employee must be regularly scheduled to work 30 or more hours per week to be considered full-time by the PERS. An employee must be regularly scheduled to work 15 or more hours per week but less than 30 hours to be considered a part-time employee for PERS purposes.
- Elected state officials.
- Elected municipal officials who are compensated and receive at least \$2,001.00 per month.

Members can convert to the DCR Plan if they are an eligible nonvested member of the PERS 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 PERS DCR Plan.

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## 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 for Others members and 25 years of service for Peace Officer/Firefighter members, 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 Public Employees' Retirement System Defined Contribution Retirement Plan

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## 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 for Others members or 25 years of service for Peace Officer/Firefighter members.
- Peace Officer/Firefighter members may select the defined contribution account or the monthly benefit payable as if they were retiring under Tier 3 (service continues during disability, final average salary is as of date of disability).
- 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 for Others members and 50% of salary for Peace Officer/Firefighter members.
- 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 Public Employees' Retirement System Defined Contribution Retirement Plan

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## 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. Payroll is assumed to increase by the payroll growth assumption per year for this purpose. 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 & 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 disability 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 Public Employees' Retirement System Defined Contribution Retirement Plan

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## 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 Public Employees' 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, 2013 for PERS 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, 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 and other plan design features.

No implicit subsidies are assumed. Employees projected to retire with 30 years of service prior to Medicare (25 years for PERS peace officer/firefighter) 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 Since the Prior Valuation**

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

# State of Alaska Public Employees' 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. (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)*	<u>Peace Officer/Firefighter:</u> Based upon the 2005-2009 actual mortality experience of the PERS DB Plan (see Table 2). 80% of the 1994 Group Annuity Mortality (GAM) Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and 60% for females. <u>Others:</u> Based upon the 2005-2009 actual mortality experience of the PERS DB Plan (see Table 3). 75% of the 1994 GAM Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and 55% for females. Deaths are assumed to be occupational 75% of the time for Peace Officer/Firefighter, 55% of the time for Others.
Mortality (Post-termination)*	1994 GAM Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with one-year set-forward for females. (See Table 4.)
Turnover	Select rates were estimated and ultimate rates were set to the PERS DB Plan's rates loaded by 10%. (See Table 5.)
Disability	Incidence rates based upon the 2005-2009 actual experience of the PERS DB Plan, in accordance with Table 6. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table. Disabilities are assumed to be occupational 75% of the time for Peace Officer/ Firefighter, 55% of the time for Others.
Retirement	Retirement rates were estimated in accordance with Table 7.
Marriage and Age Difference	Wives are assumed to be three years younger than husbands. 80% of male members and 70% of female members are assumed to be married.
Part-time Status	Part-time employees are assumed to earn 1.00 years of credited service per year for Peace Officer/Firefighter and 0.65 years of credited service per year for Other members.

\*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 109%.

# State of Alaska Public Employees' 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:		
		<b>Medical</b>	<b>Prescription Drugs</b>
	Pre-Medicare	\$11,125	\$ 2,621
	Medicare Parts A & B	\$ 1,726	\$ 2,621
	Medicare Part B Only	\$ 6,676	\$ 2,621
	Medicare Part D	N/A	\$ 502
Third Party Administrator Fees	\$177.57 per person per year; assumed trend rate of 5% per year.		
Base Claims Costs 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"><li>• 0.881 for the medical plan.</li><li>• 0.929 for the prescription drug plan.</li><li>• 0.998 for the annual indexing of member cost sharing.</li></ul>		

# State of Alaska Public Employees' 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.

	<b>Medical Pre-65</b>	<b>Medical Post-65</b>	<b>Prescription Drugs</b>
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%	6.1%	5.8%
FY25	6.0%	6.0%	5.7%
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. This 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

	<b>Medical</b>	<b>Prescription Drugs</b>
<b>Age</b>		
0-44	2.0%	4.5%
45-54	2.5%	3.5%
55-64	3.5%	3.0%
65-73	4.0%	1.5%
75-83	1.5%	0.5%
85-93	0.5%	0.0%
94+	0.0%	0.0%

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

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#### 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+	94.40%

##### 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.

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# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

Table 1  
Alaska PERS DCR Plan  
Salary Scale

#### Peace Officer/Firefighter:

Year of Employment	Percent Increase
1-4	6.36%
5	6.11
6	5.61
7+	4.12

#### Others:

Year of Employment	Percent Increase
1	9.60%
2	7.60
3	6.61
4	6.11
5	5.61
6+	Age-based

Rates vary slightly by age after 6 years of employment.

Age	Percent Increase
25	5.11%
30	4.99
35	4.86
40	4.70
45	4.53
50	4.61
55	4.24
60+	3.62

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

**Table 2**  
**Alaska PERS Peace Officer/Firefighter DCR Plan**  
**Mortality Table (Pre-termination)**

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.0303%	0.0135%
21	0.0323	0.0133
22	0.0345	0.0135
23	0.0380	0.0138
24	0.0419	0.0141
25	0.0470	0.0144
26	0.0534	0.0151
27	0.0569	0.0155
28	0.0590	0.0161
29	0.0609	0.0170
30	0.0627	0.0187
31	0.0642	0.0207
32	0.0656	0.0220
33	0.0663	0.0229
34	0.0664	0.0239
35	0.0666	0.0250
36	0.0674	0.0262
37	0.0697	0.0277
38	0.0721	0.0295
39	0.0753	0.0316
40	0.0792	0.0344
41	0.0837	0.0372
42	0.0890	0.0400
43	0.0943	0.0425
44	0.0997	0.0447
45	0.1059	0.0462
46	0.1133	0.0481
47	0.1226	0.0508
48	0.1331	0.0551
49	0.1445	0.0598
50	0.1571	0.0665
51	0.1716	0.0745
52	0.1883	0.0856
53	0.2100	0.0978
54	0.2331	0.1111
55	0.2644	0.1270
56	0.3015	0.1474
57	0.3466	0.1712
58	0.3989	0.1970
59	0.4489	0.2266
60	0.5050	0.2604



# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

**Table 3**  
**Alaska PERS Others DCR Plan**  
**Mortality Table (Pre-termination)**

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.0284%	.0123%
21	.0303	.0122
22	.0324	.0123
23	.0356	.0127
24	.0392	.0129
25	.0441	.0132
26	.0501	.0138
27	.0533	.0142
28	.0553	.0148
29	.0571	.0156
30	.0588	.0171
31	.0602	.0189
32	.0615	.0202
33	.0622	.0210
34	.0623	.0219
35	.0624	.0229
36	.0632	.0240
37	.0653	.0254
38	.0676	.0271
39	.0706	.0289
40	.0742	.0315
41	.0785	.0341
42	.0834	.0366
43	.0884	.0389
44	.0935	.0409
45	.0993	.0423
46	.1063	.0441
47	.1149	.0466
48	.1248	.0505
49	.1354	.0548
50	.1473	.0610
51	.1609	.0683
52	.1765	.0784
53	.1969	.0897
54	.2186	.1018
55	.2479	.1164
56	.2827	.1352
57	.3249	.1570
58	.3739	.1806
59	.4208	.2077
60	.4734	.2387

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

**Table 4**  
**Alaska PERS DCR Plan**  
**Mortality Table (Post-termination)**

<u>Age</u>	<u>Male</u>	<u>Female</u>
50	0.1964%	0.1241%
51	0.2145	0.1426
52	0.2354	0.1631
53	0.2625	0.1851
54	0.2914	0.2117
55	0.3305	0.2457
56	0.3769	0.2854
57	0.4333	0.3284
58	0.4986	0.3777
59	0.5611	0.4339
60	0.6312	0.4979
61	0.7251	0.5701
62	0.8188	0.6527
63	0.9436	0.7450
64	1.0644	0.8442
65	1.1956	0.9476
66	1.3618	1.0523
67	1.5123	1.1499
68	1.6336	1.2424
69	1.7873	1.3422
70	1.9147	1.4342
71	2.0940	1.5830
72	2.2981	1.7260
73	2.5175	1.9177
74	2.7475	2.0940
75	3.0609	2.3377
76	3.0609	2.6690
77	3.7879	2.9853
78	4.2924	3.3273
79	4.8681	3.7068
80	5.5102	4.1355
81	6.2135	4.6249
82	6.9722	5.1616
83	7.6164	5.7377
84	8.4319	6.4966
85	9.1495	7.3658

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

**Table 5**  
**Alaska PERS DCR Plan**  
**Turnover Assumptions**

Peace Officer/Firefighter:

#### Select Rates of Turnover During the First 5 Years of Employment

Year of Employment	Rate
1	15%
2	12%
3	10%
4	9%
5	8%

#### Ultimate Rates of Turnover After the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
20	4.5263%	5.7054%	45	4.1616%	5.3309%
21	4.5208	5.7028	46	4.1102	5.2844
22	4.5147	5.7002	47	4.0500	5.2300
23	4.5076	5.6979	48	3.9838	5.1703
24	4.4983	5.6939	49	3.9139	5.1088
25	4.4904	5.6920	50	3.8376	5.0419
26	4.4829	5.6893	51	3.7480	4.9627
27	4.4729	5.6818	52	3.6377	4.8621
28	4.4651	5.6751	53	3.5111	4.7458
29	4.4561	5.6656	54	3.3711	4.6171
30	4.4492	5.6574	55	3.2063	4.4617
31	4.4410	5.6467	56	2.9998	4.2580
32	4.4349	5.6376	57	2.7433	3.9959
33	4.4286	5.6264	58	2.4705	3.7140
34	4.4237	5.6148	59	2.1189	3.3355
35	4.4169	5.6007	60	1.7240	2.9081
36	4.4088	5.5856	61	1.2905	2.4421
37	4.3959	5.5672	62	0.7855	1.9006
38	4.3798	5.5474	63	0.2146	1.2892
39	4.3615	5.5260	64	4.7520	0.6289
40	4.3413	5.5039	65+	4.7520	5.9400
41	4.3175	5.4794			
42	4.2869	5.4494			
43	4.2525	5.4167			
44	4.2106	5.3772			

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

**Table 5**  
**Alaska PERS DCR Plan**  
**Turnover Assumptions**

Others:

#### Select Rates of Turnover During the First 5 Years of Employment

Year of Employment	Rate
1	29%
2	25%
3	20%
4	16%
5	15%

#### Ultimate Rates of Turnover After the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
20	10.4500%	15.0446%	45	5.7664%	6.6418%
21	10.4500	15.0442	46	5.7411	6.6260
22	10.4500	15.0424	47	5.7110	6.6061
23	10.4500	15.0421	48	5.6759	6.5825
24	10.4500	15.0407	49	5.6397	6.5591
25	10.4500	15.0407	50	5.5982	6.5318
26	10.4500	15.0403	51	5.5505	6.5002
27	10.4500	15.0379	52	5.4941	6.4620
28	10.4500	15.0346	53	5.4300	6.4184
29	10.4500	15.0307	54	5.3605	6.3716
30	10.4500	13.8600	55	5.2807	6.3160
31	9.9000	13.0900	56	5.1834	6.2432
32	9.2400	12.2100	57	5.0650	6.1491
33	8.5030	11.5500	58	4.9352	6.0429
34	8.0850	10.8900	59	4.7792	5.9079
35	7.7000	10.2300	60	4.6045	5.7553
36	7.3700	9.5700	61	4.4089	5.5858
37	7.0950	9.1300	62	4.1829	5.3912
38	6.8750	8.6900	63	3.9259	5.1701
39	6.7100	8.3600	64	3.6453	4.9289
40	6.4900	8.0818	65+	6.0500	6.8750
41	6.3030	8.0705			
42	6.1050	8.0578			
43	5.9290	8.0461			
44	5.7966	8.0325			

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

**Table 6**  
**Alaska PERS DCR Plan**  
**Disability Table**

<u>Age</u>	<u>Peace Officer/ Firefighter</u>	<u>Other Member Rate</u>	
	<u>Rate</u>	<u>Male</u>	<u>Female</u>
20	.088%	.031%	.024%
21	.089	.031	.024
22	.090	.032	.024
23	.091	.032	.024
24	.093	.033	.025
25	.094	.033	.025
26	.095	.033	.025
27	.098	.034	.026
28	.100	.035	.027
29	.103	.036	.028
30	.105	.037	.029
31	.108	.037	.029
32	.110	.038	.029
33	.113	.039	.030
34	.116	.041	.031
35	.120	.042	.032
36	.124	.044	.034
37	.129	.045	.035
38	.134	.047	.036
39	.139	.048	.037
40	.144	.050	.039
41	.150	.052	.040
42	.159	.056	.043
43	.170	.059	.045
44	.185	.065	.050
45	.203	.071	.055
46	.220	.077	.059
47	.239	.083	.064
48	.259	.091	.070
49	.279	.097	.075
50	.300	.105	.081
51	.325	.114	.087
52	.358	.125	.096
53	.398	.139	.107
54	.444	.155	.119
55	.500	.175	.134
56	.574	.201	.155
57	.668	.234	.180
58	.763	.267	.205
59	.900	.315	.242
60	1.054	.368	.283

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## Section 5.3 (cont'd)

### Summary of Actuarial Assumptions and Changes in Assumptions

Table 7  
Alaska PERS 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 Public Employees' Retirement System Defined Contribution Retirement Plan

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## 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 actuarial assumptions since the prior valuation.

# State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

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## *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