

State of Alaska National Guard and Naval Militia Retirement System

Actuarial Valuation Report
as of June 30, 2014

October 2015



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October 6, 2015

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The Alaska Retirement Management Board
The Department of Revenue, Treasury Division
The Department of Administration, Division of Retirement and Benefits
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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 National Guard and Naval Militia Retirement System (NGNMRS) as of June 30, 2014 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, 2014. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under the System 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 System.

The contribution requirements reflect the cost of benefits accruing in FY13 and FY14 and an amortization as a level dollar amount of the initial unfunded accrued liability and subsequent gains/losses over a period of 20 years less average military service of active members. The contribution levels are recommended by the actuary and adopted by the Board each year. 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 System and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the System. The actuary performs an analysis of System 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 2014. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 5.2.

The assumptions and methods used to determine the Actuarially Determined Contributions (ADC) to the State of Alaska National Guard and Naval Militia System as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statements No. 67, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans.

Both of the undersigned are Associates of the Society of Actuaries and 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. 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



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Executive Summary

Overview

The State of Alaska National Guard and Naval Militia Retirement System provides pension benefits to the National Guard, naval militia and other eligible members. The Commissioner of the Department of Administration is responsible for administering the System. The Alaska Retirement Management Board has fiduciary responsibility over the assets of the System. This report presents the results of the actuarial valuation of the System benefits as of the valuation date of June 30, 2014.

Purpose

An actuarial valuation is performed on the retirement plan bi-annually as of the beginning of the fiscal year, and roll-forward valuations are performed every other year. The main purposes of the actuarial valuation detailed in this report are:

1. To determine the annual contribution necessary to meet the Board's funding policy for the System;
2. To disclose the funding assets and liability measures as of the valuation date;
3. To disclose the accounting measures for the System required by GASB Nos. 67 as of the end of the last fiscal year;
4. To review the current funded status of the System;
5. To compare actual and expected experience under the System 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 the NGNMRS 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 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. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

Funded Status and Recommended Contributions

The funded 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 on the valuation date. A comparative summary of the funding ratio from the prior and current actuarial valuations follows:

Funded Status as of June 30	2012	2014
(1) Valuation Assets	\$ 33,682,091	\$ 36,271,836
(2) Accrued Liability	32,771,017	36,715,287
(3) Funded Ratio, (1) ÷ (2)	102.8%	98.8%

Recommended Contribution Amounts	FY15	FY17
(1) Normal Cost	\$ 631,921	\$ 603,495
(2) Past Service Cost	(142,594)	69,405
(3) Expense Load	<u>138,000</u>	<u>194,000</u>
(4) Total Annual Contribution, (1) + (2) + (3)	\$ 627,327	\$ 866,900

The recommended contribution amount for FY16 based on a roll-forward valuation as of June 30, 2013 is \$734,560.

Analysis of the Valuation

The funding ratio decreased from 102.8% at June 30, 2012, to 98.8% at June 30, 2014. This decrease was due to both the changes in actuarial assumptions as a result of the 2014 experience analysis, and the incoming census data reflecting 224 vested members not previously reported.

The annual rate of return based on fair value of assets during the year was 13.40%. The annual rate of return on actuarial value of assets during the year was 8.78%, compared to the assumed rate of 7.00%, resulting in an actuarial gain from investment return of approximately \$0.6 million for FY14.

Effective for the June 30, 2014 valuation, the Board adopted the changes to the demographic assumptions recommended by the actuary based on the results of an experience analysis performed on the population experience from July 1, 2009 through June 30, 2013. The changes in assumptions were adopted by the Board during the December 2014 Board meeting.

Section 1 Actuarial Funding Results

Section 1.1: Actuarial Liabilities and Normal Cost

As of June 30, 2014	Normal Cost	Accrued Liability	Present Value of Projected Benefits
Active Members			
1. Retirement Benefits	\$ 577,224	\$ 11,641,314	\$ 15,183,360
2. Termination Benefits	0	0	0
3. Death Benefits	15,887	224,486	322,005
4. Disability Benefits	10,384	220,289	283,934
5. Total Active Actuarial Value (1) + (2) + (3) + (4)	\$ 603,495	\$ 12,086,089	\$ 15,789,299
Inactive Members			
6. Vested Terminated*		\$ 19,412,164	\$ 19,412,164
7. Retirees (including QDROs)		5,217,034	5,217,034
8. Total Inactive Actuarial Value (6) + (7)		\$ 24,629,198	\$ 24,629,198
Total Actuarial Value (5) + (8)	\$ 603,495	\$ 36,715,287	\$ 40,418,497

*Includes accrued liability of \$1,966,507 for additional vested members not previously reported.

Section 1.2: Actuarial Contribution – FY17

1. Accrued Liability	\$	36,715,287
2. Actuarial Value of Assets		36,271,836
3. Total Unfunded Accrued Liability, (1) – (2)	\$	443,451
4. Amortization Factor (8.0 years) (assuming payments at beginning of the year)		6.389289
5. Past Service Payment, (3) ÷ (4)	\$	69,405
6. Normal Cost		603,495
7. Expense Load		194,000
8. Total Contribution, (5) + (6) + (7)	\$	866,900

Section 1.3: Actuarial Gain/(Loss) for FY14

1. Accrued Liability, June 30, 2013	\$ 33,907,968
2. Normal Cost for FY14	631,921
3. Interest on (1) and (2) at 7.00%	2,417,792
4. Benefit Payments for FY14	1,610,506
5. Interest on (4) at 7.00% for one-half year	55,414
6. Change in Assumptions	<u>145,422</u>
7. Expected Accrued Liability, June 30, 2014 (1) + (2) + (3) – (4) – (5) + (6)	\$ 35,437,183
8. Accrued Liability, June 30, 2014	<u>36,715,287</u>
9. Liability Gain/(Loss) (7) – (8)	\$ (1,278,104)
10. Valuation Assets, June 30, 2013	\$ 34,178,622
11. Interest on (10) at 7.00%	2,392,504
12. Contributions for FY14	740,100
13. Interest on (12) at 7.00% for one-half year	25,465
14. Benefit Payments for FY14	1,610,506
15. Interest on (14) at 7.00% for one-half year	<u>55,414</u>
16. Expected Valuation Assets, June 30, 2014 (10) + (11) + (12) + (13) – (14) – (15)	\$ 35,670,771
17. Valuation Assets, June 30, 2014	<u>36,271,836</u>
18. Asset Gain/(Loss) (17) – (16)	\$ 601,065
19. Actuarial Gain/(Loss) (9) + (18)	\$ (677,039)

Section 1.4: Development of Change in Unfunded Liability during FY14

1.	2013 Unfunded Liability		\$ (270,654)
	a. Interest on Unfunded Liability	\$ (18,946)	
	b. Normal Cost	631,921	
	c. Employer Contributions	(740,100)	
	d. Interest on b. and c.	18,769	
	e. Change in Assumptions	<u>145,422</u>	
	f. Expected Change in Liability during FY14		<u>37,066</u>
2.	Expected 2014 Unfunded Liability		\$ (233,588)
	a. Liability (gain)/loss	\$ 1,278,104	
	b. Asset (gain)/loss	<u>(601,065)</u>	
	c. Total (gain)/loss during FY14		<u>677,039</u>
3.	Actual 2014 Unfunded Liability		\$ 443,451

Section 1.5: History of UAAL and Funded Ratio

Valuation Date	Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)
June 30, 2000	\$ 17,967,471	\$ 13,734,397	76.4%	\$ 4,233,074
June 30, 2002	\$ 20,545,214	\$ 12,114,025	59.0%	\$ 8,431,189
June 30, 2004	\$ 19,749,305	\$ 13,391,055	67.8%	\$ 6,358,250
June 30, 2006	\$ 25,457,589	\$ 15,587,569	61.2%	\$ 9,870,020
June 30, 2007	\$ 26,289,978	\$ 16,882,529	64.2%	\$ 9,407,449
June 30, 2008	\$ 28,904,645	\$ 28,370,756	98.2%	\$ 533,889
June 30, 2009	\$ 30,208,411	\$ 30,123,348	99.7%	\$ 85,063
June 30, 2010	\$ 30,034,407	\$ 32,000,585	106.5%	\$ (1,966,178)
June 30, 2011	\$ 31,324,457	\$ 33,019,577	105.4%	\$ (1,695,120)
June 30, 2012	\$ 32,771,017	\$ 33,682,091	102.8%	\$ (911,074)
June 30, 2013	\$ 33,907,968	\$ 34,178,622	100.8%	\$ (270,654)
June 30, 2014	\$ 36,715,287	\$ 36,271,836	98.8%	\$ 443,451

Section 2 Plan Assets

Section 2.1: Summary of Fair Value of Assets

Net Assets as of June 30	2013	2014
Assets		
1. Cash and Cash Equivalents	\$ 2,008,913	\$ 1,123,670
2. Domestic Equity Pool	8,959,877	10,905,158
3. International Equity Pool	5,011,394	6,478,897
4. Retirement Fixed Income Pool	0	0
5. Domestic Fixed Income Pool	10,005,488	13,861,580
6. Frontier Market Pool	0	143,678
7. International Fixed Income Pool	2,590,401	1,739,439
8. Emerging Market Debt	1,102,771	272,439
9. Emerging Market Equity Pool	757,507	904,049
10. Taxable Municipal Bonds	0	394,806
11. High Yield Pool	<u>3,704,736</u>	<u>1,732,247</u>
12. Total Assets		
Sum of (1) through (11)	\$ 34,141,087	\$ 37,555,963
Liabilities		
13. Accrued expenses	\$ 88,225	\$ 68,635
14. Due to State of Alaska General Fund	<u>19,710</u>	<u>20,223</u>
15. Total Liabilities (13) + (14)	\$ 107,935	\$ 88,858
Total Net Assets (12) – (15)	\$ 34,033,152	\$ 37,467,105

Section 2.2: Changes in Fair Value of Assets

Net Assets as of June 30	2013	2014
Receipts		
1. Employer Contributions	\$ 739,100	\$ 740,100
2. Investment Income	2,670,428	4,608,493
3. Other Income	<u>4</u>	<u>21</u>
4. Total Receipts (1) + (2) + (3)	\$ 3,409,532	\$ 5,348,614
Disbursements		
5. Retirement Benefits	\$ 1,772,198	\$ 1,610,506
6. Administrative Expenses	165,651	223,334
7. Investment Expenses	<u>76,965</u>	<u>80,821</u>
8. Total Disbursements (5) +(6) + (7)	\$ 2,014,814	\$ 1,914,661
9. Net Income (4) - (8)	\$ 1,394,718	\$ 3,433,953
10. Net Assets Available for Benefits at beginning of year	<u>32,638,434</u>	<u>34,033,152</u>
11. Net Assets Available for Benefits at end of year (9) + (10)	\$ 34,033,152	\$ 37,467,105
Estimated Investment Return, Net of Expenses	7.6%	13.4%*

*Based on money-weighted rate of return used in GASB 67 calculations.

Section 2.3: Actuarial Value of Assets

The actuarial value of assets was equal to the market value 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 market value as of the current valuation date.

In Thousands	
1. Deferral of Investment Gain/(Loss)	
a. Market Value, June 30, 2013	\$ 34,033,152
b. Contributions for FY14	740,100
c. Benefit Payments for FY14	1,610,506
d. Actual Investment Return (net of expenses)	4,304,338
e. Expected Return Rate (net of expenses)	7.00%
f. Expected Return - Weighted for Timing	2,352,372
g. Investment Gain/(Loss) for the Year (d. - f.)	1,951,966
h. Deferred Investment Gain/(Loss), June 30, 2014	1,195,269
2. Actuarial Value, June 30, 2014	
a. Market Value, June 30, 2014	\$ 37,467,105
b. Deferred Investment Gain/(Loss), June 30, 2014	<u>1,195,269</u>
c. Preliminary Actuarial Value, June 30, 2014 (a. - b.)	\$ 36,271,836
d. Upper Limit: 120% of Market Value, June 30, 2014	\$ 44,960,526
e. Lower Limit: 80% of Market Value, June 30, 2014	\$ 29,973,684
f. Actuarial Value, June 30, 2014 (c. limited by d. and e.)	\$ 36,271,836
g. Ratio of Actuarial Value of Assets to Market Value of Assets	96.8%
h. Approximate Actuarial Value Investment Return Rate During FY14 Net of All Expenses	8.8%

The table below shows the development of asset gain/(loss).

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2010	\$ 1,168,219	\$ 934,576	\$ 233,643	\$ 0
6/30/2011	1,882,093	1,129,257	376,418	376,418
6/30/2012	(2,124,811)	(849,924)	(424,962)	(849,925)
6/30/2013	178,673	35,735	35,735	107,203
6/30/2014	1,951,966	0	390,393	1,561,573
Total	\$ 3,056,140	\$ 1,249,644	\$ 611,227	\$ 1,195,269

Section 2.4: Historical Asset Rate of Return

Year Ending	Actuarial Value		Fair Value	
	Annual	Cumulative	Annual*	Cumulative
June 30, 2005	N/A	N/A	6.4%	6.4%
June 30, 2006	N/A	N/A	5.2%	5.8%
June 30, 2007	8.4%	8.4%	13.1%	8.2%
June 30, 2008	6.4%	7.4%	(2.3)%	5.5%
June 30, 2009	2.8%	5.8%	(9.8)%	2.2%
June 30, 2010	3.0%	5.1%	11.8%	3.8%
June 30, 2011	4.6%	5.0%	13.4%	5.1%
June 30, 2012	3.4%	4.7%	0.5%	4.5%
June 30, 2013	4.6%	4.7%	7.6%	4.8%
June 30, 2014	8.8 %	5.2%	13.4 %	5.7%

*Rates of return after June 30, 2013 are based on money-weighted rate of return used in GASB 67.

Section 3 Accounting Information

Section 3.1: Historical Exhibits

The exhibit below shows the pension disclosure under GASB No. 25 for fiscal years ending in 1998 through 2012.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (AAL) ¹ (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) ÷ c)
June 30, 1998	\$ 12,671,276	\$ 14,252,184	\$ 1,580,908	88.9%	N/A	N/A
June 30, 2000	13,734,397	17,967,471	4,233,074	76.4%	N/A	N/A
June 30, 2002	12,114,025	20,545,214	8,431,189	59.0%	N/A	N/A
June 30, 2004	13,391,055	19,749,305	6,358,250	67.8%	N/A	N/A
June 30, 2006	15,587,569	25,457,589	9,870,020	61.2%	N/A	N/A
June 30, 2008	28,370,756	28,904,645	533,889	98.2%	N/A	N/A
June 30, 2010	32,000,585	30,034,407	(1,966,178)	106.5%	N/A	N/A
June 30, 2012	33,682,091	32,771,017	(911,074)	102.8%	N/A	N/A

¹ Prior to the June 30, 2006 valuation, Projected Unit Credit was the actuarial cost method used to determine actuarial accrued liability. Effective for the June 30, 2006 valuation, the Entry Age Normal Level Dollar Cost Method is used.

Fiscal Year Ended June 30	Annual Required Contribution	Actual Annual Contribution	Supplemental Contributions	Total Contributions	Percentage Contributed
1996	\$ 1,359,862	\$ 1,104,400	\$ 8,000,000 ¹	\$ 9,104,400	669.5%
1997	1,626,000	1,434,900	0	1,434,900	88.2%
1998	1,626,000	1,434,900	0	1,434,900	88.2%
1999	1,104,519	1,104,519	0	1,104,519	100.0%
2000	1,104,519	1,104,500	0	1,104,500	100.0%
2001	879,784	879,800	0	879,800	100.0%
2002	879,784	879,800	0	879,800	100.0%
2003	1,322,502	1,322,500	0	1,322,500	100.0%
2004	1,322,502	1,322,500	0	1,322,500	100.0%
2005	2,025,257	1,996,800	0	1,996,800	98.6%
2006	2,025,257	2,053,800	0	2,053,800	101.4%
2007	1,737,406	1,737,406	0	1,737,406	100.0%
2008	1,737,406	1,737,406	10,000,000 ²	11,737,406	675.6%
2009	2,473,282	2,473,300	0	2,473,300	100.0%
2010	2,415,077	2,603,300	0	2,603,300	107.8%
2011	965,329	965,375	0	965,375	100.0%
2012	895,565	895,611	0	965,611	100.0%
2013	431,367	739,100	0	739,100	171.3%

¹ During the year ended June 30, 1996, the System received an \$8,000,000 supplemental appropriation from the State of Alaska General Fund to increase System funding. This appropriation was in addition to the amount designated for the 1996 actuarial required contribution. The original contribution requirements for the years ended June 30, 1998 and 1997 were calculated to be \$2,584,919. These contribution requirements were revised to \$1,626,000 as a result of the supplemental contribution in fiscal year 1996

² During the year ended June 30, 2008, the System received a \$10,000,000 supplemental appropriation from the State of Alaska General Fund to increase System funding.

Section 3.2: Pension – GASB 67

Notes to the Financial Statements for the Year Ended June 30, 2014

Summary of Significant Accounting Policies

Method used to value investments. Investments are reported at fair value.

Plan Description

Plan administration. The Commissioner of Administration is responsible for administering NGNMRS. The Alaska Retirement Management Board is responsible for managing and investing the fund

Plan membership. At June 30, 2012, pension plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits	608
Inactive plan members entitled to but not yet receiving benefits	1,308
Active plan members	<u>4,397</u>
Total	<u>6,313</u>

Benefits provided. Please see Section 5.1 of the 2012 actuarial valuation report for a summary of plan provisions.

Contributions. The Board establishes contributions based on an actuarially determined contribution rate recommended by an independent actuary pursuant to State statutes. The actuarially determined contribution rate is the estimated amount as a percentage of payroll necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. For the year ended June 30, 2014, the State of Alaska contributed \$740,100 to the plan.

Investments

Rate of return. For the year ended June 30, 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 13.37%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Receivables

N/A.

Net Pension Liability (Asset)

The components of the net pension liability (asset) at June 30, 2014, were as follows:

Total pension liability	\$	35,311,535
Plan fiduciary net position		<u>(37,467,105)</u>
Employers net pension liability (asset)	\$	(2,155,570)
Plan fiduciary net position as a percentage of the total pension liability (asset)		106.10%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2012, using the following actuarial assumptions, applied to all periods included in the measurement, and rolled forward to the measurement date of June 30, 2014:

Inflation	3.12%
Salary increases	N/A
Investment rate of return	7.00%, net of pension plan investment expenses. This is based on an average inflation rate of 3.12% and a real rate of return of 3.88%.

Mortality rates were based on the 1994 Group Annuity Mortality (GAM) Table, sex distinct, 1994 Base Year without margin, projected to 2013 using Projection Scale AA, 80% of the male table for males and 60% of the female table for females for pre-termination mortality and the 1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year set-forward for females for post-termination mortality.

The actuarial assumptions used in the June 30, 2012 actuarial valuation were based on the results of an actuarial experience study for the period from July 1, 2005 to June 30, 2009, resulting in changes in actuarial assumptions adopted by the Alaska Retirement Management Board to better reflect expected future experience.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2010 are summarized in the following table (note that the rates shown below exclude the inflation component):

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic Equity	6.77%
International Equity	7.50%
Fixed Income	2.05%

Discount rate. The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that Employer and State contributions will continue to follow the current funding policy which meets State statutes. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability, calculated using the discount rate of 7.00%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.0%)	Current Discount Rate (7.0%)	1% Increase (8.0%)
Net Pension Liability (Asset)	\$ (450,532)	\$ (2,155,570)	\$ (3,686,221)

Schedules of Required Supplementary Information

Schedule of Changes in the Net Pension Liability (Asset) and Related Ratios

	FYE June 30, 2013	FYE June 30, 2014
Total pension liability		
Service cost	\$ 631,921	\$ 654,797
Interest	2,277,228	2,359,276
Changes of benefit terms	0	0
Differences between expected and actual experience	0	0
Changes of assumptions	0	0
Benefit payments	<u>(1,772,198)</u>	<u>(1,610,506)</u>
Net change in total pension liability	\$ 1,136,951	\$ 1,403,567
Total pension liability-beginning	<u>32,771,017</u>	<u>33,907,968</u>
Total pension liability-ending (a)	\$ 33,907,968	\$ 35,311,535
Plan fiduciary net position		
Contributions – employer	\$ 739,100	\$ 740,100
Contributions – members	0	0
Net investment income	2,593,463	4,527,672
Benefit payments, including refunds of member contributions	(1,772,198)	(1,610,506)
Administrative expenses	(165,651)	(223,334)
Other	<u>4</u>	<u>21</u>
Net change in Plan fiduciary net position	\$ 1,394,718	\$ 3,433,953
Plan fiduciary net position-beginning	<u>32,638,434</u>	<u>34,033,152</u>
Plan fiduciary net position-ending (b)	\$ 34,033,152	\$ 37,467,105
Plan's net pension liability (asset)-ending (a)-(b)	\$ (125,184)	\$ (2,155,570)
Plan fiduciary net position as a percentage of the total pension liability	100.37%	106.10%
Covered-employee payroll	N/A	N/A
Net pension liability (asset) as a percentage of covered-employee payroll	N/A	N/A

Notes to Schedule

Benefit changes. None.

Changes of assumptions. None.

Schedule of Employer Contributions

	FYE June 30, 2013	FYE June 30, 2014
Actuarially determined contribution	\$ 431,367	\$ 474,791
Contributions related to the actuarially determined contribution	<u>739,100</u>	<u>740,100</u>
Contribution deficiency (excess)	\$ (307,733)	\$ (265,309)
Covered employee payroll	N/A	N/A
Contributions as a percentage of covered employee payroll	N/A	N/A

Notes to Schedule

Valuation date: June 30, 2012

Actuarially determined contribution rates are calculated as of June 30th, two years prior to the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial cost method:	Entry Age Normal.
Amortization method	Level dollar, open.
Amortization period	20 years less average military service of active members.
Equivalent single amortization period	8 years.
Asset valuation method	Actuarial value that smooth's investment gains and losses over 5 years, constrained to a range of 80% - 120% of fair value.
Inflation	3.12% per annum.
Investment rate of return	7.00%, net of pension plan investment expenses. This is based on an average inflation rate of 3.12% and a real rate of return of 3.88%.
Retirement age	An age-related assumption is used for participants not yet receiving payments.

Mortality

1994 Group Annuity Mortality (GAM) Table, sex distinct, 1994 Base Year without margin, projected to 2013 using Projection Scale AA, 80% of the male table for males and 60% of the female table for females for pre-termination mortality and the 1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year set-forward for females for post-termination mortality.

Other information

Please see Section 5 of the 2012 actuarial report.

Section 3.3: Notes to Trend Data

Valuation Date	June 30, 2014
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level dollar, open
Amortization Period	20 years less average military service of active members
Asset Valuation Method	5-year smoothed market
Actuarial Assumptions	
Investment rate of return*	7.00% per annum
Projected salary increases	None
Cost-of-living adjustment	None

Section 4 Member Data

Section 4.1: Summary of Members Included

Census Information as of June 30	2012	2014
Active Air Guard Members		
Number	2,446	2,164
Number Vested	651	591
Average Age	36.00	36.52
Average Alaska Guard Service	8.10	8.95
Average Total Military Service	13.87	14.44
Active Army Guard Members		
Number	1,899	1,911
Number Vested	264	242
Average Age	31.81	31.72
Average Alaska Guard Service	5.10	5.37
Average Total Military Service	9.74	9.83
Active Naval Militia Members		
Number	52	64
Number Vested	5	7
Average Age	33.93	33.75
Average Alaska Militia Service	4.63	4.67
Average Total Military Service	9.58	10.48
Total Active Members		
Number	4,397	4,139
Number Vested	920	840
Average Age	34.16	34.26
Average Alaska Guard Service	6.76	7.23
Average Total Military Service	12.04	12.25
Vested Terminated Members		
Number	1,308	1,756
Average Age	56.49	56.58
Average Alaska Guard Service	17.52	15.58
Average Total Military Service	25.34	25.27
Retirees (including QDROs)		
Number	608	639
Average Age	57.95	58.29
Average Years Remaining	11.90	11.71

Section 4.2(a) Age and Service Distributions of Active Members – All Actives

Total Alaska Guard Service										
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	167	0	0	0	0	0	0	0	0	167
20-24	596	107	0	0	0	0	0	0	0	703
25-29	402	290	38	0	0	0	0	0	0	730
30-34	291	343	147	11	0	0	0	0	0	792
35-39	167	214	112	65	11	0	0	0	0	569
40-44	82	147	129	67	49	3	0	0	0	477
45-49	37	90	100	67	61	22	1	0	0	378
50-54	17	32	35	49	47	29	7	0	0	216
55-59	6	15	5	9	22	21	7	3	0	88
60-64	1	2	2	3	2	3	1	2	0	16
65-69	0	0	1	1	1	0	0	0	0	3
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	1,766	1,240	569	272	193	78	16	5	0	4,139

Section 4.2(b) Age and Service Distributions of Active Members – Air Actives

Total Alaska Guard Service										
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	34	0	0	0	0	0	0	0	0	34
20-24	177	52	0	0	0	0	0	0	0	229
25-29	147	153	26	0	0	0	0	0	0	326
30-34	139	235	99	6	0	0	0	0	0	479
35-39	75	134	73	46	11	0	0	0	0	339
40-44	30	87	95	49	35	1	0	0	0	297
45-49	12	55	62	52	49	15	1	0	0	246
50-54	5	16	23	29	39	21	5	0	0	138
55-59	4	8	2	5	18	15	5	3	0	60
60-64	0	2	2	3	2	1	1	2	0	13
65-69	0	0	1	1	1	0	0	0	0	3
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	623	742	383	191	155	53	12	5	0	2,164

Section 4.2(c) Age and Service Distributions of Active Members – Army Actives

Total Alaska Guard Service										
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	132	0	0	0	0	0	0	0	0	132
20-24	407	55	0	0	0	0	0	0	0	462
25-29	242	132	12	0	0	0	0	0	0	386
30-34	147	107	48	5	0	0	0	0	0	307
35-39	85	78	38	19	0	0	0	0	0	220
40-44	49	59	33	18	14	2	0	0	0	175
45-49	24	34	37	14	11	7	0	0	0	127
50-54	11	15	12	17	8	8	2	0	0	73
55-59	2	7	3	4	3	6	2	0	0	27
60-64	1	0	0	0	0	1	0	0	0	2
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	1,100	487	183	77	36	24	4	0	0	1,911

Section 4.2(d) Age and Service Distributions of Active Members – Navy Actives

Total Alaska Guard Service										
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	1	0	0	0	0	0	0	0	0	1
0-24	12	0	0	0	0	0	0	0	0	12
25-29	13	5	0	0	0	0	0	0	0	18
30-34	5	1	0	0	0	0	0	0	0	6
35-39	7	2	1	0	0	0	0	0	0	10
40-44	3	1	1	0	0	0	0	0	0	5
45-49	1	1	1	1	1	0	0	0	0	5
50-54	1	1	0	3	0	0	0	0	0	5
55-59	0	0	0	0	1	0	0	0	0	1
60-64	0	0	0	0	0	1	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	43	11	3	4	2	1	0	0	0	64

Section 4.3: Member Data Reconciliation

	Active Members	Vested Members	Benefit Recipients	Total
Total at June 30, 2012	4,397	1,308	608	6,313
New Entrants	728	0	0	728
Rehires	37	(2)	0	35
Nonvested Terminations	(710)	0	0	(710)
Vested Terminations	(248)	248	0	0
Retirements	(75)	(12)	87	0
New Survivors	0	0	0	0
New QDROs	0	0	0	0
Deaths	(1)	(8)	(7)	(16)
Data Change/Expiration of Benefits	11	222*	(49)	184
Total at June 30, 2014	4,139	1,756	639	6,534

*Includes 132 participants that were previously nonvested terminations and 92 vested members not previously reported, and less one member receiving a cashout and another member determined to be non-vested.

Section 5 Basis of the Actuarial Valuation

Section 5.1: Summary of Plan Provisions and Changes in Plan Provisions

1. Effective Date

January 1, 1973

Members Included

Members of the Alaska National Guard who were active on or after January 1, 1973, and members of the Alaska Naval Militia who were active on or after July 1, 1980.

Eligibility Service

Eligibility service is defined as the combined Alaska guard service, guard service in any other state, active military service and the reserves of them. A member must have 20 years of eligibility service to be vested in the National Guard and Naval Militia Retirement System.

Benefit Service

Benefit service is defined as satisfactory service in any branch of the Alaska guard. A member must have 5 years of benefit service to be vested in the National Guard and Naval Militia Retirement System. Benefit service is also used to determine the length of the member's pension retirement benefit.

Retirement

a. Eligibility:

Members are eligible for voluntary retirement after completing 20 years of satisfactory service in the Alaska National Guard, Alaska Naval Militia or U.S. Armed Forces, and the reserve of them or any combination of that service if they have at least five years of Alaska National Guard or Naval Militia service. Credit is also allowed for Territorial Guard service rendered to the former territory of Alaska.

Members are eligible for involuntary retirement at any time assuming there has been no misconduct.

b. Benefit:

Eligible members may elect to receive:

- (i) monthly benefits of \$100 which are payable for a period equal to the number of months that they were active members;
- (ii) a lump sum benefit equal to the actuarial equivalent of (i); or
- (iii) monthly payments until age 72 equal to the actuarial equivalent of (i).

Vesting

Members are 100% vested after 20 years of total service in the Alaska National Guard, Alaska Naval Militia, U.S. Armed Forces or Reserves, or any combination of that service if members have at least five years of Alaska National Guard or Naval Militia service.

Death Benefits

a. Active Members: If the member has at least five years of active service in the Alaska National Guard or Naval Militia, the designated beneficiary will receive a lump sum benefit equal to the benefit in 5(b) above.

b. Retired or Terminated Vested Members:

The designated beneficiary will receive a lump benefit equal to the remaining benefits payable in 5(b) above.

Disability Benefits

Members are eligible to receive monthly disability benefits of \$100 (which are payable for a period equal to the number of months that they were active members) at any age if they become incapacitated and are vested in the plan.

Section 5.2: Summary of Actuarial Methods and Assumptions

1. **Actuarial Method** – Entry Age Normal Actuarial Cost. Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 20 years less the average total military service of active members.

The 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 Liability is the excess of the actuarial accrued liability over the actuarial value of system assets measured on the valuation date.

Under this method, differences between the actual experience and that assumed in the determination of costs and liabilities will emerge as adjustments in the Unfunded Liability, subject to amortization.

2. Actuarial Assumptions

- a. Interest 7.00% per year, compounded annually, net of investment expenses.

- b. Administrative Expenses The expense load is equal to the average of the prior 2 years actual administrative expenses rounded to the nearest \$1,000 as follows:

Fiscal Year Ending June 30	Amount
2013	\$ 165,651
2014	<u>223,334</u>
Total	\$ 388,985
	<u>÷ 2</u>
Expense Load (Rounded)	\$ 194,000

- c. Mortality* Pre-termination: 60% of the male and 65% of the female rates of the post-termination healthy mortality.

Post-termination: 96% of all rates of RP-2000, 2000 Base Year projected to 2018 with Projection Scale BB.

Disability: RP-2000 Disabled Retiree Mortality Table projected to 2018 with Projection Scale BB.

*The mortality assumption includes an allowance for future mortality improvement.

d. Turnover Sample rates are:

Select Rates of Turnover During the First 5 Years of Employment		Ultimate Rates of Turnover After the First 5 Years of Employment	
Year of Employment	Unisex Rate	Age	Unisex Rate
1	20.00%	30	7.40%
2	10.00%	40	6.06%
3	10.00%	50	3.26%
4	10.00%		
5	10.00%		

e. Disability Incidence rates based upon the 2009-2013 actual experience of the State of Alaska Public Employees' Retirement System Peace Officer/Firefighter Plan.

Sample rates are shown below.

Age	Unisex Rate
20	0.0224%
25	0.0468%
30	0.0712%
35	0.0849%
40	0.1027%
45	0.1446%
50	0.2142%
55	0.3692%
60	0.6388%

f. Retirement Age

Active members are assumed to retire beginning at the earliest eligible retirement age according to the following rates:

Age	Rate	Age	Rate
<51	10%	58	35%
51	10	59	40
52	10	60	45
53	12	61	50
54	15	62	50
55	20	63	50
56	25	64	50
57	30	65+	100

Vested Terminated members are assumed to retire at current age or age 50, whichever is later.

g. 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 is initialized as of June 30, 2006 at market value and will be phased in over the next five years. Valuation assets are constrained to a range of 80% to 120% of the market value of assets.

3. Changes in Methods Since the Prior Valuation

There were no changes in methods from the prior valuation.

4. Changes in Assumptions Since the Prior Valuation

	June 30, 2013	June 30, 2014
Pre-termination Mortality	80% of the male rates and 60% of the female rates of the 1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 with Projection Scale AA.	60% of the male rates and 65% of the female rates of the post-termination mortality rates.
Post-termination Mortality	1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 with Projection Scale AA for males and with a 1-year set-forward for females.	96% of all rates of RP-2000 Combined Mortality, 2000 Base Year projected to 2018 with Projection Scale BB.
Retirement	5% if vested and age is less than 51 and increasing linearly until 100% at age 65.	Retirement rates based on 2010-2013 experience. Terminated vested members are expected to commence benefits at age 50.
Disability Mortality	RP-2000 Disabled Retiree Mortality Table.	RP-2000 Disabled Retiree Mortality Table, 2000 Base Year projected to 2018 with Projection Scale BB.

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 67 and 68	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. 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.
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.