State of Alaska

National Guard and Naval Militia Retirement System

Actuarial Valuation Report
As of June 30, 2022

May 2023

May 31, 2023

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 actuarial valuation results of the State of Alaska National Guard and Naval Militia Retirement System (NGNMRS) as of June 30, 2022 performed by Buck Global, LLC (Buck).

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 as summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2022. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under NGNMRS 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 is solely responsible for the actuarial data and actuarial results presented in this report. This report fully and fairly discloses the actuarial position of NGNMRS as of June 30, 2022.

The contribution requirements reflect the cost of benefits accruing in the upcoming year, administrative expenses expected to be paid from the trust, and a level dollar amortization of the initial unfunded actuarial 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. Absent future gains/losses, actuarially determined contributions are expected to remain zero and the funded status is expected to remain at or above 100%.

The Board and staff of the State of Alaska may use this report for the review of the operations of NGNMRS. Use of this report for any other purpose or by anyone other than the Board or staff of the State of Alaska may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advanced review of any statement to be based on information contained in this report. Buck will accept no liability for any such statement made without its prior review.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the actuarial assumptions, changes expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of such future differences is beyond the scope of this valuation.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the plan. The actuary performs an analysis of plan experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed for the period July 1, 2017 to June 30, 2021. Based on that experience study, the Board adopted new assumptions effective beginning with the June 30, 2022 valuation to better reflect expected future experience. A summary of the actuarial assumptions and methods used in this actuarial valuation is shown in Sections 4.2 and 4.3. We certify that the assumptions and methods described in Sections 4.2 and 4.3 of this report meet the requirements of all applicable Actuarial Standards of Practice.

Actuarial Standards of Practice No. 27 (ASOP 27) and No. 35 (ASOP 35) require the actuary to disclose the information and analysis used to support the actuary's determination that the assumptions selected by the plan sponsor do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement. Buck provides advice on reasonable assumptions when performing periodic experience studies. The Board selects the assumptions used and the signing actuary reviews the assumptions through discussions with the Board staff and analyzing actuarial gain/loss experience. In the case of the Board's selection of the expected return on assets (EROA), the signing actuary has used economic information and tools provided by Buck's Financial Risk Management (FRM) practice. A spreadsheet tool created by the FRM practice converts averages, standard deviations, and correlations from Buck's Capital Markets Assumptions that are used for stochastic forecasting into approximate percentile ranges for the arithmetic and geometric average returns. It is intended to suggest possible reasonable ranges for EROA without attempting to predict or select a specific best estimate rate of return. It takes into account the duration (horizon) of investment and the target allocation of assets in the portfolio to various asset classes. Based on the actuary's analysis, including consistency with other assumptions used in the valuation, the percentiles generated by the spreadsheet tool described above, and review of actuarial gain/loss analysis, the actuary believes the assumptions do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement.

ACFR Information

We have prepared the following information in this report for the Actuarial Section and Statistical Section of the ACFR: (i) member data tables in Section 3; (ii) changes in contribution rates in the Executive Summary; and (iii) summary of actuarial assumptions in Section 4.3.

Governmental Accounting Standards Board (GASB) Statement No. 67 (GASB 67) was effective for NGNMRS beginning with fiscal year ending June 30, 2014. Please see our separate GASB 67 report for other information needed for the ACFR.

Assessment of Risks

Actuarial Standard of Practice No. 51 (ASOP 51) applies to actuaries performing funding calculations related to a pension plan. See Section 5 of this report for further details regarding ASOP 51.

Use of Models

Actuarial Standard of Practice No. 56 (ASOP 56) provides guidance to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. Buck uses third-party software in the performance of annual actuarial valuations and projections. The model is intended to calculate the liabilities associated with the provisions of the plan using data and assumptions as of the measurement date under the funding methods specified in this report. The output from the third-party vendor software is used as input to internally developed models that apply applicable funding methods and policies to the derived liabilities and other inputs, such as plan assets and contributions, to generate many of the exhibits found in this report. Buck has an extensive review process in which the results of the liability calculations are checked using detailed sample life output, changes from year to year are summarized by source, and significant deviations from expectations are investigated. Other funding outputs and the internal models are similarly reviewed in detail and at a higher level for accuracy, reasonability, and consistency with prior results. Buck also reviews the third-party model when significant changes are made to the software. This review is performed by experts within Buck who are familiar with applicable funding methods, as well as the manner in which the model generates its output. If significant changes are made to the internal models, extra checking and review are completed. Significant changes to the internal models that are applicable to multiple clients are generally developed, checked, and reviewed by multiple experts within Buck who are familiar with the details of the required changes.

This report was prepared under the overall direction of David Kershner, who meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. He is a Fellow of the Society of Actuaries, an Enrolled Actuary, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries.

We are available to discuss this report with you at your convenience. David can be reached at 602-803-6174 and Brett can be reached at 260-423-1072.

Respectfully submitted,

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

Brett Hunter, ASA, EA, MAAA
Senior Consultant
Buck

Contents

Executive Summary

Overview

The State of Alaska National Guard and Naval Militia Retirement System (NGNMRS) 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 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 NGNMRS as of the valuation date of June 30, 2022.

Purpose

An actuarial valuation is performed on the plan once every two years as of the end 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 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 review the current funded status of the plan and assess the funded status as an appropriate measure for determining future actuarially determined contributions;
4. To compare actual and expected experience under the plan during the fiscal year; and
5. 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 NGNMRS based on the plan provisions, membership data, assets, and actuarial methods and assumptions as of the valuation date.

Funded Status

Where presented, references to “funded ratio” and “unfunded actuarial accrued liability” typically are measured on an actuarial value of assets basis. It should be noted that the same measurements using market value of assets would result in different funded ratios and unfunded actuarial accrued liabilities. Moreover, the funded ratio presented is appropriate for evaluating the need and level of future contributions but makes no assessment regarding the funded status of the plan if the plan were to settle (i.e. purchase annuities) for a portion or all of its liabilities.

Funded Status as of June 30		2020		2022
a. Actuarial Accrued Liability	$	22,417,247	$	28,366,668
b. Valuation Assets		43,020,393		46,215,854
c. Unfunded Actuarial Accrued Liability, (a) – (b)	$	(20,603,146)	$	(17,849,186)
d. Funded Ratio based on Valuation Assets, (b) ÷ (a)		191.9%		162.9%
e. Fair Value of Assets	$	42,095,708	$	44,088,041
f. Funding Ratio based on Fair Value of Assets, (e) ÷ (a)		187.8%		155.4%

Actuarially Determined Contribution Amounts		FY23		FY25
a. Normal Cost	$	503,140	$	690,172
b. Past Service Cost		(3,224,638)		(2,691,240)
c. Expense Load		256,000		331,000
d. Total Annual Contribution, (a) + (b) + (c), not less than 0	$	0	$	0

The Actuarially Determined Contribution amount for FY24 based on a roll-forward valuation as of June 30, 2021 was $0.

The key reasons for the change in funded status are described below:

1. **Investment Experience**

   The approximate investment returns based on fair value of assets were 23.0% for FY21 and (7.7)% for FY22, compared to the expected investment return of 7.00% (net of investment expenses). This resulted in market asset gains of approximately $6.6 million for FY21 and market asset losses of approximately $7.2 million for FY22. Due to the recognition of investment gains and losses over a 5-year period, the investment returns based on actuarial value of assets were 9.5% for FY21 and 6.7% for FY22.

2. **Demographic Experience**[1]

   Section 3 provides statistics on active and inactive participants. The number of active participants decreased from 3,934 at June 30, 2020 to 3,909 at June 30, 2022. The average age of active participants increased from 34.20 to 35.15, and average credited service increased from 6.87 years to 7.99 years.

   The number of retirees and QDROs decreased from 708 to 691, and their average age increased from 58.83 to 59.58.

   The number of vested terminated participants increased from 649 to 702, and their average age increased from 57.00 to 57.82.

   The overall effect of the demographic experience was a liability loss of approximately $1.0 million (approximately 3.8% of the expected liability). This loss is mainly attributed to new entrants and rehires that have service accrued prior to June 30, 2022.

3. **Changes in Methods Since the Prior Valuation**

   There were no changes in actuarial methods since the prior valuation.

4. **Changes in Assumptions Since the Prior Valuation**

   Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. The effect of the new assumptions was to increase the Actuarial Accrued Liability as of June 30, 2022 by approximately $3.9 million.

   The amount included in the Normal Cost for administrative expenses was changed from $256,000 at June 30, 2020 to $331,000 at June 30, 2022.

5. **Changes in Benefit Provisions Since the Prior Valuation**

   There were no changes in benefit provisions since the prior valuation.

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[1] The data for the Air Guard group was available as of June 30, 2021 only. We assumed the status of each Air Guard member as of June 30, 2021 was the same as of June 30, 2022, and we increased each Air Guard active member's service as of June 30, 2021 by 1 year. Approximating the June 30, 2022 Air Guard data in this way did not materially impact the overall valuation results.

Section 1: Actuarial Funding Results

Section 1.1: Actuarial Liabilities and Normal Cost

As of June 30, 2022	Present Value of Projected Benefits	Actuarial Accrued Liability
Active Members		
Retirement Benefits	$ 17,874,565	$ 14,074,254
Termination Benefits	0	0
Death Benefits	285,330	195,690
Disability Benefits	157,632	125,839
Subtotal	$ 18,317,527	$ 14,395,783
Inactive Members		
Vested Terminated	$ 7,806,050	$ 7,806,050
Retirees (including QDROs)	6,164,835	6,164,835
Subtotal	$ 13,970,885	$ 13,970,885
Total	**$ 32,288,412**	**$ 28,366,668**

As of June 30, 2022	Normal Cost
Active Members	
Retirement Benefits	$ 669,283
Termination Benefits	0
Death Benefits	15,199
Disability Benefits	5,690
Subtotal	$ 690,172
Expense Load	
Administrative Expense	$ 331,000
Total	**$ 1,021,172**

Section 1.2: Actuarial Contributions as of June 30, 2022 (for FY25)

1.	Actuarial Accrued Liability	$	28,366,668
2.	Valuation Assets		46,215,854
3.	Total Unfunded Actuarial Accrued Liability, (1) – (2)	$	(17,849,186)
4.	Past Service Cost Amortization Payment[1]		(2,691,240)
5.	Normal Cost, including Expense Load		1,021,172
6.	**Total Contribution, (4) + (5), not less than 0**	**$**	**0**

[1] Calculated on a level dollar basis over an 8-year period as of June 30, 2022.

Section 1.3: Actuarial Gain/(Loss) for FY22

1.	Expected Actuarial Accrued Liability		
	a. Actuarial Accrued Liability, June 30, 2021	$	22,975,269
	b. Normal Cost for FY22		503,140
	c. Interest on (a) and (b) at 7.00%		1,643,488
	d. Benefit Payments for FY22		(1,620,749)
	e. Interest on (d) at 7.00%, adjusted for timing		(60,500)
	f. Change in Actuarial Assumptions		3,890,292
	g. Expected Actuarial Accrued Liability as of June 30, 2022, (a) + (b) + (c) + (d) + (e) + (f)	$	27,330,940
2.	Actual Actuarial Accrued Liability, June 30, 2022		28,366,668
3.	**Liability Gain/(Loss), (1)(g) – (2)**	**$**	**(1,035,728)**[1]
4.	Expected Actuarial Asset Value		
	a. Actuarial Asset Value, June 30, 2021	$	45,248,391
	b. Interest on (a) at 7.00%		3,167,387
	c. Employer Contributions for FY22		0
	d. Interest on (c) at 7.00%, adjusted for timing		0
	e. Benefit Payments for FY22		(1,620,749)
	f. Interest on (e) at 7.00%, adjusted for timing		(60,500)
	g. Administrative Expenses for FY22		(357,740)
	h. Interest on (g) at 7.00%, adjusted for timing		(12,309)
	i. Expected Actuarial Asset Value as of June 30, 2022, (a) + (b) + (c) + (d) + (e) + (f) + (g) + (h)	$	46,364,480
5.	Actuarial Asset Value, June 30, 2022		46,215,854
6.	**Actuarial Asset Gain/(Loss), (5) – (4)(i)**	**$**	**(148,626)**
7.	**Actuarial Gain/(Loss), (3) + (6)**	**$**	**(1,184,354)**

[1] Includes a liability reduction of $26,547 due to a programming adjustment for calculation of the retiree death benefit of remaining payments. The FY22 liability experience loss excluding the $26,547 programming effect is $1,062,275.

Section 1.4: Development of Change in Unfunded Liability during FY22

1.	June 30, 2021 Unfunded Liability	$	(22,273,122)
	a. Normal Cost		503,140
	b. Interest on (1) and (1)(a)		(1,523,899)
	c. Employer Contributions		0
	d. Interest on (c)		0
	e. Administrative Expenses		357,740
	f. Interest on (e)		12,309
	g. Change in Actuarial Assumptions		3,890,292
	h. Expected Change in Unfunded Liability during FY22	$	3,239,582
2.	Expected June 30, 2022 Unfunded Liability, (1) + (1)(h)	$	(19,033,540)
	a. Liability (gain)/ loss		1,035,728
	b. Asset (gain)/ loss		148,626
	c. Total Actuarial (gain)/ loss during FY22, (2)(a) + (2)(b)	$	1,184,354
3.	Actual June 30, 2022 Unfunded Liability, (2) + (2)(c)	$	(17,849,186)

Section 1.5: History of Unfunded Liability 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
June 30, 2015	$ 38,313,473	$ 37,855,133	98.8%	$ 458,340
June 30, 2016	$ 31,184,361	$ 38,439,835	123.3%	$ (7,255,474)
June 30, 2017	$ 32,483,912	$ 39,638,736	122.0%	$ (7,154,824)
June 30, 2018[1]	$ 21,934,014	$ 41,031,353	187.1%	$ (19,097,339)
June 30, 2019	$ 22,592,882	$ 41,939,204	185.6%	$ (19,346,322)
June 30, 2020	$ 22,417,247	$ 43,020,393	191.9%	$ (20,603,146)
June 30, 2021	$ 22,975,269	$ 45,248,391	196.9%	$ (22,273,122)
June 30, 2022	$ 28,366,668	$ 46,215,854	162.9%	$ (17,849,186)

[1] Approximately $10.7 million of the decrease in Actuarial Accrued Liability reflected in the June 30, 2018 valuation was due to the elimination of 798 active and vested terminated participants who had cashed out prior to June 30, 2016.

Section 2: Plan Assets

Section 2.1 Summary of Fair Value of Assets

Fair Value of Assets as of June 30	2021	2022
Assets		
1. Cash and Cash Equivalents	$ 1,385,305	$ 578,572
2. Receivables	319	79
3. Domestic Equity Pool	9,838,388	7,925,366
4. International Equity Pool	5,193,795	4,194,787
5. Tactical Fixed Income Pool	0	0
6. Domestic Fixed Income Pool	21,285,474	20,592,295
7. Emerging Market Equity Pool	1,103,370	938,701
8. Taxable Municipal Bonds	0	0
9. Tactical Allocation Strategies Pool	1,861,374	1,611,130
10. Alternative Equity	579,272	454,958
11. Alternative Beta	462,616	501,465
12. Other Opportunistic	30,366	6,200
13. Real Assets	3,325,265	3,253,406
14. Private Equity Pool	4,979,637	4,155,582
15. **Total Assets**	**$ 50,045,181**	**$ 44,212,541**
Liabilities		
16. Accrued expenses	$ 29,429	$ 25,116
17. Due to State of Alaska General Fund	88,798	18,518
18. Securities Lending Collateral Payable	113,918	80,866
19. **Total Liabilities**	**$ 232,145**	**$ 124,500**
Fair Value of Assets, (15) – (19)	**$ 49,813,036**	**$ 44,088,041**

Section 2.2: Changes in Fair Value of Assets

Fair Value of Assets as of June 30	2021	2022
1. Fair Value of Assets at beginning of year	42,095,708	49,813,036
2. Additions		
a. Employer Contributions	$ 0	$ 0
b. Investment Income	9,571,576	(3,635,461)
c. Other	1,690	0
d. Total Additions	$ 9,573,266	$ (3,635,461)
3. Disbursements		
a. Retirement Benefits	$ 1,454,330	$ 1,620,749
b. Administrative Expenses	304,439	357,740
c. Investment Expenses	97,169	111,045
d. Total Deductions	$ 1,855,938	$ 2,089,534
4. Fair Value of Assets at end of year, (1) + (2)(d) - (3)(d)	$ 49,813,036	$ 44,088,041
Approximate Fair Value Investment Return Rate Net of Investment Expenses	23.0%	(7.7)%

Section 2.3: Development of 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 valuation date.

1.	Investment Gain/(Loss) for FY22		
a.	Market Value, June 30, 2021	$	49,813,036
b.	Contributions for FY22		0
c.	Benefit Payments for FY22		1,620,749
d.	Administrative Expenses for FY22		357,740
e.	Actual Investment Return (net of investment expenses)		(3,746,506)
f.	Expected Return Rate (net of investment expenses)		7.00%
g.	Expected Return - Weighted for Timing		3,414,104
h.	Investment Gain/(Loss) for the Year, (e) – (g)		(7,160,610)
2.	Actuarial Value, June 30, 2022		
a.	Market Value, June 30, 2022	$	44,088,041
b.	Deferred Investment Gain/(Loss)		(2,127,813)
c.	Preliminary Actuarial Value, June 30, 2022, (a) – (b)	$	46,215,854
d.	Upper Limit: 120% of Market Value, June 30, 2022	$	52,905,649
e.	Lower Limit: 80% of Market Value, June 30, 2022	$	35,270,433
f.	Actuarial Value, June 30, 2022, [(c) limited by (d) and (e)]	$	46,215,854
g.	Ratio of Actuarial Value of Assets to Market Value of Assets		104.8%
h.	Approximate Actuarial Value Investment Return Rate During FY22 (net of investment expenses)		6.7%

The table below shows the development of gains/(losses) to be recognized in the current year:

Fiscal Year Ending	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
June 30, 2018	$ (681,054)	$ (544,844)	$ (136,210)	$ 0
June 30, 2019	(407,413)	(244,449)	(81,483)	(81,481)
June 30, 2020	(685,847)	(274,338)	(137,169)	(274,340)
June 30, 2021	6,594,160	1,318,832	1,318,832	3,956,496
June 30, 2022	(7,160,610)	0	(1,432,122)	(5,728,488)
Total	**$ (2,340,764)**	**$ 255,201**	**$ (468,152)**	**$ (2,127,813)**

Section 2.4: Historical Asset Rates of Return

	Actuarial Value		Fair Value	
Year Ending	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%
June 30, 2015	7.0%	5.4%	0.9%	5.2%
June 30, 2016	4.2 %	5.3%	(0.2)%	4.8%
June 30, 2017	4.8 %	5.3%	8.2%	5.0%
June 30, 2018	5.3 %	5.3%	4.6%	5.0%
June 30, 2019	4.1 %	5.2%	5.9%	5.1%
June 30, 2020	5.1 %	5.2%	5.3%	5.1%
June 30, 2021	9.5 %	5.4%	23.0 %	6.0%
June 30, 2022	6.7 %	5.5%	(7.7)%	5.2%

*Cumulative since FYE June 30, 2005.

Section 3: Member Data

Section 3.1: Summary of Members Included

Census Information as of June 30	2014	2016	2018	2020	2022[1]
Active Air Guard Members					
1. Number	2,164	2,174	2,139	2,242	2,300
2. Number Vested	591	417	364	405	505
3. Average Age	36.52	35.16	34.98	35.20	36.33
4. Average Alaska Guard Service	8.95	7.55	7.24	7.26	8.94
5. Average Total Military Service	14.44	13.08	12.68	12.82	13.94
Active Army Guard Members					
1. Number	1,911	1,820	1,575	1,639	1,560
2. Number Vested	242	199	193	218	205
3. Average Age	31.72	32.00	32.45	32.85	33.47
4. Average Alaska Guard Service	5.37	5.72	6.00	6.41	6.68
5. Average Total Military Service	9.83	10.41	10.34	10.82	11.20
Active Naval Militia Members					
1. Number	64	60	63	53	49
2. Number Vested	7	6	8	6	7
3. Average Age	33.75	33.26	34.48	33.85	33.36
4. Average Alaska Guard Service	4.67	4.93	5.44	4.34	5.33
5. Average Total Military Service	10.48	10.72	11.86	10.28	11.02
Total Active Members					
1. Number	4,139	4,054	3,777	3,934	3,909
2. Number Vested	840	622	565	629	717
3. Average Age	34.26	33.71	33.92	34.20	35.15
4. Average Alaska Guard Service	7.23	6.69	6.69	6.87	7.99
5. Average Total Military Service	12.25	11.85	11.69	11.95	12.81
Vested Terminated Members					
1. Number	1,756	1,427	588	649	702
2. Average Age	56.58	58.37	56.10	57.00	57.82
3. Average Alaska Guard Service	15.58	14.41	13.84	13.84	13.90
4. Average Total Military Service	25.27	24.69	24.42	24.58	24.48
Retirees (including QDROs)					
1. Number	639	676	752	708	691
2. Average Age	58.29	58.28	59.18	58.83	59.58
3. Average Years Remaining	11.71	12.00	11.53	12.13	11.81

[1] The data for the Air Guard group was available as of June 30, 2021 only. We assumed the status of each Air Guard member as of June 30, 2021 was the same as of June 30, 2022, and we increased each Air Guard active member's service as of June 30, 2021 by 1 year.

Section 3.2(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	58	0	0	0	0	0	0	0	0	58
20-24	412	84	0	0	0	0	0	0	0	496
25-29	361	285	51	0	0	0	0	0	0	697
30-34	312	257	197	27	0	0	0	0	0	793
35-39	209	232	165	104	12	0	0	0	0	722
40-44	116	170	135	111	41	5	0	0	0	578
45-49	47	66	58	68	31	23	3	0	0	296
50-54	15	33	38	29	29	14	15	0	0	173
55-59	4	14	16	12	13	9	9	5	0	82
60-64	0	5	1	2	1	2	1	0	1	13
65-69	0	0	0	1	0	0	0	0	0	1
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	**1,534**	**1,146**	**661**	**354**	**127**	**53**	**28**	**5**	**1**	**3,909**

Section 3.2(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	13	0	0	0	0	0	0	0	0	13
20-24	154	45	0	0	0	0	0	0	0	199
25-29	168	182	38	0	0	0	0	0	0	388
30-34	159	171	128	16	0	0	0	0	0	474
35-39	116	138	125	78	8	0	0	0	0	465
40-44	75	119	91	73	32	4	0	0	0	394
45-49	25	46	42	41	24	20	3	0	0	201
50-54	8	18	21	17	16	12	12	0	0	104
55-59	3	6	7	6	8	9	6	5	0	50
60-64	0	5	1	2	1	1	1	0	1	12
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	721	730	453	233	89	46	22	5	1	2,300

Section 3.2(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	44	0	0	0	0	0	0	0	0	44
20-24	250	39	0	0	0	0	0	0	0	289
25-29	187	96	13	0	0	0	0	0	0	296
30-34	148	84	66	11	0	0	0	0	0	309
35-39	88	93	40	26	4	0	0	0	0	251
40-44	40	50	42	38	9	1	0	0	0	180
45-49	20	18	16	27	7	3	0	0	0	91
50-54	7	15	17	11	12	2	3	0	0	67
55-59	1	8	9	5	5	0	3	0	0	31
60-64	0	0	0	0	0	1	0	0	0	1
65-69	0	0	0	1	0	0	0	0	0	1
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	785	403	203	119	37	7	6	0	0	1,560

Section 3.2(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
20-24	8	0	0	0	0	0	0	0	0	8
25-29	6	7	0	0	0	0	0	0	0	13
30-34	5	2	3	0	0	0	0	0	0	10
35-39	5	1	0	0	0	0	0	0	0	6
40-44	1	1	2	0	0	0	0	0	0	4
45-49	2	2	0	0	0	0	0	0	0	4
50-54	0	0	0	1	1	0	0	0	0	2
55-59	0	0	0	1	0	0	0	0	0	1
60-64	0	0	0	0	0	0	0	0	0	0
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	28	13	5	2	1	0	0	0	0	49

Section 3.3: Member Data Reconciliation

	Active Members	Vested Members	Benefit Recipients	Total
Total at June 30, 2020	3,934	649	708	5,291
New Entrants	447	0	0	447
Rehires	63	0	0	63
Non-vested Terminations	(361)	0	0	(361)
Vested Terminations	(71)	71	0	0
Retirements	(33)	(23)	56	0
New Survivors	0	0	0	0
New QDROs	0	0	0	0
Deaths	0	0	(14)	(14)
Data Changes/Expiration of Benefits	(70)[1]	5[2]	(59)[3]	(124)
Total at June 30, 2022	3,909	702	691	5,302

[1] Includes 70 participants who cashed out on or after June 30, 2020.
[2] Includes 15 participants who cashed out on or after June 30, 2020 and 20 participants who were rehired from terminated non-vested status and then terminated as vested between June 30, 2020 and June 30, 2022.
[3] Includes 65 participants with an expiration of benefits, 3 additions (data corrections), and 3 participants who were rehired from terminated non-vested status and then retired between June 30, 2020 and June 30, 2022.

Section 4: Basis of the Actuarial Valuation

Section 4.1: Summary of Plan Provisions

Effective Date

January 1, 1973, with amendments through June 30, 2022.

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

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.

Benefit

Eligible members may elect to receive:

a. monthly benefits of $100 which are payable for a period equal to the number of months that they were active members;

b. a lump sum benefit equal to the actuarial equivalent of a.; or

c. monthly payments until age 72 equal to the actuarial equivalent of a.

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.

Survivor's 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 retirement benefit.

b. Retired or Terminated Vested Members: The designated beneficiary will receive a lump benefit equal to the remaining benefits payable.

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.

Changes Since the Prior Valuation

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

Section 4.2: Description of Actuarial Methods and Valuation Procedures

Actuarial Method

Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method (level dollar basis). Any funding surplus or unfunded accrued liability is amortized over 20 years less the average total military service of active 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 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 actuarial accrued liability, subject to amortization.

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 was phased in over five years. Assets are initialized at market value as of June 30, 2006. All assets are valued at fair market 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 market value of assets.

Changes in Methods Since the Prior Valuation

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

Section 4.3: Summary of Actuarial Assumptions

The demographic and economic assumptions used in the June 30, 2022 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board at the June 2022 meeting based on the experience study for the period July 1, 2017 to June 30, 2021.

Investment Return

5.75% per year, net of investment expenses.

Mortality (Pre-Commencement)

Pub-2010 Safety Employee table, amount-weighted, and projected with MP-2021 generational improvement.

Mortality (Post-Commencement)

Retiree mortality in accordance with the Pub-2010 Safety Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality in accordance with the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.

Turnover

Select and ultimate rates based on the 2017-2021 actual experience (see Table 1).

Disability

No changes to the incidence rates from the prior valuation due to insufficient 2017-2021 actual experience (see Table 2). Disability rates continue after a member is eligible for retirement.

Post-disability mortality in accordance with the Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Retirement

Retirement rates based on the 2017-2021 actual experience (see Table 3).

Vested terminated members are assumed to retire at the later of current age or age 50 when electing an annuity, and at current age when electing a lump sum.

Imputed Data

Data changes from the prior valuation which are deemed to have an immaterial impact on liabilities and contributions are assumed to be correct in the current year's client data.

Active and terminated members with a date of termination after the last date of hire are assumed to be terminated with status based on their amount of vesting service.

We assumed the status of each Air Guard member as of June 30, 2021 was the same as of June 30, 2022, and we increased each Air Guard active member's service as of June 30, 2021 by 1 year.

Form of Payment

50% of members are assumed to elect a lump sum benefit. 50% of members are assumed to elect a monthly annuity with the number of payments equal to the number of months they were active in the plan. A lump sum of the remaining payments is paid if the member should die while receiving payments. Lump sums are calculated based on a 5.75% discount rate annuity certain factor.

Administrative Expenses

The Normal Cost as of June 30, 2022 was increased by $331,000 for administrative expenses. This amount is based on the average of actual administrative expenses during the last two fiscal years.

Changes in Assumptions Since the Prior Valuation

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. The effect of the new assumptions was to increase the Actuarial Accrued Liability as of June 30, 2022 by approximately $3.9 million.

The amount included in the Normal Cost for administrative expenses was changed from $256,000 at June 30, 2020 to $331,000 at June 30, 2022.

Table 1: Turnover Rates

Select Rates during the First 5 Years of Employment

Years of Service	Unisex
< 1	20.00%
1	10.00%
2	10.00%
3	10.00%
4	10.00%

Ultimate Rates after the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
< 30	9.53%	9.94%	45	6.83%	7.13%
30	9.43%	9.84%	46	6.51%	6.79%
31	9.33%	9.74%	47	6.06%	6.32%
32	9.23%	9.63%	48	5.49%	5.73%
33	9.12%	9.51%	49	4.82%	5.03%
34	8.98%	9.37%	50	4.16%	4.33%
35	8.81%	9.20%	51	3.63%	3.79%
36	8.63%	9.00%	52	3.26%	3.40%
37	8.41%	8.77%	53	2.98%	3.12%
38	8.18%	8.53%	54	2.78%	2.91%
39	7.95%	8.29%	55	2.64%	2.75%
40	7.73%	8.06%	56	2.57%	2.67%
41	7.54%	7.87%	57	2.58%	2.69%
42	7.38%	7.70%	58	2.64%	2.76%
43	7.23%	7.55%	59	2.78%	2.90%
44	7.06%	7.37%	60	2.88%	3.00%

Table 2: Disability Rates

Age	Male	Female	Age	Male	Female
< 23	0.0179%	0.0112%	46	0.1247%	0.0780%
23	0.0244%	0.0153%	47	0.1337%	0.0836%
24	0.0310%	0.0194%	48	0.1462%	0.0914%
25	0.0374%	0.0234%	49	0.1588%	0.0993%
26	0.0440%	0.0275%	50	0.1714%	0.1071%
27	0.0505%	0.0316%	51	0.1839%	0.1150%
28	0.0526%	0.0329%	52	0.1965%	0.1228%
29	0.0548%	0.0343%	53	0.2294%	0.1434%
30	0.0570%	0.0356%	54	0.2624%	0.1640%
31	0.0591%	0.0370%	55	0.2954%	0.1846%
32	0.0612%	0.0383%	56	0.3283%	0.2052%
33	0.0634%	0.0397%	57	0.3613%	0.2258%
34	0.0657%	0.0411%	58	0.4112%	0.2570%
35	0.0679%	0.0425%	59	0.4611%	0.2882%
36	0.0702%	0.0439%	60	0.5110%	0.3194%
37	0.0724%	0.0453%	61	0.5610%	0.3506%
38	0.0757%	0.0473%	62	0.6109%	0.3818%
39	0.0789%	0.0493%	63	0.6109%	0.3818%
40	0.0822%	0.0514%	64	0.6109%	0.3818%
41	0.0854%	0.0534%	65	0.6109%	0.3818%
42	0.0886%	0.0554%	66	0.6109%	0.3818%
43	0.0977%	0.0611%	67	0.6109%	0.3818%
44	0.1066%	0.0667%	68	0.4073%	0.2546%
45	0.1157%	0.0723%	69	0.2036%	0.1273%
			70+	0.2036%	0.1273%

Table 3: Retirement Rates

Age	Male	Female
< 53	15.34%	18.20%
53	17.70%	21.00%
54	23.60%	28.00%
55	18.50%	16.25%
56	25.90%	22.75%
57	29.60%	26.00%
58	33.30%	29.25%
59	37.00%	32.50%
60	40.70%	35.75%
61	44.40%	35.75%
62	44.40%	35.75%
63	44.40%	35.75%
64	44.40%	35.75%
65+	100.00%	100.00%

Section 5: Assessment of Risks (ASOP 51 Disclosures)

Funding future retirement benefits prior to when those benefits become due involves assumptions regarding future economic and demographic experience. These assumptions are applied to calculate actuarial liabilities, current contribution requirements, and the funded status of the plans. However, to the extent future experience deviates from the assumptions used, variations will occur in these calculated values. These variations create risk to the plans. Understanding the risks to the funding of the plans is important.

Actuarial Standard of Practice No. 51 ("ASOP 51") requires certain disclosures of potential risks to the plan and provides useful information for intended users of actuarial reports that determine plan contributions or evaluate the adequacy of specified contribution levels to support benefit provisions.

Under ASOP 51, risk is defined as the potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience.

It is important to note that not all risk is negative, but all risk should be understood and accepted based on knowledge, judgement and educated decisions. Future measurements may deviate in ways that produce positive or negative financial impacts to the plan.

In the actuary's professional judgment, the following risks may reasonably be anticipated to significantly affect the pension plan's future financial condition and contribution requirements.

- Investment Risk – potential that the investment return will be different than the 5.75% expected in the actuarial valuation
- Contribution Risk – potential that the contribution actually made will be different than the actuarially determined contribution in the actuarial valuation
- Long-Term Return on Investment Risk – potential that changes in long-term capital market assumptions or the plan's asset allocation will create the need to update the long-term return on investment assumption
- Longevity Risk – potential that participants live longer than expected compared to the valuation mortality assumptions
- Other Demographic Risk – potential that other demographic experience will be different than expected

The following information is provided to comply with ASOP 51 and furnish beneficial information on potential risks to the plan. **This list is not all-inclusive**; it is an attempt to identify the more significant risks and how those risks might affect the results shown in this report.

Note that ASOP 51 does not require the actuary to evaluate the ability or willingness of the plan sponsor to make contributions to the plan when due, or to assess the likelihood or consequences of potential future changes in law. In addition, this valuation report is not intended to provide investment advice or to provide guidance on the management or reduction of risk.

Assessment of Risks

Investment Risk

Plan costs are very sensitive to the market return.

- Any return on assets lower than assumed will increase costs.
- The plan uses an actuarial value of assets that smooths gains and losses on market returns over a five-year period to help control some of the volatility in costs due to investment risk.
- Historical experience of actual returns is shown in Section 2.4 of this report. This historical experience illustrates how returns can vary over time.

Contribution Risk

There is a risk to the plan when the actual contribution amount and the actuarially determined amount differ.

- If the actual contribution is lower than the actuarially determined contribution, the plan may not be sustainable in the long term.
- Any underpayment of the contribution will increase future contribution amounts to help pay off the additional Unfunded Actuarial Accrued Liability associated with the underpayment(s).

Long-Term Return on Investment Risk

Inherent in the long-term return on investment assumption is the expectation that the current rate will be used until the last benefit payment of the plan is made. There is a risk that sustained changes in economic conditions, changes in long-term future capital market assumptions, or changes to the plan's asset allocations will necessitate an update to the long-term return on investment assumption used.

- Under a lower long-term return on investment assumption, less investment return is available to pay plan benefits. This may lead to a need for increased employer contributions.
- The liabilities will be higher at a lower assumed rate of return because future benefits will have a lower discount rate applied when calculating the present value.
- Historical experience of actual returns is shown in Section 2.4 of this report. The cumulative historical experience illustrates that although market returns have been above and below the assumed rate, the overall return during the time period was slightly below the 5.75%. The assumed rate, asset allocation, and future market expectations should continue to be evaluated. A 1% decrease in the long-term return on investment assumption will increase the actuarial accrued liability by approximately 9%.

Longevity Risk

Plan costs will be increased as participants are expected to live longer.

- Benefits are paid over a longer lifetime when life expectancy is expected to increase. The longer duration of payments leads to higher liabilities.
- Health care has been improving, which affects the life expectancy of participants. As health care improves, leading to longer life expectancies, costs to the plans could increase.
- The mortality assumption for the plan mitigates this risk by assuming future improvements in mortality. However, any improvement in future mortality greater than that expected by the current mortality assumption would lead to increased costs for the plan.

Other Demographic Risk

The plan is subject to risks associated with other demographic assumptions (e.g., retirement and termination assumptions). Differences between actual and expected experience for these assumptions tend to have less impact on the overall costs of the plan. The demographic assumptions used in the valuation are re-evaluated regularly as part of the 4-year experience studies to ensure the assumptions are consistent with long-term expectations.

Historical Information

Monitoring certain information over time may help understand risks faced by the plan. Historical information is included throughout this report. Some examples are:

- Section 1.5 shows how the plan's funded status (comparison of actuarial accrued liabilities to actuarial value of assets) has changed over time.
- Section 2.4 shows the volatility of asset returns over time.
- Section 3 includes various historical information showing how member census data has changed over time.

Plan Maturity Measures

There are certain measures that may aid in understanding the significant risks to the plan.

Ratio of Retired Liability to Total Liability	June 30, 2018	June 30, 2020	June 30, 2022
1. Retiree and Beneficiary Accrued Liability	$ 6,094,900	$ 5,808,004	$ 6,164,835
2. Total Accrued Liability	$ 21,934,014	$ 22,417,247	$ 28,366,668
3. Ratio, (1) ÷ (2)	27.8%	25.9%	21.7%

A high percentage of liability concentrated on participants in pay status indicates a mature plan (often a ratio above 60% - 65%). An increasing percentage may indicate a need for a less risky asset allocation, which may lead to a lower long-term return on asset assumption and increased costs. Higher percentages may also indicate greater investment risk as benefit payments may be greater than contributions creating an increased reliance on investment returns. This ratio should be monitored each year in the future.

Ratio of Cash Flow to Assets	FYE June 30, 2018	FYE June 30, 2020	FYE June 30, 2022
1. Contributions	$ 907,231	$ 860,686	$ 0
2. Benefit Payments	1,359,467	1,641,475	1,620,749
3. Cash Flow, (1) - (2)	$ (452,236)	$ (780,789)	$ (1,620,749)
4. Fair Value of Assets	$ 39,418,117	$ 42,095,708	$ 44,088,041
5. Ratio, (3) ÷ (4)	(1.1%)	(1.9%)	(3.7%)

When this cash flow ratio is negative, more cash is being paid out than deposited in the trust. Negative cash flow indicates the trust needs to rely on investment returns to cover benefit payments and / or may need to invest in more liquid assets to cover the benefit payments. More liquid assets may not generate the same returns as less liquid assets, which can increase the investment risk. Currently, due to the funded status being significantly over 100% negative cash flow is appropriate and expected. Also, the low magnitude of the ratio implies there may already be enough liquid assets to cover the benefit payments, less investment return is needed to cover the shortfall, or only a small portion of assets will need to be converted to cash. Therefore, the investment risk is likely not amplified at this time. This maturity measure should be monitored in the future especially if the funded status decreases closer to 100%.

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 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.