



State of Alaska
National Guard and Naval Militia
Retirement System

Actuarial Valuation Report as of June 30, 2008



Submitted By:
Buck Consultants
1200 Seventeenth Street, Suite 1200
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October 5, 2009

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

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

Actuarial Certification

The bi-annual actuarial valuation required for the State of Alaska National Guard and Naval Militia Retirement System has been prepared as of June 30, 2008 by Buck Consultants. The purposes of the report include:

- (1) a presentation of the valuation results of the System as of June 30, 2008;
- (2) a determination of the appropriate contribution rate for the System which will be applied for the fiscal year ending June 30, 2011; and
- (3) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The following schedules that we have prepared are included in this report:

- (1) Summary of actuarial assumptions and methods (Section 3.5)
- (2) Schedule of employer contributions (Section 2.1)
- (3) Schedule of funding progress (Section 2.2)

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the Division of Retirement and Benefits and financial information provided in the financial statements audited by KPMG LLP, to determine a sound value for the System liability. The employee data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior valuation's data.

The contribution requirements reflect the cost of benefits accruing in FY09 and FY10 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 amortization period is set by the Alaska Retirement Management Board (Board). Contribution levels are recommended by the Actuary and adopted by the Board each year.

A summary of the actuarial assumptions and methods is presented in Section 3.5 of this report. The assumptions, when applied in combination, fairly represent past and anticipated future experience of the System.

Future contribution requirements may differ from those determined in the valuation because of:

- (1) differences between actual experience and anticipated experience based on the assumptions;
- (2) changes in actuarial assumptions or methods;
- (3) changes in statutory provisions; or
- (4) differences between the contribution amounts determined by the valuation and those adopted by the Board.

This report does not take into account broad declines in U.S. equity and bond prices that have occurred after the valuation date. Taking these into account would have significantly reduced the market and actuarial value of assets shown. The effect of these on any funded ratios and on the final funding calculations is not known. System funding and accounting rules generally prohibit reflection of changes in assets and underlying economic conditions that occur after the measurement date.

The undersigned are members of the American Academy of Actuaries and the Society of Actuaries, are fully qualified to provide actuarial services to the State of Alaska, and are available to answer questions regarding this report.

We believe that the assumptions and methods used for funding purposes and for the disclosures presented in this report satisfy the parameter requirements set forth in the Government Accounting Standards Board (GASB) Statement No. 25.

We believe that this report conforms with the requirements of the Alaska statutes, and where applicable, other federal and accounting laws, regulations and rules, as well as generally accepted actuarial principles and practices.

Sincerely,



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



Michelle Reding DeLange, FSA, EA, MAAA
Director, Consulting Actuary

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Report Highlights

This report has been prepared by Buck Consultants for the State of Alaska National Guard and Naval Militia Retirement System to:

1. present the results of a valuation of the State of Alaska National Guard and Naval Militia Retirement System as of June 30, 2008;
2. determine the contribution rate for the System for Fiscal Year 2011;
3. provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into three sections. Section 1 contains the results of the valuation. It includes a development of assets during the 2007 and 2008 fiscal years, the current annual costs and reporting and disclosure information.

Section 2 contains disclosure information required by GASB No. 25. It contains schedules of employer contributions and funding progress.

Section 3 describes the basis of the valuation. It summarizes the System provisions, provides information relating to the System's participants, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

The principal results are as follows:

Funding Status as of June 30	2006	2008
1. Valuation Assets	\$ 15,587,569	\$ 28,370,756
2. Accrued Liability	25,457,589	28,904,645
3. Funding Ratio, (1) ÷ (2)	61.2%	98.2%

Recommended Contribution Amounts	FY09	FY11
1. Normal Cost	\$ 750,758	\$ 744,154
2. Past Service Cost	1,722,524	84,175
3. Expense Load	0	137,000
4. Total Annual Contribution, (1) + (2) + (3)	\$ 2,473,282	\$ 965,329

Analysis of the Valuation

The funding ratio increased from 61.2% at June 30, 2006, to 98.2% at June 30, 2008. This increase was primarily due to a \$10 million appropriation from the State of Alaska that was contributed to the Trust.

The annual rate of return on market value of assets during the year was (2.30)%. The annual rate of return on actuarial value of assets during the year was 6.35%, compared to the assumed rate of 7.25%, resulting in an actuarial loss from investment return of approximately \$0.2 million for FY08.

There was one change in actuarial assumptions since the prior valuation. An administrative expense load was added to the calculation of the annual contribution equal to the average of the prior 2 years of actual expenses, rounded to the nearest \$1,000.

Section 1

This section sets forth the results of the actuarial valuation.

Section 1.1 Shows the transactions of the System's fund during FY07 and FY08.

Section 1.2 Shows the actuarial present value of benefits and the normal cost as of June 30, 2008.

Section 1.3 Shows the development of the total contribution.

1.1(a) Statement of Net Assets

Net Assets as of June 30	2007	2008
Assets:		
1. Cash and Cash Equivalents	\$ 12,818	\$ 24,898
2. Domestic Equity Pool	5,303,340	7,876,930
3. International Equity Pool	2,219,659	2,649,176
4. Retirement Fixed Income Pool	10,166,983	16,710,578
5. Total Assets (1) + (2) + (3) + (4)	17,702,800	27,261,582
Liabilities:		
6. Accrued expenses	75,183	55,447
7. Due to State of Alaska General Fund	13,298	17,207
8. Total Liabilities (6) + (7)	88,481	72,654
Total Net Assets (5) – (8)	\$ 17,614,319	\$ 27,188,928

1.1(b) Statement of Changes in Net Assets

Change in Net Assets as of June 30	2007	2008
Receipts:		
1. Employer Contributions	\$ 1,737,406	\$ 1,737,406
2. State of Alaska Appropriation	0	10,000,000
3. Investment Income	2,317,486	(316,032)
4. Total Receipts (1) + (2) + (3)	\$ 4,054,892	\$ 11,421,374
Disbursements:		
5. Retirement Benefits	\$ 1,754,860	\$ 1,642,441
6. Administrative Expenses	150,392	124,605
7. Investment Expenses	122,890	79,719
8. Total Disbursements (5) + (6) + (7)	\$ 2,028,142	\$ 1,846,765
9. Net Income (4) - (8)	\$ 2,026,750	\$ 9,574,609
10. Net Assets Available for Benefits at beginning of year	\$ 15,587,569	\$ 17,614,319
11. Net Assets Available for Benefits at end of year (9) + (10)	\$ 17,614,319	\$ 27,188,928
Estimated Investment Return, Net of All Expenses	13.1%	(2.3)%

1.1(c) 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 Return for FY08	
a. Market Value, June 30, 2007	\$ 17,614,319
b. Contributions for FY08	11,737,406
- <i>Weighted for timing</i>	5,868,703
c. Benefit Payments for FY08	1,642,441
- <i>Weighted for timing</i>	821,221
d. Actual Investment Return (<i>net of expenses</i>)	(520,356)
e. Expected Return Rate (<i>net of expenses</i>)	7.25%
f. Expected Return - Weighted for Timing [(a. + b. - c.) x e.]	1,642,981
g. Investment Gain/(Loss) for the Year (d. - f.)	(2,163,337)
h. Deferred Investment Return/(Loss)	(1,181,828)
2. Actuarial Value, June 30, 2008	
a. Market Value, June 30, 2008	\$ 27,188,928
b. 2008 Deferred Investment Return/(Loss)	(1,181,828)
c. Preliminary Actuarial Value, June 30, 2008 (a. - b.)	28,370,756
d. Upper Limit: 120% of Market Value, June 30, 2008	32,626,714
e. Lower Limit: 80% of Market Value, June 30, 2008	21,751,142
f. Actuarial Market Value, June 30, 2008 (c. limited by d. and e.)	\$ 28,370,756
g. Ratio of Actuarial Value of Assets to Market Value of Assets	104.35%
h. Approximate Actuarial Value Investment Return Rate During FY08 Net of All Expenses	6.35%

1.1(c) Actuarial Value of Assets (continued)

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

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2007	\$ 914,738	\$ 182,948	\$ 182,948	\$ 548,842
6/30/2008	(2,163,337)	0	(432,667)	(1,730,670)
Total	\$ (1,248,599)	\$ 182,948	\$ (249,719)	\$ (1,181,828)

1.2 Actuarial Values

As of June 30, 2008	Normal Cost	Accrued Liability
Active Members		
1. Retirement Benefits	\$ 598,566	\$ 9,722,308
2. Termination Benefits ¹	106,429	1,411,553
3. Death Benefits	27,170	230,207
4. Disability Benefits	11,989	185,856
5. Total Active Actuarial Value <i>(1) + (2) + (3) + (4)</i>	\$ 744,154	\$ 11,549,924
Inactive Members		
6. Vested Terminated		13,139,045
7. Retirees (including QDROs)		4,215,676
8. Total Inactive Actuarial Value (6) + (7)		17,354,721
Total Actuarial Value (5) + (8)	\$ 744,154	\$ 28,904,645

¹ Members who terminate before assumed retirement age, but after completing 20 years of service.

1.3 Development of Actuarial Gain/(Loss) for FY08

1.	Accrued Liability, June 30, 2007	\$ 26,289,978
2.	Normal Cost for FY08	773,281
3.	Interest on (1) and (2) at 7.25%	1,962,086
4.	Benefit Payments for FY08	1,642,441
5.	Interest on (4) at 7.25% for one-half year	59,538
6.	Expected Accrued Liability, June 30, 2008 (1) + (2) + (3) – (4) – (5)	\$ 27,323,366
7.	Accrued Liability, June 30, 2008	28,904,645
8.	Liability Gain/(Loss) (6) – (7)	\$ (1,581,279)
9.	Valuation Assets, June 30, 2007	\$ 16,882,529
10.	Interest on (9) at 7.25%	1,223,983
11.	Contributions for FY08	11,737,406
12.	Interest on (11) at 7.25% for one-half year	425,481
13.	Benefit Payments for FY08	1,642,441
14.	Interest on (13) at 7.25% for one-half year	59,538
15.	Expected Valuation Assets, June 30, 2008 (9) + (10) + (11) + (12) – (13) – (14)	\$ 28,567,420
16.	Valuation Assets, June 30, 2008	28,370,756
17.	Asset Gain/(Loss) (16) – (15)	\$ (196,664)
18.	Actuarial Gain/(Loss) (8) + (17)	\$ (1,777,943)
19.	Effect of Delay on Contribution Amount	(789,783)
20.	State Appropriations with Interest	10,362,500
21.	Total Gain/(Loss) (18) + (19) + (20)	\$ 7,794,774

1.4 Calculation of Total Contribution Amount – FY11

1. Accrued Liability	\$ 28,904,645
2. Assets	28,370,756
3. Total Unfunded Accrued Liability, (1) – (2)	\$ 533,889
4. Amortization Factor (8.0 years) (assuming payments at beginning of the year)	6.342633
5. Past Service Payment, (3) ÷ (4)	\$ 84,175
6. Normal Cost	744,154
7. Expense Load	137,000
8. Total Contribution , (5) + (6) + (7)	\$ 965,329

Section 2

This section contains supplementary information on retirement benefits that is required to be disclosed in financial statements to comply with Statement No. 25 of the Governmental Accounting Standards Board (GASB No. 25)

Section 2.1 Presents the Schedule of Employer Contributions.

Section 2.2 Presents the Schedule of Funding Progress.

Section 2.3 Actuarial Assumptions, Methods, and Additional Information.

2.1 Schedule of Employer Contributions

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 ²	\$ 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 ³	11,737,406	675.6%

² 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.

³ 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.

2.2 Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (AAL) ⁴ (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

2.3 Actuarial Assumptions, Methods and Additional Information

Valuation Date	June 30, 2008
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*	7.25% per annum
Projected salary increases	None
Cost-of-living adjustment	None

* Includes inflation at 3.50% per annum.

⁴ 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.

Section 3

In this section, the basis of the valuation is presented and described. This information -- the provisions of the System and the census of members -- is the foundation of the valuation, since these are the present facts upon which benefit payments will depend.

Employee data was provided by the System. This information would customarily not be verified by a system's actuary. We have reviewed the data for internal consistencies and made best estimates of the missing or inconsistent data.

A summary of the System's provisions is provided in Section 3.1 and member census information is shown in Sections 3.1, 3.2 and 3.3.

The valuation is based upon the premise that the System will continue in existence, so that future events must also be considered. These future events are assumed to occur in accordance with the actuarial assumptions and concern such events as the earnings of the fund, the number of members who will retire, die, terminate their services, their ages at such termination and their expected benefits.

The actuarial assumptions and methods, which have been adopted to guide the sponsor in funding the System in a reasonable and acceptable manner, are described in Section 3.5.

3.1 Summary of System Provisions

1. Effective Date

January 1, 1973.

2. 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.

3. 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. An involuntary discharge from the Alaska guard (for reasons other than misconduct) waives these eligibility requirements.

4. 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.

5. 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).

6. 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.

3.1 Summary of System Provisions (continued)

7. 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 3(b) above.

(b) Retired or Terminated Vested Members:

The designated beneficiary will receive a lump benefit equal to the remaining benefits payable in 3(b) above.

8. 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.

3.2 Changes in System Participation from June 30, 2006 to June 30, 2008

	Active Members	Vested Members	Benefit Recipients	Total
Total at June 30, 2006	3,846	936	506	5,288
New Entrants	952	21	7	980
Rehires	32	(2)	(1)	29
Nonvested Terminations	(625)	0	0	(625)
Vested Terminations	(250)	250	0	0
Retirements	(56)	(16)	72	0
New Survivors	0	0	0	0
New QDROs	0	0	0	0
Deaths	(2)	(8)	(8)	(18)
Data Change	0	(33)	(60)	(93)
Total at June 30, 2008	3,897	1,148	516	5,561

3.3 Participant Census Information

Census Information as of June 30	2006	2008
Active Air Guard Members		
Number	1,909	1,956
Number Vested	556	524
Average Age	36.10	36.16
Average Alaska Guard Service	8.01	8.18
Average Total Military Service	14.46	14.54
Active Army Guard Members		
Number	1,871	1,866
Number Vested	371	260
Average Age	33.17	31.94
Average Alaska Guard Service	5.96	5.19
Average Total Military Service	11.31	10.16
Active Naval Militia Members		
Number	66	75
Number Vested	16	20
Average Age	40.16	37.63
Average Alaska Militia Service	6.70	6.14
Average Total Military Service	12.39	13.39
Total Active Members		
Number	3,846	3,897
Number Vested	943	804
Average Age	34.74	34.17
Average Alaska Militia Service	6.99	6.71
Average Total Military Service	12.89	12.42
Vested Terminated Members		
Number	936	1,148
Average Age	52.51	53.50
Average Alaska Guard Service	14.99	18.29
Average Total Military Service	24.66	25.79
Retirees (including QDROs)		
Number	506	516
Average Age	59.50	58.95
Average Years Remaining	11.27	11.58

3.4 (a) Distributions of Active Participants – All Actives

Age Group	Total Military Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	198	0	1	0	0	0	0	0	0	199
20-24	468	176	2	0	0	0	0	0	0	646
25-29	136	465	114	0	0	1	0	0	0	716
30-34	54	108	290	94	0	0	1	0	0	547
35-39	28	59	113	330	97	0	0	0	0	627
40-44	6	19	48	145	293	56	0	0	0	567
45-49	1	6	22	50	100	139	31	0	0	349
50-54	0	3	5	23	32	47	40	12	0	162
55-59	0	2	0	3	14	24	21	11	0	75
60-64	0	0	1	1	1	1	2	2	0	8
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	1	0	0	0	0	0	0	1
Total	891	838	597	646	537	268	95	25	0	3,897

3.4 (b) Distributions of Active Participants – Air Actives

Total Military Service										
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	25	0	1	0	0	0	0	0	0	26
20-24	150	72	2	0	0	0	0	0	0	224
25-29	49	228	62	0	0	1	0	0	0	340
30-34	18	57	173	65	0	0	1	0	0	314
35-39	6	22	60	212	55	0	0	0	0	355
40-44	1	7	18	88	196	37	0	0	0	347
45-49	1	3	7	24	66	92	18	0	0	211
50-54	0	1	1	16	20	28	25	7	0	98
55-59	0	1	0	2	6	11	10	7	0	37
60-64	0	0	1	0	1	1	0	0	0	3
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	1	0	0	0	0	0	0	1
Total	250	391	326	407	344	170	54	14	0	1,956

3.4 (c) Distributions of Active Participants – Army Actives

Total Military Service										
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	170	0	0	0	0	0	0	0	0	170
20-24	309	102	0	0	0	0	0	0	0	411
25-29	84	234	51	0	0	0	0	0	0	369
30-34	36	49	110	28	0	0	0	0	0	223
35-39	22	35	48	114	40	0	0	0	0	259
40-44	3	11	28	56	92	19	0	0	0	209
45-49	0	3	14	26	32	44	13	0	0	132
50-54	0	2	3	7	12	16	14	5	0	59
55-59	0	0	0	0	7	9	10	4	0	30
60-64	0	0	0	1	0	0	1	2	0	4
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	624	436	254	232	183	88	38	11	0	1,866

3.4 (d) Distributions of Active Participants – Navy Actives

Age Group	Total Military Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	3	0	0	0	0	0	0	0	0	3
0-24	9	2	0	0	0	0	0	0	0	11
25-29	3	3	1	0	0	0	0	0	0	7
30-34	0	2	7	1	0	0	0	0	0	10
35-39	0	2	5	4	2	0	0	0	0	13
40-44	2	1	2	1	5	0	0	0	0	11
45-49	0	0	1	0	2	3	0	0	0	6
50-54	0	0	1	0	0	3	1	0	0	5
55-59	0	1	0	1	1	4	1	0	0	8
60-64	0	0	0	0	0	0	1	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	17	11	17	7	10	10	3	0	0	75

3.5 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 7.25% 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
2008	\$ 124,605
2007	<u>150,392</u>
Total	\$ 274,997
	<u>÷ 2</u>
Expense Load (Rounded)	\$ 137,000

- (c) Mortality 1994 Group Annuity Mortality Basic Table for males and females, 1994 base year without margin.

Sample disabled mortality rates are shown below:

Age	Rate	
	<u>Males</u>	<u>Females</u>
30	.0495	.0432
40	.0476	.0396
50	.0580	.0401
60	.0746	.0442
70	.0873	.0536

- (d) Turnover Turnover is assumed at 25% in the first year, and at 8% in the second; both rates are independent of age. Turnover after the second year is assumed to follow the T-3 Table published in the Pension Actuary's Handbook. Sample rates are:

Age	Rate
30	.04930
40	.04041
50	.02172

3.5 Actuarial Methods and Assumptions (continued)

- (e) Disability Disability rates under Group Long Term Disability policies, as given in the 1978 Society of Actuaries Study.

Sample rates are shown below.

Age	Male	Female
20	0.00070	0.00070
25	0.00072	0.00074
30	0.00079	0.00089
35	0.00089	0.00145
40	0.00119	0.00275
45	0.00252	0.00357
50	0.00478	0.00490
55	0.00860	0.00740
60	0.01330	0.01085

- (f) Retirement Age Active members are assumed to retire after 20 years of total military service, except if they complete 20 years of total military service before age 55, it is assumed that they will work one-half of the remaining years to age 55.

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 and Assumptions Since the Prior Valuation

An administrative expense load was added to the calculation of the annual contribution equal to the average of the prior 2 years of actual expenses, rounded to the nearest \$1,000.