

# State of Alaska Elected Public Officers Retirement System

Actuarial Valuation Report As of June 30, 2006

July 2008



Submitted By:
Buck Consultants
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July 31, 2008

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

To the Commissioner of Administration:

#### **Actuarial Certification**

The annual actuarial valuation required for the State of Alaska Elected Public Officers Retirement System has been prepared as of June 30, 2006 by Buck Consultants. The purposes of the report include:

- (1) a presentation of the valuation results of the Plan as of June 30, 2006;
- (2) a review of experience under the Plan for the year ended June 30, 2006;
- (3) a determination of the appropriate contribution amount which will be applied for the fiscal year ending June 30, 2007; and
- (4) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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. The employee data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data. Actuarial methods, medical cost trend, and assumed blended medical premiums were also reviewed.

The contribution requirements are determined as a level dollar amount to reflect the cost to amortize the unfunded liability over a fixed 25-year period. A summary of the actuarial assumptions and methods is presented in Section 1.3 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:

- 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 rates determined by the valuation and those adopted by the Board.

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 Nos. 25 and 43.

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. Slishinsky, ASA, EA, MAAA

Principal, Consulting Actuary

Michelle Reding DeLange, FSA, EA, MAAA

Director, Consulting Actuary

The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and hereby affirms her qualification to render opinions in such matters, in accordance with the qualification standards of the American Academy of Actuaries.

Melissa Krumholz, FSA, MAAA

Senior Consultant, Health & Productivity



# **Highlights**

This report has been prepared by Buck Consultants, an ACS Company, to:

- (1) Present the results of a valuation of the State of Alaska Elected Public Officers Retirement System as of June 30, 2006;
- (2) Review experience under the plan since the last actuarial valuation;
- (3) Determine the contribution for the Elected Public Officers Retirement System;
- (4) Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

This report is divided into three sections. Section 1 describes the basis of the valuation. It summarizes the plan provisions, provides information relating to the plan participants, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

Section 2 contains the results of the valuation. It includes the current annual costs and reporting and disclosure information.

Section 3 contains the information required by GASB 25 and 43.

The principal results are as follows:

Fun	ding Status as of June 30	2005	2006
(a)	Valuation Assets	\$ 0	\$ 0
(b)	Actuarial Accrued Liability	\$ 20,028,323	\$ 18,921,264
(c)	Accrued Benefit Funding Ratio, $(a) \neq (b)$	0%	0%
Rec	ommended Contribution	2005	2006
(a)	Normal Cost	\$ 58,597	\$ 0
(b)	Past Service Cost	 1,353,389	 1,278,581
(c)	Total Annual Cost, $(a) + (b)$	\$ 1,411,986	\$ 1,278,581



### **Analysis of Valuation**

#### Actuarial Assumptions

This actuarial valuation report is for the Elected Public Officers Retirement System of the State of Alaska. Plan benefits are not prefunded, but are paid when due. In order to discount the value of future benefit payments, we have assumed an interest rate of 5.00% per year. This is reflective of the expected long-term rate of return of general fund assets, the source of benefit funding. So long as the plan is operated on a "pay-as-you-go" basis and no assets are accumulated in the Plan, this will be a relatively unimportant assumption. However, the interest assumption is necessary in order to develop present values and other liability calculations which are desired by the Governmental Accounting Standards Board. We have assumed that salaries and therefore, retiree benefits, will increase at 4% per year. Since benefits of retired elected public officers are subject to increases along with increases in the salaries for active public officers, this is an important assumption.

#### Actuarial vs. Pay-As-You-Go-Funding

Since inception in 1976, benefits under EPORS have been paid for on a "pay-as-you-go" basis. This means that just enough money has been appropriated each year to pay the benefits as they come due. Under this method, no fund is built up and therefore, no investment earnings offset the State's cost. In Section 2.3 of this report, we have projected the total benefit payments under EPORS for the next 35 years. Annual benefit payments are projected to decrease from their current levels, which are approximately \$1,500,000 per year.

This valuation uses the Entry Age Normal Actuarial Funding Method to disclose costs and liabilities. The actuarial funding method amortizes all unfunded liabilities over 25 years in level dollar payments. There is also no normal cost component for the active member because he is beyond assumed retirement age. Since most of the costs and liabilities of EPORS are associated with inactive members and because there are no assets in an EPORS fund, the costs associated with EPORS are "past service costs."

Projections this far in the future are only valid if actual experience tracks closely with the actuarial assumptions. We have used our "best guess" in an attempt to predict long-term future rates of inflation, investment performance and salary increases for elected public officers. These estimates are subject to short-term volatility. Nevertheless, we believe that the assumptions, in the aggregate, are reasonable and that the projections provide a starting place to determine costs under EPORS. If it is decided to prefund these benefits, the discount rate should be reviewed to be reflective of the expected rate of return given the fund's asset allocation.

#### Changes Since Last Year

We have changed the actuarial funding method from Projected Unit Credit to Entry Age Normal to be consistent with the other State of Alaska systems. Since the only current active employee is beyond assumed retirement age, there is no normal cost for the system and this change has no impact on the valuation.

We also changed the age difference between spouses assumption and the percent married assumption to be more consistent with the other State of Alaska systems. We now assume husbands are three years older than their wives, and 100% of members are married. This change had a small impact on the valuation.



# Section 1 Basis of Valuation

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

A summary of plan provisions is provided in Section 1.1 and participant census information is shown in Section 1.2.

The valuation is based upon the premise that the plan 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 number of participants who will retire, die, terminate their services, their ages at such termination and their expected benefits.

The actuarial assumptions and the actuarial cost method, or funding method, are described in Section 1.3.



## Section 1.1 Summary of Plan Provisions

#### (1) Employees Included

The governor, lieutenant governor, and members of the Alaska State Legislature, holding office between January 1, 1976 and October 14, 1976.

#### (2) Employee Contributions

- (a) Mandatory employee contribution: 7% of salary.
- (b) Interest Credited: 4.5% compounded semi-annually on June 30 and December 31.
- (c) Voluntary Refund at Termination: Return of contributions with interest.
- (d) Refund at Death: If no eligible survivors, return of contribution with interest to designated beneficiary or beneficiaries.

#### (3) Normal Retirement Benefit

- (a) Eligibility: Age 60 with 5 or more years of paid service.
- (b) Type: Life with automatic 50% joint and survivor benefit if married at least one year prior to date of death. If the accrued benefit formula percentage is less than 60% at the time of death, the survivor benefit may not be less than 30% of the current base salary of the judicial office.
- (c) Amount: Members may irrevocably choose between two types of benefit calculations at the time of retirement: variable Alaska Statute (AS) 39.37.050(a)(1) and fixed AS 39.37.050(a)(2). Under the variable method, benefits are calculated based on the active salary of the office from which the member retired. Benefits may raise or lower depending on the change in the active salary. The fixed method bases the calculation on the average monthly compensation as defined in AS 39.35.680. Benefits calculated under the fixed method do not change when the active salary changes. Benefit calculation is 5% for each year of elected public officer service plus 2% for any other PERS service performed to a maximum of 75% times either the salary of the office from which the member retired or the average monthly salary depending on which option is chosen.
- (d) Variable Benefit Increases/Decreases: Members who elect a variable benefit will have their benefit recalculated when the active salary of the position they retired from changes. If the salary lowers, retirement benefits will also be lowered.
- (e) Cost of Living Increases: Retired members who select the variable option are eligible for post retirement pension increases (Chapter 91, Section 1 SLA 2001) if they have been receiving benefits without an increase for at least 10 years. Benefits will be increased by 75% of the cost of living increase calculated from the date of the last benefit adjustment or the date when the member retired, whichever is later. The member may not receive another cost of living increase until the base retirement calculation exceeds the benefit amount adjusted for prior increases or until another 10 years has elapsed, whichever is first.



# Section 1.1 (continued) Summary of Plan Provisions

#### (4) Early Retirement Benefit

- (a) Eligibility: At least age 55 with 5 or more years of paid service or any age with 20 or more years of paid service.
- (b) Type: Life benefit with automatic 50% joint and survivor benefit if married at least one year prior to date of death. If the accrued benefit formula percentage is less than 60% at the time of death, the survivor benefit may not be less than 30% of the current base salary of the judicial office.
- (c) Amount: Normal retirement benefit based on service to early retirement date reduced 0.5% per month for each month which precedes normal retirement date. Members may irrevocably choose between two types of benefit calculations at the time of retirement: variable AS 39.37.050(a)(1) and fixed AS 39.37.050(a)(2). Under the variable method, benefits are calculated based on the active salary of the office from which the member retired. Benefits may raise or lower depending on the change in the active salary. The fixed method bases the calculation on the average monthly compensation as defined in AS 39.35.680. Benefits calculated under the fixed method do not change when the active salary changes. Benefit calculation is 5% for each year of elected public officer service plus 2% for any other PERS service times either the salary of the office from which the member retired or the average monthly salary depending on which option is chosen.
- (d) Variable Benefit Increases/Decreases: Members who elect a variable benefit will have their benefit recalculated when the active salary of the position they retired from changes. If the salary lowers, retirement benefits will also be lowered.
- (e) Cost of Living Increases: Retired members who select the variable option are eligible for post retirement pension increases (Chapter 91, Section 1 SLA 2001) if they have been receiving benefits without an increase for at least 10 years. Benefits will be increased by 75% of the cost of living increase calculated from the date of the last benefit adjustment or the date when the member retired, whichever is later. The member may not receive another cost of living increase until the base retirement calculation exceeds the benefit amount adjusted for prior increases or until another 10 years has elapsed, whichever is first.

#### (5) Deferred Vested Benefit

- (a) Eligibility: Vested with 5 or more years of paid service. Benefits may commence at Early or Normal retirement.
- (b) Type: Normal or Early retirement benefit.
- (c) Amount: Calculated in the same manner as a Normal or Early retirement benefit.
- (d) Variable Benefit Increases/Decreases: Same provisions as Normal or Early retirement.
- (e) Cost of Living Increases: Same provisions as Normal or Early retirement.



# Section 1.1 (continued) Summary of Plan Provisions

#### (6) Retirement for Incapacity Benefit

- (a) Eligibility: Incapacitated from performing the duties of their position at any age with five or more years of paid service.
- (b) Type: Monthly benefit received until death.
- (c) Amount: Calculated in the same manner as a Normal retirement except benefits commence the first of the month following an approved recommendation of the review board.
- (d) Variable Benefit Increases/Decreases: Same provisions as Normal retirement.
- (e) Cost of Living Increases: Same provisions as Normal retirement.

#### (7) Death Benefit Before Retirement

Provided the deceased member accrued at least 2 years of credited service and had been married for at least 1 year the spouse is entitled to an automatic survivor benefit of 50% of the accrued benefit at the time of death. If the accrued benefit formula percentage is less than 60% at the time of death, the survivor benefit may not be less than 30% of the current base salary of the judicial office. If there is no surviving spouse but there are dependent children at the time of death, 50% of the above benefit may be divided in equal shares to the dependent children for the duration of their dependency. If there is no spouse or dependent children, the contribution account balance, plus interest, will be paid to the designated beneficiary or beneficiaries.

#### (8) Medical Benefits

Each retiree is provided with medical and prescription drug benefits with no premium payment required. These benefits are available for the lifetime of the retiree and for the lifetime of the spouse if a survivor benefit is payable. Benefits are also available to eligible dependents for the duration of their dependency.



# Section 1.2 Member Information

		As of <u>June 30, 2005</u>	As of <u>June 30, 2006</u>
Active	e Members		
(1)	Number	2	1
(2)	Average Age	62.01	67.06
(3)	Average Service Years <sup>1</sup>	12.43	3.42
(4)	Average Annual Pay	\$80,090	\$93,576
Veste	d Terminated Members		
(1)	Number	1	1
(2)	Average Age	54.88	55.88
(3)	Average Service	7.00	7.00
Retire	ees and Beneficiaries		
(1)	Number	38	37
(2)	Average Age	73.46	72.44
(3)	Average Monthly Benefits	\$2,826	\$2,802

<sup>1</sup> Only service since rehire from retirement is considered.



# Section 1.3 Actuarial Methods and Assumptions

#### Valuation of Liabilities

#### A. Actuarial Method

Entry Age Normal

Projected pension and postemployment healthcare benefits were determined for the active member using Entry Age Normal. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for pension benefits (constant dollar amount for healthcare benefits), from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members. The actuarial accrued liability for the active member (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs. The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The unfunded accrued benefit liability, including accumulated actuarial gains and losses, is amortized over 25 years on a level dollar basis. The annual required contribution will not be less than the expected benefit payments for the upcoming year.

# Section 1.3 (continued)

## **Actuarial Methods and Assumptions**

#### **B.** Actuarial Assumptions

1. Interest 5.00% per year, compounded annually, net of investment

expenses.

2. Inflation 3.50% per year.

3. Salary Scale 4% per year, compounded annually.

4. Mortality

a. Post-retirement 1994 Group Annuity Mortality Basic Table for males

and females, 1994 Base Year.

b. Pre-retirement None.

5. Turnover None.

6. Retirement Age 60 for active members, age 55 for deferred

members.

Disability
 Dependent Children
 None.

9. Benefit Option Members are assumed to elect the variable method of

benefit calculation. Members are assumed to be married at retirement. Husbands are assumed to be 3 years older than their wives. If actual benefit election is known at the time of the valuation, the actual election is used.

10. Health Benefits The assumptions used to determine the cost of medical

benefits are exactly the same as those shown in Section 2.3(D) of the June 30, 2006 valuation report for the

Teachers' Retirement System.

C. Valuation Asset Method Actuarial Value of Assets equals Market Value of

Assets.

# Section 2 Valuation Results

This section sets forth the results of the actuarial valuation.

Section 2.1 shows the actuarial present values as of June 30, 2006.

Section 2.2 develops the total contribution rate.

Section 2.3 estimates total benefit payments for the next 35 years.

# Section 2.1 Breakdown of Actuarial Accrued Liability as of June 30, 2006

	<u>Norma</u>	al Cost	<u>Actu</u>	arial Accrued Liability
Active Participants				
Retirement Benefits	\$	0	\$	446,320
Health Benefits		0		177,611
Subtotal	\$	0	\$	623,931
Retirees and Survivors				
Retired Members' Benefits			\$	15,629,306
Health Benefits				2,360,461
Subtotal			\$	17,989,767
<b>Vested Terminations</b>				
Deferred Retirement Benefits			\$	188,934
Health Benefits				118,632
Subtotal			\$	307,566
Total			\$	18,921,264

# Section 2.2 Calculation of Total Annual Contribution for Fiscal Year Ending June 30, 2007

(1)	Total Normal Cost	\$ 0
(2)	Total Salaries	\$ 93,576
(3)	Expected Employee Contribution	\$ 0
(4)	Employer Normal Cost $[(1) - (3)]$	\$ 0
(5)	Actuarial Accrued Liability	\$ 18,921,264
(6)	Assets	 0
(7)	Total Unfunded Liability [(5) – (6)]	\$ 18,921,264
(8)	Amortization Factor (25 years at 5%)	14.798642
(9)	Past Service Payment [(7) / (8)]	\$ 1,278,581
(10)	Annual Actuarial Contribution at Beginning of Year [(4) + (9)]	\$ 1,278,581
(11)	Interest	 63,929
(12)	Annual Actuarial Contribution at End of Year $[(10) + (11)]$	\$ 1,342,510
(13)	Expected Benefit Payments for the Upcoming Year	\$ 1,513,591
(14)	Annual Recommended Contribution [Greater of (12) and (13)]	\$ 1,513,591

# Section 2.3 Estimated Cash Flow

Year Starting July 1	Annual Contributions	Estimated Annual Payments			
2006	\$ 0	\$ 1,513,591 <sup>(1)</sup>			
2007	0	1,474,192			
2008	0	1,461,213			
2009	0	1,433,050			
2010	0	1,418,862			
2011	0	1,407,339			
	_				
2012	0	1,382,403			
2013	0	1,361,225			
2014	0	1,319,525			
2015	0	1,277,411			
2016	0	1,245,857			
2017	0	1,212,685			
2018	0	1,178,111			
2019	0	1,142,228			
2020	0	1,105,456			
2021	0	1,067,913			
2022	0	1 020 425			
	0	1,029,435			
2023	0	990,011			
2024	0	949,326			
2025	0	907,292			
2026	0	863,847			
2027	0	818,865			
2028	0	772,393			
2029	0	724,542			
2030	0	675,636			
2031	0	625,949			
2032	0	575,701			
2033	0	525,270			
2034	0	475,104			
2035	0	425,763			
2036	0	377,812			
2037	0	331,766			
2038	0	288,081			
2039	0	247,159			
2040	0	209,368			
2041	0	175,018			

<sup>(1)</sup> Actual FY07 contributions made for Pension and Healthcare Benefits were \$1,670,005.



# Section 3

Section 3 sets forth the information required by GASB 25 and 43.

- Section 3.1 Summary of Accrued and Unfunded Accrued Liabilities.
- Section 3.2 Schedule of Employer Contributions.
- Section 3.3 Actuarial Assumptions, Methods and Additional Information.

# 3.1 Summary of Accrued and Unfunded Accrued Liabilities

Valuation Date	Aggregate Accrued Liability	 aluation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2005 <sup>1</sup>	\$ 20,028,323	\$ 0	N/A	\$ 20,028,323	\$ 160,181	12,503.57%

The exhibit below shows the pension disclosure under GASB No. 25

Valuation Date	Aggregate Accrued Liability	= :	aluation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2006	\$ 16,264,560	\$	0	N/A	\$ 16,264,560	\$ 93,576	17,381.12%

The exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy under GASB No. 43.

Valuation Date	Aggregate Accrued Liability	 luation ssets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2006	\$ 2,982,910	\$ 0	N/A	\$ 2,982,910	\$ 93,576	3,187.69%

<sup>&</sup>lt;sup>1</sup> This is the first valuation to be completed since GASB 25 was adopted.



## 3.2 Schedule of Employer Contributions

Year Ended June 30	Total Annual Required Contribution	Total Percentage Contributed
2007	\$ 1,670,005	100%
2006	1,630,202	100%
2005	N/A	N/A

The annual required contribution is the greater of the annual recommended contribution and the statutorily required contribution described in AS 39.37.110.

### 3.3 Actuarial Assumptions, Methods and Additional Information

Valuation Date	June 30, 2006
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level dollar basis
Equivalent Single Amortization Period	25 years
Asset Valuation Method	Market Value
Actuarial Assumptions:	
Investment rate of return*	5.00%
Projected salary increases	4% per year, compounded annually
*Includes inflation at	3.5%

GASB 43 requires that the discount rate used in the valuation be the estimated long-term yield on investments that are expected to finance postemployment benefits. Depending on the method by which a plan is financed, the relevant investments could be plan assets, employer assets or a combination of plan and employer assets. The investment return should reflect the nature and the mix of both current and expected investments and the basis used to determine the actuarial value of assets.

The State of Alaska Elected Public Officers Retirement System's retiree healthcare benefits are fully funded using the pay-as-you-go method. For this system, the pay-as-you-go cost exceeds the annual required contribution (ARC). GASB states that for plans that contribute more than the ARC, the discount rate used in the valuation should reflect the long-term investment yield on plan assets. The State of Alaska has utilized a discount rate of 5.00% as of June 30, 2006, to be used for fiscal 2007 disclosure.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2007 employer ARC for accounting purposes is \$251,417 for healthcare benefits and \$1,529,523 for healthcare and pension benefits combined.

