

State of Alaska Teachers' Retirement System

Actuarial Valuation Report as of June 30, 2010

buckconsultants[•]

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October 4, 2011

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 annual actuarial valuation required for the State of Alaska Teachers' Retirement System has been prepared as of June 30, 2010 by Buck Consultants. The purposes of the report include:

- (1) a presentation of the valuation results of the System as of June 30, 2010;
- (2) a review of experience under the System for the year ended June 30, 2010;
- (3) a determination of the appropriate total contribution rate to be paid by all employers in the System including additional State contributions pursuant to SB 125, which will be applied for the fiscal year ending June 30, 2013; and
- (4) 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 2.3)
- (2) Schedule of active member valuation data (Section 2.2(c))
- (3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(i))
- (4) Solvency test (Section 3.3)
- (5) Analysis of financial experience (Section 3.1)
- (6) Schedule of Funding Progress, Schedule of Employer Contributions and trend data schedules (Section 3.2)

The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration October 4, 2011 Page 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 years' data. The actuarial assumptions are based on the results of an experience study presented to The Alaska Retirement Management Board (Board) in September 2010 and adopted by the Board in December 2010. Actuarial methods, medical cost trend, and assumed blended medical premiums were also reviewed during the experience study.

The total contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY11 and a fixed 25-year amortization as a level percentage of payroll of the initial unfunded accrued liability and subsequent assumption changes and gains/losses. The payroll used to determine the contribution rates is the total payroll of all active members in the System, including those hired after July 1, 2006 who are in the Defined Contribution Retirement (DCR) Plan. The amortization period is set by the Board. Contribution levels are recommended by the Actuary and adopted by the Board each year. The ratio of valuation assets to liabilities decreased from 57.0% to 53.6% during the year. This report provides an analysis of the factors that led to the decrease. This report also provides a history of the funding ratio of the System.

A summary of the actuarial assumptions and methods is presented in Section 2.3 of this report. The assumptions, when applied in combination, fairly represent past and anticipated future experience of the System.

The funding objective of the plan, as adopted by the ARM Board, is to set a contribution rate that will pay the normal cost and amortize the initial unfunded actuarial accrued liability and each subsequent annual change in the unfunded actuarial accrued liability over a closed 25-year period as a level percentage of payroll. The funding objective for the plan, as adopted by the ARM Board, is currently being met.

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.

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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. Slockinsky

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

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

Milisa a Bissett

Melissa Bissett, FSA, MAAA Senior Consultant, Health & Productivity

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Report Highlights

This report has been prepared by Buck Consultants for the State of Alaska Teachers' Retirement System to:

- (1) Present the results of a valuation of the Alaska Teachers' Retirement System as of June 30, 2010;
- (2) Review experience under the plan for the year ended June 30, 2010;
- (3) Determine the appropriate contribution rate for all employers in the System; and
- (4) 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 the experience of the plan during Fiscal Year 2010, the current annual costs, and 30-year projections.

Section 2 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 3 contains additional exhibits showing historical information on system experience and unfunded liabilities and GASB information.

The principal results are as follows:

Funding Status as of June 30 ¹	2009	2010
(a) Accrued Liability ²	\$7,847,514	\$8,847,788
(b) Valuation Assets ²	4,472,958	4,739,128
(c) Unfunded Accrued Liability ² , $(a) - (b)$	\$3,374,556	\$4,108,660
(d) Funding Ratio based on Valuation Assets, $(b) \div (a)$	57.0%	53.6%
(e) Market Value of Assets ²	\$3,727,466	\$4,024,193
(f) Funding Ratio based on Market Assets, $(e) \div (a)$	47.5%	45.5%

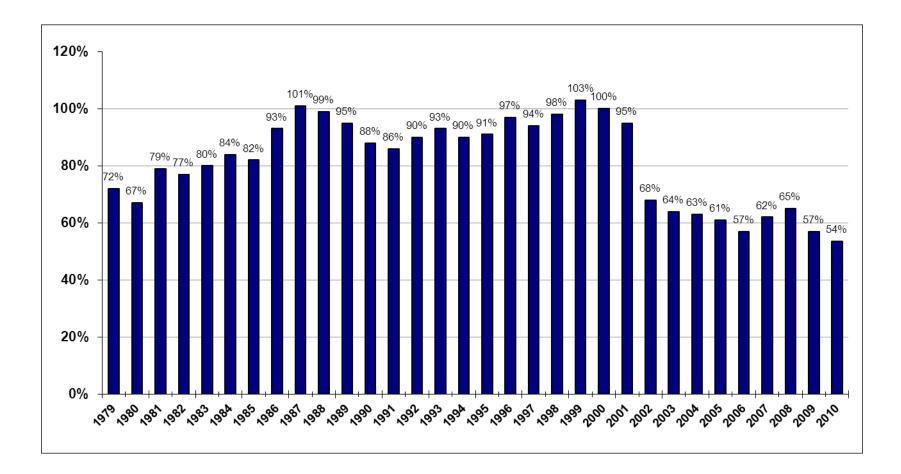


¹ Includes pension and healthcare benefits.

Report Highlights (continued)

TRS Funding Ratio History

(Based on Valuation Assets)



Report Highlights (continued)

Employer/State Contribution Rates for Pension

for Fiscal Year:	2012	2013
(a) Normal Cost Rate Net of Member Contributions	2.42%	3.15%
(b) Past Service Rate	<u>24.19%</u>	<u>27.38%</u>
(c) Total Employer/State Contribution Rate $(a) + (b)$	26.61%	30.53%
Employer/State Contribution Rates for Postemployment Healthcare for Fiscal Year:	2012	2013
(a) Normal Cost Rate	4.15%	4.32%
(b) Past Service Rate	<u>11.85%</u>	<u>14.71%</u>
(c) Total Employer/State Contribution Rate $(a) + (b)$	16.00%	19.03%
Total Employer/State Contribution Rates for Fiscal Year:	2012	2013
(a) Normal Cost Rate Net of Member Contributions	6.57%	7.47%
(b) Past Service Rate	<u>36.04%</u>	<u>42.09%</u>
(c) Total Employer/State Contribution Rate $(a) + (b)$	42.61%	49.56%
(d) Board Adopted Total Employer/State Contribution Rate	42.61%	49.56%
(e) Defined Contribution Retirement (DCR) Rate Paid by Employers(f) Board Adopted Total Rate, Including DCR Rate Paid by	<u>2.94%</u>	<u>3.11%</u>
Employers $(d) + (e)$	45.55%	52.67%

Contribution rates are based on salary for both DB plan members and DCR members, combined.

The rates shown above are for funding purposes which differ from the Annual Required Contribution for GASB No. 43 reporting purposes. Under GASB No. 43, postemployment healthcare liabilities are gross of the retiree drug subsidy and are calculated with a discount rate for a partially funded plan.

Contribution rates include Employer contribution rates as limited by State statute, and include the additional State contribution required under SB 125.

Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio based on valuation assets as of June 30, 2010 has decreased from 57.0% to 53.6%, a decrease of 3.4%. The total calculated Employer/State contribution rate has increased from 42.61% of payroll for FY12 to 49.56% for FY13, an increase of 6.95%. The reasons for the change in the funded status and calculated contribution rate are explained below.

(1) Retiree Medical Costs and Assumptions

The following table summarizes the monthly premium per benefit recipient since 1977.

Time Period	Monthly Premium Per Retiree For Health Coverage	Annual Percentage Change	Average Compound Annual Increase Since FY78
2/1/77-1/31/78	\$ 57.64	66%	
2/1/78-1/31/79	69.10	20%	20%
2/1/79-1/31/80	64.70	-6%	6%
2/1/80-1/31/81	96.34	49%	19%
2/1/81-1/31/82	96.34	0%	14%
2/1/82-1/31/83	115.61	20%	15%
2/1/83-1/31/84	156.07	35%	18%
2/1/84-1/31/85	191.85	23%	19%
2/1/85-1/31/86	168.25	-12%	14%
2/1/86-1/31/87	165.00	-2%	12%
2/1/87-1/31/88	140.25	-15%	9%
2/1/88-1/31/89	211.22	51%	13%
2/1/89-1/31/90	252.83	20%	13%
2/1/90-1/31/91	243.98	-4%	12%
2/1/91-1/31/92	243.98	0%	11%
2/1/92-1/31/93	226.90	-7%	10%
2/1/93-1/31/94	309.72	37%	11%
2/1/94-1/31/95	336.05	9%	11%
2/1/95-1/31/96	350.50	4%	11%
2/1/96-1/31/97	350.50	0%	10%
2/1/97-1/31/98	368.00	5%	10%
2/1/98-12/31/98	368.00	0%	9%
1/1/99-12/31/99	442.00	20%	10%
1/1/00-12/31/00	530.00	20%	10%
1/1/01-12/31/01	610.00	15%	10%
1/1/02-12/31/02	668.00	10%	10%
1/1/03-12/31/03	720.00	8%	10%
1/1/04-12/31/04	806.00	12%	10%
1/1/05-12/31/05	850.00	5%	10%
1/1/06-12/31/06	876.00	3%	10%
1/1/07-12/31/07	876.00	0%	10%
1/1/08-12/31/08	876.00	0%	9%
1/1/09-12/31/09	937.00	7%	9%
1/1/10-12/31/10	1,068.00	14%	9%
1/1/11-12/31/11	1,176.00	10%	9%

As shown in above table, the monthly retiree medical premium for the January 1, 2011 to December 31, 2011 time period will increase to \$1,176. This represents an increase of 10% from the previous year's medical premium of \$1,068. The health cost trend rates used for this valuation are described in Section 2.3. Over the last 10 years, annual premium rate changes have ranged from no change to up 14%. Also, over the last ten years, the increase in the premium rate has been about 6.8% compounded annually.



An analysis of medical costs was completed based on claims information and enrollment data provided by Wells Fargo Insurance Services (WFIS). Costs for medical services and prescriptions were analyzed separately, and separate trend rates were developed to project expected future medical and prescription costs. An offset for costs expected to be reimbursed by Medicare was incorporated beginning at age 65. Average medical claims were then distributed across the population based on expected increases in medical expenses that occur with age.

For the 2010 valuation, we updated claims cost and Medicare offset analyses using fiscal year 2010 claims and enrollment information. For Medicare Part B only participants, we were provided a census of all current retirees that do not have Medicare Part A. This census was provided by WFIS and reduced the number of Part B only individuals in the analysis, compared with our prior estimates. Prior estimates were based on employee date of hire, date of birth, tier, etc., and eligibility rules for Medicare Part A and associated claims costs. A lower average claims cost was applied to retirees covered by both Medicare Part A and B vs. retirees covered only by Medicare Part B. The assumed lag used to adjust claims data from a paid to incurred basis reflects the results of our June 30, 2010 lag study. Assumed lag from incurred date to paid claim is approximately 2.4 months for medical claims and 0.15 months for prescription claims. Composite lag for combined medical and prescription claims is about 1.6 months, lower than the 2-month composite lag assumption (1.9) used for our 2009 valuation. The trend assumption is based on the Society of Actuaries' Healthcare Cost Trend Model as adopted by the ARM Board at their December 5, 2008 meeting. The trend rate varies by year declining to 5.1% over 100 years. The trends vary by medical and prescription drugs until 2012, at which point the same trends are used for both benefit types.

Individual claim level detail from WFIS and Premera were obtained for fiscal years 2007 through 2009 (Premera) and fiscal year 2010 (WFIS). This data was reviewed and compared to management level reporting supplied by WFIS. For the 2010 valuation, we have not modified any management level reporting information used to develop per capita claim cost rates. However, we will continue to compare data from both sources and potentially modify future claims cost rate derivation to reflect salient information at the individual claimant level that may enhance global management level data. For the 2010 valuation, we do not recommend any changes to morbidity assumptions used to project increasing claims costs as members age. However, we will continue to compare age-based claims costs derived from individual claimant data to the current morbidity curve and potentially modify the assumed aging impact on claims costs in future valuations. Based on census data received from WFIS, the portion of retirees eligible for Medicare Part B only was modified, decreasing the Part B only proportion of all Medicare retirees from 3.5% to 0.6%. Finally, explicit third-party administration (TPA) costs were added to medical and prescription claims cost rates. Per-member TPA costs are derived from the current WFIS contract and are projected to increase at the assumed rate of 5%.

Since 2004, the funding valuation also reflects the impact of the Medicare Part D Retiree Drug Subsidy (RDS) in the projection of prescription drug benefit costs. Buck's actuaries have attested that the prescription drug benefits meet the actuarial equivalence requirements and the plan qualifies to receive the RDS under the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) for calendar 2010 and 2011. Based on current plan provisions and utilization data, we anticipate the plan will continue to qualify for RDS payments. The State has shared its payments for calendar 2006 through calendar 2009 and this information was used to estimate future RDS payments in this valuation. Please note, Part D subsidies are not reflected for accounting purposes under GASB No. 43.

Utilization and claims cost data indicate that healthcare experience emerging since the prior valuation is improving slightly. A large portion of the historical unfavorable experience is due to members with chronic diseases (diabetes, ESRD, etc.), and the corresponding large claims that accompany those diseases. Due to the nature of these diseases, it is expected that the State will have these members as benefit recipients for some time, and that costs may be able to be controlled, but not eliminated. With the introduction of a health improvement plan for State employees, as well as disease management provided by the TPA, it is hoped that the incidence of the most severe and costly chronic conditions can be reduced to a more manageable and stable level. As with the prior valuation, a weighting methodology is employed, where each of the experience years is weighted appropriately, with more emphasis on the most recent two years, when calculating the claims costs. This has the effect of preventing any one year from unduly influencing the claims costs. In the current valuation, we averaged national trend assumptions with Alaska-specific trend, with 75% weight to Alaska-specific trend and 25% to national trend, during the experience period to give more credibility to Alaskaspecific experience while still reflecting national trends.

The following table summarizes data sources and assumptions and the relative impact changes in each have on healthcare cost projections for 2010 as compared to 2009:

Healthcare Cost Rate Data Source or Assumption Change, 2010 vs. 2009	Gain / Loss Impact on 2010 Valuation Results
Claim lag specific to medical and prescription experience (2.4 months for medical and 0.15 months for Rx versus 2.6 and 0.5 respectively)	Negligible
Individual claims level data	 No impact on cost data used for 2010, though potentially a source of future modifications
	 No impact on morbidity assumptions used for 2010, though potentially a source of future modifications
	 Moderate gain from decreasing the Part B only proportion of all Medicare retirees from 3.5% to 0.6%
Explicit TPA fees	Negligible
Actual RDS payments received	Negligible
Weighting of prior experience periods used to derive base claims during the valuation year (more weight to recent years vs. prior method of nearly equal weights for all years)	Minor loss due to unweighting of early years of Premera contract when claims were lower than prior TPA due to provider discounts
Averaging Alaska-specific trend during the experience period with Health Care Cost Trend Rates (HCCTR) used to bring prior data forward to the valuation year	No change
Aggregate claims data	Moderate gain due to experience, but dampened by weighting methodology

(2) Investment Experience

The approximate FY10 investment return based on market values was 10.6% compared to the expected investment return of 8.25%. This resulted in a gain of approximately \$86.1 million to the System from investment experience. The asset valuation method recognizes 20 percent of this gain (\$17.2 million) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY06 investment gain, 20 percent of the FY07 investment gain, 20 percent of the FY08 investment loss and 20 percent of the FY09 investment loss were recognized this year. The approximate FY10 investment return based on actuarial values was 8.1% compared to the expected investment return of 8.25%. The net result was an investment loss of \$6.0 million which decreased the funding ratio by 0.07% and increased the Employer/State contribution rate by 0.05%.

(3) Salary Increase

During the period from June 30, 2009, to June 30, 2010, salary increases for continuing active members were more than anticipated in the valuation assumptions. Higher accrued liabilities caused the funding ratio to decrease by 0.32%. The net effect of the salary loss was an increase of 0.59% in the Employer/State contribution rate.

(4) Demographic Experience

Section 2.2 provides statistics on active and inactive participants. The number of active participants decreased 4.79% from 8,226 at June 30, 2009 to 7,832 at June 30, 2010 due to the closure of the plan to new entrants as of July 1, 2006. The average age of active participants increased from 47.42 to 48.10 and average credited service increased from 13.19 to 13.97 years.

The number of retirees and beneficiaries increased 3.34% from 10,255 to 10,598, and their average age increased from 66.42 to 66.91. There was a 4.98% decrease in the number of vested terminated participants from 884 to 840. Their average age decreased from 49.42 to 49.34.

The overall effect of these participant data changes along with the healthcare experience was an actuarial gain to the System, resulting in a decrease in the Employer/State contribution rate of 0.56% of total payroll. This gain is due to having a larger payroll base to spread the unfunded contribution over. The gain/loss by decrement on the accrued liability is shown on the summary page.

(5) Effect of the Two-Year Delay in the Contribution Rate

As of June 30, 2009, the actuarially calculated rate was 42.61% for FY12 Employer/State contributions. Since Employer/State contribution rates are determined two years prior to the fiscal year, the June 30, 2007 adopted employer rate of 39.53% was contributed during FY10. The difference between the two calculated rates, 39.53% and 42.61%, created a contribution deficit to the System. However, because of additional contributions from the Medicare Part D subsidy and the legal settlement, this deficit is very small. This deficit increased the Employer/State contribution rate by 0.01%.

(6) Actuarial Projections

At the Fall 1991 Board Meetings, the TRS Board approved the use of an enhanced actuarial projection system in the valuation report. The same actuarial cost method is used, but the enhanced system projects the associated liabilities 30 years into the future. By also projecting plan assets, this report in effect produces an actuarial valuation for each of the next 30 years. Section 1.5, Actuarial Projections, contains the results of this analysis.

This type of information can be especially useful to multi-tiered systems, such as TRS. No new DB plan entrants are anticipated. The total active population is expected to grow at 1% per year.

(7) Changes in Methods from the Prior Valuation

There were no changes in asset or valuation methods from the prior valuation.

(8) Changes in Assumptions from the Prior Valuation

Effective for the June 30, 2010 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary based on the results of an experience analysis performed on the population experience from July 1, 2005 through June 30, 2009. The changes in assumptions were adopted by the Board during the December 2010 Board meeting.

(9) Changes in Benefit Provisions Since the Prior Valuation

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



Summary of Actuarial Gain/(Loss) and Other Changes During the Year

The following table summarizes the sources of change in the total Employer/State contribution rate based on DB and DCR member payroll combined:

		Pension	Healthcare	<u>Total</u>
1.	Last year's total Employer/State contribution rate	26.61%	16.00%	42.61%
2.	Change due to:			
	a. New assumptions	3.96%	2.90%	6.86%
	b. Effect of two-year delay in the contribution rate	0.46%	(0.45)%	0.01%
	c. Investment experience	(0.34)%	0.39%	0.05%
	d. Salary increases	0.59%	N/A	0.59%
	e. Demographic and medical experience ¹	<u>(0.75)%</u>	<u>0.19%</u>	<u>(0.56)%</u>
	f. Total change $(a + b + c + d + e)$	3.92%	3.03%	6.95%
3.	Total Employer/State contribution rate this year, $(1) + (2f)$	30.53%	19.03%	49.56%

The following table shows the pension gain/(loss) on total accrued liability (in thousands):	
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- Retirement Experience	\$ 7,922
- Termination Experience	(9,763)
- Mortality Experience	(17,413)
- Disability Experience	(556)
- Other Demographic Experience	(20,959)
- Salary Increases	(35,479)
- Alaska COLA	3,185
- PRPA Other Than Expected	<u>55,638</u>
– Total	\$ (17,425)
The following table shows the healthcare gain/(loss) on total accrued liability (in thousands):	<u>Amount</u>
- Claims Costs and Other Demographic Experience	\$ (92,168)
- Administration Fee	3,192
- More precise data regarding which members are eligible for Part B only	<u>16,209</u>
– Total	\$ (72,767)

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

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Amount

¹ Includes changes in future healthcare claims costs.

Section 1

This section sets forth the results of the actuarial valuation.

Section 1.1(a)	Statement of Net Assets.
Section 1.1(b)	Statement of Changes in Net Assets During FY10 and the Investment Return for FY10.
Section 1.1(c)	Actuarial Value of Assets.
Section 1.2	Actuarial Present Values.
Section 1.3	Development of Total Employer/State Contribution Rate for FY13.
Section 1.4	Development of Actuarial Gain or Loss for FY10.
Section 1.5(a)	Actuarial Projections. Based on Total DB and DCR Payroll.
Section 1.5(b)	Actuarial Projections – Effect of Economic Scenarios. Based on Total DB and DCR Payroll.



1.1(a) Statement of Net Assets

As of June 30, 2010 (in thousands)		Pension	Healthcare	M	Total larket Value
Cash and Cash Equivalents	\$	27,073	\$ 11,763	\$	38,836
Domestic Equity Pool		786,027	364,601		1,150,628
Domestic Fixed Income Pool		378,996	197,773		576,769
International Equity Pool		416,985	189,868		606,853
Real Estate Pool		239,928	111,245		351,173
International Fixed Income Pool		41,311	18,406		59,717
Private Equity Pool		265,520	120,457		385,977
Emerging Markets Equity Pool		156,220	75,819		232,039
Other Investments Pool		161,226	67,959		229,185
High Yield Pool		67,474	30,272		97,746
Absolute Return Pool		137,659	62,657		200,316
Treasury Inflation Protection Pool		15,378	7,851		23,229
Emerging Debt Pool		20,900	9,468		30,368
Loans and Mortgages (Net of Reserves)		1	 984		985
Total Cash and Investments	\$	2,714,698	\$ 1,269,123	\$	3,983,821
Net Accrued Receivables		1,859	 38,513		40,372
Net Assets	\$	2,716,557	\$ 1,307,636	\$	4,024,193



1.1(b) Statement of Changes in Net Assets

Fiscal Year 2010 (in thousands) Per		Pension		Healthcare	I	Total Market Value	
(1)	Net Assets, June 30, 2009 (market value)	\$	2,596,433	\$	1,131,033	\$	3,727,466
(2)	Additions:						
	(a) Plan Member Contributions	\$	56,554	\$	117	\$	56,671
	(b) Employer Contributions		33,800		42,694		76,494
	(c) Employer Legislative Relief		100,475		72,987		173,462
	(d) Interest and Dividend Income		50,419		22,577		72,996
	(e) Net Appreciation/(Depreciation) in Fair Value of Investments		225,483		103,351		328,834
	(f) Legal Settlement, Net of Fees		0		43,993		43,993
	(g) Medicare Part D Subsidy		0		4,448		4,448
	(h) Other		9		2		11
	(i) Total Additions	\$	466,740	\$	290,169	\$	756,909
(3)	Deductions:						
	(a) Medical Benefits	\$	0	\$	110,313	\$	110,313
	(b) Retirement Benefits		332,690		0		332,690
	(c) Refunds of Contributions		3,472		0		3,472
	(d) Investment Expenses		7,756		25		7,781
	(e) Administrative Expenses		2,698		3,228		5,926
	(f) Total Deductions	\$	346,616	\$	113,566	\$	460,182
(4)	Net Assets, June 30, 2010 (market value)	\$	2,716,557	\$	1,307,636	\$	4,024,193
Retu	Approximate Market Value Investment Return Rate During FY10 Net of All				10 6%		
ъхр	enses		10.5%		10.9%		10.6%



1.1(c) Actuarial Value of Assets

The actuarial value of assets was set equal to the market value at June 30, 2002. 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	Pension	Healthcare	Total
(1) Deferral of Investment Return/(Loss) for FY10			
(a) Market Value, June 30, 2009	\$2,596,433	\$ 1,131,033	\$ 3,727,466
(b) Contributions for FY10	190,829	115,798	306,627
(c) Medicare Part D Subsidy	0	4,448	4,448
(d) Benefit Payments for FY10	336,162	110,313	446,475
(e) Legal Settlement, Net of Fees	0	43,993	43,993
(f) Actual Investment Return (net of expenses)	265,457	122,677	388,134
(g) Expected Return Rate (net of expenses)	8.25%	8.25%	8.25%
(h) Expected Return - Weighted for Timing	208,330	93,712	302,042
(i) Investment Gain/(Loss) for the Year $(f_{\cdot} - h_{\cdot})$	57,127	28,965	86,092
(j) Deferred Investment Return/(Loss)	\$ (730,170)	\$ (171,624)	\$ (901,794)
(2) Actuarial Value, June 30, 2010			
(a) Market Value, June 30, 2010	\$2,716,557	\$ 1,307,636	\$ 4,024,193
(b) 2010 Deferred Investment Return/(Loss)	(730,170)	(171,624)	(901,794)
(c) Preliminary Actuarial Value, June 30, 2010 (a b.)	3,446,727	1,479,260	4,925,987
(d) Upper Limit: 120% of Market Value, June 30, 2010	3,259,868	1,569,163	N/A
(e) Lower Limit: 80% of Market Value, June 30, 2010	2,173,246	1,046,109	N/A
(f) Actuarial Value, June 30, 2010 (c. limited by d. and e.)	\$3,259,868	\$ 1,479,260	\$ 4,739,128
(g) Ratio of Actuarial Value of Assets to Market Value of Assets	120.0%	113.1%	117.8%
 (h) Approximate Actuarial Value Investment Return Rate During FY10 Net of All Expenses 	9.5%	4.9%	8.1%

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1.1(c) Actuarial Value of Assets (continued)

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

		Pension				
Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years		
6/30/2006 ¹	\$ 96,920	\$ 77,535	\$ 19,385	\$	0	
6/30/2007 ¹	335,304	201,183	67,061		67,060	
6/30/2008	(451,260)	(180,504)	(90,252)		(180,504)	
6/30/2009	(1,104,046)	(220,809)	(220,809)		(662,428)	
6/30/2010	57,127	0	11,425		45,702	
Total	\$ (1,065,955)	\$(122,595)	\$(213,190)	\$	(730,170)	

			Healthcare				
Plan Year Ended	Asset Gain/(Loss)		Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years		
6/30/2006 ¹	4		\$ 22,133	\$ 5,534	\$	0	
6/30/2007 ¹		95,718	57,430	19,144		19,144	
6/30/2008		(102,901)	(41,160)	(20,580)		(41,161)	
6/30/2009		(287,965)	(57,593)	(57,593)		(172,779)	
6/30/2010		28,965	0	5,793		23,172	
Total	\$	(238,516)	\$ (19,190)	\$ (47,702)	\$	(171,624)	

		Total				
Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years		
6/30/2006	\$ 124,587	\$ 99,668	\$ 24,919	\$	0	
6/30/2007	431,022	258,613	86,205		86,204	
6/30/2008	(554,161)	(221,664)	(110,832)		(221,665)	
6/30/2009	(1,392,011)	(278,402)	(278,402)		(835,207)	
6/30/2010	86,092	0	17,218		68,874	
Total	\$ (1,304,471)	\$(141,785)	\$(260,892)	\$	(901,794)	

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¹ The pension and healthcare assets bases were allocated using a ratio of market value of assets as of June 30, 2007.

1.2 Actuarial Present Values

As of June 30, 2010 (in thousands	5)		Normal Cost	Accrued (Past Service) Liability
Active Members				-
Retirement Benefits	\$		55,291	\$ 1,914,735
Termination Benefits			6,191	36,501
Disability Benefits			643	993
Death Benefits			553	11,802
Return of Contributions			11,386	(58,907)
Medical and Prescription	Drug Benefits		33,482	1,163,042
Medicare Part D Subsidy			(2,427)	(78,196)
Indebtedness			N/A	(51,262)
Subtotal	\$		105,119	\$ 2,938,708
nactive Members				
Not Vested				\$ 43,118
Vested Terminations	- Retirement Benefits			89,040
	- Medical and Prescription I	Dru	g Benefits	152,724
	- Medicare Part D Subsidy			(10,492)
	- Indebtedness			(3,372)
Retirees & Beneficiaries	- Retirement Benefits			4,024,333
	- Medical and Prescription I	Dru	g Benefits	1,760,622
	- Medicare Part D Subsidy			(146,893)
Subtotal				\$ 5,909,080
Fotal	\$		105,119	\$ 8,847,788
Total Pension	\$		74,064	\$ 6,006,981
Total Medical, Net of Part D Su	ıbsidy \$		31,055	\$ 2,840,807
Total Medical, Gross of Part D	Subsidy \$		33,482	\$ 3,076,388



1.2 Actuarial Present Values

(continued)

As of June 30, 2010 (in thousands)	Normal Cost	Accrued (Past Service) Liability
By Tier		
Tier 1		
- Pension	\$ 19,930	\$ 4,786,347
- Medical, Net of Part D Subsidy	5,885	1,988,477
Tier 2		
- Pension	54,134	1,220,634
- Medical, Net of Part D Subsidy	25,170	 852,330
Total	\$ 105,119	\$ 8,847,788



1.3 Development of Total Employer/State Contribution Rate – FY13 (in thousands)

Nor	mal Cost Rate	Р	ension	Н	ealthcare	Total		
(1)	Total Normal Cost	\$	74,064	\$	31,055	\$	105,119	
(2)	DB Member Salaries Projected for FY11		591,943		591,943		591,943	
(3)	DCR Member Salaries Projected for FY11		126,520		126,520		126,520	
(4)	Total Salaries Projected for FY11		718,463		718,463		718,463	
(5)	Normal Cost Rate							
	a. Based on DB Member Salaries, $(1) \div (2)$		12.51%		5.25%		17.76%	
	b. Based on Total Salaries, $(1) \div (4)$		10.31%		4.32%		14.63%	
(6)	Average Member Contribution Rate ¹		7.16%		0.00%		7.16%	
(7)	Employer Normal Cost Rate, (5b) – (6)		3.15%		4.32%		7.47%	
Past	t Service Rate							
(1)	Accrued Liability	\$	6,006,981	\$	2,840,807	\$	8,847,788	
(2)	Valuation Assets		3,259,868		1,479,260		4,739,128	
(3)	Total Unfunded Liability, $(1) - (2)$		2,747,113		1,361,547		4,108,660	
(4)	Funded Ratio, $(2) \div (1)$		54.3%		52.1%		53.6%	
(5)	Past Service Cost Amortization Payment ²		196,732		105,664		302,396	
(6)	Total Salaries Projected for FY11		718,463		718,463		718,463	
(7)	Past Service Rate, $(5) \div (6)$		27.38%		14.71%		42.09%	
Tota	al Employer/State Contribution Rate		30.53%		19.03%		49.56%	
Nor	mal Cost Rate by Tier (Total Employer and Me	ember) ³					
	Tier 1		13.05%		3.85%		16.90%	
	Tier 2		12.33%		5.73%		18.06%	

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¹ Assumes no member contribution from members in the DCR plan, 9.65% contributions for Tier 1 members who elected supplemental coverage and 8.65% for the remaining members.

² Amortized on a level percentage of pay basis.

³ Rate determined considering the pay for members of the plan in this tier. DCR payroll is excluded from these calculations.

Development of Total Employer/State Contribution Rate – FY13 1.3 (continued)

	Amortizati	on Period	Bala	nce	es	_		
	Date Created	Years Left	 Initial	(Outstanding	Ве	ginning-of-Year Payment	
Initial Unfunded								
Liability ¹	6/30/2002	17	\$ 871,526	\$	930,349	\$	74,669	
FY03 Loss ¹	6/30/2003	18	168,666		179,991		13,894	
FY04 Loss ¹	6/30/2004	19	83,331		88,633		6,600	
FY05 Loss ¹	6/30/2005	20	117,313		124,037		8,934	
Change in								
Assumptions/Methods ¹	6/30/2006	21	284,349		298,158		20,819	
FY06 Gain ¹	6/30/2006	21	(21,576)		(22,624)		(1,580)	
FY07 Loss	6/30/2007	22	25,203		26,193		1,777	
FY08 Gain	6/30/2008	23	(51,093)		(52,530)		(3,469)	
FY09 Loss	6/30/2009	24	780,078		792,026		51,005	
Change in Assumptions	6/30/2010	25	351,643		351,643		22,118	
FY10 Loss	6/30/2010	25	31,237		31,237		1,965	
Total				\$	2,747,113	\$	196,732	

Schedule of Past Service Cost Amortizations - Pension

Schedule of Past Service Cost Amortizations - Healthcare

	Amortizati	on Period	Bala	6			
	Date Created	Years Left	 Initial	c	outstanding	Be	ginning-of-Year Payment
Initial Unfunded							
Liability ¹	6/30/2002	17	\$ 851,080	\$	908,523	\$	72,918
FY03 Loss ¹	6/30/2003	18	164,710		175,769		13,568
FY04 Loss ¹	6/30/2004	19	81,376		86,553		6,445
FY05 Loss ¹	6/30/2005	20	114,560		121,127		8,724
Change in							
Assumptions/Methods ¹	6/30/2006	21	277,678		291,163		20,331
FY06 Gain ¹	6/30/2006	21	(21,071)		(22,095)		(1,543)
FY07 Gain	6/30/2007	22	(375,974)		(390,752)		(26,509)
Change in Assumptions	6/30/2008	23	138,986		142,898		9,437
FY08 Gain	6/30/2008	23	(186,882)		(192,142)		(12,689)
FY09 Gain	6/30/2009	24	(95,703)		(97,168)		(6,257)
Change in Assumptions	6/30/2010	25	272,151		272,151		17,118
FY10 Loss	6/30/2010	25	65,520		65,520		4,121
Total				\$	1,361,547	\$	105,664

¹ The pension and healthcare split was done using a ratio of unfunded accrued liability as of June 30, 2006. State of Alaska **buck**consultants 19

1.3 Development of Total Employer/State Contribution Rate – FY13 *(continued)*

	Amortization Period Balances							
	Date Created	Years Left		Initial	C	Outstanding	Beg	ginning-of-Year Payment
Initial Unfunded								
Liability	6/30/2002	17	\$	1,722,606	\$	1,838,872	\$	147,587
FY03 Loss	6/30/2003	18		333,376		355,760		27,462
FY04 Loss	6/30/2004	19		164,707		175,186		13,045
FY05 Loss	6/30/2005	20		231,873		245,164		17,658
Change in								
Assumptions/Methods	6/30/2006	21		562,027		589,321		41,150
FY06 Gain	6/30/2006	21		(42,647)		(44,719)		(3,123)
FY07 Gain	6/30/2007	22		(350,771)		(364,559)		(24,732)
Change in Assumptions	6/30/2008	23		138,986		142,898		9,437
FY08 Gain	6/30/2008	23		(237,975)		(244,672)		(16,158)
FY09 Loss	6/30/2009	24		684,375		694,858		44,748
Change in Assumptions	6/30/2010	25		623,794		623,794		39,236
FY10 Loss	6/30/2010	25		96,757		96,757		6,086

Schedule of Past Service Cost Amortizations - Total

Total

\$ 4,108,660 \$ 302,396

The amortization factor for 25 years is 15.898717. The weighted average amortization factor is 13.587018. The amortization method is level percentage of pay.

The equivalent single amortization period is 19 years.



1.4 Development of Actuarial Gain/(Loss) for FY10 (in thousands)

	Pension	Healthcare	Total
(1) Expected Actuarial Accrued Liability			
(a) Accrued Liability, June 30, 2009	\$ 5,463,9	87 \$ 2,383,527	\$ 7,847,514
(b) Normal Cost for FY10	67,3	45 28,170	95,515
(c) Interest on (a) and (b) at 8.25%	456,3	35 198,965	655,300
(d) Benefit Payments for FY10	332,6	90 110,313	443,003
(e) Refund of Contributions for FY10	3,4	72 0	3,472
(f) Interest on (d) and (e) at 8.25% for one-half year	13,5	92 4,460	18,052
(g) Change in Assumptions	351,6	43 272,151	623,794
(h) Expected Accrued Liability as of June 30, 2010 (a) + (b) + (c) - (d) - (e) - (f) + (g)	5,989,5		8,757,596
(2) Actual Accrued Liability, June 30, 2010	6,006,9		8,847,788
(3) Liability Gain/(Loss), $(1)(h) - (2)$	\$ (17,4		\$ (90,192)
(4) Expected Actuarial Asset Value			
(a) Actuarial Asset Value, June 30, 2009	\$ 3,115,7	19 \$ 1,357,239	\$ 4,472,958
(b) Interest on (a) at 8.25%	257,0	47 111,972	369,019
(c) Employee Contributions for FY10	56,5	54 117	56,671
(d) Employer Contributions for FY10	33,8	00 42,694	76,494
(e) Employer Legislative Relief for FY10	100,4	75 72,987	173,462
(f) Medicare Part D Subsidy		0 4,448	4,448
(g) Interest on (c), (d), (e) and (f) at 8.25% for			
one-half year	7,7		12,578
(h) Legal Settlements, Net of Fees		0 43,993	43,993
(i) Benefit Payments for FY10	332,6	90 110,313	443,003
(j) Refund of Contributions for FY10	3,4		3,472
(k) Interest on (i) and (j) at 8.25% for one-half year	13,5	92 4,460	18,052
(l) Expected Actuarial Asset Value, June 30, 2010 (a)+(b)+(c)+(d)+(e)+(f)+(g)+(h)-(i)-(j)-(k)	3,221,5	57 1,523,539	4,745,096
(5) Actuarial Asset Value, June 30, 2010	3,259,8	68 1,479,260	4,739,128
(6) Actuarial Asset Gain/(Loss), (5) - (4)(l)	\$ 38,3	11 \$ (44,279)	\$ (5,968)
(7) Actuarial Gain/(Loss), (3) + (6)	\$ 20,8	86 \$ (117,046)	\$ (96,160)
(8) Effect of the 2-Year Delay on Contributions	\$ (52,1	23) \$ 51,526	\$ (597)
(9) FY10 Gain/(Loss) to be Amortized, (7) + (8)	\$ (31,2	37) \$ (65,520)	\$ (96,757)

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1.5(a) Actuarial Projections Based on Total DB and DCR Payroll

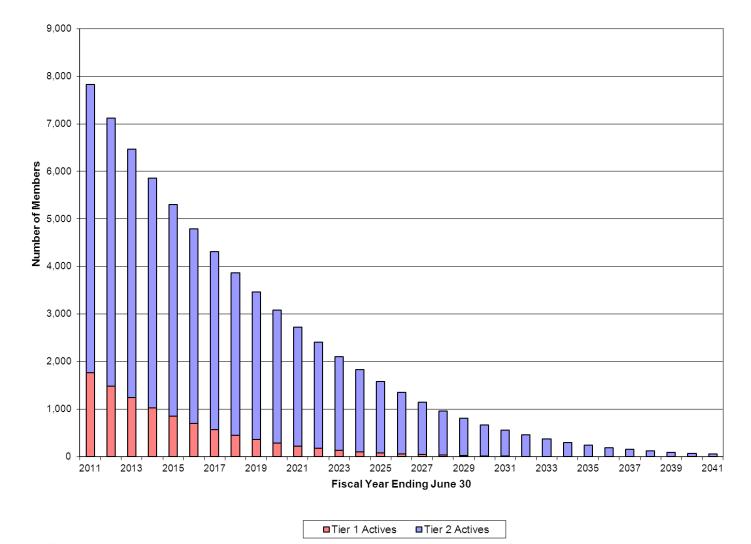
Key Assumptions

- 8.00% investment return on the Market Value of Assets in all future years.
- The Actuarial Value of Assets reflects the deferred gains and losses generated by the smoothing method. The current deferred amounts are recognized in the first four years of the projections.
- Actuarial assumptions and methods as described in Section 2.3.
- The actuarially calculated contribution rate with a two-year lag is adopted each year.
- No new DB Plan members enter Tiers 1 and 2.
- Projections assume a 1% increase in the total active member population. All new members are expected to enter the DCR plan and contribution rates are determined as a percent of total DB and DCR payroll, combined.



1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

Projected Active Member Count



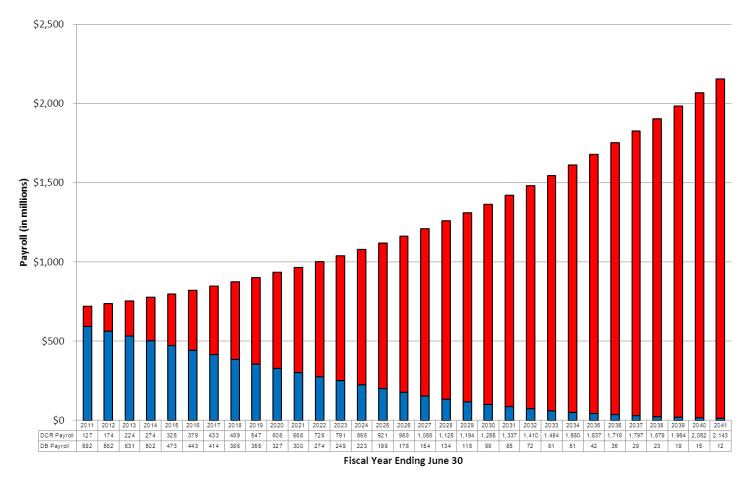
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State of Alaska Teachers' Retirement System As of June 30, 2010

1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

Projected DB and DCR Payroll

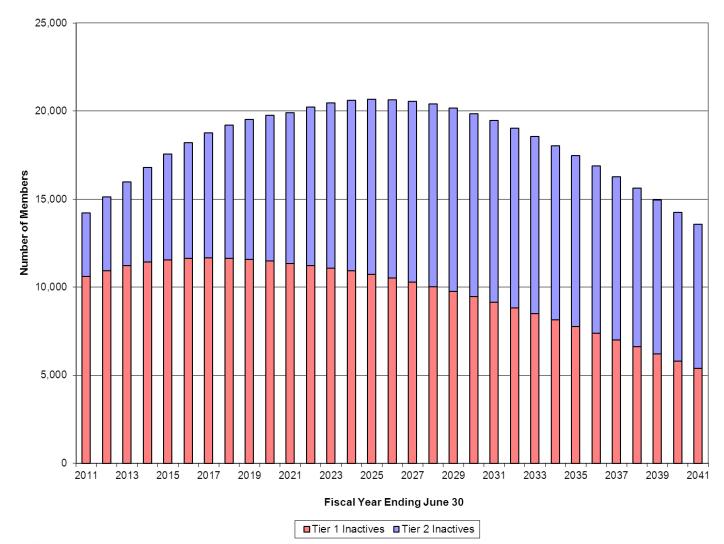


DB Payroll DCR Payroll



1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

Projected Inactive Member Count





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1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

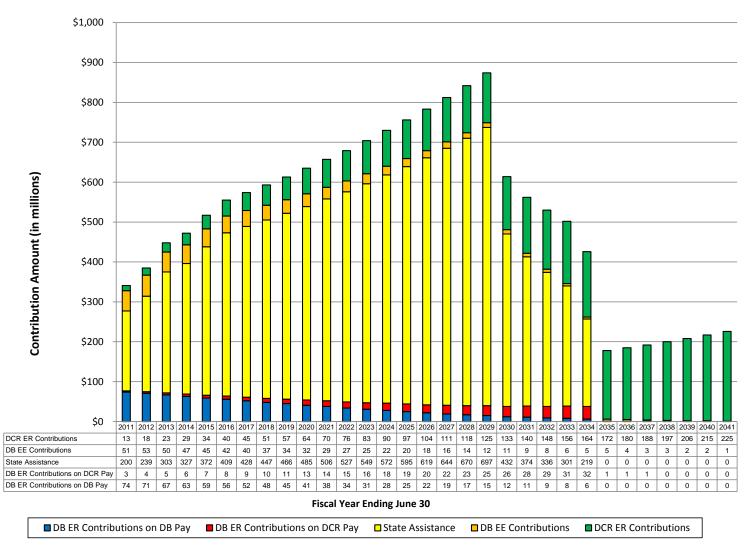
Observations

- Contribution amounts increase and contribution rates remain high until FY29 before dropping off significantly as the June 30, 2002 unfunded liability amortization base is paid off.
- Contributions become \$0 towards the end of the projection period upon completion of 25-year amortizations of recent gains and losses.
- Funding ratios decrease until FY14 as the deferral of recent investment losses are realized, and then improve throughout the rest of the projection period.



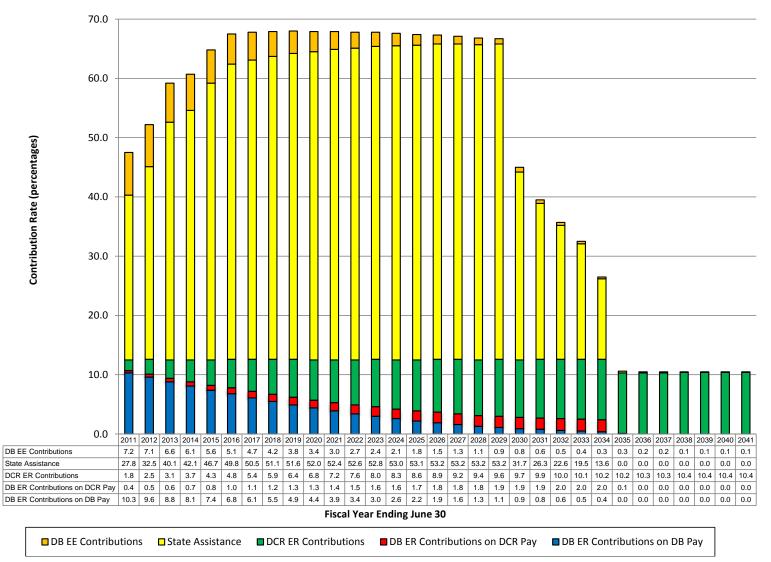
1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

Projected Employer/State Contribution Amounts



1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

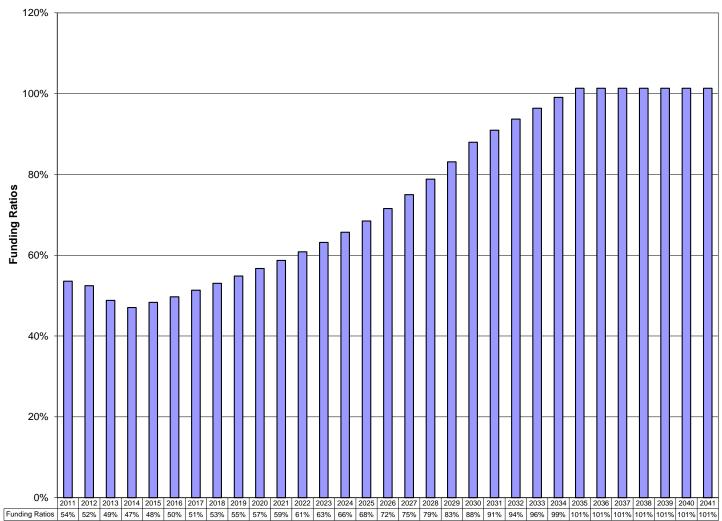
Projected Employer/State Contribution Rates



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1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

Projected Funding Ratios



Fiscal Year Ending June 30



1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

						Financial Pr	ojections (in ˈ	Thousands)							
		ment Return								10 11 11					
Fiscal Year End	Actuarial Assets	Accrued Liability	Funding Ratio	of Fiscal Year) Surplus (Deficit) 	Total Salaries	Employer/State Ctb Rate	Employer Contribs	ow Amounts D State Contribs 	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings	_Recognized Asset Gain/(Loss)	Ending Actuarial Assets
2011	\$4,739,128	\$8,847,788	54%	(\$4,108,660)	\$718,463	38.56%	\$76,967	\$200,072	\$57,120	\$334,159	\$478,378	(\$144,219)	\$316,278	(\$98,953)	\$4,812,234
2012	4,812,234	9,172,454	52%	(4,360,220)	736,010	42.61%	74,147	239,467	58,484	372,098	510,621	(138,523)	330,266	(372,016)	4,631,961
2013	4,631,961	9,487,261	49%	(4,855,300)	754,867	49.56%	71,342	302,770	56,172	430,284	539,116	(108,832)	346,770	(261,184)	4,608,715
2014	4,608,715	9,791,124	47%	(5,182,409)	775,692	50.95%	68,703	326,512	53,796	449,011	567,787	(118,776)	365,415	17,218	4,872,572
2015	4,872,572	10,083,092	48%	(5,210,520)	798,173	54.94%	66,113	372,403	51,549	490,065	596,264	(106,199)	385,640	0	5,152,013
2016	5,152,013	10,362,384	50%	(5,210,371)	822,076	57.51%	63,538	409,238	49,330	522,106	623,107	(101,001)	408,199	0	5,459,211
2017	5,459,211	10,630,018	51%	(5,170,807)	847,476	57.71%	61,019	428,059	47,056	536,134	653,294	(117,160)	432,141	0	5,774,192
2018	5,774,192	10,881,688	53%	(5,107,496)	874,243	57.83%	58,460	447,115	44,794	550,369	685,941	(135,572)	456,617	0	6,095,237
2019	6,095,237	11,114,009	55%	(5,018,772)	902,665	57.81%	55,959	465,872	42,556	564,387	715,777	(151,390)	481,680	0	6,425,527
2020	6,425,527	11,326,775	57%	(4,901,248)	933,147	57.77%	53,604	485,475	40,258	579,337	744,445	(165,108)	507,565	0	6,767,984
2021	6,767,984	11,522,617	59%	(4,754,633)	966,229	57.68%	51,459	505,862	29,373	586,694	772,182	(185,488)	534,162	0	7,116,658
2022	7,116,658	11,698,386	61%	(4,581,728)	1,002,069	57.57%	49,478	527,413	26,956	603,847	795,528	(191,681)	561,813	0	7,486,790
2023	7,486,790	11,852,156	63%	(4,365,366)	1,039,611	57.41%	47,593	549,248	24,639	621,480	829,812	(208,332)	590,770	0	7,869,228
2024	7,869,228	11,975,907	66%	(4,106,679)	1,079,021	57.26%	45,776	572,071	22,336	640,183	859,762	(219,579)	620,924	0	8,270,573
2025	8,270,573	12,075,682	68%	(3,805,109)	1,120,478	57.05%	44,089	595,144	20,169	659,402	885,411	(226,009)	652,779	0	8,697,343
2026	8,697,343	12,150,958	72%	(3,453,615)	1,164,327	56.84%	42,583	619,220	17,931	679,734	913,563	(233,829)	686,614	0	9,150,128
2027	9,150,128	12,199,985	75%	(3,049,857)	1,210,528	56.62%	41,219	644,182	15,858	701,259	942,254	(240,995)	722,556	0	9,631,689
2028	9,631,689	12,218,528	79%	(2,586,839)	1,258,797	56.40%	40,093	669,869	13,847	723,809	966,172	(242,363)	761,027	0	10,150,353
2029	10,150,353	12,210,934	83%	(2,060,581)	1,310,150	56.17%	39,262	696,649	12,053	747,964	1,005,570	(257,606)	801,922	0	10,694,669
2030	10,694,669	12,158,429	88%	(1,463,760)	1,364,411	34.49%	38,678	431,907	10,506	481,091	1,029,420	(548,329)	834,062	0	10,980,402
2031	10,980,402	12,073,093	91%	(1,092,691)	1,421,780	28.97%	38,361	373,529	8,957	420,847	1,044,600	(623,753)	853,962	0	11,210,611
2032	11,210,611	11,963,836	94%	(753,225)	1,482,242	25.22%	38,264	335,557	7,708	381,529	1,063,325	(681,796)	870,102	0	11,398,917
2033	11,398,917	11,824,252	96%	(425,335)	1,545,220	21.96%	38,377	300,953	6,490	345,820	1,091,332	(745,512)	882,667	0	11,536,072
2034	11,536,072	11,642,620	99%	(106,548)	1,610,886	15.97%	38,697	218,561	5,477	262,735	1,103,436	(840,701)	889,905	0	11,585,276
2035	11,585,276	11,432,252	101%	153,024	1,679,296	0.07%	1,176	0	4,534	5,710	1,109,280	(1,103,570)	883,528	0	11,365,234
2036	11,365,234	11,215,116	101%	150,118	1,750,771	0.05%	875	0	3,852	4,727	1,111,181	(1,106,454)	865,812	0	11,124,592
2037	11,124,592	10,977,653	101%	146,939	1,825,252	0.04%	730	0	3,103	3,833	1,113,400	(1,109,567)	846,439	0	10,861,464
2038	10,861,464	10,718,000	101%	143,464	1,902,306	0.02%	380	0	2,663	3,043	1,110,492	(1,107,449)	825,471	0	10,579,486
2039	10,579,486	10,439,747	101%	139,739	1,982,775	0.01%	198	0	2,181	2,379	1,109,739	(1,107,360)	802,917	0	10,275,043
2040	10,275,043	10,139,325	101%	135,718	2,066,738	0.01%	207	0	1,653	1,860	1,100,655	(1,098,795)	778,897	0	9,955,145
2041	9,955,145	9,823,653	101%	131,492	2,154,341	0.01%	215	0	1,293	1,508	1,080,924	(1,079,416)	754,066	0	9,629,795

State of Alaska TRS

Financial Projections (in Thousands)



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1.5(a) Actuarial Projections Based on Total DB and DCR Payroll (continued)

	Invest	ment Return	8.00%												
	Valuation Am	nounts on July	1 (Beginning o	of Fiscal Year)			FI	ow Amounts D	uring Followi	ng 12 Mionths				Recognized	Ending
Fiscal	Actuarial	Accrued	Funding	Surplus	Total	Employer/State	Employer	State	Employee	Total	Benefit	Net	Investment	Asset	Actuarial
Year End	Assets	Liability	Ratio	(Deficit)	Salaries	Ctb Rate	Contribs	Contribs	Contribs	Contribs	Payments	Contribs	Earnings	Gain/(Loss)	Assets
2042	9,629,795	9,502,600	101%	127,195	2,245,599	0.00%	0	0	1,123	1,123	1,070,031	(1,068,908)	728,450	0	9,289,337
2043	9,289,337	9,166,639	101%	122,698	2,340,156	0.00%	0	0	936	936	1,044,155	(1,043,219)	702,221	0	8,948,339
2044	8,948,339	8,830,145	101%	118,194	2,438,186	0.00%	0	0	731	731	1,010,522	(1,009,791)	676,253	0	8,614,801
2045	8,614,801	8,501,012	101%	113,789	2,539,982	0.00%	0	0	508	508	988,015	(987,507)	650,444	0	8,277,738
2046	8,277,738	8,168,402	101%	109,336	2,645,886	0.00%	0	0	265	265	959,013	(958,748)	624,607	0	7,943,597
2047	7,943,597	7,838,674	101%	104,923	2,755,990	0.00%	0	0	276	276	925,095	(924,819)	599,207	0	7,617,985
2048	7,617,985	7,517,363	101%	100,622	2,869,769	0.00%	0	0	287	287	896,268	(895,981)	574,289	0	7,296,293
2049	7,296,293	7,199,920	101%	96,373	2,988,212	0.00%	0	0	0	0	866,400	(866,400)	549,714	0	6,979,607
2050	6,979,607	6,887,417	101%	92,190	3,111,389	0.00%	0	0	0	0	834,606	(834,606)	525,627	0	6,670,628
2051	6,670,628	6,582,519	101%	88,109	3,239,904	0.00%	0	0	0	0	802,725	(802,725)	502,159	0	6,370,062
2052	6,370,062	6,285,923	101%	84,139	3,373,946	0.00%	0	0	0	0	770,486	(770,486)	479,378	0	6,078,954
2053	6,078,954	5,998,660	101%	80,294	3,513,107	0.00%	0	0	0	0	737,800	(737,800)	457,372	0	5,798,526
2054	5,798,526	5,721,936	101%	76,590	3,657,840	0.00%	0	0	0	0	704,658	(704,658)	436,238	0	5,530,106
2055	5,530,106	5,457,062	101%	73,044	3,808,528	0.00%	0	0	0	0	671,537	(671,537)	416,064	0	5,274,633
2056	5,274,633	5,204,963	101%	69,670	3,965,625	0.00%	0	0	0	0	638,382	(638,382)	396,927	0	5,033,178
2057	5,033,178	4,966,697	101%	66,481	4,129,313	0.00%	0	0	0	0	605,355	(605,355)	378,906	0	4,806,729
2058	4,806,729	4,743,239	101%	63,490	4,299,107	0.00%	0	0	0	0	572,446	(572,446)	362,081	0	4,596,364
2059	4,596,364	4,535,653	101%	60,711	4,476,172	0.00%	0	0	0	0	539,729	(539,729)	346,535	0	4,403,170
2060	4,403,170	4,345,011	101%	58,159	4,660,729	0.00%	0	0	0	0	507,438	(507,438)	332,347	0	4,228,079
2061	4,228,079	4,172,232	101%	55,847	4,853,084	0.00%	0	0	0	0	475,424	(475,424)	319,595	0	4,072,250
2062	4,072,250	4,018,462	101%	53,788	5,053,600	0.00%	0	0	0	0	443,743	(443,743)	308,372	0	3,936,879
2063	3,936,879	3,884,879	101%	52,000	5,262,629	0.00%	0	0	0	0	412,376	(412,376)	298,773	0	3,823,276
2064	3,823,276	3,772,776	101%	50,500	5,480,478	0.00%	0	0	0	0	381,325	(381,325)	290,903	0	3,732,854
2065	3,732,854	3,683,549	101%	49,305	5,707,539	0.00%	0	0	0	0	350,795	(350,795)	284,866	0	3,666,925
2066	3,666,925	3,618,490	101%	48,435	5,944,161	0.00%	0	0	0	0	320,873	(320,873)	280,766	0	3,626,818
2067	3,626,818	3,578,913	101%	47,905	6,190,770	0.00%	0	0	0	0	291,617	(291,617)	278,705	0	3,613,906
2068	3,613,906	3,566,172	101%	47,734	6,447,767	0.00%	0	0	0	0	263,191	(263,191)	278,787	0	3,629,502
2069	3,629,502	3,581,562	101%	47,940	6,715,463	0.00%	0	0	0	0	235,703	(235,703)	281,113	ů 0	3,674,912
2000	3,674,912	3,626,372	101%	48,540	6,994,321	0.00%	0 0	0	0	Ő	209,324	(209,324)	285,781	0	3,751,369
2070	3,751,369	3,701,819	101%	49,550	7,284,812	0.00%	0 0	0	0	0 0	184,245	(184,245)	292,881	0	3,860,005
207.1	0,701,000	5,701,010	10170	10,000	.,201,012	0.0070	\$1 247 562	\$10 717 148	\$746 820	\$12 711 530		(101,210)	202,001	Ŭ	2,000,000

State of Alaska TRS Financial Projections (in Thousands)

\$1,247,562 \$10,717,148 \$746,820 \$12,711,530



Valuation Results

1.5(b) Actuarial Projections – Effect of Economic Scenarios Based on Total DB and DCR Payroll

Key Assumptions

All assumptions and methods are the same as Section 1.5(a) except investment returns on the Market Value of Assets are assumed as follows:

Base Case:	8.00% for all future years
Optimistic:	8.75% for all future years
Pessimistic:	7.25% for all future years

In all cases, liabilities have been projected using 8.00% as the discount rate for future benefit payments. These scenarios are intended to illustrate the impact if investment rates are different than the 8.00% assumed investment return. They do not illustrate the effect of changing the assumed discount rate for determining liabilities.

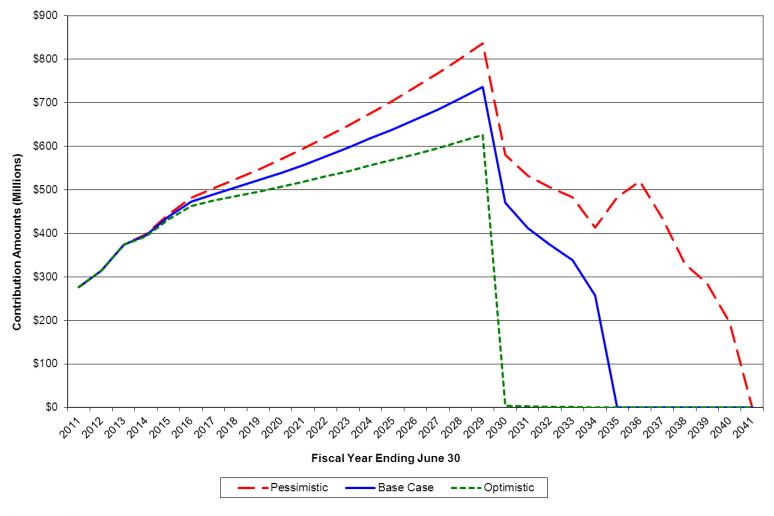
Observations

- As expected, lower investment returns would yield higher contribution requirements and higher investment returns would yield lower contribution requirements.
- In all scenarios, contribution amounts decrease towards the end of the projection period upon completion of 25-year amortizations of recent gains and losses.



1.5(b) Actuarial Projections – Projections at Calculated Rate Effect of Economic Scenarios Based on Total DB and DCR Payroll (continued)

Projected Employer/State Contribution Amounts



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Section 2

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 2.1 and participant census information is shown in Section 2.2.

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 earnings of the fund, the number of participants who will retire, die, or terminate their services, their ages at such termination and their expected benefits.

The actuarial assumptions and the actuarial cost method, or funding method, which have been adopted to guide the sponsor in funding the plan in a reasonable and acceptable manner, are described in Section 2.3.



(1) Effective Date

July 1, 1955, with amendments through June 30, 2010. Chapter 97, 1990 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under the TRS before July 1, 1990 (Tier 1) are eligible for different benefits than members hired after June 30, 1990 (Tier 2). Chapter 9, 2005 Session Laws of Alaska, closed the plan to new members hired after June 30, 2006.

(2) Administration of Plan

The Commissioner of Administration or the Commissioner's designee is the administrator of the system. The Attorney General of the state is the legal counsel for the system and shall advise the administrator and represent the system in legal proceedings.

Prior to June 30, 2005, the Teachers' Retirement Board prescribed policies and adopted regulations and performed other activities necessary to carry out the provisions of the system. The Alaska State Pension Investment Board, Department of Revenue, Treasury Division was responsible for investing TRS funds.

On July 27, 2005, Senate Bill 141, enacted as Chapter 9, 2005 Session laws of Alaska, replaced the Teachers' Retirement Board and the Alaska State Pension Investment Board with the Alaska Retirement Management Board.

(3) Employers Included

Currently, there are 58 employers participating in the TRS, including the State of Alaska, 53 school districts, and four other eligible organizations.

(4) Membership

Membership in the Alaska TRS is mandatory for the following employees hired before July 1, 2006:

- certificated full-time and part-time elementary and secondary teachers, certificated school nurses, and certificated employees in positions requiring teaching certificates;
- positions requiring a teaching certificate as a condition of employment in the Department of Education and Early Development and the Department of Labor and Workforce Development;
- University of Alaska full-time and part-time teachers, and full-time administrative employees in positions requiring academic standing if approved by the TRS administrator;
- certain full-time or part-time teachers of Alaska Native language or culture who have elected to be covered under the TRS;
- members on approved sabbatical leave under AS 14.20.310;
- certain State legislators who have elected to be covered under the TRS; and
- a teacher who has filed for worker's compensation benefits due to an on-the-job assault and who, as a result of the physical injury, is placed on leave without pay.

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Employees participating in the University of Alaska's Optional Retirement Plan or other retirement plans funded by the State are not covered by the TRS.

Employees who work half-time in the TRS and Public Employees' Retirement System (PERS) simultaneously are eligible for half-time TRS and PERS credit.

Senate Bill 141, signed into law on July 27, 2005, closes the plan effective July 1, 2006 to new members first hired on or after July 1, 2006.

(5) Credited Service

TRS members receive a year of membership credit if they work a minimum of 172 days during the school year (July 1 through June 30 of the following year). Fractional credit is determined based on the number of days worked. Part-time members who work at least 50% of full-time receive membership credit for each day in proportion to full-time service. Credit is granted for all Alaskan public school service.

Members may claim other types of service, including:

- Outside teaching service in out-of-state schools or Alaska private schools (not more than ten years may be claimed);
- Military service (not more than five years of military service or ten years of combined outside and military service may be claimed);
- Alaska Bureau of Indian Affairs (BIA) service;
- Retroactive Alaskan service that was not creditable at the time it occurred, but later became creditable because of legislative change;
- Unused sick leave credit after members retire; and
- Leave of absence without pay.

Except for retroactive Alaska service that occurred before July 1, 1955, and unused sick leave, contributions are required for all claimed service.

Members receiving TRS disability benefits continue to earn TRS credit while disabled.

Survivors who are receiving occupational death benefits continue to earn TRS service credit while occupational survivor benefits are being paid.

(6) **Employer Contributions**

TRS employers contribute the amounts required, in addition to employees' contributions, to fund the benefits of the system.



The normal cost rate is a uniform rate for all participating employers (less the value of members' contributions).

The past service rate is a uniform rate for all participating employers to amortize the unfunded past service liability with payments that are a level percentage of pay amount over fixed 25-year periods.

Employer rates cannot be less than the normal cost rate.

(7) Additional State Contribution

Pursuant to AS14.25.070 effective July 1, 2008, the State shall contribute an amount (in addition to the State contribution as an employer) that when combined with the employer contribution (12.56%) will be sufficient to pay the total contribution rate adopted by The State of Alaska Retirement Management Board.

(8) Member Contributions

<u>Mandatory Contributions:</u> Members are required to contribute 8.65% of their base salaries. Members' contributions are deducted from gross salaries before federal income taxes are withheld.

<u>Contributions for Claimed Service</u>: Member contributions are also required for most of the claimed service described in (5) above.

<u>1% Supplemental Contributions:</u> Members who joined the system before July 1, 1982 and elected to participate in the supplemental contributions provision are required to contribute an additional 1% of their salaries. Supplemental contributions are deducted from gross salaries after federal income taxes are withheld. Under the supplemental provision, an eligible spouse or dependent child will receive a survivor's allowance or spouse's pension if the member dies (see (13) below). Supplemental contributions are only refundable upon death (see (13) below).

Interest: Members' contributions earn 4.5% interest, compounded annually on June 30.

<u>Refund of Contributions:</u> Terminated members may receive refunds of their member contribution accounts which includes their mandatory contributions, indebtedness payments, and interest earned. Terminated members' accounts may be attached to satisfy claims under Alaska Statute 09.38.065, federal income tax levies, and valid Qualified Domestic Relations Orders.

<u>Reinstatement of Contributions:</u> Refunded accounts and the corresponding TRS service may be reinstated upon reemployment in the TRS prior to July 1, 2010. Accounts attached to satisfy claims under Alaska Statute 09.38.065 or a federal tax levy may be reinstated at any time. Interest accrues on refunds until paid in full or members retire.



(9) **Retirement Benefits**

<u>Eligibility:</u>

- (a) Members, including deferred vested members, are eligible for normal retirement at age 55 or early retirement at age 50 if they were hired before July 1, 1990 (Tier 1) and age 60 or early retirement at age 55 if they were hired on or after July 1, 1990 (Tier 2). Additionally, they must have at least:
 - (i) eight years of paid-up membership service;
 - (ii) 15 years of paid-up creditable service, the last five years of which are membership service, and they were first hired under the TRS before July 1, 1975;
 - (iii) five years of paid-up membership service and three years of paid-up Alaska Bureau of Indian Affairs service;
 - (iv) 12 years of combined part-time and full-time paid-up membership service;
 - (v) two years of paid-up membership service if they are vested in the Public Employees' Retirement System (PERS); or
 - (vi) one year of paid-up membership service if they are retired from the PERS.
- (b) Members may retire at any age when they have:
 - (i) 25 years of paid-up creditable service, the last five years of which are membership service;
 - (ii) 20 years of paid-up membership service;
 - (iii) 20 years of combined paid-up membership and Alaska Bureau of Indian Affairs service, the last five years of which are membership service; or
 - (iv) 20 years of combined paid-up part-time and full-time membership service.

<u>Benefit Type:</u> Lifetime benefits are paid to members. Eligible members may receive normal, unreduced benefits when they (1) reach normal retirement age and complete the service required; or (2) satisfy the minimum service requirements to retire at any age under (b) above. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

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Members may select joint and survivor options and a last survivor option. Under those options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

<u>Benefit Calculation:</u> Retirement benefits are calculated by multiplying the average base salary (ABS) times the total TRS service times the percentage multiplier. The ABS is determined by averaging the salaries earned during the three highest school years. Members must earn at least 115 days of credit in a school year to include it in the ABS calculation. The TRS pays a minimum benefit of \$25.00 per month for each year of service when the calculated benefit is less.

The percentage multipliers are 2% for the first 20 years and 2.5% for all remaining service. Service before July 1, 1990 is calculated at 2%.

<u>Indebtedness:</u> Members who terminate and refund their TRS contributions are not eligible to retire unless they return to TRS employment and pay back their refunds plus interest or accrue additional service which qualifies them for retirement. TRS refunds must be paid in full if the corresponding service is to count toward the minimum service requirements for retirement. Refunded TRS service is included in total service for the purpose of calculating retirement benefits. However, when refunds are not completely paid before retirement, benefits are actuarially reduced for life. Indebtedness balances may also be created when a member purchases qualified claimed service.

(10) Reemployment of Retired Members

Retirees who return to work in a permanent full-time or part-time TRS position after a Normal Retirement have two options available, the Standard Option or the Waiver Option.

Under the Standard Option, retirement and retiree healthcare benefits are suspended while retired members are reemployed under the TRS. During reemployment, members earn additional TRS service and contributions are withheld from their wages.

If an Alaska school district has established that there is a shortage of teachers in a particular discipline or specialty and has passed a resolution to that effect, a retiree returning to work in a permanent full-time or part-time TRS position with that school district may exercise the Waiver Option. The Waiver Option allows a retiree who retired under a Normal Retirement to reemploy with a TRS employer and continue to receive a retirement benefit by signing a waiver of participation in the TRS. The Waiver Option first became effective July 1, 2005 and applies to reemployment periods after that date. The Waiver Option is no longer available after June 30, 2009.

The Waiver Option is not available to members who retired early or under the Retirement Incentive Program (RIP).



Members retired under the RIP who return to employment under the TRS, Public Employees' Retirement System (PERS), Judicial Retirement System (JRS) or the University of Alaska's Optional Retirement Plan will:

- (a) forfeit the three years of incentive credits that they received;
- (b) owe the TRS 110% of the benefits that they received under the RIP, which may include costs for health insurance, excluding amounts that they paid to participate; and
- (c) be charged 7% interest from the date that they are reemployed until their indebtedness is paid in full or they retire again. If the indebtedness is not completely paid, future benefits will be actuarially reduced for life.

Employers make contributions to the unfunded liability of the plan on behalf of rehired retired members at the rate the employer is making contributions to the unfunded liability of the plan for other members.

(11) **Postemployment Healthcare Benefits**

When pension benefits begin, major medical benefits are provided by the TRS to (1) all employees first hired before July 1, 1990 (Tier 1) and their surviving spouses and (2) members and their surviving spouses who have twenty-five years of membership service, are disabled or age sixty or older, regardless of their initial hire dates. Employees first hired after June 30, 1990 (Tier 2) and their surviving spouses may receive major medical benefits prior to age sixty by paying premiums.

(12) Disability Benefits

Monthly disability benefits are paid to permanently disabled members until they die, recover or become eligible for normal retirement. To be eligible, members must have at least five years of paid-up membership service.

Disability benefits are equal to 50% of the member's base salary at the time of disability. The benefit is increased by 10% of the base salary for each minor child, up to a maximum of 40%. Members continue to earn TRS service until eligible for normal retirement.

Members are appointed to normal retirement on the first of the month after they become eligible.

(13) **Death Benefits**

Monthly death benefits may be paid to a spouse or dependent children upon the death of a member. If monthly benefits are not payable under the supplemental contributions provision or occupational and nonoccupational death provisions, the designated beneficiary receives the lump sum benefit described below.



<u>Occupational Death:</u> When an active member dies from occupational causes, a monthly survivor's pension may be paid to the spouse, unless benefits are payable under the supplemental contributions provision (below). The pension equals 40% of the member's base salary on the date of death or disability, if earlier. If there is no spouse, the pension may be paid to the member's dependent children. On the member's normal retirement date, the benefit converts to a normal retirement benefit. The normal benefit is based on the member's average base salary on the date of death and service, including service accumulated from the date of the member's death to the normal retirement date.

<u>Nonoccupational Death:</u> When a vested member dies from nonoccupational causes, the surviving spouse may elect to receive a monthly 50% joint and survivor benefit or a lump sum benefit, unless benefits are payable under the supplemental contributions provision (below). The monthly benefit is calculated on the member's average base salary and TRS service accrued at the time of death.

Lump Sum Benefit: Upon the death of an active member who has less than one year of service or an inactive member who is not vested, the designated beneficiary receives the member's contribution account, which includes mandatory contributions, indebtedness payments, and interest earned. Any supplemental contributions will also be refunded. If the member has more than one year of TRS service or is vested, the beneficiary also receives \$1,000 and \$100 for each year of TRS service, up to a maximum of \$3,000. An additional \$500 may be payable if the member is survived by dependent children.

<u>Supplemental Contributions Provision:</u> Members are eligible for supplemental coverage if they joined the TRS before July 1, 1982, elected to participate in the supplemental provision, and made the required contributions. A survivor's allowance or spouse's pension (below) may be payable if the member made supplemental contributions for at least one year and dies while in membership service or while disabled under the TRS. In addition, the allowance and pension may be payable if the member dies while retired or in deferred vested status if supplemental contributions were made for at least five years.

- (a) <u>Survivor's Allowance:</u> If the member is survived by dependent children, the surviving spouse and dependent children are entitled to a survivor's allowance. The allowance for the spouse is equal to 35% of the member's base salary at the time of death or disability, plus 10% for each dependent child up to a maximum of 40%. The allowance terminates and a spouse's pension becomes payable when there is no longer an eligible dependent child.
- (b) <u>Spouse's Pension</u>: The spouse's pension is equal to 50% of the retirement benefit that the deceased member was receiving or the unreduced retirement benefit that the deceased member would have received if retired at the time of death. The spouse's pension begins on the first of the month after the member's death or termination of the survivor's allowance.

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<u>Death After Retirement:</u> If a joint and survivor option was selected at retirement, the eligible spouse receives continuing, lifetime monthly benefits after the member dies. A survivor's allowance or spouse's pension may be payable if the member participated in the supplemental contributions provision. If a joint and survivor option was not selected and benefits are not payable under the supplemental contributions provision, the designated beneficiary receives the member's contribution account, less any benefits already paid and the member's last benefit check.

(14) **Postretirement Pension Adjustments**

Postretirement pension adjustments (PRPAs) are granted annually to eligible benefit recipients when the consumer price index (CPI) for urban wage earners and clerical workers for Anchorage increases during the preceding calendar year. PRPAs are calculated by multiplying the recipient's base benefit, including past PRPAs, excluding the Alaska COLA, times:

- (a) 75% of the CPI increase in the preceding calendar year or 9%, whichever is less, if the recipient is at least age 65 or on TRS disability; or
- (b) 50% of the CPI increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60, or under age 60 if the recipient has been receiving benefits for at least eight years.

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who were first hired before July 1, 1990 (Tier 1) if the CPI increases and the funding ratio is at least 105%.

In a year where an Ad Hoc PRPA is granted, eligible recipients will receive the higher of the two calculations.

(15) Alaska Cost of Living Allowance

Eligible benefit recipients who reside in Alaska receive an Alaska cost of living allowance (COLA) equal to 10% of their base benefits. The following benefit recipients are eligible:

- (a) members who were first hired under the TRS before July 1, 1990 (Tier 1) and their survivors;
- (b) members who were first hired under the TRS after June 30, 1990 (Tier 2) and their survivors if they are at least age 65; and
- (c) all disabled members.

Changes in Benefit Provisions Since the Prior Valuation

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

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2.2(a) Member Census Information – Total TRS

As of June 30	2006	2007	2008	2009	2010
Active Members					
(1) Number	9,710	9,107	8,531	8,226	7,832
(2) Average Age	45.02	45.84	46.64	47.42	48.10
(3) Average Credited Service	10.87	11.70	12.44	13.19	13.97
(4) Average Entry Age	34.15	34.14	34.20	34.23	34.13
(5) Average Annual Earnings	\$ 59,156	\$ 60,859	\$ 64,371	\$ 67,715	\$ 72,125
(6) Number Vested	5,462	5,571	5,612	5,799	5,959
(7) Percent Who Are Vested	56.3%	61.2%	65.8%	70.5%	76.1%
Retirees, Disableds and Beneficiaries					
(1) Number	9,386	9,678	10,026	10,255	10,598
(2) Average Age	64.83	65.33	65.82	66.42	66.91
(3) Average Monthly Pension Benefit					
Base	\$ 1,962	\$ 1,977	\$ 1,994	\$ 1,994	\$ 2,017
C.O.L.A.	122	123	123	124	124
P.R.P.A.	469	483	485	526	505
Adjustment	0	0	0	0	0
Sick	42	44	45	47	48
Total	\$ 2,595	\$ 2,627	\$ 2,647	\$ 2,691	\$ 2,694
Vested Terminations (vested at time of t	ermination, I	not refunded o	contributions	or commend	ed benefit)
(1) Number	795	846	873	884	840
(2) Average Age	48.80	49.03	49.14	49.52	49.34
(3) Average Monthly Pension Benefit	\$ 1,051	\$ 1,094	\$ 1,099	\$ 1,204	\$ 1,109
Non-Vested Terminations (not vested at	termination,	not refunded	contributions	s)	
(1) Number	3,085	3,044	2,971	2,830	2,789
(2) Average Account Balance	\$ 12,057	\$ 12,675	\$ 13,692	\$ 14,408	\$ 15,460
Total Number of Members	22,976	22,675	22,401	22,195	22,059

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2.2(a) Member Census Information – Total TRS (continued)

As of June 30, 2010	Tier 1	Tier 2	Total
Retirees, Disableds and Beneficiaries			
(1) Number	9,939	659	10,598
(2) Average Age	67.13	63.63	66.91
(3) Average Monthly Pension Benefit			
Base	\$ 2,066	\$ 1,277	\$ 2,017
C.O.L.A.	130	28	124
P.R.P.A.	535	58	505
Adjustment	0	0	0
Sick	49	27	48
Total	\$ 2,780	\$ 1,390	\$ 2,694



12,000 50 10,000 Number of Actives 48 8,000 Average Age 46 6,000 44 4,000 42 40 2,000 38 0 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 \$70,000 15 Average Annual Earnings \$50,000 \$40,000 \$30,000 \$20,000 \$10,000 **Average Credited Service** 14 13 12 11 10 9 8 \$0 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

2.2(a) Member Census Information – TRS Active Members at June 30 (continued)

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Annual Earnings by Credited Service

2.2(b) Distribution of Active Members

Annual Earnings by Age

		Total	Average		Years		Total	Average
		Annual	Annual		of		Annual	Annual
Age	Number	Earnings	Earnings		Service	Number	Earnings	Earnings
0 – 19	0	\$ 0	\$ 0	-	0	1	\$ 55,028	\$ 55,028
20 – 24	0	0	0		1	9	437,596	48,622
25 – 29	141	7,587,312	53,811		2	39	2,223,422	57,011
30 – 34	675	40,448,821	59,924		3	76	4,248,385	55,900
35 – 39	1,014	65,971,165	65,060		4	213	12,573,331	59,030
40 – 44	1,211	84,332,930	69,639	-	0-4	338	19,537,762	57,804
45 – 49	1,269	92,416,893	72,827		5 – 9	2,370	149,657,159	63,146
50 – 54	1,364	103,190,065	75,653		10 – 14	1,997	139,910,026	70,060
55 – 59	1,333	103,114,215	77,355		15 – 19	1,441	111,336,053	77,263
60 – 64	641	52,218,585	81,464		20 – 24	924	76,019,188	82,272
65 – 69	153	12,966,197	84,746		25 – 29	526	46,027,286	87,504
70 – 74	28	2,388,554	85,306		30 – 34	170	15,815,571	93,033
75+	3	252,080	84,027		35 – 39	50	4,906,142	98,123
					40+	16	1,677,630	104,852
Total	7,832	\$564,886,817	\$ 72,125		Total	7,832	\$564,886,817	\$ 72,125

Years of Credited Service by Age

				Yea	rs of Servi	ce				
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	0	0	0	0	0	0	0	0	0	0
25 – 29	29	111	1	0	0	0	0	0	0	141
30 – 34	71	535	69	0	0	0	0	0	0	675
35 – 39	66	470	443	35	0	0	0	0	0	1,014
40 – 44	35	355	469	300	52	0	0	0	0	1,211
45 – 49	43	278	346	356	215	31	0	0	0	1,269
50 – 54	28	250	306	314	272	168	26	0	0	1,364
55 – 59	45	236	241	282	248	193	78	10	0	1,333
60 - 64	19	108	99	122	112	94	48	32	7	641
65 – 69	2	23	15	26	24	35	16	7	5	153
70 – 74	0	4	7	6	0	5	2	1	3	28
75+	0	0	1	0	1	0	0	0	1	3
Total	338	2,370	1,997	1,441	924	526	170	50	16	7,832

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

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2.2(c) Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Earnings (000's) ¹	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2010	7,832	\$ 564,887	\$ 72,125	6.5%	58
June 30, 2009	8,226	557,026	67,715	5.2%	58
June 30, 2008	8,531	549,148	64,371	5.8%	58
June 30, 2007	9,107	554,245	60,859	2.9%	58
June 30, 2006	9,710	574,409	59,156	6.6%	58
June 30, 2005	9,656	535,837	55,493	2.9%	58
June 30, 2004	9,688	522,421	53,925	0.0%	58
June 30, 2003	9,873	532,630	53,948	2.7%	57
June 30, 2002	9,690	509,437	52,535	3.9%	57
June 30, 2001	9,815	496,188	50,544	1.8%	60

¹ Prior to June 30, 2006, unannualized earnings were used. Starting June 30, 2006, annualized earnings are used. State of Alaska **buck**consultants

2.2(d) Statistics on New Benefit Recipients

During the Year Ending June 30		2006	2007	2008	2009	2010	
Service							
(1) Number		425	368	419	299	442	
(2) Average Age at Commencement		56.52	56.73	57.16	57.30	58.24	
(3) Average Monthly Pension Benefit	\$	2,290	\$ 2,556	\$ 2,600	\$ 2,374	\$ 2,881	
Survivor (including surviving spouse and Q	DROs	5)					
(1) Number		57	61	55	65	84	
(2) Average Age at Commencement		63.29	65.32	64.54	68.52	66.32	
(3) Average Monthly Pension Benefit	\$	1,288	\$ 1,338	\$ 1,460	\$ 1,419	\$ 1,451	
Disability							
(1) Number		5	3	7	4	7	
(2) Average Age at Commencement		44.41	54.76	53.60	49.85	53.45	
(3) Average Monthly Pension Benefit	\$	2,855	\$ 2,844	\$ 2,693	\$ 3,426	\$ 2,857	
Total							
(1) Number		487	432	481	368	533	
(2) Average Age at Commencement		57.19	57.93	57.95	59.20	59.45	
(3) Average Monthly Pension Benefit	\$	2,179	\$ 2,386	\$ 2,471	\$ 2,217	\$ 2,655	



Years of Credited Service 5 - 915 - 1925 - 290 - 410 - 1420 – 24 30 +Period 7/1/09 - 6/30/10:¹ 482 \$ 6.263 \$ \$ 1.020 \$ 1.343 \$ 2.263 \$ 2.992 \$ 4.120 Average Monthly Pension Benefit Number of Recipients 14 50 63 85 109 79 49 Period 7/1/08 - 6/30/09:¹ \$ 230 \$ \$ 950 \$ 1,168 \$ 2.239 \$ 2.957 \$ 3.897 4.860 Average Monthly Pension Benefit Number of Recipients 13 35 64 52 67 54 18 Period 7/1/07-6/30/08:1 209 \$ 5,057 \$ \$ 945 \$ 1.248 \$ 2.226 \$ 2.966 \$ 3.832 Average Monthly Pension Benefit Number of Recipients 13 44 62 92 95 87 33 Period 7/1/06- 6/30/07:¹ \$ 214 798 \$ 2.909 \$ 5.109 \$ \$ 1.249 \$ 2.250 \$ 3.709 **Average Monthly Pension Benefit** Number of Recipients 9 41 54 69 102 68 28 Period 7/1/05-6/30/06:1 \$ 1.078 \$ 960 \$ 1.110 \$ 1.982 \$ 2.695 \$ 3.388 \$ 4.563 Average Monthly Pension Benefit Number of Recipients 9 50 63 90 124 68 26 Period 7/1/04- 6/30/05:¹ \$ 1,287 \$ 1,106 \$ \$ 2,255 \$ 2,932 \$ 3,534 \$ 4,018 1,575 Average Monthly Pension Benefit Number of Recipients 119 24 33 69 105 31 16 Period 7/1/03-6/30/04: \$ \$ 2,782 \$ 251 \$ 896 \$ 1,243 \$ 2,044 \$ 3,640 4,860 Average Monthly Pension Benefit 21 51 75 Number of Recipients 85 178 64 17 Period 7/1/02-6/30/03: \$ 236 \$ 899 \$ 1,153 \$ 2,350 \$ 2,835 \$ 3,969 \$ 5,133 Average Monthly Pension Benefit Number of Recipients 16 40 69 91 264 87 32 Period 7/1/01-6/30/02: \$ 795 \$ 1.706 \$ 3,126 \$ 3.915 \$ 532 \$ 1.168 \$ 2.455 Average Monthly Pension Benefit Number of Recipients 4 36 62 78 180 137 92

2.2(e) Schedule of Average Pension Benefit Payments - New Benefit Recipients

"Average Monthly Benefit" includes postretirement pension adjustments and cost-of-living increases.

¹ Does not include beneficiaries.

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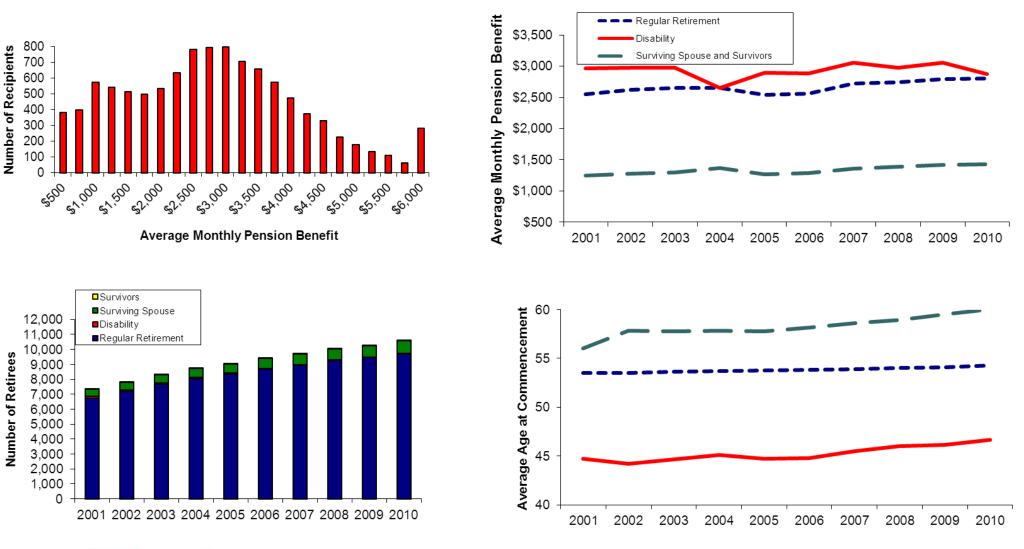
Basis of Valuation

2.2(f) Statistics on All Pension Benefit Recipients

As of June 30	2006	2007	2008	2009	2010
Service					
(1) Number, Fiscal Year Start	8,351	8,675	8,926	9,250	9,432
(2) Net Change	324	251	324	182	275
(3) Number, Fiscal Year End	8,675	8,926	9,250	9,432	9,707
(4) Average Age at Commencement	53.81	53.91	54.03	54.10	54.26
(5) Average Current Age	64.72	65.19	65.66	66.25	66.72
(6) Average Monthly Pension Benefit	\$ 2,558	\$ 2,723	\$ 2,745	\$ 2,794	\$ 2,804
Surviving Spouse's Benefits (includes Q	DROs)				
(1) Number, Fiscal Year Start	602	647	696	726	774
(2) Net Change	45	49	30	48	67
(3) Number, Fiscal Year End	647	696	726	774	841
(4) Average Age at Commencement	58.16	58.61	59.06	59.64	60.23
(5) Average Current Age	67.71	68.17	68.77	69.50	70.11
(6) Average Monthly Pension Benefit	\$ 1,292	\$ 1,362	\$ 1,390	\$ 1,421	\$ 1,431
Survivor's Benefits (other than spouses)					
(1) Number, Fiscal Year Start	1	1	1	3	3
(2) Net Change	0	0	2	0	3
(3) Number, Fiscal Year End	1	1	3	3	6
(4) Average Age at Commencement	35.52	35.52	33.44	33.44	31.90
(5) Average Current Age	36.77	37.77	35.19	36.19	34.11
(6) Average Monthly Pension Benefit	\$ 451	\$ 469	\$ 536	\$ 545	\$ 648
Disabilities					
(1) Number, Fiscal Year Start	66	63	55	47	46
(2) Net Change	(3)	(8)	(8)	(1)	(2)
(3) Number, Fiscal Year End	63	55	47	46	44
(4) Average Age at Commencement	44.76	45.47	46.02	46.13	46.64
(5) Average Current Age	51.03	51.71	51.79	52.13	52.66
(6) Average Monthly Pension Benefit	\$ 2,885	\$ 3,060	\$ 2,977	\$ 3,058	\$ 2,879
Total					
(1) Number, Fiscal Year Start	9,020	9,386	9,678	10,026	10,255
(2) Net Change	366	292	348	229	343
(3) Number, Fiscal Year End	9,386	9,678	10,026	10,255	10,598
(4) Average Age at Commencement	54.05	54.20	54.35	54.48	54.69
(5) Average Current Age	64.83	65.33	65.82	66.42	66.91

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2.2(f) Statistics on All Pension Benefit Recipients (continued)



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2.2(g) Distribution of Annual Pension Benefits for Benefit Recipients

		Total	A	verage Annual		Years		Total Annual	Ai	rerage nnual
Age	Number	Annual Pension Benefit		ension Benefit		Since Commencement	Number	Pension Benefit		ension enefit
0 – 19	3	\$ 24,824	\$	8,275	-	0	456	\$ 14,202,430	\$	31,146
0 – 19 20 – 24	-	+ ,=	φ	,		0	430	÷ · ·,===, · · · ·	φ	,
-	0	0		0		1		11,801,113		28,643
25 – 29	0	0		0		2	461	13,850,843		30,045
30 – 34	1	30,106		30,106		3	438	12,937,809		29,538
35 – 39	2	75,396		37,698		4	440	12,500,760		28,411
40 – 44	17	408,598		24,035		0 – 4	2,207	65,292,955		29,584
45 – 49	117	3,688,294		31,524		5 – 9	2,328	67,400,874		28,952
50 – 54	506	15,883,668		31,391		10 – 14	2,628	86,661,527		32,976
55 – 59	1,557	46,814,206		30,067		15 – 19	1,172	39,465,847		33,674
60 – 64	2,690	81,227,780		30,196		20 – 24	1,374	53,586,657		39,000
65 – 69	2,383	80,027,128		33,583		25 – 29	526	19,285,256		36,664
70 – 74	1,496	52,466,620		35,071		30 – 34	301	9,189,632		30,530
75+	1,826	61,974,388		33,940		35 – 39	57	1,571,397		27,568
_						40+	5	166,863		33,373
Total	10,598	\$ 342,621,008	\$	32,329		Total	10,598	\$ 342,621,008	\$	32,329

Annual Pension Benefit by Age

Annual Pension Benefit by Years Since Commencement

Years Since Benefit Commencement by Age

Years Since	Commencement
-------------	--------------

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0 – 19	3	0	0	0	0	0	0	0	0	3
20 – 24	0	0	0	0	0	0	0	0	0	0
25 – 29	0	0	0	0	0	0	0	0	0	0
30 – 34	1	0	0	0	0	0	0	0	0	1
35 – 39	2	0	0	0	0	0	0	0	0	2
40 – 44	11	4	2	0	0	0	0	0	0	17
45 – 49	87	28	2	0	0	0	0	0	0	117
50 – 54	310	146	46	3	0	0	0	1	0	506
55 – 59	731	504	295	25	2	0	0	0	0	1,557
60 – 64	628	978	814	187	76	5	1	1	0	2,690
65 – 69	263	443	951	363	344	14	4	1	0	2,383
70 – 74	77	145	351	374	442	97	8	2	0	1,496
75+	94	80	167	220	510	410	288	52	5	1,826
Total	2,207	2,328	2,628	1,172	1,374	526	301	57	5	10,598



Amount of	Number of	Туре о	f Pension Be	enefit		Option Se	lected	elected			
Monthly Pension Benefit	Recipients	1	2	3	1	2	3	4			
\$ 1 \$ 300	188	142	46	0	110	38	31	9			
301 – 600	345	260	85	0	185	74	69	17			
601 – 900	615	497	118	0	324	133	128	30			
901 – 1,200	665	551	114	0	374	143	118	30			
1,201 – 1,500	611	482	129	0	333	133	123	22			
1,501 – 1,800	606	498	106	2	344	126	120	16			
1,801 – 2,100	662	565	96	1	338	143	158	23			
2,101 – 2,400	855	793	55	7	430	191	201	33			
2,401 – 2,700	977	931	38	8	473	218	261	25			
2,701 – 3,000	951	915	25	11	483	189	257	22			
3,001 – 3,300	856	840	13	3	425	149	260	22			
3,301 – 3,600	752	734	12	6	405	123	206	18			
3,601 – 3,900	623	618	2	3	344	94	172	13			
3,901 – 4,200	499	491	6	2	258	66	169	6			
Over \$4,200	1,393	1,390	2	1	708	189	458	38			
Totals	10,598	9,707	847	44	5,534	2,009	2,731	324			

2.2(h) Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Selected

Type of Pension Benefit

Option Selected

- 1. Regular retirement
- 1. Whole Life Annuity
- 2. Survivor payment
- 3. Disability

- 2. 75% Joint and Contingent Annuity
- 3. 50% Joint and Contingent Annuity
- 4. 66 2/3% Joint and Survivor Annuity

2.2(i) Schedule of Pension Benefit Recipients Added to and Removed from Rolls

	Ade	ded to Rolls	Remov	ed from Rolls Rolls – End of Ye		Removed from Rolls Rolls – End		End of Year	Percent	
Year Ended	No. ¹	Annual Pension Allowances ¹	No. ¹	Annual Pension Allowances ¹	No.	Annual Pension Allowances	Increase in Annual Pension Allowances	Average Annual Pension Allowance		
June 30, 2010	533	\$16,980,817	190	\$5,495,399	10,598	\$342,621,008	3.47%	\$32,329		
June 30, 2009	368	9,788,639	139	(2,857,118)	10,255	331,135,590	3.97%	32,290		
June 30, 2008	481	14,265,236	133	806,945	10,026	318,489,833	4.41%	31,766		
June 30, 2007	432	12,388,703	140	(14,114,559)	9,678	305,031,542	9.52%	31,518		
June 30, 2006	487	12,731,292	121	(50,838)	9,386	278,528,280	4.81%	29,675		
June 30, 2005	446	11,243,448	121	13,053,612	9,020	265,746,150	(0.68)%	29,462		
June 30, 2004	491	17,867,366	96	5,503,666	8,707	267,556,314	4.84%	30,729		
June 30, 2003	599	21,475,421	91	3,377,352	8,312	255,192,614	7.63%	30,702		
June 30, 2002	589	24,789,896	118	4,966,397	7,804	237,094,545	9.12%	30,381		
June 30, 2001	1,057	39,213,327	210	7,790,727	7,333	217,271,046	16.91%	29,629		

¹ Numbers are estimated, and include other internal transfers.

Basis of the Valuation

2.3 Summary of Actuarial Assumptions, Methods and Procedures

The demographic and economic assumptions used in the June 30, 2010 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board in December 2010. These assumptions were the result of an experience study performed as of June 30, 2009. The funding method used in this valuation was adopted by the Board in October 2006. The asset smoothing method used to determine valuation assets was changed effective June 30, 2002.

Benefits valued are those delineated in Alaska State statutes as of the valuation date. Changes in State statutes effective after the valuation date are not taken into consideration in setting the assumptions and methods.

Valuation of Liabilities

(A) Actuarial Method – Entry Age Actuarial Cost.

Liabilities and contributions shown in the report are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 25 years as a level percent of pay amount. Payroll is assumed to increase by the payroll growth assumption per year for this purpose. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined. However, for GASB disclosure requirements, the net amortization period will not exceed 30 years and the level dollar amortization method is used since the defined benefit plan membership was closed effective July 1, 2006.

Projected pension and postemployment healthcare benefits were determined for all active members. 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 and determining an average normal cost rate which is then related to 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 actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

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Changes in Methods from the Prior Valuation

There were no changes in methods from the prior valuation, except for any described in the healthcare sections below.

(B) Valuation of Assets

Effective June 30, 2002, the asset valuation method recognizes 20% of the difference between actual and expected investment return in each of the current and preceding four years. This method was phased in over the next five years. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP. Valuation assets are constrained to a range of 80% to 120% of the market value of assets.

(C) Valuation of Medical Benefits

This section outlines the detailed methodology used to develop the initial per capita claims cost rates for the State of Alaska Teachers' Retirement System postemployment healthcare plan. Note that methodology reflects the results of our annual experience rate update for the period July 1, 2010 to June 30, 2011.

Base claims cost rates are incurred healthcare costs expressed as a rate per member per year. Ideally, claims cost rates should be derived for each significant component of cost that can be expected to require differing projection assumptions or methods, i.e., medical claims, prescription drug claims, administrative costs, etc. Separate analysis is limited by the availability and credibility of cost and enrollment data for each component of cost. This valuation reflects non-prescription claims separated by Medicare status, including eligibility for free Part A coverage. Prescription costs are analyzed separately as in prior valuations. Administrative costs are assumed in the final per capita claims cost rates used for valuation purposes, as described below. Analysis to date on Medicare Part A coverage is limited since Part A claim data is not available by individual, nor is this status incorporated into historical claim data.

We analyzed WFIS and Premera management level reporting for fiscal 2007 through fiscal 2010, as well as WFIS and Premera claim level data for the same period and derived recommended base claims cost rates as described in the following steps:

- 1. Based on analysis described in our Experience Study, dental, vision and audio claims (DVA) are excluded from data analyzed for this valuation.
- 2. Available management level reporting does not show claims or enrollment separately for Medicare and non-Medicare plan participants, but does include overall statistics as to the percentage of claims and enrollment attributable to both groups. Claim level reporting was used to augment cost data by Medicare status.

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3. Alaska retirees who do not have 40 quarters of Medicare-covered compensation do not qualify for Medicare Part A coverage free of charge. This is a relatively small and closed group. Medicare was applied to State employment for all employees hired after March 31, 1986. For these "no-Part A" individuals, the State is the primary payer for hospital bills and other Part A services. Thus, claims costs are higher for the no-Part A group. To date, claim experience is not available separately for participants with both Medicare Parts A and B and those with Part B only. Therefore, higher no-Part A claims are spread across the entire retired population and have been applied to future claims of current active employees projected to retire in the future. To the extent that no-Part A claims can be isolated and applied strictly to the appropriate closed group, actuarial accrued liability will be more accurate and will be lower. The smaller the no-Part A population, the more accrued liabilities will decrease.

Based on census data received from WFIS, 0.6% of the current retiree population was identified as having coverage only under Medicare Part B. For future retirees, we assume their Part A eligible status based on a combination of date of hire, date of birth, tier, etc.

All claims cost rates developed from management level reporting have been compared to similar rates developed from claim level data.

- 4. The steps above result in separate paid claims cost rates for medical and prescription benefits for non-Medicare, Medicare Part B only and Medicare Part A&B members for the past four fiscal years. Medical claims cost rates reflect differing average ages and levels of Medicare coordination for each group. Prescription claims cost rates reflect differing average ages. We converted paid claim data to incurred cost rates projected from each historical data period to the valuation year using a weighted average of national and Alaska-specific trend factors and developed weighted average incurred claims cost rates. The assumed lag between medical claim incurred and paid dates is approximately 2.4 months for medical claims and 0.15 months for prescription claims.
- 5. Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact of the following provisions; however, none of the impacts have been included in the valuation results.
 - Because the State plan is retiree-only, and was in effect at the time the legislation was enacted, not all provisions are required. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions. We reviewed the impact of including these provisions, but there was no decision made to adopt them, and no requirement to do so.
 - The Plan will be subject to the high cost plan excise tax (Cadillac tax). Based upon guidance available at the time of disclosures, Buck estimated the year in which the tax would potentially affect Alaska to be 2047, and with a minimal impact. Buck determined the impact to be immaterial based on a blend of pre-Medicare and Medicare retirees.

We have not identified any other specific provisions of healthcare reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.

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	—		,	Medical		112011010			Pres	scription Drugs	6		1	
					1	Medicare B						ledicare B		
	P	re-Medicare	M	edicare A&B		Only	F	Pre-Medicare	Μ	edicare A&B		Only		Total
Fiscal 2007 Paid Claims	\$	129,762,975	\$	22,677,328	\$	3,524,812	\$	46,176,199	\$	42,348,638	\$	2,391,089	\$	246,881,041
Membership		33,446		20,315		1,069		33,446		20,315		1,069		54,830
Paid Claims Cost Rate	\$	3,880	\$	1,116	\$	3,297	\$	1,381	\$	2,085	\$	2,236	\$	4,503
Trend to FY2011		1.512		1.512		1.512		1.467		1.467		1.467		
FY 2011 Paid Cost Rate	\$	5,866	\$	1,688	\$	4,984	\$	2,026	\$	3,059	\$	3,282	\$	6,734
Paid to Incurred Factor**		1.022		1.022		1.022		1.001		1.001		1.001		
FY 2011 Incurred Cost Rate	\$	5,995	\$	1,725	\$	5,094	\$	2,028	\$	3,062	\$	3,285	\$	6,830
Fiscal 2008 Paid Claims	\$	169,598,064	\$	28,657,490	\$	6,079,463	\$	53,506,123	\$	52,529,773	\$	2,346,512	\$	312,717,425
Membership		33,630		21,434		893		33,630		21,434		893		55,957
Paid Claims Cost Rate	\$	5,043	\$	1,337	\$	6,807	\$	1,591	\$	2,451	\$	2,627	\$	5,589
Trend to FY2011		1.358		1.358		1.358		1.316		1.316		1.316		
FY 2011 Paid Cost Rate	\$	6,847	\$	1,815	\$	9,243	\$	2,094	\$	3,226	\$	3,459	\$	7,508
Paid to Incurred Factor**		1.022		1.022		1.022		1.001		1.001		1.001		
FY 2011 Incurred Cost Rate	\$	6,998	\$	1,855	\$	9,446	\$	2,096	\$	3,229	\$	3,462	\$	7,618
Fiscal 2009 Paid Claims	\$	185,275,626	\$	39,286,392	\$	3,949,927	\$	61,062,842	\$	60,195,838	\$	1,412,907	\$	351,183,532
Membership		32,943		24,624		539		32,943		24,624		539		58,106
Paid Claims Cost Rate	\$	5,624	\$	1,595	\$	7,327	\$	1,854	\$	2,445	\$	2,621	\$	6,044
Trend to FY2011		1.221		1.221		1.221		1.184		1.184		1.184		
FY 2011 Paid Cost Rate	\$	6,866	\$	1,948	\$	8,944	\$	2,194	\$	2,893	\$	3,102	\$	7,300
Paid to Incurred Factor**		1.022		1.022		1.022		1.001		1.001		1.001		
FY 2011 Incurred Cost Rate	\$	7,017	\$	1,991	\$	9,141	\$	2,196	\$	2,896	\$	3,105	\$	7,407

June 30, 2010 \	Valuation –	FY 2011	Claims	Cost Rates
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** As data specific to Medicare and Pre-Medicare retirees is provided, lag factors specific to Medicare status will be reflected.

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				Medical				I	Pres	cription Drugs	5		1	
					Ν	ledicare B					Ν	ledicare B		
	P	re-Medicare	M	edicare A&B		Only	P	re-Medicare	M	edicare A&B		Only		Total
Fiscal 2010 Paid Claims	\$	199,739,865	\$	51,373,725	\$	1,215,832	\$	62,310,224	\$	73,005,066	\$	414,101	\$	388,058,813
Membership		32,026		27,915		156		32,026		27,915		156		60,097
Paid Claims Cost Rate	\$	6,237	\$	1,840	\$	7,794	\$	1,946	\$	2,615	\$	2,654	\$	6,457
Trend to FY2011		1.130		1.130		1.130		1.096		1.096		1.096		
FY 2011 Paid Cost Rate	\$	7,050	\$	2,080	\$	8,810	\$	2,132	\$	2,866	\$	2,909	\$	7,221
Paid to Incurred Factor**		1.022		1.022		1.022		1.001		1.001		1.001		
FY 2011 Incurred Cost Rate	\$	7,205	\$	2,126	\$	9,003	\$	2,134	\$	2,869	\$	2,912	\$	7,327
Weighted Average 7/1/2010-6/30/2011 Incur	red	Claims Cost Ra	ates	:										
At average age	\$	6,967	\$	1,978	\$	8,756	\$	2,141	\$	2,971	\$	3,136	\$	7,427
At age 65*	\$	8,606	\$	1,563	\$	6,654	\$	2,600	\$	2,600	\$	2,600	\$	7,924

June 30, 2010 Valuation – FY 2011 Claims Cost Rates

* Methodology prior to 2006 did not include separate Part B only analysis; applicable rates above are determined so that the composite Medicare rate equates to separate A&B and B only rates based on the 3.5% of Medicare membership assumed to lack Part A.

** As data specific to Medicare and Pre-Medicare retirees is provided, lag factors specific to Medicare status will be reflected.

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Following the development of total projected costs, a distribution of per capita claims cost was developed. This was accomplished by allocating total projected costs to the population census used in the valuation. The allocation was done separately for each of prescription drugs and medical costs for the Medicare eligible and pre-Medicare populations. The allocation weights were developed using participant counts by age and assumed morbidity and aging factors. Results were tested for reasonableness based on historical trend and external benchmarks for costs paid by Medicare.

Below are the results of this analysis:

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug	Medicare Retiree Drug Subsidy
45	\$ 4,766	\$ 4,766	\$ 1,372	\$ 0
50	5,392	5,392	1,629	0
55	6,101	6,101	1,935	0
60	7,246	7,246	2,243	0
65	1,563	6,654	2,600	515
70	1,902	8,096	2,801	555
75	2,258	9,613	2,988	592
80	2,433	10,356	3,063	607

Distribution of Per Capita Claims Cost by Age for the Period July 1, 2010 through June 30, 2011

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Investment Return / Discount Rate	8.00% per year (geometric), compounded annually, net of expenses.
Salary Scale	Inflation – 3.12% per year.
	Productivity -0.5% per year.
	See Table 1 for salary scale rates.
Payroll Growth	3.62% per year. (Inflation + Productivity).
Total Inflation	Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.12% annually.
Mortality (Pre-termination)	Based upon the 2005-2009 actual experience. (See Table 2). 1994 Group Annuity Mortality (GAM) Sex-distinct Table 1994 Base Year without margin projected to 2013 using Projection Scale AA, adjusted 55% for females and 45% for males. Deaths are assumed to result from non-occupational causes 85% of the time.
Mortality (Post-termination)	Based upon the 2005-2009 actual experience. (See Table 3). The 1994 GAM Sex-distinct Table 1994 Base Year without margin projected to 2013 using Projection Scale AA, with a 3- year setback for females and 4-year setback for males.
Turnover	Select and ultimate rates based upon the 2005-2009 actual withdrawal experience. (See Table 4).
Disability	Incidence rates based upon the 2005-2009 actual experience, in accordance with Table 5. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table.
Retirement	Retirement rates based upon the 2005-2009 actual experience in accordance with Table 6. Deferred vested members are assumed to retire at their earliest unreduced retirement date.
Marriage and Age Difference	Wives are assumed to be three years younger than husbands. 85% of male members and 75% of female members are assumed to be married.
Dependent Children	Benefits to dependent children have been valued assuming members who are married and between the ages of 25 and 45 have two dependent children.
Contribution Refunds	10% of terminating members with vested benefits are assumed to have their contributions refunded. 100% of those with non- vested benefits are assumed to have their contributions refunded.

(D) Actuarial Assumptions



COLA	Of those benefit recipients who are eligible for the COLA, 60% are assumed to remain in Alaska and receive the COLA.					
Sick Leave	4.7 days of unused sick leave for each year of service are assumed to be available to be credited once the member is retired, terminates or dies.					
Postretirement Pension Adjustment	50% and 75% of assumed inflation, or 1.56% and 2.34% respectively, is valued for the annual automatic Postretirement Pension Adjustment (PRPA) as specified in the statute.					
Expenses	All expenses are net of the	investment return	n assumption.			
Part-time Status	Part-time employees are assumed to earn 0.60 years of credited service per year.					
Re-employment Option	We assume all re-employed retirees return to work under the Standard Option.					
Service	 Total credited service is provided by the State. We assume that this service is the only service that should be used to calculate benefits. Additionally, the State provides claimed service (including Bureau of Indian Affairs Service). Claimed service is used for vesting and eligibility purposes as described in Section 2.1. 					
Final Average Earnings	Final Average Earnings is provided on the data for active members. This amount is used as a minimum in the calculation of the average earnings in the future.					
Per Capita Claims Cost	Sample claims cost rates a benefits are shown below:	djusted to age 65	for FY11 medical			
			Prescription			
	Dry Mallague	Medical	Drugs			
	Pre-Medicare	\$ 8,606	\$ 2,600			
	Medicare Parts A & B	\$ 1,563	\$ 2,600			
	Medicare Part B Only	\$ 6,654	\$ 2,600			
	Medicare Part D	N/A	\$ 515			
Third Party Administrator Fees	\$153.33 per person per year.	ar; assumed trend	rate of 5% per			

(D) Actuarial Assumptions (continued)



(D) Actuarial Assumptions (continued)

Health Cost Trend

The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 6.9% is applied to the FY11 medical claims cost to get the FY12 medical claims cost.

	Medical	Prescription Drugs
FY11	6.9%	8.3%
FY12	6.4%	7.1%
FY13	5.9%	5.9%
FY14	5.9%	5.9%
FY15	5.9%	5.9%
FY16	5.9%	5.9%
FY17	5.9%	5.9%
FY25	5.8%	5.8%
FY50	5.7%	5.7%
FY100	5.1%	5.1%

For the June 30, 2009 valuations and later, the Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model effectively begins estimating trend amounts beginning in 2012 and projects out to 2100. The model has been populated with assumptions that are specific to the State of Alaska.

Aging Factors			Prescription
	Age	Medical	Drugs
	0-44	2.0%	4.5%
	45-54	2.5%	3.5%
	55-64	3.5%	3.0%
	65-74	4.0%	1.5%
	75-84	1.5%	0.5%
	85-94	0.5%	0.0%
	95+	0.0%	0.0%



(D) Actuarial Assumptions (continued)

Coverage Category	Calendar 2011 Annual Contribution	Calendar 2011 Monthly Contribution	Calendar 2010 Monthly Contribution
Retiree Only	\$ 9,492	\$ 791	\$ 719
Retiree and Spouse	\$ 18,996	\$ 1,583	\$ 1,439
Retiree and Child(ren)	\$ 13,416	\$ 1,118	\$ 1,016
Retiree and Family	\$ 22,920	\$ 1,910	\$ 1,736
Composite	\$ 14,112	\$ 1,176	\$ 1,068



Trend Rate for Retired Member Medical Contribution	The table below shows the rate used to project the retired member medical contributions from the shown fiscal year to the next fiscal year. For example, 6.7% is applied to the FY11 retired member medical contributions to get the FY12 retired member medical contributions.					
	FY11	6.7%				
	FY12	6.3%				
	FY13	6.0%				
	FY14	5.7%				
	FY15	5.3%				
	FY16	5.0%				
	FY17	5.0%				
	FY18	5.0%				
	FY19 and later	5.0%				
	Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2005 valuation. Note that actual FY10 retired member medical contributions are reflected in the valuation so trend on such contribution during FY10 is not					
	applicable.					
Healthcare Participation	100% of system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible. 10% of non-system paid members and their spouses are assumed to elect healthcare benefits					

(D) Actuarial Assumptions (continued)



as soon as they are eligible.

Salary Scale		
Year of Employment	Unisex Rate	
1-6 7 8 9 10 11	6.11% 5.94 5.78 5.61 5.44 5.28	
12 13 14 15 16 17 18 19 20	5.11 4.94 4.78 4.61 4.45 4.28 4.11 3.95 3.78	
21+	3.62	

Table 1 Alaska TRS



Table 2Alaska TRSMortality Table (Pre-termination)

Age	Male	<u>Female</u>
20	.017%	.012%
21	.018	.012
22	.019	.012
23	.021	.013
24	.024	.013
25	.026	.013
26	.030	.014
27	.032	.014
28	.033	.015
29	.034	.016
30	.035	.017
31	.036	.019
32	.037	.020
33	.037	.021
34	.037	.022
35	.037	.023
36	.038	.024
37	.039	.025
38	.041	.027
39	.042	.029
40	.045	.032
41	.047	.034
42	.050	.037
43	.053	.039
44	.056	.041
45	.060	.042
46	.064	.044
47	.069	.047
48	.075	.051
49	.081	.055
50	.088	.061
51	.097	.068
52	.106	.078
53	.118	.090
54	.131	.102
55	.149	.116
56	.170	.135
57	.195	.157
58	.224	.181
59	.253	.208
60	.284	.239
61	.326	.274
62	.368	.314
63	.425	.359
64	.479	.410

Table 3Alaska TRSMortality Table (Post-termination)

Age	Male	Female
50	.142%	.085%
51	.153	.092
52	.166	.100
53	.181	.111
54	.196	.124
55	.215	.143
56	.235	.163
57	.263	.185
58	.291	.212
59	.331	.246
60	.377	.285
61	.433	.328
62	.499	.378
63	.561	.434
64	.631	.498
65	.725	.570
66	.819	.653
67	.944	.745
68	1.064	.844
69	1.196	.948
70	1.362	1.052
71	1.512	1.150
72	1.634	1.242
73	1.787	1.342
74	1.915	1.434
75	2.094	1.583
76	2.298	1.726
77	2.518	1.918
78	2.748	2.094
79	3.061	2.338
80	3.361	2.669
81	3.788	2.985
82	4.292	3.327
83	4.868	3.707
84	5.510	4.136
85	6.214	4.625



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Table 4 Alaska TRS Turnover Assumptions

Select Rates of Turnover During the First 8 Years of Employment

Year of	
Employment	Unisex Rate
1	17.00%
2	17.00
3	14.00
4	12.00
5	10.00
6	9.00
7	7.50
8	6.00

Ultimate Rates of Turnover After the First 8 Vears of Employment

After the First 8 Years of Employment											
Age	Male	Female	Age	Male	Female						
15	4.4584%	4.3747%	40	4.3189%	4.2658%						
16	4.4528	4.3714	41	4.3065	4.2559						
17	4.4483	4.3692	42	4.2908	4.2460						
18	4.4438	4.3681	43	4.2762	4.2372						
19	4.4415	4.3670	44	4.2570	4.2262						
20	4.4067	4.3351	45	4.2357	4.2130						
21	4.4044	4.3351	46	4.2132	4.2009						
22	4.3999	4.3340	47	4.1850	4.1844						
23	4.3965	4.3340	48	4.1524	4.1657						
24	4.3909	4.3329	49	4.1187	4.1470						
25	4.3864	4.3329	50	4.0804	4.1250						
26	4.3819	4.3318	51	4.0354	4.0997						
27	4.3774	4.3307	52	3.9825	4.0700						
28	4.3729	4.3274	53	3.9240	4.0348						
29	4.3684	4.3241	54	3.8588	3.9974						
30	4.3650	4.3208	55	3.7845	3.9523						
31	4.3628	4.3186	56	3.6945	3.8940						
32	4.3594	4.3142	57	3.5843	3.8192						
33	4.3572	4.3109	58	3.4639	3.7345						
34	4.3560	4.3065	59	3.3188	3.6267						
35	4.3538	4.3021	60	3.1557	3.5046						
36	4.3504	4.2955	61	2.9745	3.3682						
37	4.3459	4.2900	62	2.7642	3.2131						
38	4.3380	4.2823	63	2.5245	3.0360						
39	4.3290	4.2746	64	2.2647	2.8435						
			65+	4.5000	4.4000						

/	Table 5 Alaska TRS Disability Table	
Age	Male	Female
20	.0224%	.0202%
21	.0224	.0202
22	.0232	.0209
23	.0232	.0209
24	.0240	.0216
25	.0240	.0216
26	.0240	.0216
27	.0248	.0223
28	.0256	.0230
29	.0264	.0238
30	.0272	.0245
31	.0272	.0245
32	.0280	.0252
33	.0288	.0259
34 35	.0296 .0304	.0266 .0274
36	.0320	.0288
37 38	.0328 .0344	.0295 .0310
38 39	.0344	.0317
40	.0368	.0331
41	.0384	
41 42	.0408	.0346 .0367
43	.0432	.0389
44	.0472	.0425
45	.0520	.0468
46	.0560	.0504
47	.0608	.0547
48	.0664	.0598
49	.0712	.0641
50	.0768	.0691
51	.0832	.0749
52	.0912	.0821
53	.1016	.0914
54	.1136	.1022
55	.1280	.1152
56	.1472	.1325
57	.1712	.1541
58	.1952	.1757
59 60	.2304	.2074
60	.2696	.2426
61	.3120	.2808
62 62	.3616	.3254
63 64	.4176	.3758
64	.4768	.4291



2.3	Summary of Actuarial Assumptions, Methods and Procedures
	(continued)

Age at	Retirement Rate								
Retirement	Reduced	Unre	educed						
	Unisex								
	Rates	Male	Female						
<50	N/A	10.00%	10.00%						
50	8.00%	13.00	13.00						
51	8.00	12.00	12.00						
52	8.00	12.00	12.00						
53	6.00	13.00	13.00						
54	12.00	16.00	16.00						
55	8.00	18.00	20.00						
56	8.00	17.00	15.00						
57	8.00	13.00	17.50						
58	8.00	17.50	18.00						
59	12.00	15.00	17.50						
60	N/A	17.50	20.00						
61	N/A	17.50	20.00						
62	N/A	11.00	25.00						
63	N/A	20.00	25.00						
64	N/A	25.00	20.00						
65	N/A	30.00	20.00						
66	N/A	25.00	20.00						
67	N/A	25.00	20.00						
68	N/A	25.00	20.00						
69	N/A	25.00	20.00						
70-84	N/A	50.00	50.00						
85		100.00	100.00						

Table 6 Alaska TRS Retirement Table



	June 30, 2009	June 30, 2010
Salary Scale	Based on actual experience from	Rates adjusted on actual
	2001 to 2005.	experience from 2005 to 2009.
Payroll Growth	4.00% per year.	3.62% per year.
Total Inflation	3.50%	3.12%
Investment Return/ Discount Rate	8.25% per year (geometric), compounded annually, net of expenses.	8.00% per year (geometric), compounded annually, net of expenses.
Pre-termination Mortality	The 1994 GAM Sex-distinct Table, 1994 Base Year adjusted 55% for males, and 60% for females.	The 1994 GAM Sex-distinct Table, 1994 Base Year projected to 2013 using Projection Scale AA, adjusted 45% for males, and 55% for females.
Post-termination Mortality	The 1994 GAM Sex-distinct Table, 1994 Base Year, setback 1 year for females and 3-year setback for males.	The 1994 GAM Sex-distinct Table, 1994 Base Year projected to 2013 using Projection Scale AA, setback 3 years for females and 4-year setback for males.
Disability Mortality	1979 PBGC Disability Mortality Table for those receiving Social Security disability benefits.	RP-2000 Disabled Retiree Mortality Table.
Turnover	Based on actual experience from 2001 to 2005.	Rates adjusted based on actual experience from 2005 to 2009.
Disability	Based on actual experience from 2001 to 2005.	Male/female rates decreased based on actual experience from 2005 to 2009 and stop rates at earliest retirement age.
Retirement	Based on actual experience from 2001 to 2005.	Rates adjusted based on actual experience from 2005 to 2009.
Part-time Service	.55 years of credited service per year.	.60 years of credited service per year.
Occupational Assumption	0% of deaths are assumed to be from occupational causes.	15% of deaths are assumed to be from occupational causes.
Deferred Vested Commencement Age	Earliest reduced age.	Earliest unreduced age.
Healthcare Participation	100% of members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.	100% of system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.
		10% of non-system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.

Changes in Actuarial Assumptions Since the Prior Valuation



Other Historical Information

Section 3

- Section 3.1 Analysis of Financial Experience.
- Section 3.2(a) Summary of Accrued and Unfunded Accrued Liabilities.
- Section 3.2(b) Schedule of Contributions from Employers and Other Contributing Entities.
- Section 3.2(c) Actuarial Assumptions, Methods and Additional Information Under GASB.
- Section 3.3 Solvency Test.



3.1 Analysis of Financial Experience

Change in Employer/State Contribution Rate Due to (Gains) and Losses in Accrued Liabilities During the Last Five Fiscal Years Resulting From Differences Between Assumed Experience and Actual Experience

		Change in	Employer/State	Contribution	Rate During Fis	scal Year			
	-	Pension							
Type of (Gain) or Loss		2006	2007	2008	2009	2010			
(1)	Health Experience	N/A	N/A	N/A	N/A	N/A			
(2)	Salary Experience	0.79%	(0.27)%	0.43%	0.29%	0.59%			
(3)	Investment Experience	0.10%	(0.32)%	(0.62)%	6.53%	(0.34)%			
(4)	Demographic Experience	(0.27)%	1.63%	(0.33)%	(0.54)%	(0.75)%			
(5)	Contribution Shortfall	(0.41)%	0.42%	(0.11)%	0.01%	0.46%			
(6)	(Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	0.21%	1.46%	(0.63)%	6.29%	(0.04)%			
(7)	Asset Valuation Method	0.00%	0.00%	0.00%	0.00%	0.00%			
(8)	Past Service Amortization Change	0.00%	0.00%	0.00%	0.00%	0.00%			
(9)	Assumption and Method Changes	2.96%	(1.08)%*	0.00%	0.00%	3.96%			
(10)	System Benefit Changes	0.00%	0.00%	0.00%	0.00%	0.00%			
(11)	Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10)	3.17%	0.38%	(0.63)%	6.29%	3.92%			
(12)	Beginning Total Employer/State Contribution Rate	17.40%	20.57%	20.95%	20.32%	26.61%			
(13)	Ending Total Employer/State Contribution Rate, $(11) + (12)$	20.57%	20.95%	20.32%	26.61%	30.53%			
(14)	Fiscal Year Above Rate is Applied	FY09	FY10	FY11	FY12	FY13			

*Includes change in rate by using total payroll.

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3.1 Analysis of Financial Experience (continued)

Change in Employer/State Contribution Rate Due to (Gains) and Losses in Accrued Liabilities During the Last Five Fiscal Years Resulting From Differences Between Assumed Experience and Actual Experience

	Change in	Employer/State	e Contribution	Rate During Fis	cal Year			
-	Healthcare							
Type of (Gain) or Loss	2006	2007	2008	2009	2010			
(1) Health Experience	(2.52)%	(3.90)%	(1.22)%	(2.67)%	0.19%			
(2) Salary Experience	N/A	N/A	N/A	N/A	N/A			
(3) Investment Experience	(0.46)%	(1.05)%	(0.23)%	0.70%	0.39%			
(4) Demographic Experience	N/A	N/A	N/A	N/A	N/A			
(5) Contribution Shortfall	1.62%	0.89%	(0.87)%	(0.27)%	(0.45)%			
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	(1.36)%	(4.06)%	(2.32)%	(2.24)%	0.13%			
(7) Asset Valuation Method	0.00%	0.00%	0.00%	0.00%	0.00%			
(8) Past Service Amortization Change	0.00%	0.00%	0.00%	0.00%	0.00%			
(9) Assumption and Method Changes	0.10%	(0.96)%*	1.98%	0.00%	2.90%			
(10) System Benefit Changes	0.00%	0.00%	0.00%	0.00%	0.00%			
 (11) Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10) 	(1.26)%	(5.02)%	(0.34)%	(2.24)%	3.03%			
(12) Beginning Total Employer/State Contribution Rate	24.86%	23.60%	18.58%	18.24%	16.00%			
(13) Ending Total Employer/State Contribution Rate, (11) + (12)	23.60%	18.58%	18.24%	16.00%	19.03%			
(14) Fiscal Year Above Rate is Applied	FY09	FY10	FY11	FY12	FY13			

*Includes change in rate by using total payroll.



Other Historical Information

3.1 Analysis of Financial Experience (continued)

Change in Employer/State Contribution Rate Due to (Gains) and Losses in Accrued Liabilities During the Last Five Fiscal Years Resulting From Differences Between Assumed Experience and Actual Experience

		Change in	Employer/Sta	ate Contribut	ion Rate Duri	ng Fiscal Yea
				Total		
Туре	e of (Gain) or Loss	2006	2007	2008	2009	2010
(1)	Health Experience	(2.52)%	(3.90)%	(1.22)%	(2.67)%	0.19%
(2)	Salary Experience	0.79%	(0.27)%	0.43%	0.29%	0.59%
(3)	Investment Experience	(0.36)%	(1.37)%	(0.85)%	7.23%	0.05%
(4)	Demographic Experience	(0.27)%	1.63%	(0.33)%	(0.54)%	(0.75)%
5)	Contribution Shortfall	1.21%	1.31%	(0.98)%	(0.26)%	0.01%
(6)	(Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	(1.15)%	(2.60)%	(2.95)%	4.05%	0.09%
7)	Asset Valuation Method	0.00%	0.00%	0.00%	0.00%	0.00%
8)	Past Service Amortization Change	0.00%	0.00%	0.00%	0.00%	0.00%
9)	Assumption and Method Changes	3.06%	(2.04)%*	1.98%	0.00%	6.86%
10)	System Benefit Changes	0.00%	0.00%	0.00%	0.00%	0.00%
(11)	Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10)	1.91%	(4.64)%	(0.97)%	4.05%	6.95%
12)	Beginning Total Employer/State Contribution Rate	42.26%	44.17%	39.53%	38.56%	42.61%
13)	Ending Total Employer/State Contribution Rate,					
	(11) + (12)	44.17%	39.53%	38.56%	42.61%	49.56%
(14)	Fiscal Year Above Rate is Applied	FY09	FY10	FY11	FY12	FY13

*Includes change in rate by using total payroll.

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3.2(a) Summary of Accrued and Unfunded Accrued Liabilities

Valuation Date	Aggregate Accrued Liability (000's	Valuation Assets ;) (000's)	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL) (000's)	Annual Active Member Payroll (000's)	UAL as a Percent of Annual Active Member Payroll	
June 30, $2010^1 - 8.00\%$	\$ 6,006,981	\$ 3,259,868	54.3%	\$ 2,747,113	\$ 564,887	486.3%	
June 30, 2009 – 8.25%	\$ 5,463,987	\$ 3,115,719	57.0%	\$ 2,348,268	\$ 557,026	421.6%	
June 30, 2008 – 8.25%	\$ 5,231,654	\$ 3,670,086	70.2%	\$ 1,561,568	\$ 549,148	284.4%	
June 30, 2007 – 8.25%	\$ 5,043,448	\$ 3,441,867	68.2%	\$ 1,601,581	\$ 554,245	289.0%	
June 30, $2006^1 - 8.25\%$	\$ 4,859,336	\$ 3,296,934	67.8%	\$ 1,562,402	\$ 574,409	272.0%	

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

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 (000's)		Accrued Assets		Assets as a Percent of Accrued Liability		Unfunded Accrued Liabilities (UAL) (000's)		Annual Active Member Payroll (000's)		UAL as a Percent of Annual Active Member Payroll	
June 30, $2010^1 - 8.00\%$	\$	3,076,388	\$	1,479,260		48.1%	\$	1,597,128	\$	564,887		282.7%
June 30, 2009 – 4.50%	\$	4,604,820	\$	1,357,239		29.5%	\$	3,247,581	\$	557,026		583.0%
June 30, $2008^1 - 4.50\%$	\$	4,648,055	\$	1,266,890		27.3%	\$	3,381,165	\$	549,148		615.7%
June 30, 2007 – 4.50%	\$	4,059,573	\$	982,532		24.2%	\$	3,077,041	\$	554,245		552.2%
June 30, $2006^1 - 4.50\%$	\$	4,288,707	\$	844,766		19.7%	\$	3,443,941	\$	574,409		599.6%

For illustration, the exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy discounted at 8.00% and at 4.25% per annum under GASB No. 43 for the current year. These values show the minimum and maximum accrued liability amounts depending on the portion of ARC actually contributed.

Valuation Date	Aggregate Accrued Liability (000's)	Valuation Assets (000's)	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL) (000's)	Annual Active Member Payroll (000's)	UAL as a Percent of Annual Active Member Payroll
June 30, $2010^1 - 8.00\%$	\$ 3,076,388	\$ 1,479,260	48.1%	\$ 1,597,128	\$ 564,887	282.7%
June 30, $2010^1 - 4.25\%$	\$ 5,809,756	\$ 1,479,260	25.5%	\$ 4,330,496	\$ 564,887	766.6%

¹ Change in assumptions

3.2(a) Summary of Accrued and Unfunded Accrued Liabilities (continued)

The exhibit below shows the combined pension and postemployment healthcare disclosure under GASB No.	. 25, prior to 2006.
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Valuation Date	Aggregate Accrued bility (000's)	aluation Assets (000's)	Assets as a Percent of Accrued Liability	I	Unfunded Accrued Liabilities IAL) (000's)	I	Annual Active Member vroll (000's)	UAL as a Percent of Annual Active Member Payroll
June 30, 2005	\$ 6,498,556	\$ 3,958,939	60.9%	\$	2,539,617	\$	535,837	474.0%
June 30, 2004 ²	\$ 6,123,600	\$ 3,845,370	62.8%	\$	2,278,230	\$	522,421	436.1%
June 30, 2003	\$ 5,835,609	\$ 3,752,285	64.3%	\$	2,083,324	\$	532,630	391.1%
June 30, 2002 ^{1 2 3}	\$ 5,411,642	\$ 3,689,036	68.2%	\$	1,722,606	\$	509,437	338.1%
June 30, 2001	\$ 4,603,147	\$ 4,372,229	95.0%	\$	230,918	\$	496,188	46.5%
June 30, 2000 ¹²³	\$ 4,198,868	\$ 4,184,015	99.6%	\$	14,853	\$	482,571	3.1%
June 30, 1999	\$ 3,720,954	\$ 3,815,633	102.5%	\$	N/A	\$	466,414	N/A
June 30, 1998	\$ 3,528,757	\$ 3,446,070	97.7%	\$	82,687	\$	469,433	17.6%
June 30, 1997	\$ 3,320,069	\$ 3,120,044	94.0%	\$	200,025	\$	466,455	42.9%

¹ Change in Asset Valuation Method ² Change of Assumptions

³ Change in Methods

3.2(b) Schedule of Contributions from Employers and Other Contributing Entities (\$'s in thousands)

The exhibit below shows the combined pension and postemployment healthcare disclosure under GASB No. 25 and 26 for fiscal years ending in 2006 and before.

Fiscal Year Ended June 30	Total Annual Required Contribution	Total Percentage Contributed
2006	\$ 236,738	54.0%
2005	207,951	45.0%
2004	82,660	83.0%
2003	47,370	133.0%
2002	39,576	155.0%
2001	56,391	114.0%
2000	67,874	92.0%
1999	53,901	114.0%
1998	76,504	80.0%

The following shows pension disclosure under GASB No. 25 for fiscal year ending 2007 and later.

		Percentage Contributed				
Fiscal Year Ended June 30	Total Annual Required Contribution	By Employer	By State	Total		
2010	\$ 170,788	19.8%	58.8%	78.6%		
2009	\$ 94,388	28.7%	110.6%	139.3%		
2008	\$ 134,544	23.3%	82.7%	106.0%		
2007	\$ 169,974	62.2%	0.00%	62.2%		

The following shows postemployment healthcare disclosure. The ARC is determined without regard to the Medicare Part D subsidy under GASB No. 43 for fiscal year ending 2007 and later.

		Perce	ntage Contri	buted
Fiscal Year Ended June 30	Total Annual Required Contribution	By Employer	By State	Total
2010*	\$ 312,922	13.6%	38.8%	52.4%
2009	\$ 164,171	28.7%	62.1%	90.8%
2008	\$ 185,271	23.6%	85.7%	109.3%
2007	\$ 76,879	62.2%	0.00%	62.2%

*The ARC and percentage contributed is based on Buck's calculation and does not match the June 30, 2010 CAFR. The percentage contributed in FY10 includes the legal settlement, net of fees, as well as the Medicare Part D subsidy contributed by the State to the Healthcare Fund.

3.2(b) Schedule of Contributions from Employers and Other Contributing Entities (continued)

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

	-		y)			
Valuation Date	Fiscal Year	Pension	Healthcare	Total	Pension Discount Rate	Healthcare Discount Rate
June 30, 2005	FY08	22.73%	54.45%	77.18%	8.25%	4.50%
June 30, 2006	FY09	26.89%	52.20%	79.09%	8.25%	4.50%
June 30, 2007	FY10	28.61%	52.42%	81.03%	8.25%	4.50%
June 30, 2008	FY11	28.76%	28.71%	57.47%	8.25%	8.25%
June 30, 2009	FY12	40.84%	34.29%	75.13%	8.25%	7.08%
June 30, 2010*	FY13	47.23%	60.07%	107.30%	8.00%	5.01%

* Change in actuarial assumptions effective June 30, 2010.

ARC is based on DB salary only and a level dollar amortization of the unfunded liability.

Other Historical Information

Valuation Date June 30, 2010 Actuarial Cost Method Entry Age Normal Level Percentage of Pay for Pension Level Dollar for Healthcare Amortization Method Level dollar, closed Equivalent Single Amortization Period 19 years 5-year smoothed market Asset Valuation Method Actuarial Assumptions: Investment rate of return* 8.00% for pension, 8.00% for healthcare Projected salary increases 6.11% for first 5 years of service grading down to 3.2% after 20 years *Includes inflation at 3.12% Postretirement Pension Adjustment as described in Section Cost-of-living adjustment 2.1, item (13)

3.2(c) Actuarial Assumptions, Methods and Additional Information Under GASB

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 Teachers Retirement System's retiree healthcare benefits are partially funded. GASB outlines two reasonable methods of developing a blended discount rate when a plan is partially funded. These methods base the proportion of assumed plan and employer asset returns on 1) the funded ratio and 2) the percentage of the annual required contribution (ARC) actually being contributed to the plan. The State of Alaska has utilized the second methodology to develop a discount rate of 8.25% as of June 30, 2008, to be used for fiscal 2011 disclosure.

The development of the discount rate used for the FY11 healthcare liabilities valuation disclosure purposes is summarized below:

Investment Returns

Plan A	ssets (Long-Term Return)	=	8.25%
Employ	yer Assets (Estimated Short-Term Return)	=	4.50%
Based	on Percentage of ARC Contributed during FY08*		
1.	Contribution Allocated to Healthcare	=	36.09%
2.	Annual Required Contribution, Funding Assumptions	=	31.03%
3.	Pay-as-you-go Contribution	=	14.36%
4.	Portion of ARC Contributed: $[(1-3) / (2-3)]$, not less than 0%,		
	not more than 100%]	=	100.00%
5.	Multiplied by long-term investment return	=	8.25%
6.	Portion of ARC not Contributed: [100% - (4)]	=	0.00%
7.	Multiplied by short-term investment return	=	0.00%
8.	Total: $(5) + (7)$	=	8.25%

*It is assumed that fiscal 2006 contributions allocated to healthcare ARC for funding purposes and pay-as-you-go contributions are used to derive the GASB 43 discount rate applied to the June 30, 2008 valuation (fiscal 2009), which in turn drives the fiscal 2011 GASB 43 ARC.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2011 employer ARC rate for accounting purposes is 28.71% of pay for healthcare benefits and 57.47% of pay for healthcare and pension benefits combined.

3.3 Solvency Test – Pension and Healthcare

Valuation Date	Aggregate Accrued Liability For:				Portion of Accrued Liabilities Covered by Assets		
	(1) Active Member Contributions (000's)	(2) Inactive Members (000's)	(3) Active Members (Employer- Financed Portion) (000's)	- Valuation Assets (000's)	(1)	(2)	(3)
June 30, 2010 ²	\$ 716,675	\$ 5,909,080	\$ 2,222,033	\$ 4,739,128	100%	68.1%	0.0%
June 30, 2009	692,105	5,292,808	1,862,601	4,472,958	100%	71.4%	0.0%
June 30, 2008 ²	654,662	5,181,676	1,782,840	4,936,976	100%	82.6%	0.0%
June 30, 2007	638,420	4,912,025	1,638,958	4,424,399	100%	77.1%	0.0%
June 30, 2006 ^{2 3}	615,207	4,925,922	1,688,722	4,141,700	100%	71.6%	0.0%
June 30, 2005	589,169	4,694,176	1,215,211	3,958,939	100%	71.8%	0.0%
June 30, 2004 ²	569,435	4,423,036	1,131,129	3,845,370	100%	74.1%	0.0%
June 30, 2003	548,947	4,105,445	1,181,217	3,752,285	100%	78.0%	0.0%
June 30, 2002 ¹²³	523,142	3,755,882	1,132,618	3,689,036	100%	84.3%	0.0%
June 30, 2001	533,752	3,213,431	855,964	4,372,229	100%	100%	73.0%

Healthcare liabilities are calculated using the funding assumptions (i.e., funding investment return and net of Medicare Part D subsidy).

Change in Asset Valuation Method Change in Assumptions

2

3 Change in Methods

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