



State of Alaska Public Employees' Retirement System

Actuarial Valuation Report
as of June 30, 2013

August 2014

buckconsultants®

Submitted By:
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State of Alaska Public Employees' Retirement System

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August 22, 2014

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

Certification of Actuarial Valuation

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

This report summarizes the annual actuarial valuation results of the State of Alaska Public Employees' Retirement System (PERS) as of June 30, 2013 performed by Buck Consultants, LLC.

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP and member data provided by the Division of Retirement and Benefits and summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2013. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under the System were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable. Buck Consultants, LLC is solely responsible for the actuarial data and actuarial results presented in this report. This report fully and fairly discloses the actuarial position of the System.

The State of Alaska Public Employees' Retirement System is funded by Employer, State, and Member Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board). The funding objective for the State of Alaska Public Employees' Retirement System is to pay required contributions that remain level as a percent of total PERS Compensation. The Board has also established a funding policy objective that the required contributions be sufficient to pay the Normal Costs of active plan members, System expenses, and amortize the Unfunded Actuarial Accrued Liability as a level dollar amount over a closed 25-year period. The Board changed the amortization method used for funding from the level percentage of payroll method to the level dollar method in June 2012, effective June 30, 2012. The compensation used to determine required contributions is the total compensation of all active members in PERS, including those hired after July 1, 2006 who are members of the Defined Contribution Retirement (DCR) Plan. This objective is currently being met and is projected to continue to be met.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the System and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the System. The actuary performs an analysis of System experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed in 2010. A review of the healthcare assumptions was performed for last year's actuarial valuation and changes were made to the healthcare cost trend rates and the per capita claim cost rates effective June 30, 2012 to better reflect expected future healthcare experience. Base on updated experience, these assumptions are still reasonable. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 6 beginning on page 82.

The assumptions and methods used to determine the Annual Required Contributions (ARC) of the Employers to the State of Alaska Public Employees' Retirement System as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statements No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Based on member data and asset information provided by the Division of Retirement and Benefits, we have prepared the Schedule of Funding Progress, Schedule of Employer Contributions, and trend data schedules under GASB Nos. 25 and 43 that are included in the Financial Section of the CAFR. We have also prepared the member data tables shown in Section 5 of this report for the Statistical Section of the CAFR, and the summary of actuarial assumptions, solvency test, and analysis of financial experience for the Actuarial Section of the CAFR.

The undersigned is an Enrolled Actuary, an Associate of the Society of Actuaries and Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,

BUCK CONSULTANTS, LLC



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

The Alaska Retirement Management Board, The Department of Revenue and The Department of
Administration
August 22, 2014
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The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and hereby affirms her qualification to render opinions in such matters, in accordance with the qualification standards of the American Academy of Actuaries.



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

State of Alaska Public Employees' Retirement System

EXECUTIVE SUMMARY

Overview

The State of Alaska Public Employees' Retirement System provides pension and postemployment healthcare benefits to eligible participants. The Commissioner of the Department of Administration is responsible for administering the System. The Alaska Retirement Management Board has fiduciary responsibility over the assets of the System. This report presents the results of the actuarial valuation of the System benefits as of the valuation date of June 30, 2013.

Purpose

An actuarial valuation is performed on the retirement plan annually as of the beginning of the fiscal year. The main purposes of the actuarial valuation detailed in this report are:

1. To determine the Employer/State contribution necessary to meet the Board's funding policy for the System;
2. To disclose the funding assets and liability measures as of the valuation date;
3. To disclose the accounting measures for the System required by GASB Nos. 25 and 43 as of the end of the last fiscal year;
4. To review the current funded status of the System;
5. To compare actual and expected experience under the System during the last fiscal year;
6. And to report trends in contributions, assets, liabilities, and funded status over the last several years.

The actuarial valuation provides a "snapshot" of the funded position of the PERS based on the plan provisions, membership, assets, and actuarial assumptions as of the valuation date. Actuarial projections are also performed to provide a long-term view of the expected future funding status and contribution patterns (see Section 4 beginning on page 50).

Future actuarial valuation measurements and projections may differ from the current measurements presented in this report due to such factors as: plan experience different from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. The sensitivity analysis shown on page 59 is an example of the differences which can occur in projected contribution amounts when actual investment returns are different than assumed, but does not include the impact of all possible future differences that can impact future measurements.

State of Alaska Public Employees' Retirement System

Funding Status

The funding status is a measure of the progress that has been made in funding the plan as of the valuation date. It is determined as a ratio of the value of assets using either the actuarial or fair value of assets, divided by the total actuarial accrued liability on the valuation date. A ratio of over 100% represents a plan that is ahead in funding, and a ratio of less than 100% represents a plan that is behind in funding on the valuation date. A comparative summary of the funding ratio from the prior and current actuarial valuations follows:

Funding Status as of June 30 ¹	2012	2013
Pension		
(a) Accrued Liability ²	\$ 11,428,944	\$ 11,945,881
(b) Valuation Assets ²	<u>6,530,421</u>	<u>6,510,749</u>
(c) Unfunded Accrued Liability ² , (a) – (b)	\$ 4,898,523	\$ 5,435,132
(d) Funding Ratio based on Valuation Assets, (b) ÷ (a)	57.1%	54.5%
(e) Fair Value of Assets ²	\$ 6,118,294	\$ 6,694,482
(f) Funding Ratio based on Fair Assets, (e) ÷ (a)	53.5%	56.0%
Healthcare		
(a) Accrued Liability ²	\$ 7,863,417	\$ 8,046,878
(b) Valuation Assets ²	<u>5,301,609</u>	<u>5,651,877</u>
(c) Unfunded Accrued Liability ² , (a) – (b)	\$ 2,561,808	\$ 2,395,001
(d) Funding Ratio based on Valuation Assets, (b) ÷ (a)	67.4%	70.2%
(e) Fair Value of Assets ²	\$ 5,171,815	\$ 5,829,571
(f) Funding Ratio based on Fair Assets, (e) ÷ (a)	65.8%	72.4%
Total		
(a) Accrued Liability ²	\$ 19,292,361	\$ 19,992,759
(b) Valuation Assets ²	<u>11,832,030</u>	<u>12,162,626</u>
(c) Unfunded Accrued Liability ² , (a) – (b)	\$ 7,460,331	\$ 7,830,133
(d) Funding Ratio based on Valuation Assets, (b) ÷ (a)	61.3%	60.8%
(e) Fair Value of Assets ²	\$ 11,290,109	\$ 12,524,053
(f) Funding Ratio based on Fair Assets, (e) ÷ (a)	58.5%	62.6%

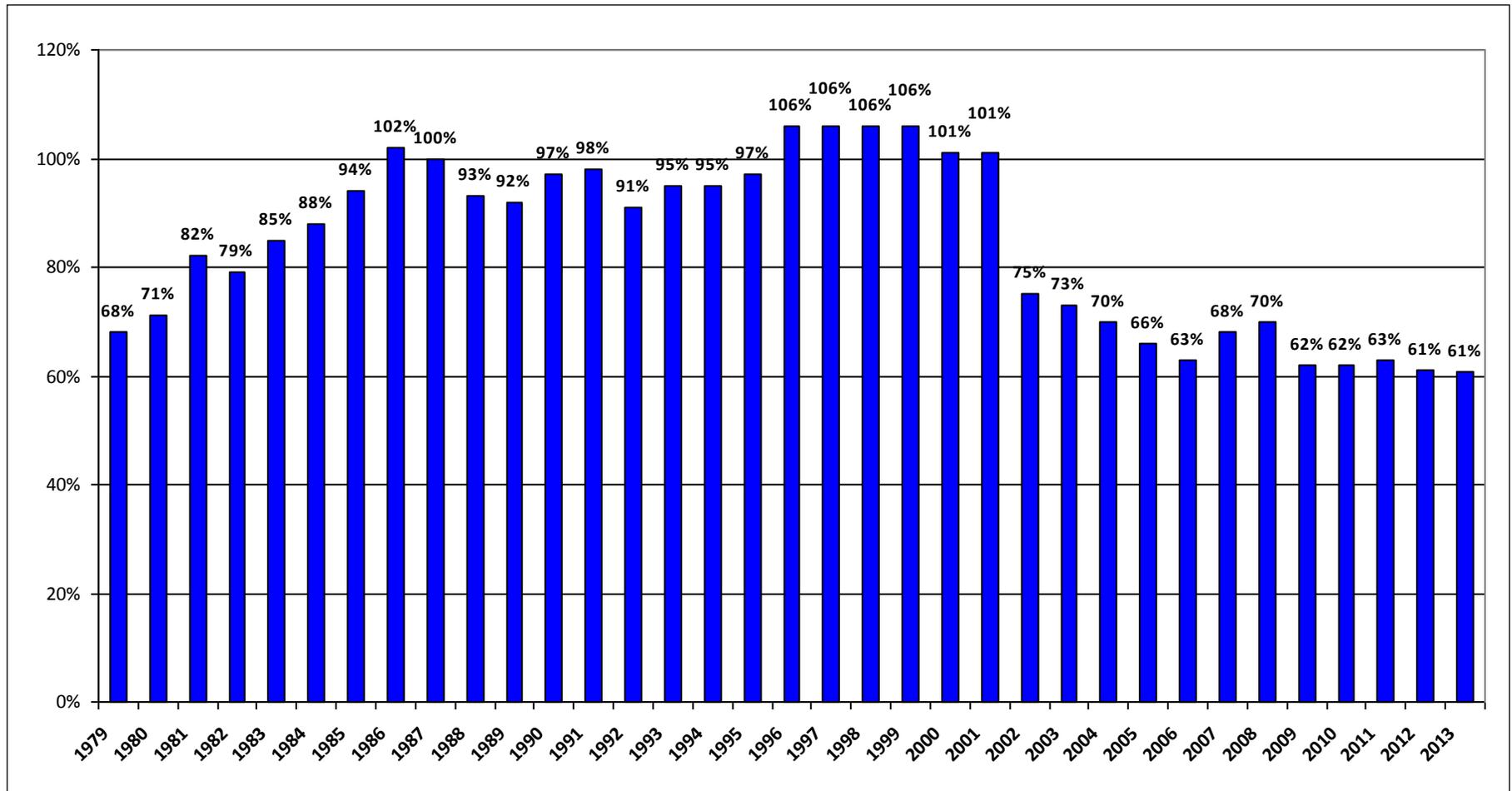
¹ Includes pension and healthcare benefits.

² In thousands.

State of Alaska Public Employees' Retirement System

Executive Summary (cont'd)

PERS Funding Ratio History (Based on Valuation Assets)



State of Alaska Public Employees' Retirement System

Executive Summary (cont'd)

As shown previously, the funding ratio based on valuation assets as of June 30, 2013 has decreased from 61.3% to 60.8%, a decrease of 0.5%. The calculated Employer/State contribution rate has increased from 39.85% of payroll for FY15 to 40.28% for FY16, an increase of 0.43% of payroll. The reasons for the change in the funded status and 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%
1/1/12-12/31/12	1,200.00	2%	9%
1/1/13-12/31/13	1,223.00	2%	9%
1/1/14-12/31/14	1,223.00	0%	9%

As shown in the above table, the monthly retiree medical premium for the January 1, 2014 to December 31, 2014 time period will increase to \$1,223. This represents an increase of 0% from the previous year's medical premium of \$1,223. The health cost trend rates used for this valuation are described in Section 6.3. Over the last 10 years, annual premium rate changes have ranged from no change to up to 14%. Also, over the last ten years, the increase in the premium rate has been about 4.3% compounded annually.

Executive Summary (cont'd)

An analysis of medical costs was completed based on claims information and enrollment data provided by HealthSmart (formerly Wells Fargo Insurance Services). 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 2013 valuation, we updated incurred claims cost and Medicare offset analyses using fiscal 2013 incurred claims and enrollment information through June 2013. For Medicare Part B only participants, we were provided a census, from HealthSmart, of all current retirees that do not have Medicare Part A. 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. 2013 experience rates were developed using historical incurred claims for fiscal years 2010 - 2013. The trend assumption is based on the proposed Society of Actuaries' Healthcare Cost Trend Model updated for 2012. The trend rate varies by year declining to 4.5% over 100 years. The trends vary by medical, pre-Medicare and Medicare, and aggregate prescription drugs.

For the 2013 valuation, we have not modified any management level reporting information used to develop per capita claim cost rates. We will continue to compare data from multiple 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 2013 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. Finally, explicit third-party administration (TPA) costs were added to medical and prescription claims cost rates. Per-member TPA costs are derived from the go-forward Aetna contract and are projected to increase at the assumed rate of 5%.

Based upon variations in medical cost trends between Medicare-eligible and pre-Medicare populations, Buck's practice is to use separate healthcare cost trends for these populations. This, in conjunction with updates to legislation, long-term trend models and time since prior assumptions were set, indicated a need to re-set this assumption for the 2012 valuation. Based upon emerging experience, we did not update the trend assumptions for the 2013 valuation.

Executive Summary (Cont'd)

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 2013 and 2014. 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 December 2012 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 increasing slightly, but still favorably, compared to industry and aggregate trend expectations. Some of the favorable experience can be attributed to the lower proportion of participants not eligible for Medicare Part A as compared to historical valuation claims costs. 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 maintain 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 Alaska-specific experience while still reflecting national trends.

The new third-party administration contract effective January 1, 2014 is expected to deliver greater medical network and pharmacy discount savings compared to levels implicit in claims data used to develop base-year claim cost rates.

Further detail on development of base claim cost rates is provided in Section 6.2(C) below.

State of Alaska Public Employees' Retirement System

Executive Summary (cont'd)

The following table summarizes data sources and assumptions and the relative impact changes in each have on healthcare cost projections for 2013 as compared to 2012:

Healthcare Cost Rate Data Source or Assumption Change, 2013 vs. 2012	Gain / Loss Impact on 2013 Valuation Results
Claim lag specific to medical and prescription experience	Negligible
Individual claims level data	<ul style="list-style-type: none"> – No impact on cost data used for 2012, though potentially a source of future modifications – No impact on morbidity assumptions used for 2012, though potentially a source of future modifications
Explicit TPA fees	Negligible
Assumed TPA medical and pharmacy network discounts	Modest gain
Actual RDS payments received	Negligible
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	N/A / Negligible
Aggregate claims data	Moderate gain due to experience, but dampened by weighting methodology
Census Data – Medicare Part B only participation	Gain due to fewer Medicare Part B only participants as compared to historical estimates

Executive Summary (cont'd)

(2) Investment Experience

The approximate FY13 investment return based on fair values was 12.1% compared to the expected investment return of 8.00%. This resulted in a gain of approximately \$478 million to the System from investment experience. The asset valuation method recognizes 20 percent of this gain (\$95.5 million) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY09 investment loss, 20 percent of the FY10 investment gain, 20 percent of the FY11 investment gain, and 20 percent of the FY12 investment loss were recognized this year. The approximate FY13 investment return based on actuarial values was 4.0%, compared to the expected investment return of 8.00%. The net result was an investment loss of \$469.0 million which decreased the funding ratio by 2.3% and increased the Employer/State contribution rate by 1.76%.

(3) Salary Increase

During the period from June 30, 2012 to June 30, 2013, salary increases for continuing active members were more than anticipated in the valuation assumptions. Higher accrued liabilities caused the funding ratio to decrease by 0.1%. The net effect of the salary loss was an increase of 0.23% in the Employer/State contribution rate.

(4) Demographic Experience

Section 5 provides statistics on active participants. The number of active participants decreased 7.8%, from 22,730 at June 30, 2012 to 20,955 at June 30, 2013 due to members retiring and terminating during the year and the closure of the plan to new entrants as of July 1, 2006. The average age of active participants increased from 49.85 to 50.39 and average credited service increased from 13.32 to 14.00 years.

The number of benefit recipients increased 4.6%, from 28,540 to 29,865, and their average age increased from 67.41 to 67.76. There was a 1.0% decrease in the number of vested terminated participants from 6,294 to 6,230. Their average age increased from 50.55 to 50.84.

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 equal to 2.35% of total payroll. Most of this gain is due to spreading the unfunded contribution over a larger payroll base, a lower than expected PRPA increase and a smaller than expected growth in the per capita claims cost rates for healthcare. As a result, expected benefit payments for FY13 and future years are reduced. The gain/loss by decrement on the accrued liability is shown in the summary on page 11.

Executive Summary (cont'd)

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

As of June 30, 2012, the actuarially calculated rate was 39.85% for FY15 Employer/State contributions. Since Employer/State contribution rates are determined two years prior to the fiscal year, the June 30, 2010 employer rate of 32.83% was contributed during FY13. The difference between the two calculated rates, 39.85% and 32.83%, or an actuarial contribution rate of 7.02% less than the actuarial rate, created a contribution deficit to the System. This deficit increased the Employer/State contribution rate by 0.79%.

(6) Actuarial Projections

At the Fall 1991 Board Meetings, the PERS Board approved the use of an enhanced actuarial projection system. 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 4, Actuarial Funding Projections, contains the results of this analysis.

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

(7) Changes in Methods Since the Prior Valuation

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

(8) Changes in Assumptions Since the Prior Valuation

There have been no changes in actuarial assumptions since the prior valuation.

(9) Changes in Benefit Provisions Since the Prior Valuation

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

State of Alaska Public Employees' Retirement System

Comparative Summary of Key Actuarial Valuation Results

Employer/State Contribution Rates for Pension for Fiscal Year:	2015	2016
(a) Normal Cost Rate Net of Member Contributions	2.57%	2.38%
(b) Past Service Rate	<u>20.67%</u>	<u>22.46%</u>
(c) Total Employer/State Contribution Rate (a) + (b)	23.24%	24.84%
Employer/State Contribution Rates for Postemployment Healthcare for Fiscal Year:	2015	2016
(a) Normal Cost Rate	4.25%	3.73%
(b) Past Service Rate	<u>12.36%</u>	<u>11.71%</u>
(c) Total Employer/State Contribution Rate (a) + (b)	16.61%	15.44%
Total Employer/State Contribution Rates for Fiscal Year:	2015	2016
(a) Normal Cost Rate Net of Member Contributions	6.82%	6.11%
(b) Past Service Rate	<u>33.03%</u>	<u>34.17%</u>
(c) Total Employer/State Contribution Rate (a) + (b)	39.85%	40.28%
(d) Board Adopted Total Employer/State Contribution Rate	39.85%	TBD*
(e) Defined Contribution Retirement (DCR) Rate Paid by Employers	<u>4.18%</u>	TBD*
(f) Board Adopted Total Rate, Including DCR Rate Paid by Employers (d) + (e)	44.03%	TBD*

*The contribution rates for fiscal year ending June 30, 2016 are to be determined using new methodology in accordance with 2014 legislation under HB 385 and SB 119 which change the amortization methodology to a closed 25-year period as a level percentage of pay and eliminate the time lag on the contribution rate calculation.

Contribution rates are based on total salaries for DB and DC plan members, combined.

The rates shown above are for funding purposes which differ from the Annual Required Contribution for GASB Nos. 25 and 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. Under both GASB Nos. 25 and 43, the amortization of the unfunded liabilities is calculated as a level dollar amount.

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

State of Alaska Public Employees' Retirement System

Comparative Summary of Key Actuarial Valuation Results

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 payroll combined:

	<u>Pension</u>	<u>Healthcare</u>	<u>Total</u>
1. Last year's total Employer/State contribution rate	23.24%	16.61%	39.85%
2. Change due to:			
a. Effect of two-year delay in the contribution rate	0.78%	0.01%	0.79%
b. Investment experience	1.43%	0.33%	1.76%
c. Salary increases	0.23%	N/A	0.23%
d. Demographic and medical experience ¹	<u>(0.84)%</u>	<u>(1.51)%</u>	<u>(2.35)%</u>
e. Total change (<i>a + b + c + d</i>)	1.60%	(1.17)%	0.43%
3. Total Employer/State contribution rate this year (<i>1</i>) + (<i>2e</i>)	24.84%	15.44%	40.28%

The following table shows the gain/(loss) on total accrued liability (in thousands):

	<u>Pension</u>	<u>Healthcare</u>	<u>Total</u>	<u>% of Total Expected Accrued Liability</u>
- Retirement Experience	\$ (14,528)	\$ (34,739)	\$ (49,267)	(0.2%)
- Termination Experience	(23,716)	775	(22,941)	(0.1%)
- Active Mortality Experience	8,575	3,859	12,434	0.1%
- Inactive Mortality Experience	(15,978)	(4,004)	(19,982)	(0.1%)
- Disability Experience	15	(2,460)	(2,445)	nil
- Rehires	(23,427)	(11,840)	(35,267)	(0.2%)
- Other Demographic Experience	(19,679)	(3,656)	(23,335)	(0.1%)
- Salary Increases	(10,070)	N/A	(10,070)	(0.1%)
- Alaska COLA	5,865	N/A	5,865	nil
- PRPA Other Than Expected	36,714	N/A	36,714	0.2%
- Medical Claims Costs	N/A	215,974	215,974	1.1%
- Total	\$ (56,229)	\$ 163,909	\$ 107,680	0.5%

¹ Includes changes in future healthcare claims costs.

Section 1

Actuarial Funding Results

State of Alaska Public Employees' Retirement System

Section 1.1

Actuarial Liabilities and Normal Cost - Peace Officer/Firefighter (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
Active Members		
Retirement Benefits	\$ 803,552	\$ 663,671
Termination Benefits	32,901	15,971
Disability Benefits	7,058	(514)
Death Benefits	11,022	5,901
Return of Contributions	5,728	(6,875)
Medical and Prescription Drug Benefits	388,263	327,372
Medicare Part D Subsidy	(17,596)	(14,899)
Indebtedness	(6,784)	(6,784)
Subtotal	\$ 1,224,144	\$ 983,843
Inactive Members		
Not Vested	\$ 2,273	\$ 2,273
Vested Terminations		
- Retirement Benefits	22,136	22,136
- Medical and Prescription Drug Benefits	29,871	29,871
- Medicare Part D Subsidy	(1,442)	(1,442)
- Indebtedness	(472)	(472)
Retirees & Beneficiaries		
- Retirement Benefits	1,155,929	1,155,929
- Medical and Prescription Drug Benefits	540,730	540,730
- Medicare Part D Subsidy	(35,010)	(35,010)
Subtotal	\$ 1,714,015	\$ 1,714,015
Total	\$ 2,938,159	\$ 2,697,858
Total Pension	\$ 2,033,343	\$ 1,851,236
Total Medical, Net of Part D Subsidy	\$ 904,816	\$ 846,622
Total Medical, Gross of Part D Subsidy	\$ 958,864	\$ 897,973

State of Alaska Public Employees' Retirement System

Section 1.1 (cont'd)

Actuarial Liabilities and Normal Cost – Peace Officer/Firefighter (cont'd) (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
By Tier		
Tier 1		
- Pension	\$ 1,077,136	\$ 1,070,477
- Medical, Net of Part D Subsidy	464,515	461,277
Tier 2		
- Pension	490,242	450,627
- Medical, Net of Part D Subsidy	203,542	193,697
Tier 3		
- Pension	465,965	330,132
- Medical, Net of Part D Subsidy	236,759	191,648
Total	\$ 2,938,159	\$ 2,697,858

As of June 30, 2013	Normal Cost
Active Members	
Retirement Benefits	\$ 19,956
Termination Benefits	2,397
Disability Benefits	1,094
Death Benefits	751
Return of Contributions	1,803
Medical and Prescription Drug Benefits	10,083
Medicare Part D Subsidy	(449)
Subtotal	\$ 35,635
Total	\$ 35,635
Total Pension	\$ 26,001
Total Medical, Net of Part D Subsidy	\$ 9,634
Total Medical, Gross of Part D Subsidy	\$ 10,083

By Tier	
Tier 1	
- Pension	\$ 1,848
- Medical, Net of Part D Subsidy	941
Tier 2	
- Pension	7,435
- Medical, Net of Part D Subsidy	2,041
Tier 3	
- Pension	16,718
- Medical, Net of Part D Subsidy	6,652
Total	\$ 35,635

State of Alaska Public Employees' Retirement System

Section 1.1 (cont'd)

Actuarial Liabilities and Normal Cost – Others (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
Active Members		
Retirement Benefits	\$ 4,198,775	\$ 3,662,916
Termination Benefits	327,838	183,751
Disability Benefits	14,963	1,443
Death Benefits	67,886	48,408
Return of Contributions	48,381	(71,411)
Medical and Prescription Drug Benefits	3,006,564	2,587,948
Medicare Part D Subsidy	(175,007)	(151,923)
Indebtedness	(64,851)	(64,851)
Subtotal	\$ 7,424,549	\$ 6,196,281
Inactive Members		
Not Vested	\$ 71,139	\$ 71,139
Vested Terminations		
- Retirement Benefits	470,829	470,829
- Medical and Prescription Drug Benefits	893,529	893,529
- Medicare Part D Subsidy	(43,892)	(43,892)
- Indebtedness	(12,243)	(12,243)
Retirees & Beneficiaries		
- Retirement Benefits	5,804,664	5,804,664
- Medical and Prescription Drug Benefits	4,215,681	4,215,681
- Medicare Part D Subsidy	(301,087)	(301,087)
Subtotal	\$ 11,098,620	\$ 11,098,620
Total	\$ 18,523,169	\$ 17,294,901
Total Pension	\$ 10,927,381	\$ 10,094,645
Total Medical, Net of Part D Subsidy	\$ 7,595,788	\$ 7,200,256
Total Medical, Gross of Part D Subsidy	\$ 8,115,774	\$ 7,697,158

State of Alaska Public Employees' Retirement System

Section 1.1 (cont'd)

Actuarial Liabilities and Normal Cost – Others (cont'd) (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
By Tier		
Tier 1		
- Pension	\$ 6,245,126	\$ 6,135,229
- Medical, Net of Part D Subsidy	4,166,143	4,076,091
Tier 2		
- Pension	2,667,234	2,440,319
- Medical, Net of Part D Subsidy	1,868,567	1,777,207
Tier 3		
- Pension	2,015,021	1,519,097
- Medical, Net of Part D Subsidy	1,561,078	1,346,958
Total	\$ 18,523,169	\$ 17,294,901

As of June 30, 2013	Normal Cost
Active Members	
Retirement Benefits	\$ 91,391
Termination Benefits	20,346
Disability Benefits	2,074
Death Benefits	3,155
Return of Contributions	17,861
Medical and Prescription Drug Benefits	81,103
Medicare Part D Subsidy	(4,404)
Subtotal	\$ 211,526
Total	\$ 211,526
Total Pension	\$ 134,827
Total Medical, Net of Part D Subsidy	\$ 76,699
Total Medical, Gross of Part D Subsidy	\$ 81,103

By Tier	
Tier 1	
- Pension	\$ 26,480
- Medical, Net of Part D Subsidy	23,364
Tier 2	
- Pension	37,891
- Medical, Net of Part D Subsidy	17,389
Tier 3	
- Pension	70,456
- Medical, Net of Part D Subsidy	35,946
Total	\$ 211,526

State of Alaska Public Employees' Retirement System

Section 1.1 (cont'd)

Actuarial Liabilities and Normal Cost – All Members (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
Active Members		
Retirement Benefits	\$ 5,002,327	\$ 4,326,587
Termination Benefits	360,739	199,722
Disability Benefits	22,021	929
Death Benefits	78,908	54,309
Return of Contributions	54,109	(78,286)
Medical and Prescription Drug Benefits	3,394,827	2,915,320
Medicare Part D Subsidy	(192,603)	(166,822)
Indebtedness	(71,635)	(71,635)
Subtotal	\$ 8,648,693	\$ 7,180,124
Inactive Members		
Not Vested	\$ 73,412	\$ 73,412
Vested Terminations		
- Retirement Benefits	492,965	492,965
- Medical and Prescription Drug Benefits	923,400	923,400
- Medicare Part D Subsidy	(45,334)	(45,334)
- Indebtedness	(12,715)	(12,715)
Retirees & Beneficiaries		
- Retirement Benefits	6,960,593	6,960,593
- Medical and Prescription Drug Benefits	4,756,411	4,756,411
- Medicare Part D Subsidy	(336,097)	(336,097)
Subtotal	\$ 12,812,635	\$ 12,812,635
Total	\$ 21,461,328	\$ 19,992,759
Total Pension	\$ 12,960,724	\$ 11,945,881
Total Medical, Net of Part D Subsidy	\$ 8,500,604	\$ 8,046,878
Total Medical, Gross of Part D Subsidy	\$ 9,074,638	\$ 8,595,131

State of Alaska Public Employees' Retirement System

Section 1.1 (cont'd)

Actuarial Liabilities and Normal Cost – All Members (cont'd) (\$'s in 000's)

As of June 30, 2013	Present Value of Projected Benefits	Accrued (Past Service) Liability
By Tier		
Tier 1		
- Pension	\$ 7,322,262	\$ 7,205,706
- Medical, Net of Part D Subsidy	4,630,658	4,537,368
Tier 2		
- Pension	3,157,476	2,890,946
- Medical, Net of Part D Subsidy	2,072,109	1,970,904
Tier 3		
- Pension	2,480,986	1,849,229
- Medical, Net of Part D Subsidy	1,797,837	1,538,606
Total	\$ 21,461,328	\$ 19,992,759

As of June 30, 2013	Normal Cost
Active Members	
Retirement Benefits	\$ 111,347
Termination Benefits	22,743
Disability Benefits	3,168
Death Benefits	3,906
Return of Contributions	19,664
Medical and Prescription Drug Benefits	91,186
Medicare Part D Subsidy	(4,853)
Subtotal	\$ 247,161
Total	\$ 247,161
Total Pension	\$ 160,828
Total Medical, Net of Part D Subsidy	\$ 86,333
Total Medical, Gross of Part D Subsidy	\$ 91,186

By Tier	
Tier 1	
- Pension	\$ 28,328
- Medical, Net of Part D Subsidy	24,305
Tier 2	
- Pension	45,326
- Medical, Net of Part D Subsidy	19,430
Tier 3	
- Pension	87,174
- Medical, Net of Part D Subsidy	42,598
Total	\$ 247,161

State of Alaska Public Employees' Retirement System

Section 1.2

Actuarial Contributions - FY16 - Peace Officer/Firefighter (\$'s in 000's)

Normal Cost Rate	Pension	Healthcare	Total
(1) Total Normal Cost	\$ 26,001	\$ 9,634	\$ 35,635
(2) DB Member Salaries Projected for FY14	205,747	205,747	205,747
(3) DCR Member Salaries Projected for FY14	80,152	80,152	80,152
(4) Total Salaries Projected for FY14	285,899	285,899	285,899
(5) Normal Cost Rate for Peace Officer/Firefighter			
a. Based on DB Member Salaries, (1) ÷ (2)	12.64%	4.68%	17.32%
b. Based on Total Salaries, (1) ÷ (4)	9.09%	3.37%	12.46%
(6) Member Contribution Rate (Peace Officer/Firefighter) ¹	5.42%	0.00%	5.42%
(7) Employer Normal Cost Rate For Peace Officer/Firefighter, (5b) – (6)	3.67%	3.37%	7.04%
Past Service Rate			
(1) Accrued Liability	\$ 1,851,236	\$ 846,622	\$ 2,697,858
(2) Valuation Assets ²	<u>1,008,961</u>	<u>594,641</u>	<u>1,603,602</u>
(3) Unfunded Liability, (1) – (2)	\$ 842,275	\$ 251,981	\$ 1,094,256
(4) Funded Ratio, (2) ÷ (1)	54.5%	70.2%	59.4%
(5) Past Service Cost Amortization Payment ³	80,654	28,180	108,834
(6) Total Salaries Projected for FY14	285,899	285,899	285,899
(7) Past Service Rate, (5) ÷ (6)	28.21%	9.86%	38.07%
Total Employer/State Contribution Rate	31.88%	13.23%	45.11%
Normal Cost Rate by Tier (Total Employer and Member)⁴			
Tier 1	14.20%	7.23%	21.43%
Tier 2	12.28%	3.37%	15.65%
Tier 3	12.65%	5.03%	17.68%
Maturity Ratio	63.7%	63.1%	63.5%

¹ Assumes no member contributions from members in the DCR plan and 7.50% from Tiers 1, 2 and 3 in Peace Officer/Firefighter.

² Allocated between Peace Officer/Firefighter and Others in proportion to accrued liability.

³ Amortized on a level dollar basis.

⁴ Rate determined considering the pay for members of the plan in this tier. DCR payroll is excluded from these calculations.

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - Peace Officer/Firefighter (cont'd) (\$'s in 000's)

Schedule of Past Service Cost Amortizations

Pension						
	Amortization Period		Balances		Beginning-of-Year Payment	
	Date Created	Years Left	Initial	Outstanding		
Initial Unfunded Liability ¹	6/30/2002	14	\$ 137,169	\$ 138,633	\$ 15,570	
FY03 Loss ¹	6/30/2003	15	9,777	9,988	1,080	
FY04 Loss ¹	6/30/2004	16	25,832	26,559	2,778	
FY05 Loss ¹	6/30/2005	17	48,970	50,485	5,125	
Change in Assumptions/Methods ¹	6/30/2006	18	65,436	67,415	6,660	
FY06 Gain ¹	6/30/2006	18	(19,153)	(19,731)	(1,949)	
FY07 Loss	6/30/2007	19	22,584	23,219	2,239	
FY08 Gain	6/30/2008	20	(3,036)	(3,107)	(293)	
FY09 Loss	6/30/2009	21	249,836	253,876	23,468	
Change in Assumptions	6/30/2010	22	46,836	47,110	4,276	
FY10 Gain	6/30/2010	22	(8,620)	(8,670)	(787)	
FY11 Loss	6/30/2011	23	40,553	40,428	3,609	
FY12 Loss	6/30/2012	24	114,501	112,935	9,932	
FY13 Loss	6/30/2013	25	103,135	103,135	8,946	
Total				\$ 842,275	\$ 80,654	

Healthcare						
	Amortization Period		Balances		Beginning-of-Year Payment	
	Date Created	Years Left	Initial	Outstanding		
Initial Unfunded Liability ¹	6/30/2002	14	\$ 175,533	\$ 177,406	\$ 19,925	
FY03 Loss ¹	6/30/2003	15	12,512	12,782	1,383	
FY04 Loss ¹	6/30/2004	16	33,056	33,989	3,556	
FY05 Loss ¹	6/30/2005	17	62,666	64,607	6,558	
Change in Assumptions/Methods ¹	6/30/2006	18	83,737	86,269	8,523	
FY06 Gain ¹	6/30/2006	18	(24,510)	(25,250)	(2,495)	
FY07 Gain	6/30/2007	19	(86,375)	(88,804)	(8,562)	
Change in Assumptions	6/30/2008	20	44,982	46,034	4,341	
FY08 Gain	6/30/2008	20	(27,452)	(28,094)	(2,649)	
FY09 Gain	6/30/2009	21	(23,322)	(23,700)	(2,191)	
Change in Assumptions	6/30/2010	22	29,559	29,731	2,699	
FY10 Loss	6/30/2010	22	3,008	3,026	275	
FY11 Gain	6/30/2011	23	(17,392)	(17,338)	(1,548)	
Change in Assumptions	6/30/2012	24	27,643	27,265	2,398	
FY12 Gain	6/30/2012	24	(40,719)	(40,162)	(3,532)	
FY13 Gain	6/30/2013	25	(5,780)	(5,780)	(501)	
Total				\$ 251,981	\$ 28,180	

¹ The pension and healthcare split was done using a ratio of unfunded accrued liability as of June 30, 2006.

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - Peace Officer/Firefighter (cont'd) (\$'s in 000's)

Schedule of Past Service Cost Amortizations

	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
	Total				
Initial Unfunded Liability	6/30/2002	14	\$ 312,702	\$ 316,039	\$ 35,495
FY03 Loss	6/30/2003	15	22,289	22,770	2,463
FY04 Loss	6/30/2004	16	58,888	60,548	6,334
FY05 Loss	6/30/2005	17	111,636	115,092	11,683
Change in Assumptions/ Methods	6/30/2006	18	149,173	153,684	15,183
FY06 Gain	6/30/2006	18	(43,663)	(44,981)	(4,444)
FY07 Gain	6/30/2007	19	(63,791)	(65,585)	(6,323)
Change in Assumptions	6/30/2008	20	44,982	46,034	4,341
FY08 Gain	6/30/2008	20	(30,488)	(31,201)	(2,942)
FY09 Loss	6/30/2009	21	226,514	230,176	21,277
Change in Assumptions	6/30/2010	22	76,395	76,841	6,975
FY10 Gain	6/30/2010	22	(5,612)	(5,644)	(512)
FY11 Loss	6/30/2011	23	23,161	23,090	2,061
Change in Assumptions	6/30/2012	24	27,643	27,265	2,398
FY12 Loss	6/30/2012	24	73,782	72,773	6,400
FY13 Loss	6/30/2013	25	97,355	97,355	8,445
Total				\$ 1,094,256	\$ 108,834

The amortization factor for 25 years is 11.528758. The weighted average amortization factor is 10.054358. The amortization method is on a level dollar basis.

The equivalent single amortization period is 18 years.

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - Others (\$'s in 000's)

Normal Cost Rate	Pension	Healthcare	Total
(1) Total Normal Cost	\$ 134,827	\$ 76,699	\$ 211,526
(2) DB Member Salaries Projected for FY14	1,308,287	1,308,287	1,308,287
(3) DCR Member Salaries Projected for FY14	722,493	722,493	722,493
(4) Total Salaries Projected for FY14	2,030,780	2,030,780	2,030,780
(5) Normal Cost Rate for Others			
a. Based on DB Member Salaries, (1) ÷ (2)	10.31%	5.86%	16.17%
b. Based on Total Salaries, (1) ÷ (4)	6.64%	3.78%	10.42%
(6) Member Contribution Rate (Others) ¹	4.44%	0.00%	4.44%
(7) Employer/State Normal Cost Rate For Others, (5b) – (6)	2.20%	3.78%	5.98%
Past Service Rate			
(1) Accrued Liability	\$ 10,094,645	\$ 7,200,256	\$ 17,294,901
(2) Valuation Assets ²	<u>5,501,788</u>	<u>5,057,236</u>	<u>10,559,024</u>
(3) Unfunded Liability, (1) – (2)	\$ 4,592,857	\$ 2,143,020	\$ 6,735,877
(4) Funded Ratio, (2) ÷ (1)	54.5%	70.2%	61.1%
(5) Past Service Cost Amortization Payment ³	439,619	243,147	682,766
(6) Total Salaries Projected for FY14	2,030,780	2,030,780	2,030,780
(7) Past Service Rate, (5) ÷ (6)	21.65%	11.97%	33.62%
Total Employer/State Contribution Rate	23.85%	15.75%	39.60%
Normal Cost Rate by Tier (Total Employer and Member)⁴			
Tier 1	11.55%	10.19%	21.74%
Tier 2	9.79%	4.49%	14.28%
Tier 3	10.18%	5.19%	15.37%
Maturity Ratio	62.7%	66.2%	64.2%

¹ Assumes no member contributions from members in the DCR plan and 6.75% from Tiers 1, 2 and 3 in Others members.

² Allocated between Peace Officer/Firefighter and Others in proportion to accrued liability.

³ Amortized on a level dollar basis.

⁴ Rate determined considering the pay for members of the plan in this tier. DCR payroll is excluded from these calculations.

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - Others (cont'd) (\$'s in 000's)

Schedule of Past Service Cost Amortizations

Pension						
	Amortization Period		Balances		Beginning-of-Year Payment	
	Date Created	Years Left	Initial	Outstanding		
Initial Unfunded Liability ¹	6/30/2002	14	\$ 734,495	\$ 742,328	\$ 83,372	
FY03 Loss ¹	6/30/2003	15	52,354	53,485	5,786	
FY04 Loss ¹	6/30/2004	16	138,320	142,223	14,878	
FY05 Loss ¹	6/30/2005	17	262,218	270,328	27,440	
Change in Assumptions/Methods ¹	6/30/2006	18	350,386	360,980	35,665	
FY06 Gain ¹	6/30/2006	18	(102,558)	(105,661)	(10,440)	
FY07 Loss	6/30/2007	19	120,930	124,334	11,987	
FY08 Loss	6/30/2008	20	7,896	8,081	762	
FY09 Loss	6/30/2009	21	1,389,049	1,411,512	130,476	
Change in Assumptions	6/30/2010	22	184,848	185,930	16,877	
FY10 Loss	6/30/2010	22	51,817	52,119	4,731	
FY11 Loss	6/30/2011	23	197,121	196,512	17,545	
FY12 Loss	6/30/2012	24	616,150	607,722	53,444	
FY13 Loss	6/30/2013	25	542,964	542,964	47,096	
Total				\$ 4,592,857	\$ 439,619	

Healthcare						
	Amortization Period		Balances		Beginning-of-Year Payment	
	Date Created	Years Left	Initial	Outstanding		
Initial Unfunded Liability ¹	6/30/2002	14	\$ 1,596,753	\$ 1,613,784	\$ 181,247	
FY03 Loss ¹	6/30/2003	15	113,814	116,273	12,578	
FY04 Loss ¹	6/30/2004	16	300,702	309,182	32,343	
FY05 Loss ¹	6/30/2005	17	570,049	587,684	59,655	
Change in Assumptions/Methods ¹	6/30/2006	18	761,720	784,752	77,532	
FY06 Gain ¹	6/30/2006	18	(222,957)	(229,699)	(22,694)	
FY07 Gain	6/30/2007	19	(785,717)	(807,825)	(77,886)	
Change in Assumptions	6/30/2008	20	364,085	372,580	35,137	
FY08 Gain	6/30/2008	20	(238,309)	(243,871)	(22,999)	
FY09 Gain	6/30/2009	21	(148,044)	(150,437)	(13,906)	
Change in Assumptions	6/30/2010	22	356,581	358,669	32,556	
FY10 Gain	6/30/2010	22	(60,664)	(61,020)	(5,539)	
FY11 Gain	6/30/2011	23	(274,356)	(273,509)	(24,419)	
Change in Assumptions	6/30/2012	24	198,960	196,239	17,258	
FY12 Gain	6/30/2012	24	(368,627)	(363,584)	(31,974)	
FY13 Gain	6/30/2013	25	(66,198)	(66,198)	(5,742)	
Total				\$ 2,143,020	\$ 243,147	

¹ The pension and healthcare split was done using a ratio of unfunded accrued liability as of June 30, 2006.

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - Others (cont'd) (\$'s in 000's)

Schedule of Past Service Cost Amortizations

	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
Initial Unfunded Liability	6/30/2002	14	\$ 2,331,248	\$ 2,356,112	\$ 264,619
FY03 Loss	6/30/2003	15	166,168	169,758	18,364
FY04 Loss	6/30/2004	16	439,022	451,405	47,221
FY05 Loss	6/30/2005	17	832,267	858,012	87,095
Change in Assumptions/ Methods	6/30/2006	18	1,112,106	1,145,732	113,197
FY06 Gain	6/30/2006	18	(325,515)	(335,360)	(33,134)
FY07 Gain	6/30/2007	19	(664,787)	(683,491)	(65,899)
Change in Assumptions	6/30/2008	20	364,085	372,580	35,137
FY08 Gain	6/30/2008	20	(230,413)	(235,790)	(22,237)
FY09 Loss	6/30/2009	21	1,241,005	1,261,075	116,570
Change in Assumptions	6/30/2010	22	541,429	544,599	49,433
FY10 Gain	6/30/2010	22	(8,847)	(8,901)	(808)
FY11 Gain	6/30/2011	23	(77,235)	(76,997)	(6,874)
Change in Assumptions	6/30/2012	24	198,960	196,239	17,258
FY12 Loss	6/30/2012	24	247,523	244,138	21,470
FY13 Loss	6/30/2013	25	476,766	476,766	41,354
Total				\$ 6,735,877	\$ 682,766

The amortization factor for 25 years is 11.528758. The weighted average amortization factor is 9.865572. The amortization method is on a level dollar basis.

The equivalent single amortization period is 17 years.

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - All Members (\$'s in 000's)

Normal Cost Rate	Pension	Healthcare	Total
(1) Total Normal Cost	\$ 160,828	\$ 86,333	\$ 247,161
(2) DB Member Salaries Projected for FY14	1,514,034	1,514,034	1,514,034
(3) DCR Member Salaries Projected for FY14	802,645	802,645	802,645
(4) Total Salaries Projected for FY14	2,316,679	2,316,679	2,316,679
(5) Normal Cost Rate for All Members			
a. Based on DB Member Salaries, (1) ÷ (2)	10.62%	5.70%	16.32%
b. Based on Total Salaries, (1) ÷ (4)	6.94%	3.73%	10.67%
(6) Average Member Contribution Rate ¹	4.56%	0.00%	4.56%
(7) Employer Normal Cost Rate For All Members, (5b) – (6)	2.38%	3.73%	6.11%
Past Service Rate			
(1) Accrued Liability	\$ 11,945,881	\$ 8,046,878	\$ 19,992,759
(2) Valuation Assets	<u>6,510,749</u>	<u>5,651,877</u>	<u>12,162,626</u>
(3) Total Unfunded Liability, (1) – (2)	\$ 5,435,132	\$ 2,395,001	\$ 7,830,133
(4) Funded Ratio, (2) ÷ (1)	54.5%	70.2%	60.8%
(5) Past Service Cost Amortization Payment ²	520,273	271,327	791,600
(6) Total Salaries Projected for FY14	2,316,679	2,316,679	2,316,679
(7) Past Service Rate, (5) ÷ (6)	22.46%	11.71%	34.17%
Total Employer/State Contribution Rate	24.84%	15.44%	40.28%
Normal Cost Rate by Tier (Total Employer and Member)³			
Tier 1	11.69%	10.03%	21.72%
Tier 2	10.13%	4.34%	14.47%
Tier 3	10.58%	5.17%	15.75%
Maturity Ratio	62.9%	65.8%	64.1%

¹ Assumes no member contribution from members in the DCR plan, 7.5% for Peace Officer/Firefighter members and 6.75% for Others members.

² Amortized on a level dollar basis.

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

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - All Members (cont'd) (\$'s in 000's)

Schedule of Past Service Cost Amortizations

Pension						
	Amortization Period		Balances		Beginning-of-Year Payment	
	Date Created	Years Left	Initial	Outstanding		
Initial Unfunded Liability ¹	6/30/2002	14	\$ 871,664	\$ 880,961	\$ 98,942	
FY03 Loss ¹	6/30/2003	15	62,131	63,473	6,866	
FY04 Loss ¹	6/30/2004	16	164,152	168,782	17,656	
FY05 Loss ¹	6/30/2005	17	311,188	320,813	32,565	
Change in Assumptions/Methods ¹	6/30/2006	18	415,822	428,395	42,325	
FY06 Gain ¹	6/30/2006	18	(121,711)	(125,392)	(12,389)	
FY07 Loss	6/30/2007	19	143,514	147,553	14,226	
FY08 Loss	6/30/2008	20	4,860	4,974	469	
FY09 Loss	6/30/2009	21	1,638,885	1,665,388	153,944	
Change in Assumptions	6/30/2010	22	231,684	233,040	21,153	
FY10 Loss	6/30/2010	22	43,197	43,449	3,944	
FY11 Loss	6/30/2011	23	237,674	236,940	21,154	
FY12 Loss	6/30/2012	24	730,651	720,657	63,376	
FY13 Loss	6/30/2013	25	646,099	646,099	56,042	
Total				\$ 5,435,132	\$ 520,273	

Healthcare						
	Amortization Period		Balances		Beginning-of-Year Payment	
	Date Created	Years Left	Initial	Outstanding		
Initial Unfunded Liability ¹	6/30/2002	14	\$ 1,772,286	\$ 1,791,190	\$ 201,172	
FY03 Loss ¹	6/30/2003	15	126,326	129,055	13,961	
FY04 Loss ¹	6/30/2004	16	333,758	343,171	35,899	
FY05 Loss ¹	6/30/2005	17	632,715	652,291	66,213	
Change in Assumptions/Methods ¹	6/30/2006	18	845,457	871,021	86,055	
FY06 Gain ¹	6/30/2006	18	(247,467)	(254,949)	(25,189)	
FY07 Gain	6/30/2007	19	(872,092)	(896,629)	(86,448)	
Changes in Assumptions	6/30/2008	20	409,067	418,614	39,478	
FY08 Gain	6/30/2008	20	(265,761)	(271,965)	(25,648)	
FY09 Gain	6/30/2009	21	(171,366)	(174,137)	(16,097)	
Change in Assumptions	6/30/2010	22	386,140	388,400	35,255	
FY10 Gain	6/30/2010	22	(57,656)	(57,994)	(5,264)	
FY11 Gain	6/30/2011	23	(291,748)	(290,847)	(25,967)	
Change in Assumptions	6/30/2012	24	226,603	223,504	19,656	
FY12 Gain	6/30/2012	24	(409,346)	(403,746)	(35,506)	
FY13 Gain	6/30/2013	25	(71,978)	(71,978)	(6,243)	
Total				\$ 2,395,001	\$ 271,327	

¹ The pension and healthcare split was done using a ratio of unfunded accrued liability as of June 30, 2006.

State of Alaska Public Employees' Retirement System

Section 1.2 (cont'd)

Actuarial Contributions - FY16 - All Members (cont'd) (\$'s in 000's)

Schedule of Past Service Cost Amortizations

	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
	Total				
Initial Unfunded Liability	6/30/2002	14	\$ 2,643,950	\$ 2,672,151	\$ 300,114
FY03 Loss	6/30/2003	15	188,457	192,528	20,827
FY04 Loss	6/30/2004	16	497,910	511,953	53,555
FY05 Loss	6/30/2005	17	943,903	973,104	98,778
Change in Assumptions/ Methods	6/30/2006	18	1,261,279	1,299,416	128,380
FY06 Gain	6/30/2006	18	(369,178)	(380,341)	(37,578)
FY07 Gain	6/30/2007	19	(728,578)	(749,076)	(72,222)
Change in Assumptions	6/30/2008	20	409,067	418,614	39,478
FY08 Gain	6/30/2008	20	(260,901)	(266,991)	(25,179)
FY09 Loss	6/30/2009	21	1,467,519	1,491,251	137,847
Change in Assumptions	6/30/2010	22	617,824	621,440	56,408
FY10 Gain	6/30/2010	22	(14,459)	(14,545)	(1,320)
FY11 Gain	6/30/2011	23	(54,074)	(53,907)	(4,813)
Change in Assumptions	6/30/2012	24	226,603	223,504	19,656
FY12 Loss	6/30/2012	24	321,305	316,911	27,870
FY13 Loss	6/30/2013	25	574,121	574,121	49,799
Total				\$ 7,830,133	\$ 791,600

The amortization factor for 25 years is 11.528758. The weighted average amortization factor is 9.891527. The amortization method is on a level dollar basis.

The equivalent single amortization period is 17 years.

State of Alaska Public Employees' Retirement System

Section 1.3

Actuarial Gain/(Loss) for FY13 (\$'s in 000's)

	Pension	Healthcare	Total
(1) Expected Actuarial Accrued Liability			
(a) Accrued Liability, June 30, 2012	\$ 11,428,944	\$ 7,863,417	\$ 19,292,361
(b) Normal Cost for FY13	167,203	95,499	262,702
(c) Interest on (a) and (b) at 8.00%	927,692	636,713	1,564,405
(d) Benefit Payments for FY13	599,318	370,314	969,632
(e) Refund of Contributions for FY13	10,929	0	10,929
(f) Interest on (d) and (e) at 8.00% for one-half year	23,940	14,528	38,468
(g) Expected Accrued Liability as of June 30, 2013 (a) + (b) + (c) - (d) - (e) - (f)	11,889,652	8,210,787	20,100,439
(2) Actual Accrued Liability, June 30, 2013	11,945,881	8,046,878	19,992,759
(3) Liability Gain/(Loss), (1)(g) - (2)	\$ (56,229)	\$ 163,909	\$ 107,680
(4) Expected Actuarial Asset Value			
(a) Actuarial Asset Value, June 30, 2012	\$ 6,530,421	\$ 5,301,609	\$ 11,832,030
(b) Interest on (a) at 8.00%	522,434	424,129	946,563
(c) Employee Contributions for FY13	110,808	635	111,443
(d) Employer Contributions for FY13	179,976	229,990	409,966
(e) Employer Legislative Relief for FY13	164,087	143,215	307,302
(f) Medicare Part D Subsidy	0	10,415	10,415
(g) Interest on (c), (d), (e) and (f) at 8.00% for one-half year	17,845	15,075	32,920
(h) Benefit Payments for FY13	599,318	370,314	969,632
(i) Refund of Contributions for FY13	10,929	0	10,929
(j) Interest on (h) and (i) at 8.00% for one-half year	23,940	14,528	38,468
(k) Expected Actuarial Asset Value, June 30, 2013 (a)+(b)+(c)+(d)+(e)+(f)+(g)-(h)-(i)-(j)	6,891,384	5,740,226	12,631,610
(5) Actuarial Asset Value, June 30, 2013	6,510,749	5,651,877	12,162,626
(6) Actuarial Asset Gain/(Loss), (5) - (4)(k)	\$ (380,635)	\$ (88,349)	\$ (468,984)
(7) Actuarial Gain/(Loss), (3) + (6)	\$ (436,864)	\$ 75,560	\$ (361,304)
(8) Effect of the 2-Year Delay on Contributions	\$ (209,235)	\$ (3,582)	\$ (212,817)
(9) FY13 Gain/(Loss) to be Amortized, (7) + (8)	\$ (646,099)	\$ 71,978	\$ (574,121)

State of Alaska Public Employees' Retirement System

Section 1.4

Development of Change in Unfunded Liability During FY13

	Pension	Healthcare	Total
1. 2012 Unfunded Liability	\$ 4,898,523	\$ 2,561,808	\$ 7,460,331
a. Interest on unfunded liability	\$ 391,882	\$ 204,944	\$ 596,826
b. Normal cost	167,203	95,499	262,702
c. Employee contributions	(110,808)	(635)	(111,443)
d. Employer contributions	(179,976)	(229,990)	(409,966)
e. Employer legislative relief	(164,087)	(143,215)	(307,302)
f. Medicare Part D subsidy	0	(10,415)	(10,415)
g. Interest on b., c., d., e., and f.	<u>(4,469)</u>	<u>(7,435)</u>	<u>(11,904)</u>
h. Expected change in unfunded liability during FY13	\$ 99,745	\$ (91,247)	\$ 8,498
2. Expected 2013 Unfunded Liability	\$ 4,998,268	\$ 2,470,561	\$ 7,468,829
a. Liability (gains)/losses	\$ 56,229	\$ (163,909)	\$ (107,680)
b. Assets (gains)/losses	<u>380,635</u>	<u>88,349</u>	<u>468,984</u>
c. Other changes in unfunded liability during FY13	\$ 436,864	\$ (75,560)	\$ 361,304
3. Actual 2013 Unfunded Liability	\$ 5,435,132	\$ 2,395,001	\$ 7,830,133

Analysis of Financial Experience - Pension

**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**

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	Pension				
	2009	2010	2011	2012	2013
(1) Health Experience	N/A	N/A	N/A	N/A	N/A
(2) Salary Experience	0.23%	0.06%	0.31%	0.23%	0.23%
(3) Investment Experience	4.72%	(0.19)%	0.00%	2.40%	1.43%
(4) Demographic Experience	(0.29)%	(0.30)%	0.29%	(1.00)%	(0.84)%
(5) Contribution Shortfall	0.01%	0.36%	0.42%	0.25%	0.78%
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	4.67%	(0.07)%	1.02%	1.88%	1.60%
Non-recurring Changes					
(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%	4.89%	0.00%
(9) Assumption and Method Changes	0.00%	0.87%	0.00%	0.00%	0.00%
(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)	4.67%	0.80%	1.02%	6.77%	1.60%
(12) Beginning Employer/State Contribution Rate	9.98%	14.65%	15.45%	16.47%	23.24%
(13) Ending Employer/State Contribution Rate, (11) + (12)	14.65%	15.45%	16.47%	23.24%	24.84%
(14) Fiscal Year Above Rate is Applied	FY12	FY13	FY14	FY15	FY16

Analysis of Financial Experience - Healthcare

**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**

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	Healthcare				
	2009	2010	2011	2012	2013
(1) Health Experience	(2.21)%	0.24%	(1.82)%	(2.97)%	(1.51)%
(2) Salary Experience	N/A	N/A	N/A	N/A	N/A
(3) Investment Experience	0.59%	0.47%	0.26%	0.71%	0.33%
(4) Demographic Experience	N/A	N/A	N/A	N/A	N/A
(5) Contribution Shortfall	(0.25)%	(1.03)%	0.02%	(0.04)%	0.01%
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	(1.87)%	(0.32)%	(1.54)%	(2.30)%	(1.17)%
Non-recurring Changes					
(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%	2.32%	0.00%
(9) Assumption and Method Changes	0.00%	1.59%	0.00%	0.75%	0.00%
(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)	(1.87)%	1.27%	(1.54)%	0.77%	(1.17)%
(12) Beginning Employer/State Contribution Rate	17.98%	16.11%	17.38%	15.84%	16.61%
(13) Ending Employer/State Contribution Rate, (11) + (12)	16.11%	17.38%	15.84%	16.61%	15.44%
(14) Fiscal Year Above Rate is Applied	FY12	FY13	FY14	FY15	FY16

State of Alaska Public Employees' Retirement System

Section 1.5 (cont'd)

Analysis of Financial Experience - Total

**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**

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	Total				
	2009	2010	2011	2012	2013
(1) Health Experience	(2.21)%	0.24%	(1.82)%	(2.97)%	(1.51)%
(2) Salary Experience	0.23%	0.06%	0.31%	0.23%	0.23%
(3) Investment Experience	5.31%	0.28%	0.26%	3.11%	1.76%
(4) Demographic Experience	(0.29)%	(0.30)%	0.29%	(1.00)%	(0.84)%
(5) Contribution Shortfall	(0.24)%	(0.67)%	0.44%	0.21%	0.79%
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	2.80%	(0.39)%	(0.52)%	(0.42)%	0.43%
Non-recurring Changes					
(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%	7.21%	0.00%
(9) Assumption and Method Changes	0.00%	2.46%	0.00%	0.75%	0.00%
(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)	2.80%	2.07%	(0.52)%	7.54%	0.43%
(12) Beginning Employer/State Contribution Rate	27.96%	30.76%	32.83%	32.31%	39.85%
(13) Ending Employer/State Contribution Rate, (11) + (12)	30.76%	32.83%	32.31%	39.85%	40.28%
(14) Fiscal Year Above Rate is Applied	FY12	FY13	FY14	FY15	FY16

History of UAAL and Funded Ratio (\$'s in 000's)

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)
June 30, 2003	10,561,653	7,687,281	72.8%	2,874,372
June 30, 2004	11,443,916	8,030,414	70.2%	3,413,502
June 30, 2005	12,844,841	8,442,919	65.7%	4,401,922
June 30, 2006	14,388,413	9,040,908	62.8%	5,347,505
June 30, 2007	14,570,933	9,900,960	68.0%	4,669,973
June 30, 2008	15,888,141	11,040,106	69.5%	4,848,035
June 30, 2009	16,579,371	10,242,978	61.8%	6,336,393
June 30, 2010	18,132,492	11,157,464	61.5%	6,975,028
June 30, 2011	18,740,550	11,813,774	63.0%	6,926,776
June 30, 2012	19,292,361	11,832,030	61.3%	7,460,331
June 30, 2013	19,992,759	12,162,626	60.8%	7,830,133

Section 2

Plan Assets

State of Alaska Public Employees' Retirement System

Section 2.1

Summary of Fair Value of Assets (\$'s in 000's)

As of June 30, 2013	Pension	Healthcare	Total Fair Value	Allocation Percent
Cash and Short-Term Investments				
- Cash and Cash Equivalents	\$ 79,519	\$ 97,597	\$ 177,116	1.4%
- Subtotal	\$ 79,519	\$ 97,597	\$ 177,116	1.4%
Fixed Income Investments				
- Domestic Fixed Income Pool	\$ 508,306	\$ 444,101	\$ 952,407	7.6%
- International Fixed Income Pool	131,613	114,986	246,599	2.0%
- High Yield Pool	188,206	164,434	352,640	2.8%
- Treasury Inflation Protection Pool	3,095	2,704	5,799	0.0%
- Emerging Debt Pool	56,023	48,947	104,970	0.8%
- Subtotal	\$ 887,243	\$ 775,172	\$ 1,662,415	13.2%
Equity Investments				
- Domestic Equity Pool	\$ 2,180,511	\$ 1,905,166	\$ 4,085,677	32.5%
- International Equity Pool	1,298,463	1,134,483	2,432,946	19.4%
- Private Equity Pool	598,588	522,982	1,121,570	9.0%
- Emerging Markets Equity Pool	196,267	171,477	367,744	2.9%
- Subtotal	\$ 4,273,829	\$ 3,734,108	\$ 8,007,937	63.8%
Other Investments				
- Real Estate Pool	\$ 609,482	\$ 534,734	\$ 1,144,216	9.2%
- Other Investments Pool	537,716	469,837	1,007,553	8.0%
- Absolute Return Pool	294,813	257,575	552,388	4.4%
- Other Assets	23	3,378	3,401	nil
- Subtotal	\$ 1,442,034	\$ 1,265,524	\$ 2,707,558	21.6%
Total Cash and Investments	\$ 6,682,625	\$ 5,872,401	\$12,555,026	100.0%
Net Accrued Receivables / (Payables)	11,857	(42,830)	(30,973)	
Net Assets	\$ 6,694,482	\$ 5,829,571	\$12,524,053	

State of Alaska Public Employees' Retirement System

Section 2.2

Changes in Fair Value of Assets (\$'s in 000's)

Fiscal Year 2013	Pension	Healthcare	Total Fair Value
(1) Net Assets, June 30, 2012 (fair value)	\$ 6,118,294	\$ 5,171,815	\$11,290,109
(2) Additions:			
(a) Plan Member Contributions	\$ 110,808	\$ 635	\$ 111,443
(b) Employer Contributions	179,976	229,990	409,966
(c) Employer Legislative Relief	164,087	143,215	307,302
(d) Interest and Dividend Income	118,528	102,528	221,056
(e) Net Appreciation/(Depreciation) in Fair Value of Investments	646,379	549,624	1,196,003
(f) Medicare Part D Subsidy	0	10,415	10,415
(g) Other	<u>28</u>	<u>22</u>	<u>50</u>
(h) Total Additions	\$ 1,219,806	\$ 1,036,429	\$ 2,256,235
(3) Deductions:			
(a) Medical Benefits	\$ 0	\$ 370,314	\$ 370,314
(b) Retirement Benefits	599,318	0	599,318
(c) Refunds of Contributions	10,929	0	10,929
(d) Investment Expenses	26,251	34	26,285
(e) Administrative Expenses	<u>7,120</u>	<u>8,325</u>	<u>15,445</u>
(f) Total Deductions	\$ 643,618	\$ 378,673	\$ 1,022,291
(4) Net Assets, June 30, 2013 (fair value)	\$ 6,694,482	\$ 5,829,571	\$12,524,053
Approximate Fair Value Investment Return Rate During FY13 Net of All Expense	12.0%	12.3%	12.1%
Liquidity Factor	10.5	14.9	12.1

State of Alaska Public Employees' Retirement System

Section 2.3

Actuarial Value of Assets (\$'s in 000's)

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

	Pension	Healthcare	Total
(1) Deferral of Investment Return/(Loss) for FY13			
(a) Fair Value, June 30, 2012	\$ 6,118,294	\$ 5,171,815	\$ 11,290,109
(b) Contributions for FY13	454,871	373,840	828,711
(c) Medicare Part D Subsidy	0	10,415	10,415
(d) Benefit Payments for FY13	610,247	370,314	980,561
(e) Actual Investment Return (<i>net of expenses</i>)	731,564	643,815	1,375,379
(f) Expected Return Rate (<i>net of expenses</i>)	8.00%	8.00%	8.00%
(g) Expected Return - Weighted for Timing	483,368	414,292	897,660
(h) Investment Gain/(Loss) for the Year (<i>e. - g.</i>)	248,196	229,523	477,719
(i) Deferred Investment Return/(Loss)	183,733	177,694	361,427
(2) Actuarial Value, June 30, 2013			
(a) Fair Value, June 30, 2013	\$ 6,694,482	\$ 5,829,571	\$ 12,524,053
(b) 2013 Deferred Investment Return/(Loss)	183,733	177,694	361,427
(c) Preliminary Actuarial Value, June 30, 2013 (<i>a. - b.</i>)	6,510,749	5,651,877	12,162,626
(d) Upper Limit: 120% of Fair Value, June 30, 2013	8,033,378	6,995,485	N/A
(e) Lower Limit: 80% of Fair Value, June 30, 2013	5,355,586	4,663,657	N/A
(f) Actuarial Value, June 30, 2013 (<i>c. limited by d. and e.</i>)	\$ 6,510,749	\$ 5,651,877	\$ 12,162,626
(g) Ratio of Actuarial Value of Assets to Fair Value of Assets	97.3%	97.0%	97.1%
(h) Approximate Actuarial Value Investment Return Rate During FY13 Net of All Expenses	2.1%	6.3%	4.0%

State of Alaska Public Employees' Retirement System

Section 2.3 (cont'd)

Actuarial Value of Assets (\$'s in 000's)

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
6/30/2009	\$ (2,243,791)	\$ (1,795,032)	\$ (448,759)	\$ 0
6/30/2010	87,855	52,713	17,571	17,571
6/30/2011	670,244	268,098	134,049	268,097
6/30/2012	(500,820)	(100,164)	(100,164)	(300,492)
6/30/2013	248,196	0	49,639	198,557
Total	\$ (1,738,316)	\$ (1,574,385)	\$ (347,664)	\$ 183,733

Healthcare				
Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2009	\$ (837,986)	\$ (670,389)	\$ (167,597)	\$ 0
6/30/2010	79,755	47,853	15,951	15,951
6/30/2011	526,010	210,404	105,202	210,404
6/30/2012	(387,131)	(77,426)	(77,426)	(232,279)
6/30/2013	229,523	0	45,905	183,618
Total	\$ (389,829)	\$ (489,558)	\$ (77,965)	\$ 177,694

Total				
Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2009	\$ (3,081,777)	\$(2,465,421)	\$ (616,356)	\$ 0
6/30/2010	167,610	100,566	33,522	33,522
6/30/2011	1,196,254	478,502	239,251	478,501
6/30/2012	(887,951)	(177,590)	(177,590)	(532,771)
6/30/2013	477,719	0	95,544	382,175
Total	\$ (2,128,145)	\$(2,063,943)	\$ (425,629)	\$ 361,427

Historical Asset Rate of Return

Year Ending	Actuarial Value		Fair Value	
	Annual	Cumulative	Annual	Cumulative
June 30, 2005	8.7%	8.7%	8.5%	8.5%
June 30, 2006	9.3%	9.0%	11.4%	9.9%
June 30, 2007	11.6%	9.9%	18.5%	12.7%
June 30, 2008	10.0%	9.9%	(3.1)%	8.5%
June 30, 2009	(7.3)%	6.2%	(20.5)%	2.0%
June 30, 2010	7.2%	6.4%	10.2%	3.3%
June 30, 2011	7.2%	6.5%	20.4%	5.6%
June 30, 2012	1.2%	5.8%	0.2%	4.9%
June 30, 2013	4.0%	5.6%	12.1%	5.7%

Section 3

Accounting Information

State of Alaska Public Employees' Retirement System

Section 3.1

Schedule of Funding Progress – Total PERS (\$'s in 000's)

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

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll ¹	UAL as a Percent of Annual Active Member Payroll
June 30, 2013 – 8.00%	\$ 11,945,881	\$ 6,510,749	54.5%	\$ 5,435,132	\$ 1,534,665	354.2%
June 30, 2012 – 8.00%	\$ 11,428,944	\$ 6,530,421	57.1%	\$ 4,898,523	\$ 1,522,399	321.8%
June 30, 2011 – 8.00%	\$ 10,919,047	\$ 6,762,149	61.9%	\$ 4,156,898	\$ 1,559,938	266.5%
June 30, 2010 ² – 8.00%	\$ 10,371,672	\$ 6,469,832	62.4%	\$ 3,901,840	\$ 1,586,697	245.9%
June 30, 2009 – 8.25%	\$ 9,702,086	\$ 6,108,528	63.0%	\$ 3,593,558	\$ 1,585,490	226.7%
June 30, 2008 – 8.25%	\$ 9,154,282	\$ 7,210,772	78.8%	\$ 1,943,510	\$ 1,577,846	123.2%
June 30, 2007 – 8.25%	\$ 8,662,324	\$ 6,739,004	77.8%	\$ 1,923,320	\$ 1,605,819	119.8%
June 30, 2006 ² – 8.25%	\$ 8,094,043	\$ 6,331,065	78.2%	\$ 1,762,978	\$ 1,590,693	110.8%

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	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll ¹	UAL as a Percent of Annual Active Member Payroll
June 30, 2013 – 5.41%	\$ 12,281,372	\$ 5,651,877	46.0%	\$ 6,629,495	\$ 1,534,665	432.0%
June 30, 2012 ² – 6.88%	\$ 9,812,274	\$ 5,301,609	54.0%	\$ 4,510,665	\$ 1,522,399	296.3%
June 30, 2011 – 7.43%	\$ 9,091,034	\$ 5,051,625	55.6%	\$ 4,039,409	\$ 1,559,938	258.9%
June 30, 2010 ² – 7.48%	\$ 9,304,504	\$ 4,687,632	50.4%	\$ 4,616,872	\$ 1,586,697	291.0%
June 30, 2009 – 4.70%	\$ 12,770,990	\$ 4,134,450	32.4%	\$ 8,636,540	\$ 1,585,490	544.7%
June 30, 2008 ² – 4.50%	\$ 13,013,450	\$ 3,829,334	29.4%	\$ 9,184,116	\$ 1,577,846	582.1%
June 30, 2007 – 4.50%	\$ 11,108,553	\$ 3,161,956	28.5%	\$ 7,946,597	\$ 1,605,819	494.9%
June 30, 2006 ² – 4.50%	\$ 11,455,015	\$ 2,709,843	23.7%	\$ 8,745,172	\$ 1,590,693	549.8%

¹ Actual active member payroll has been based on information provided by KPMG, LLP.

² Change in assumptions

Schedule of Funding Progress – Total PERS

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	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2013 – 8.00%	\$ 8,595,131	\$ 5,651,877	65.8%	\$ 2,943,254	\$ 1,534,665	191.8%
June 30, 2013 – 4.25%	\$ 14,753,927	\$ 5,651,877	38.3%	\$ 9,102,050	\$ 1,534,665	593.1%

State of Alaska Public Employees' Retirement System

Section 3.1 (cont'd)

Schedule of Funding Progress – Total PERS (\$'s in 000's)

The exhibit below shows the combined pension and postemployment healthcare disclosure under GASB No. 25, prior to 2006.

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2005	\$ 12,844,841	\$ 8,442,919	65.7%	\$ 4,401,922	\$ 1,513,117	290.9%
June 30, 2004 ^{2,3}	11,443,916	8,030,414	70.2%	3,413,502	1,472,987	231.7%
June 30, 2003	10,561,653	7,687,281	72.8%	2,874,372	1,460,783	196.8%
June 30, 2002 ^{1,2,3}	9,859,591	7,412,833	75.2%	2,446,758	1,402,687	174.4%
June 30, 2001	7,868,574	7,941,756	100.9%	N/A	1,360,401	N/A
June 30, 2000 ^{2,3}	7,376,912	7,454,758	101.1%	N/A	1,324,278	N/A
June 30, 1999	6,648,673	7,016,340	105.5%	N/A	1,279,359	N/A
June 30, 1998 ^{1,2,3}	6,203,991	6,571,562	105.9%	N/A	1,232,488	N/A
June 30, 1997	5,534,116	5,885,488	106.3%	N/A	1,227,795	N/A

¹ Change in Asset Valuation Method

² Change of Assumptions

³ Change in Methods

State of Alaska Public Employees' Retirement System

Section 3.2

Schedule of Employer Contributions (\$'s in 000's)

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	\$ 416,237	65.4%
2005	376,754	47.3%
2004	105,585	100.0%
2003	89,934	110.3%
2002	92,098	102.9%
2001	91,628	105.3%
2000	89,084	105.2%
1999	97,197	100.0%
1998	95,217	100.0%
1997	144,863	100.0%

This exhibit below shows the pension disclosure under GASB No. 25 for fiscal year ending 2007 and later.

Fiscal Year Ended June 30	Total Annual Required Contribution	Percentage Contributed		
		By Employer	By State	Total
2013	\$ 382,889	47.0%	42.9%	89.9%
2012	\$ 351,674	52.0%	37.2%	89.2%
2011	\$ 220,419	63.1%	29.6%	92.7%
2010*	\$ 217,080	65.5%	20.5%	86.0%
2009	\$ 166,016	68.1%	48.0%	116.1%
2008	\$ 140,729	71.2%	36.2%	107.4%
2007	\$ 268,742	73.2%	4.1%	77.3%

This exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy under GASB No. 43 for fiscal year ending 2007 and later.

Fiscal Year Ended June 30	Total Annual Required Contribution	Percentage Contributed		
		By Employer	By State	Total
2013	\$ 612,792	37.5%	25.1%	62.6%
2012	\$ 498,433	44.8%	28.8%	73.6%
2011	\$ 525,075	49.8%	21.6%	71.4%
2010*	\$ 790,793	31.6%	54.8%	86.4%
2009	\$ 391,321	68.1%	41.4%	109.5%
2008	\$ 370,456	71.2%	36.2%	107.4%
2007	\$ 189,495	73.2%	4.1%	77.3%

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

State of Alaska Public Employees' Retirement System

Section 3.2 (cont'd)

Schedule of Employer Contributions

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

Valuation Date	Fiscal Year	ARC (% of Pay)			Pension Discount Rate	Healthcare Discount Rate
		Pension	Healthcare	Total		
June 30, 2005	FY08	10.72%	53.96%	64.68%	8.25%	4.50%
June 30, 2006	FY09	13.49%	55.87%	69.36%	8.25%	4.50%
June 30, 2007	FY10	13.72%	49.98%	63.70%	8.25%	4.70%
June 30, 2008	FY11	14.13%	33.66%	47.79%	8.25%	7.48%
June 30, 2009	FY12	23.10%	32.74%	55.84%	8.25%	7.43%
June 30, 2010*	FY13	24.95%	39.93%	64.88%	8.00%	6.88%
June 30, 2011	FY14	27.94%	52.55%	80.49%	8.00%	5.41%
June 30, 2012	FY15	33.05%	55.07%	88.12%	8.00%	4.90%
June 30, 2013	FY16	37.79%	58.73%	96.52%	8.00%	4.55%

*Change in discount rate assumptions effective June 30, 2010

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

Notes To Trend Data

Actuarial Assumptions, Methods and Additional Information Under GASB

Valuation Date	June 30, 2013
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	17 years
Asset Valuation Method	5-year smoothed fair value
Actuarial Assumptions:	
Investment rate of return*	8.00% for pension, 5.41% for healthcare.
Projected salary increases	Peace Officer/Firefighter: Merit – 2.75% per year for the first 4 years of employment, grading down to 0.5% at 7 years and thereafter. Productivity – 0.5% per year. Others: Merit – 6.00% per year grading down to 2.00% after 5 years; for more than 6 years of service, 1.50% grading down to 0%. Productivity – 0.5% per year.
*Includes inflation at	3.12%
Cost-of-living adjustment	Post-retirement Pension Adjustment as described in Section 6.1, item (14)

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 Public Employees' 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 5.41% as of June 30, 2011, to be used for fiscal 2014 disclosure.

The development of the discount rate used for the FY14 healthcare liabilities valuation disclosure purposes is summarized below:

Investment Returns

Plan Assets (Long-Term Return)	=	8.00%
Employer Assets (Estimated Short-Term Return)	=	4.25%

Based on Percentage of ARC Contributed During FY11*

1. Contribution Allocated to Healthcare	=	22.61%
2. Annual Required Contribution, Funding Assumptions	=	33.66%
3. Pay-as-you-go Contribution	=	17.68%
4. Portion of ARC Contributed: [(1-3) / (2-3), not less than 0%, not greater than 100%]	=	30.87%
5. Multiplied by long-term investment return	=	2.47%
6. Portion of ARC not Contributed: [100% - (4)]	=	69.13%
7. Multiplied by short-term investment return	=	2.94%
8. Total: (5) + (7)	=	5.41%

*It is assumed that fiscal 2009 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, 2011 valuation (fiscal 2012), which in turn drives the fiscal 2014 GASB 43 ARC.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2014 employer ARC rate for accounting purposes is 52.55% of pay for healthcare benefits and 80.49% of pay for healthcare and pension benefits combined.

State of Alaska Public Employees' Retirement System

Section 3.4

Solvency Test (\$'s in 000's)

The exhibit below shows the combined pension and postemployment healthcare Solvency Test for valuation dates June 30, 2010 and before.

Valuation Date	Aggregate Accrued Liability For:			Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2010 ¹	\$ 1,388,029	\$ 10,850,267	\$ 5,894,196	\$ 11,157,464	100.0%	90.0%	0.0%
June 30, 2009	1,315,924	10,147,353	5,116,094	10,242,978	100.0%	88.0%	0.0%
June 30, 2008 ¹	1,242,288	9,772,672	4,873,181	11,040,106	100.0%	100.0%	0.5%
June 30, 2007	1,203,007	8,967,038	4,400,888	9,900,960	100.0%	97.0%	0.0%
June 30, 2006 ^{1 2}	1,157,755	8,923,811	4,306,847	9,040,908	100.0%	88.3%	0.0%
June 30, 2005	1,104,821	8,667,058	3,072,962	8,442,919	100.0%	84.7%	0.0%
June 30, 2004 ¹	1,070,268	7,650,156	2,723,492	8,030,414	100.0%	91.0%	0.0%
June 30, 2003	1,026,730	6,860,834	2,674,089	7,687,281	100.0%	97.1%	0.0%
June 30, 2002 ^{1 2 3}	967,045	6,301,095	2,591,451	7,412,833	100.0%	100.0%	5.6%
June 30, 2001	920,702	5,059,386	1,888,486	7,941,756	100.0%	100.0%	100.0%

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

¹ Change in Assumptions

² Change in Methods

³ Change in Asset Valuation Method

State of Alaska Public Employees' Retirement System

Section 3.3 (cont'd)

Solvency Test (\$'s in 000's)

The exhibit below shows the pension Solvency Test for valuation dates June 30, 2005 and later.

Valuation Date	Pension Aggregate Accrued Liability For:			Pension Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2013	\$ 1,479,538	\$ 7,514,255	\$ 2,952,088	\$ 6,510,749	100.0%	67.0%	0.0%
June 30, 2012	1,459,943	7,057,967	2,911,034	6,530,421	100.0%	71.8%	0.0%
June 30, 2011	1,421,967	6,657,517	2,839,563	6,762,149	100.0%	80.2%	0.0%
June 30, 2010 ¹	1,388,029	6,268,461	2,715,182	6,469,832	100.0%	81.1%	0.0%
June 30, 2009	1,315,924	5,914,959	2,471,203	6,108,528	100.0%	81.0%	0.0%
June 30, 2008	1,242,288	5,606,402	2,305,592	7,210,772	100.0%	100.0%	15.7%
June 30, 2007	1,203,007	5,282,132	2,177,185	6,739,004	100.0%	100.0%	11.7%
June 30, 2006 ^{1 2}	1,157,755	4,933,609	2,002,679	6,331,065	100.0%	100.0%	12.0%
June 30, 2005	1,104,821	4,627,467	1,354,903	6,016,713 ³	100.0%	100.0%	21.0%

¹ Change in Assumptions

² Change in Methods

³ The pension and postemployment healthcare valuation assets were allocated using a ratio of fair value of assets as of June 30, 2005

State of Alaska Public Employees' Retirement System

Section 3.3 (cont'd)

Solvency Test (\$'s in 000's)

The exhibit below shows the postemployment healthcare Solvency Test for valuation dates June 30, 2005 and later.

Valuation Date	Postemployment Healthcare Aggregate Accrued Liability For:				Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)	Postemployment Healthcare Valuation Assets	(1)	(2)	(3)
June 30, 2013 ¹	\$ 0	\$ 5,298,380	\$ 2,748,498	\$ 5,651,877	100.0%	100.0%	12.9%
June 30, 2012 ¹	0	5,026,080	2,837,337	5,301,609	100.0%	100.0%	9.7%
June 30, 2011	0	4,812,845	3,008,658	5,051,625	100.0%	100.0%	7.9%
June 30, 2010 ¹	0	4,581,806	3,179,014	4,687,632	100.0%	100.0%	3.3%
June 30, 2009	0	4,232,394	2,644,891	4,134,450	100.0%	97.7%	0.0%
June 30, 2008 ¹	0	4,166,270	2,567,589	3,829,334	100.0%	91.9%	0.0%
June 30, 2007	0	3,684,906	2,223,703	3,161,956	100.0%	85.8%	0.0%
June 30, 2006 ^{1 2}	0	3,990,202	2,304,168	2,709,843	100.0%	67.9%	0.0%
June 30, 2005	0	4,039,591	1,718,059	2,426,206 ³	100.0%	60.1%	0.0%

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

¹ Change in Assumptions

² Change in Methods

³ The pension and postemployment healthcare valuation assets were allocated using a ratio of fair value of assets as of June 30, 2005

Section 4

Projections

Projection Assumptions and Methods

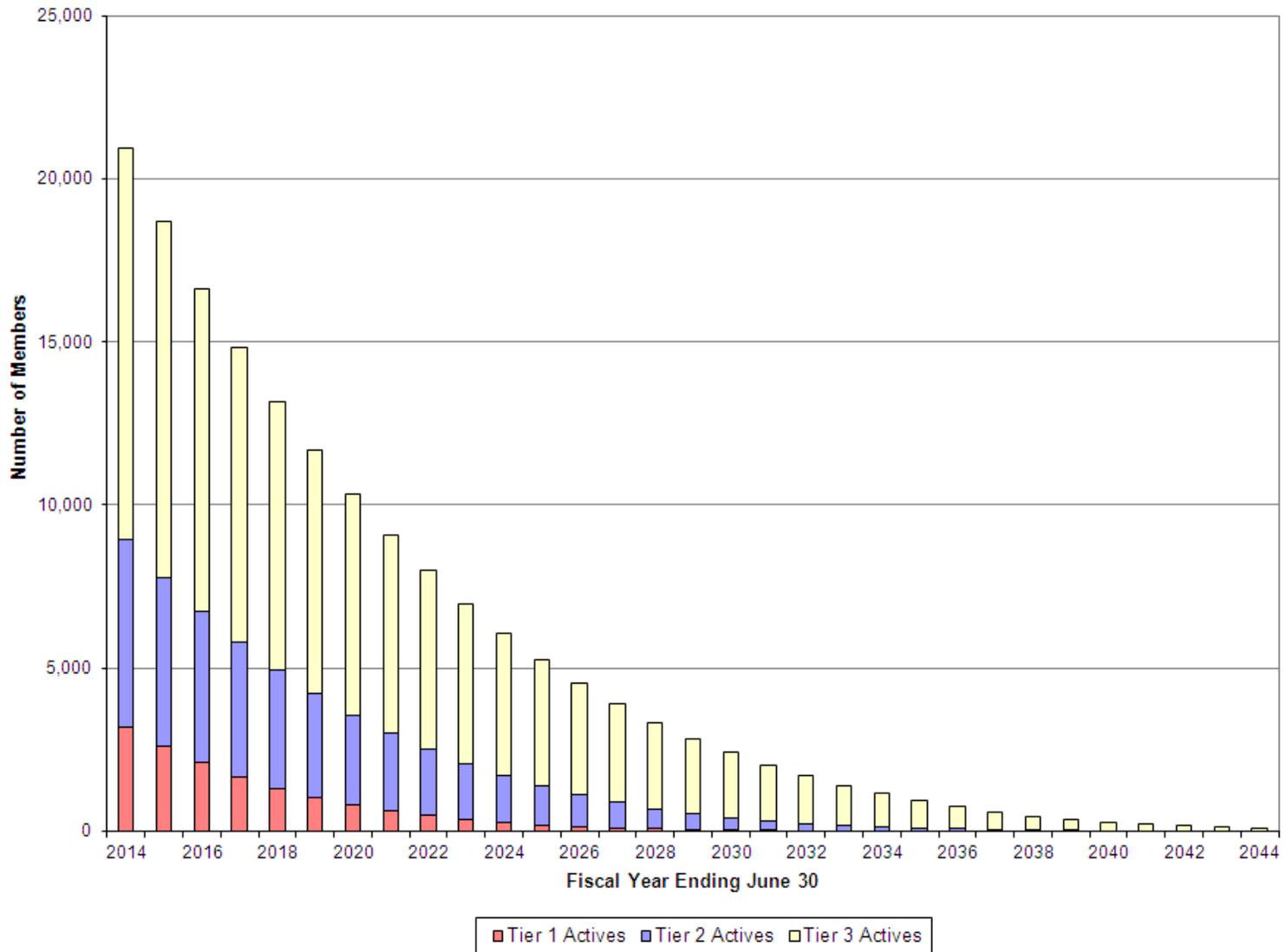
Key Assumptions

- 8.00% investment return on the Fair 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 6. All future demographic experience is assumed to be exactly realized.
- The actuarially calculated contribution rate with a two-year lag is adopted each year.
- No new DB Plan members enter into Tiers 1,2 and 3.
- 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.
- For the Sensitivity Analysis, all assumptions and methods are the same except investment returns on the Fair Value of Assets are assumed as follows:

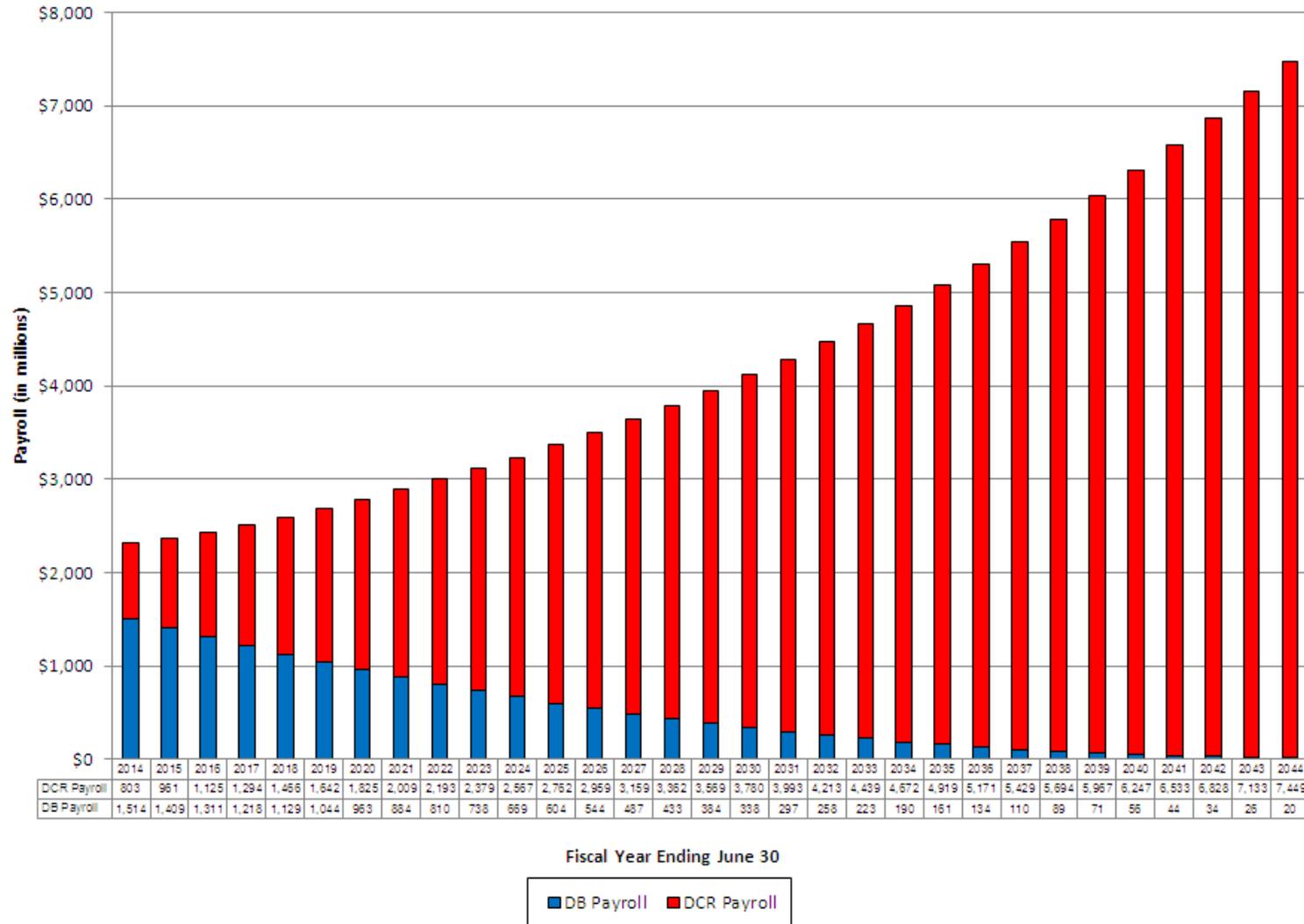
Base Case:	8.00% for all future years
Optimistic:	8.75% for all future years
Pessimistic:	7.25% for all future years

In each case, 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.

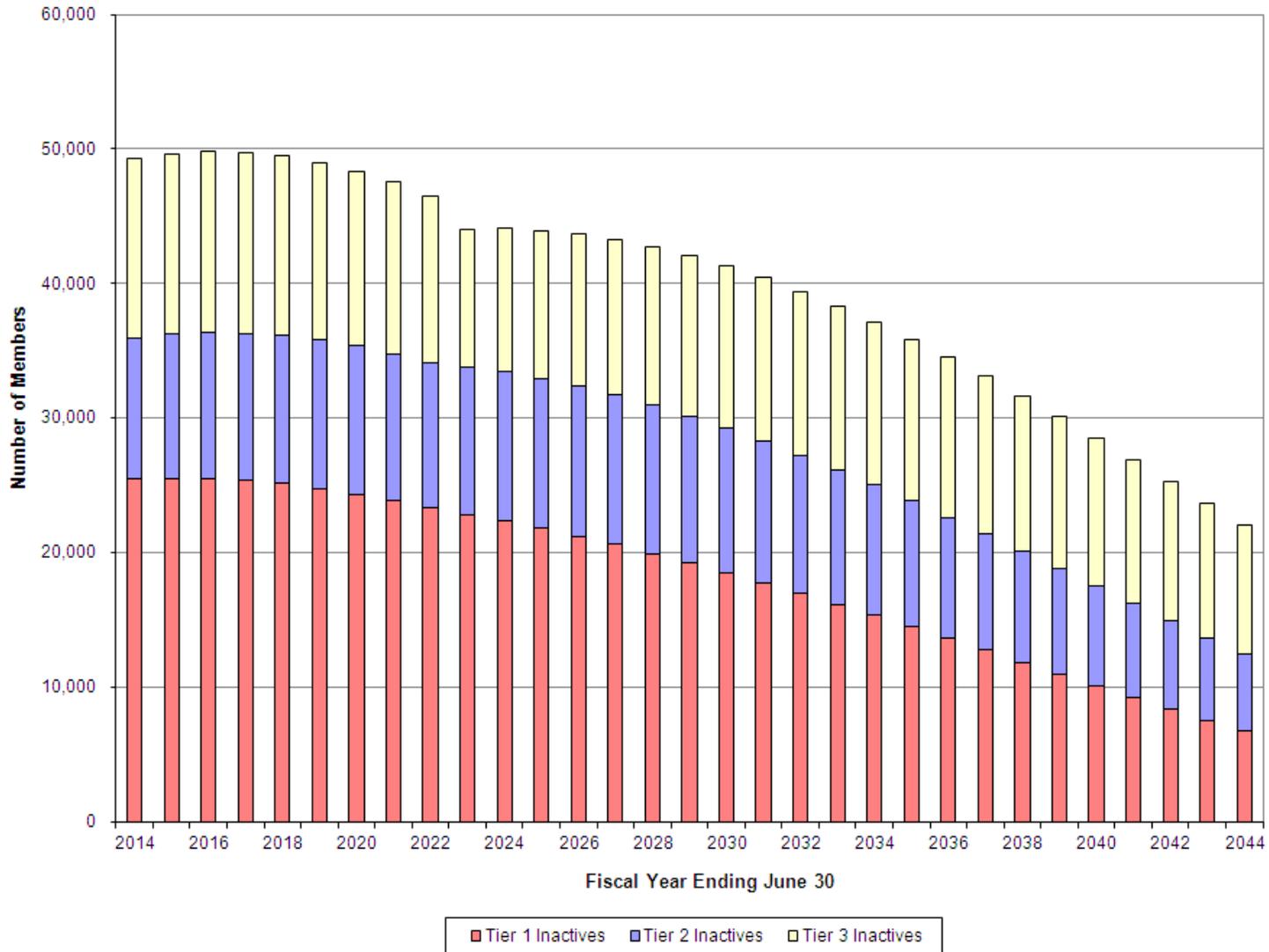
Membership Projection Projected Active Member Count



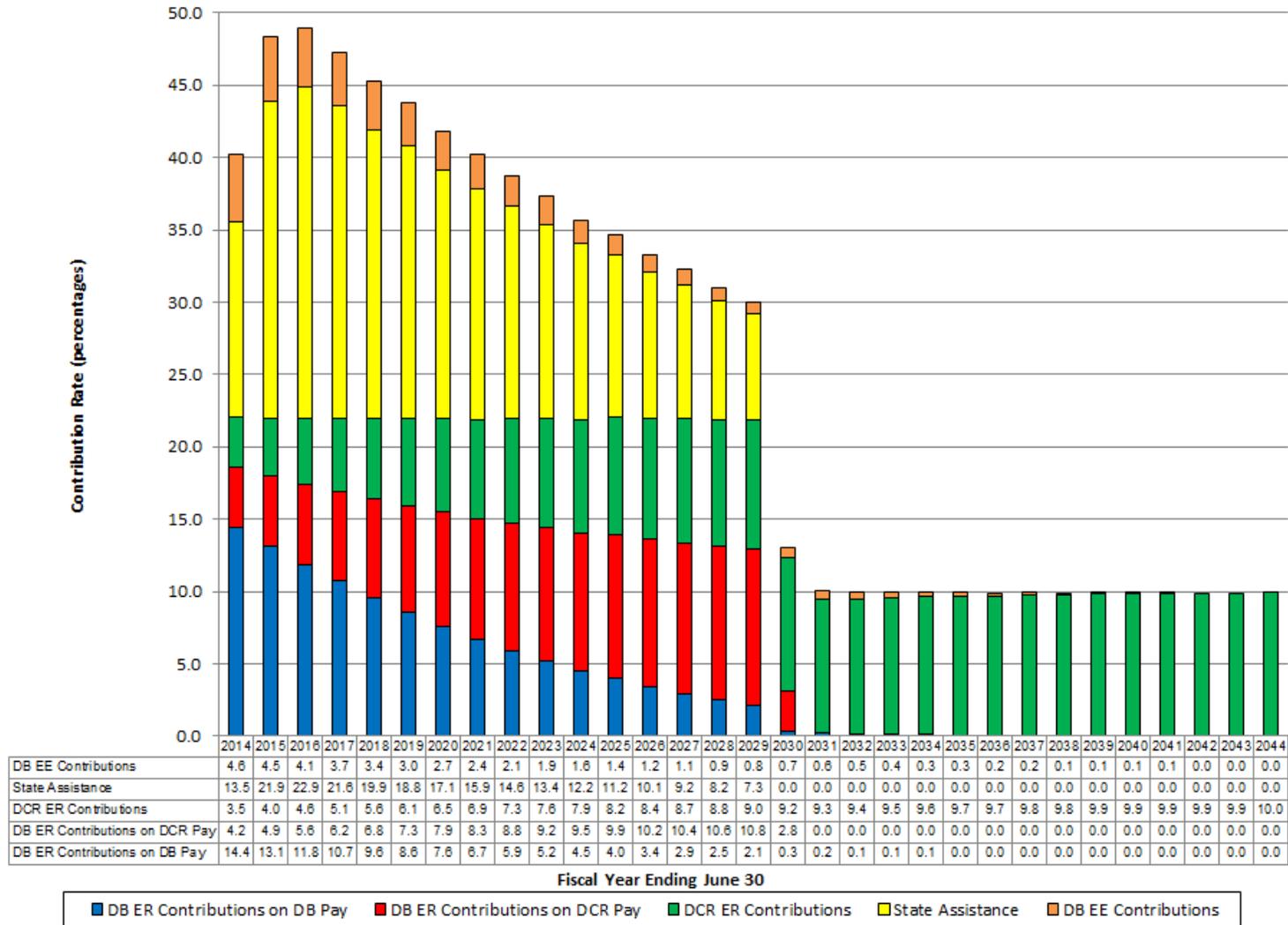
Membership Projection Projected DB and DCR Payroll



Membership Projection Projected Inactive Member Count



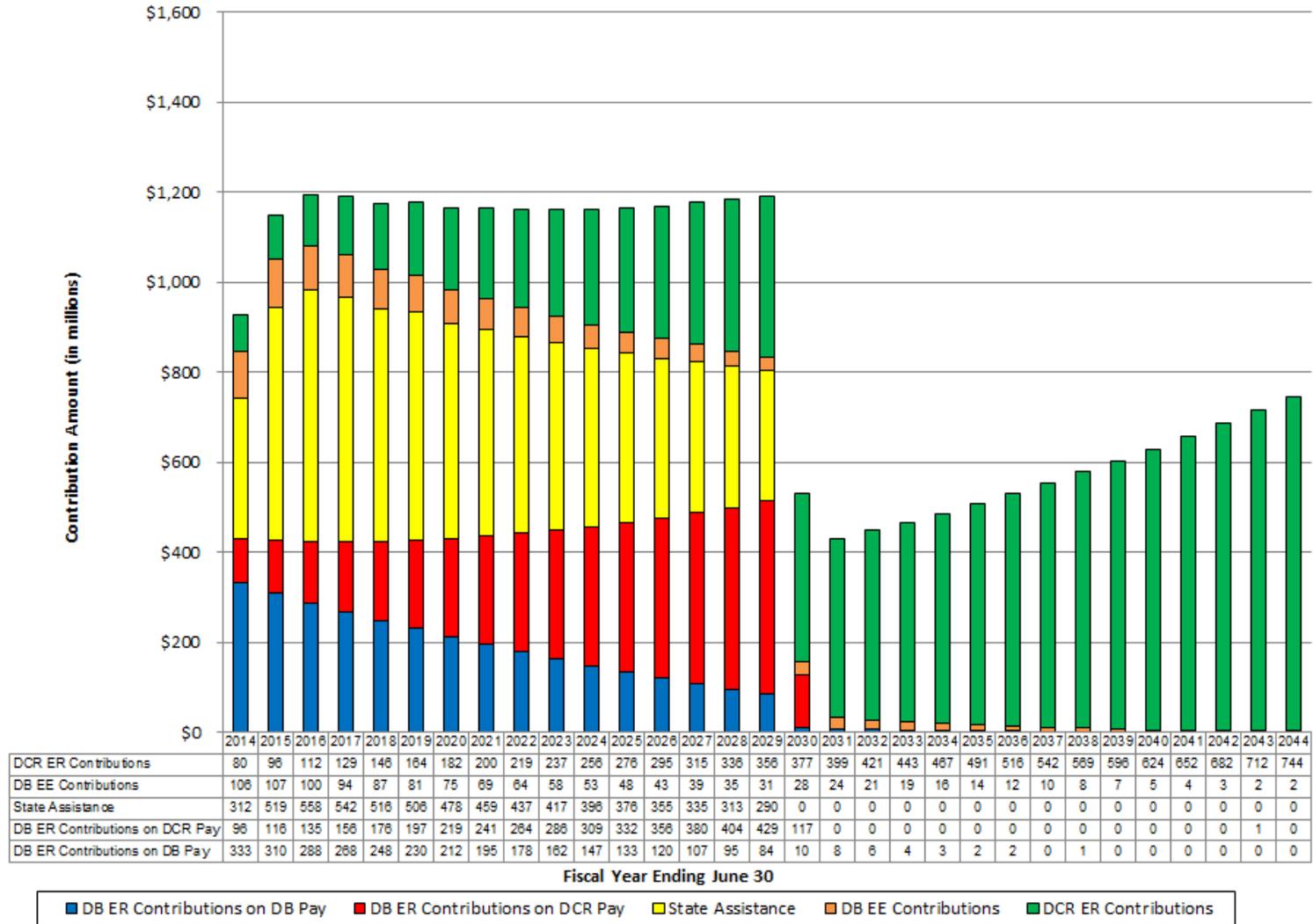
Projected Employer/State Contribution Rates (Based on Total DB and DCR Payroll)



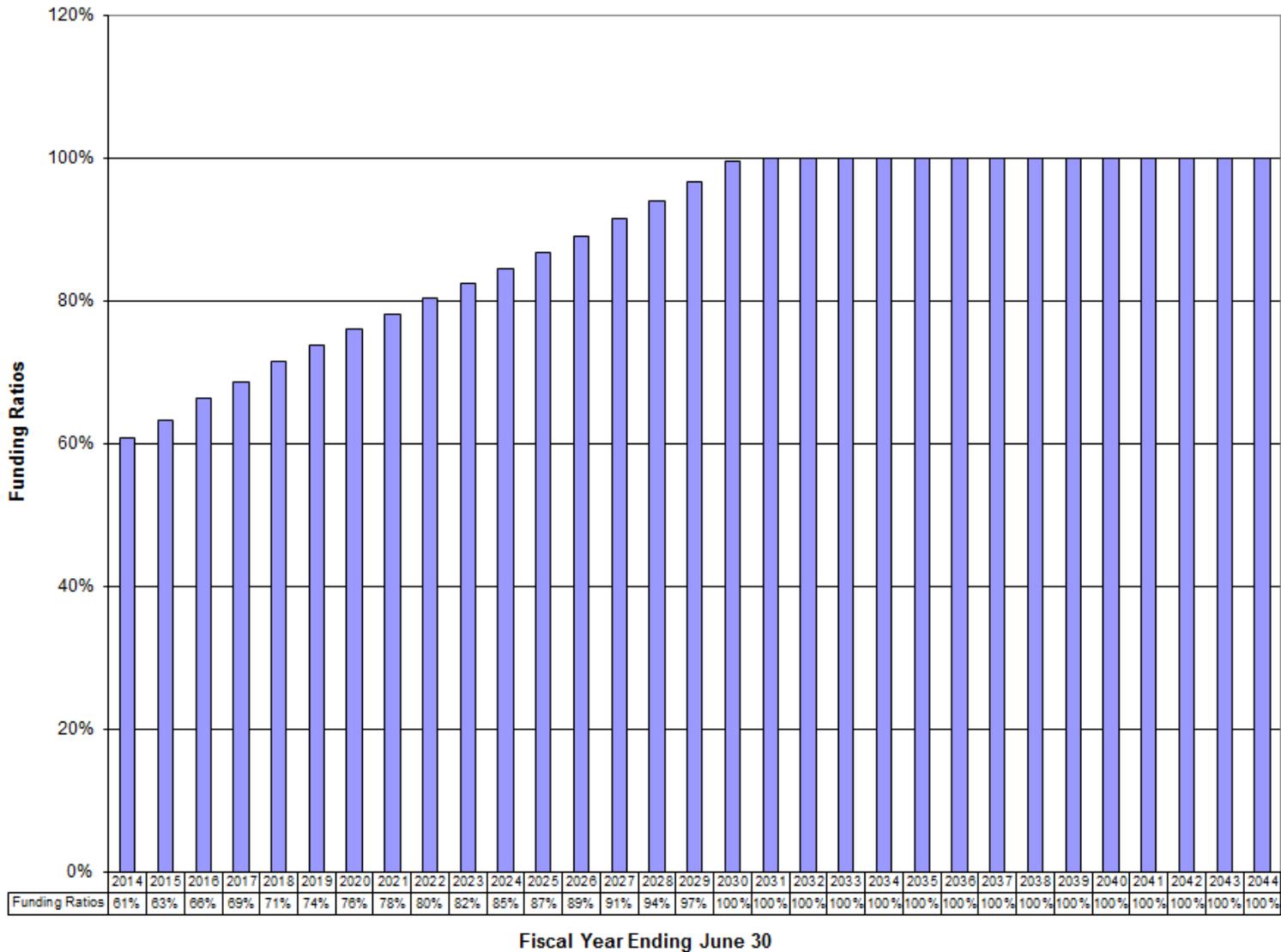
State of Alaska Public Employees' Retirement System

Section 4.4

Projected Employer/State Contribution Amounts



Projection of Funding Ratios



State of Alaska Public Employees' Retirement System

Section 4.6

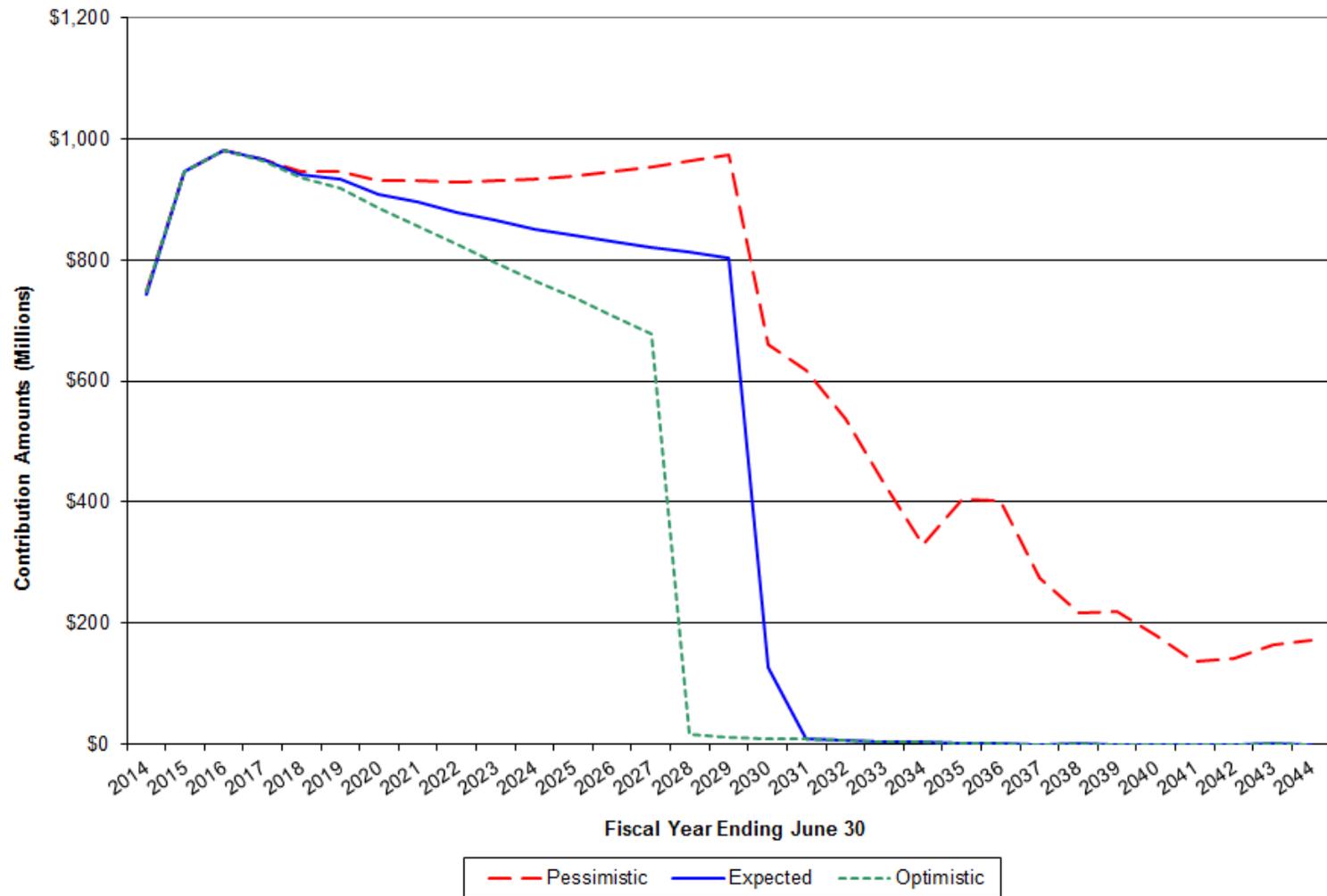
Table of Projected Actuarial Results

State of Alaska PERS
Financial Projections (in Thousands)

Fiscal Year End	Investment Return: 8.00%				Flow Amounts During Following 12 Months										Recognized Asset Gain/(Loss)	Ending Actuarial Assets
	Valuation Amounts on July 1 (Beginning of Fiscal Year)				Total Salaries	Employer/State Ctb Rate	Employer Contribs	State Contribs	Employer/State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2014	\$12,162,626	\$19,992,759	60.8%	(\$7,830,133)	\$2,316,679	32.31%	\$429,550	\$312,473	\$742,023	\$114,407	\$856,430	\$1,049,470	(\$193,040)	\$990,848	\$190,726	\$13,151,160
2015	13,151,160	20,768,141	63.3%	(7,616,981)	2,370,407	39.85%	425,561	519,046	944,607	116,539	1,061,146	1,131,484	(70,338)	1,059,213	157,204	14,297,239
2016	14,297,239	21,500,882	66.5%	(7,203,643)	2,436,356	40.28%	423,684	557,680	981,364	109,950	1,091,314	1,214,599	(123,285)	1,135,968	(82,046)	15,227,876
2017	15,227,876	22,184,844	68.6%	(6,956,968)	2,511,843	38.42%	423,480	541,570	965,050	103,695	1,068,745	1,299,599	(230,854)	1,212,479	95,544	16,305,045
2018	16,305,045	22,814,808	71.5%	(6,509,763)	2,595,714	36.26%	424,725	516,481	941,206	97,670	1,038,876	1,377,948	(339,072)	1,286,502	0	17,252,475
2019	17,252,475	23,393,892	73.7%	(6,141,417)	2,686,454	34.73%	427,132	505,873	933,005	92,055	1,025,060	1,451,473	(426,413)	1,358,625	0	18,184,687
2020	18,184,687	23,926,293	76.0%	(5,741,606)	2,788,129	32.61%	431,221	477,988	909,209	86,417	995,626	1,527,324	(531,698)	1,428,818	0	19,081,807
2021	19,081,807	24,406,593	78.2%	(5,324,786)	2,892,936	30.93%	435,993	458,792	894,785	81,071	975,856	1,611,639	(635,783)	1,496,223	0	19,942,247
2022	19,942,247	24,822,310	80.3%	(4,880,063)	3,002,594	29.28%	441,704	437,456	879,160	76,122	955,282	1,692,187	(736,905)	1,560,822	0	20,766,164
2023	20,766,164	25,174,984	82.5%	(4,408,820)	3,116,400	27.75%	448,183	416,618	864,801	71,305	936,106	1,772,810	(836,704)	1,622,551	0	21,552,011
2024	21,552,011	25,459,864	84.7%	(3,907,853)	3,236,445	26.32%	455,761	396,071	851,832	53,078	904,910	1,845,937	(941,027)	1,681,082	0	22,292,066
2025	22,292,066	25,678,505	86.8%	(3,386,439)	3,366,562	24.97%	464,905	375,726	840,631	48,142	888,773	1,902,783	(1,014,010)	1,737,234	0	23,015,290
2026	23,015,290	25,832,756	89.1%	(2,817,466)	3,502,782	23.70%	475,202	354,957	830,159	43,434	873,593	1,985,483	(1,111,890)	1,790,976	0	23,694,376
2027	23,694,376	25,901,466	91.5%	(2,207,090)	3,645,213	22.53%	486,571	334,695	821,266	39,368	860,634	2,048,252	(1,187,618)	1,842,122	0	24,348,880
2028	24,348,880	25,902,397	94.0%	(1,553,517)	3,795,013	21.40%	499,199	312,934	812,133	34,914	847,047	2,117,951	(1,270,904)	1,890,983	0	24,968,959
2029	24,968,959	25,821,508	96.7%	(852,549)	3,952,739	20.32%	513,227	289,970	803,197	31,227	834,424	2,170,995	(1,336,571)	1,937,836	0	25,570,224
2030	25,570,224	25,672,461	99.6%	(102,237)	4,118,011	3.09%	127,247	0	127,247	27,591	154,838	2,219,861	(2,065,023)	1,957,196	0	25,462,397
2031	25,462,397	25,453,386	100.0%	9,011	4,289,990	0.18%	7,722	0	7,722	24,453	32,175	2,280,277	(2,248,102)	1,941,186	0	25,155,481
2032	25,155,481	25,147,126	100.0%	8,355	4,471,185	0.13%	5,813	0	5,813	21,462	27,275	2,337,925	(2,310,650)	1,913,987	0	24,758,818
2033	24,758,818	24,752,661	100.0%	6,157	4,661,733	0.09%	4,196	0	4,196	18,647	22,843	2,377,043	(2,354,200)	1,880,415	0	24,285,033
2034	24,285,033	24,277,953	100.0%	7,080	4,862,368	0.07%	3,404	0	3,404	16,046	19,450	2,394,265	(2,374,815)	1,841,646	0	23,751,864
2035	23,751,864	23,746,376	100.0%	5,488	5,080,240	0.04%	2,032	0	2,032	13,717	15,749	2,416,667	(2,400,918)	1,797,893	0	23,148,839
2036	23,148,839	23,141,649	100.0%	7,190	5,305,359	0.03%	1,592	0	1,592	11,672	13,264	2,431,262	(2,417,998)	1,748,933	0	22,479,774
2037	22,479,774	22,473,818	100.0%	5,956	5,539,016	0.00%	0	0	0	9,970	9,970	2,456,605	(2,446,635)	1,694,199	0	21,727,338
2038	21,727,338	21,721,299	100.0%	6,039	5,782,772	0.01%	578	0	578	8,096	8,674	2,447,489	(2,438,815)	1,634,342	0	20,922,865
2039	20,922,865	20,917,657	100.0%	5,208	6,037,582	0.00%	0	0	0	6,641	6,641	2,412,688	(2,406,047)	1,571,386	0	20,088,204
2040	20,088,204	20,083,898	100.0%	4,306	6,302,754	0.00%	0	0	0	5,042	5,042	2,383,196	(2,378,154)	1,505,805	0	19,215,855
2041	19,215,855	19,212,496	100.0%	3,359	6,576,801	0.00%	0	0	0	3,946	3,946	2,367,646	(2,363,700)	1,436,636	0	18,288,791
2042	18,288,791	18,286,080	100.0%	2,711	6,862,328	0.00%	0	0	0	3,431	3,431	2,306,781	(2,303,350)	1,365,042	0	17,350,483
2043	17,350,483	17,348,031	100.0%	2,452	7,159,124	0.01%	716	0	716	2,148	2,864	2,247,131	(2,244,267)	1,292,494	0	16,398,710
2044	16,398,710	16,396,247	100.0%	2,463	7,469,002	0.00%	0	0	0	2,241	2,241	2,171,587	(2,169,346)	1,219,544	0	15,448,908
							\$ 7,359,398	\$ 6,808,330	\$ 14,167,728	\$ 1,374,497	\$ 15,542,225					

Sensitivity Analysis

Impact Various Investment Rates of Return Have on the Employer/State Contribution Amount



Section 5

Member Data

State of Alaska Public Employees' Retirement System

Section 5.1

Summary of Members Included – Total PERS

As of June 30	2009	2010	2011	2012	2013
Active Members					
(1) Number	27,565	26,442	24,393	22,730	20,955
(2) Average Age	47.85	48.58	49.22	49.85	50.39
(3) Average Credited Service	11.19	11.84	12.60	13.32	14.00
(4) Average Entry Age	36.66	36.74	36.62	36.53	36.39
(5) Average Annual Earnings	\$ 57,518	\$ 60,007	\$ 63,201	\$ 66,119	\$ 69,211
(6) Number Vested	20,671	21,477	21,640	20,842	19,670
(7) Percent Who Are Vested	75.0%	81.2%	88.7%	91.7%	93.9%
Retirees, Disableds and Beneficiaries					
(1) Number	25,015	26,237	27,359	28,540	29,865
(2) Average Age	66.39	66.71	67.05	67.41	67.76
(3) Average Monthly Pension Benefit					
Base	\$ 1,280	\$ 1,309	\$ 1,345	\$ 1,375	\$ 1,415
COLA	85	86	88	89	90
P.R.P.A.	244	231	229	241	242
Adjustment	0	0	0	0	0
Total	\$ 1,609	\$ 1,626	\$ 1,662	\$ 1,705	\$ 1,747
Vested Terminations (vested at time of termination, not refunded contributions or commenced benefits)					
(1) Number	6,566	6,253	6,414	6,294	6,230
(2) Average Age	49.83	49.90	50.29	50.55	50.84
(3) Average Monthly Pension Benefit	\$ 836	\$ 805	\$ 821	\$ 844	\$ 863
Non-Vested Terminations With Account Balances (not vested at termination, not refunded contributions)					
(1) Number	14,626	14,543	14,028	13,552	13,162
(2) Average Account Balance	\$ 4,654	\$ 4,895	\$ 5,074	\$ 5,373	\$ 5,578
Total Number of Members	73,772	73,475	72,194	71,116	70,212

State of Alaska Public Employees' Retirement System

Section 5.1 (cont'd)

Summary of Members Included – Total PERS

As of June 30, 2013	DB			Total	DCR	Grand Total
	Tier 1	Tier 2	Tier 3		Tier 4	
Active Members						
(1) Numbers	3,203	5,758	11,994	20,955	14,316	35,271
(2) Average Age	57.36	53.00	47.28	50.39	39.53	45.98
(3) Average Credited Service	20.47	18.21	10.24	14.00	2.59	9.37
(4) Average Entry Age	38.89	34.79	37.04	36.39	36.94	36.61
(5) Annual Earnings						
(a) Amount (000's)	\$ 232,569	\$ 429,018	\$ 788,733	\$ 1,450,320	\$ 748,658	\$ 2,198,978
(b) Average	\$ 72,610	\$ 74,508	\$ 65,761	\$ 69,211	\$ 52,295	\$ 62,345

As of June 30, 2013	Tier 1	Tier 2	Tier 3	Total
Retirees, Disableds and Beneficiaries				
(1) Number	23,029	5,198	1,638	29,865
(2) Average Age	68.23	66.63	64.71	67.76
(3) Average Monthly Pension Benefit				
Base	\$ 1,522	\$ 1,120	\$ 840	\$ 1,415
COLA	107	35	30	90
P.R.P.A.	293	81	31	242
Adjustment	0	0	1	0
Total	\$ 1,922	\$ 1,236	\$ 902	\$ 1,747

State of Alaska Public Employees' Retirement System

Section 5.1 (cont'd)

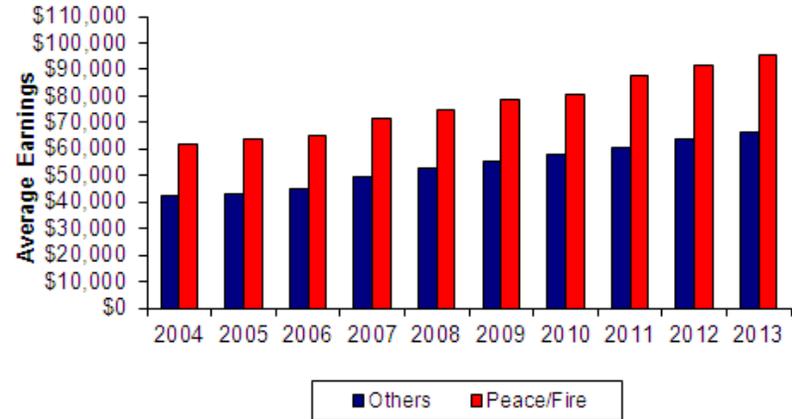
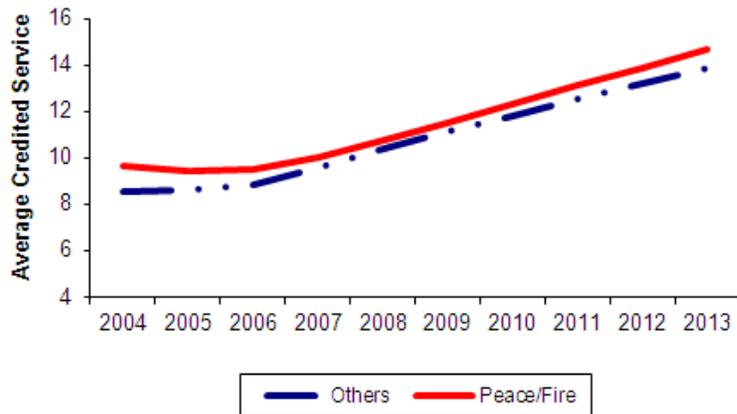
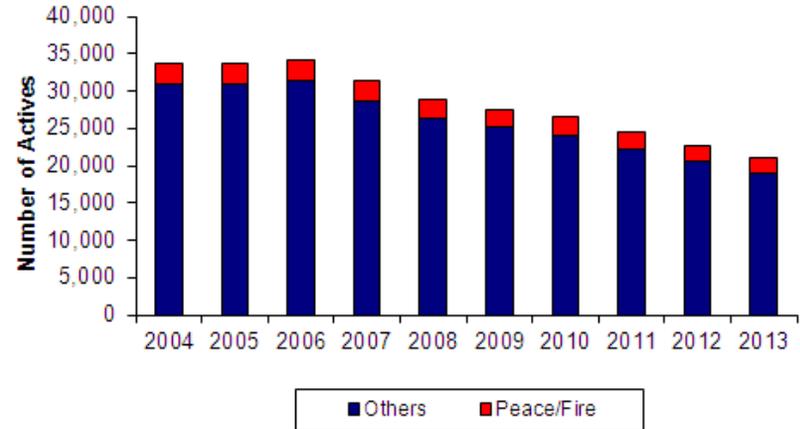
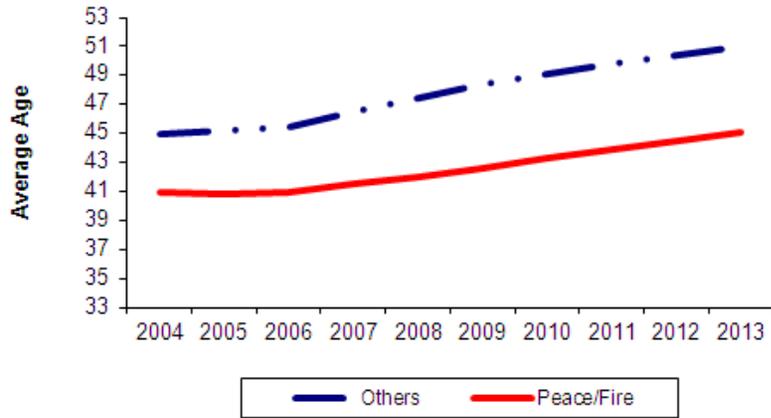
Summary of Members Included

Active Members – DB Only

As of June 30	2009	2010	2011	2012	2013
Peace Officer/Firefighter					
(1) Number	2,476	2,388	2,275	2,164	2,065
(2) Average Age	42.63	43.25	43.86	44.48	45.09
(3) Average Credited Service	11.55	12.32	13.13	13.90	14.71
(4) Average Entry Age	31.08	30.93	30.73	30.58	30.38
(5) Average Annual Earnings	\$ 78,562	\$ 80,777	\$ 87,709	\$ 91,286	\$ 95,658
(6) Number Vested	2,017	2,102	2,183	2,098	2,018
(7) Percent Who Are Vested	81.5%	88.0%	96.0%	97.0%	97.7%
Others					
(1) Number	25,089	24,054	22,118	20,566	18,890
(2) Average Age	48.36	49.11	49.77	50.41	50.97
(3) Average Credited Service	11.15	11.79	12.55	13.26	13.92
(4) Average Entry Age	37.21	37.32	37.22	37.15	37.05
(5) Average Annual Earnings	\$ 55,441	\$ 57,945	\$ 60,680	\$ 63,471	\$ 66,320
(6) Number Vested	18,654	19,375	19,457	18,744	17,652
(7) Percent Who Are Vested	74.4%	80.5%	88.0%	91.1%	93.4%
Total					
(1) Number	27,565	26,442	24,393	22,730	20,955
(2) Average Age	47.85	48.58	49.22	49.85	50.39
(3) Average Credited Service	11.19	11.84	12.60	13.32	14.00
(4) Average Entry Age	36.66	36.74	36.62	36.53	36.39
(5) Average Annual Earnings	\$ 57,518	\$ 60,007	\$ 63,201	\$ 66,119	\$ 69,211
(6) Number Vested	20,671	21,477	21,640	20,842	19,670
(7) Percent Who Are Vested	75.0%	81.2%	88.7%	91.7%	93.9%

Summary of Members Included

Active Members as of June 30



State of Alaska Public Employees' Retirement System

Section 5.2

Age and Service Distribution of Active Members – Peace Officer/Firefighter

Annual Earnings by Age				Annual Earnings by Credited Service			
Age	Number	Total Annual Earnings	Average Annual Earnings	Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0 – 19	0	\$ 0	\$ 0	0	0	\$ 0	\$ 0
20 – 24	0	0	0	1	1	46,635	46,635
25 – 29	34	2,843,996	83,647	2	3	167,427	55,809
30 – 34	196	18,164,432	92,676	3	6	478,840	79,807
35 – 39	356	33,909,483	95,251	4	14	1,039,985	74,285
40 – 44	493	48,364,462	98,102	0 – 4	24	1,732,887	72,204
45 – 49	404	39,591,350	97,998	5 – 9	491	43,066,404	87,712
50 – 54	317	30,643,961	96,669	10 – 14	676	62,965,054	93,144
55 – 59	185	16,746,332	90,521	15 – 19	489	49,586,886	101,405
60 – 64	66	6,134,849	92,952	20 – 24	264	27,879,521	105,604
65 – 69	13	1,075,474	82,729	25 – 29	88	8,865,631	100,746
70 – 74	1	59,280	59,280	30 – 34	28	2,842,501	101,518
75+	0	0	0	35 – 39	4	519,493	129,873
				40+	1	75,242	75,242
Total	2,065	\$ 197,533,619	\$ 95,658	Total	2,065	\$ 197,533,619	\$ 95,658

Years of Credited Service by Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
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	4	28	2	0	0	0	0	0	0	34
30 – 34	3	135	58	0	0	0	0	0	0	196
35 – 39	5	102	188	58	3	0	0	0	0	356
40 – 44	3	74	188	172	55	1	0	0	0	493
45 – 49	3	55	114	122	91	19	0	0	0	404
50 – 54	5	55	82	71	62	35	7	0	0	317
55 – 59	0	31	32	50	39	23	9	1	0	185
60 – 64	1	10	12	14	11	6	10	2	0	66
65 – 69	0	1	0	2	2	4	2	1	1	13
70 – 74	0	0	0	0	1	0	0	0	0	1
75+	0	0	0	0	0	0	0	0	0	0
Total	24	491	676	489	264	88	28	4	1	2,065

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

State of Alaska Public Employees' Retirement System

Section 5.2 (cont'd)

Age and Service Distribution of Active Members – Others

Annual Earnings by Age				Annual Earnings by Credited Service			
Age	Number	Total Annual Earnings	Average Annual Earnings	Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0 – 19	0	\$ 0	\$ 0	0	49	\$ 2,306,385	\$ 47,069
20 – 24	1	30,642	30,642	1	96	4,514,513	47,026
25 – 29	218	11,987,715	54,990	2	160	7,458,323	46,615
30 – 34	979	60,061,448	61,350	3	273	13,122,123	48,066
35 – 39	1,526	100,629,468	65,943	4	347	17,141,128	49,398
40 – 44	2,075	138,709,024	66,848	0 – 4	925	44,542,472	48,154
45 – 49	2,897	190,676,566	65,819	5 – 9	5,666	331,620,156	58,528
50 – 54	4,241	282,198,314	66,541	10 – 14	5,423	353,015,329	65,096
55 – 59	4,048	272,202,100	67,244	15 – 19	3,119	219,492,152	70,373
60 – 64	2,124	143,280,325	67,458	20 – 24	2,196	171,764,876	78,217
65 – 69	614	42,177,201	68,693	25 – 29	1,135	93,936,766	82,764
70 – 74	133	8,928,292	67,130	30 – 34	340	30,365,771	89,311
75+	34	1,904,912	56,027	35 – 39	67	6,098,858	91,028
				40+	19	1,949,627	102,612
Total	18,890	\$ 1,252,786,007	\$ 66,320	Total	18,890	\$ 1,252,786,007	\$ 66,320

Years of Credited Service by Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	1	0	0	0	0	0	0	0	0	1
25 – 29	76	136	6	0	0	0	0	0	0	218
30 – 34	126	656	194	3	0	0	0	0	0	979
35 – 39	114	726	590	96	0	0	0	0	0	1,526
40 – 44	93	777	793	322	86	4	0	0	0	2,075
45 – 49	127	883	886	527	366	103	5	0	0	2,897
50 – 54	147	999	1,153	788	664	398	91	1	0	4,241
55 – 59	139	821	1,091	820	658	371	129	18	1	4,048
60 – 64	75	499	506	411	314	198	88	27	6	2,124
65 – 69	18	128	163	124	90	46	23	13	9	614
70 – 74	7	29	30	26	15	13	4	7	2	133
75+	2	12	11	2	3	2	0	1	1	34
Total	925	5,666	5,423	3,119	2,196	1,135	340	67	19	18,890

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

State of Alaska Public Employees' Retirement System

Section 5.3

Member Data Reconciliation – Total PERS

Inactive Members

	Active Members	Due a Refund	With Deferred Benefits	Retired Members	Disabled Members	Bene- ficiaries	Total
As of June 30, 2012	22,730	13,552	6,294	25,384	255	2,901	71,116
Vested Terminations	(761)	(11)	773	(1)	0	0	0
Non-vested Terminations	(195)	217	(22)	0	0	0	0
Cash-outs	(124)	(368)	(77)	0	0	0	(569)
Disability Retirements	(29)	0	(6)	(1)	36	0	0
Age Retirements	(1,127)	(33)	(471)	1,666	(35)	N/A	0
Deaths With Beneficiary	(16)	0	(7)	(159)	(1)	183	0
Deaths Without Beneficiary	(35)	(42)	(12)	(303)	(4)	(83)	(479)
Retiree Medical Only	N/A	N/A	(2)	(1)	0	0	(3)
Data Corrections	(3)	(7)	(2)	0	0	(1)	(13)
Transfers Out	(27)	(7)	(7)	(1)	0	0	(42)
Rehires	500	(226)	(232)	(41)	(1)	0	0
Pick Ups	42	87	1	1	0	71	202
Net Change	(1,775)	(390)	(64)	1,160	(5)	170	(904)
New Entrants During the Year	0	0	N/A	N/A	N/A	N/A	0
As of June 30, 2013	20,955	13,162	6,230	26,544	250	3,071	70,212

State of Alaska Public Employees' Retirement System

Section 5.4

Schedule of Active Member Data – Peace Officer/Firefighter

Valuation Date	Number	Annual Earnings (000's) ¹	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2013	2,065	\$ 197,534	\$ 95,658	4.8%	159
June 30, 2012	2,164	197,544	91,286	4.1%	160
June 30, 2011	2,275	199,537	87,709	8.6%	160
June 30, 2010	2,388	192,895	80,777	2.8%	160
June 30, 2009	2,476	194,519	78,562	5.0%	160
June 30, 2008	2,549	190,729	74,825	4.9%	159
June 30, 2007	2,687	191,674	71,334	9.3%	160
June 30, 2006	2,785	181,830	65,289	2.5%	160
June 30, 2005	2,733	174,155	63,723	3.0%	160
June 30, 2004	2,705	167,317	61,855	4.9%	161

¹ Prior to June 30, 2006, unannualized earnings were used. Starting June 30, 2006, annualized earnings are used.

State of Alaska Public Employees' Retirement System

Section 5.4 (cont'd)

Schedule of Active Member Data – Others

Valuation Date	Number	Annual Earnings (000's) ¹	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2013	18,890	\$ 1,252,786	\$ 66,320	4.5%	159
June 30, 2012	20,566	1,305,337	63,471	4.6%	160
June 30, 2011	22,118	1,342,122	60,680	4.7%	160
June 30, 2010	24,054	1,393,803	57,945	4.5%	160
June 30, 2009	25,089	1,390,971	55,441	5.1%	160
June 30, 2008	26,301	1,387,117	52,740	6.9%	159
June 30, 2007	28,675	1,414,145	49,316	9.5%	160
June 30, 2006	31,286	1,408,863	45,032	4.2%	160
June 30, 2005	30,997	1,338,962	43,197	2.3%	160
June 30, 2004	30,907	1,305,670	42,245	1.8%	161

¹ Prior to June 30, 2006, unannualized earnings were used. Starting June 30, 2006, annualized earnings are used.

State of Alaska Public Employees' Retirement System

Section 5.5

Summary of New Pension Benefit Recipients – Peace Officer/Firefighter

During the Year Ending June 30	2009	2010	2011	2012	2013
Service					
(1) Number	80	86	83	78	85
(2) Average Age at Commencement	55.98	56.91	56.41	56.73	56.66
(3) Average Monthly Pension Benefit	\$ 2,402	\$ 2,865	\$ 3,229	\$ 3,042	\$ 3,400
Survivor (including surviving spouse and QDROs)					
(1) Number	25	28	29	25	23
(2) Average Age at Commencement	58.42	57.70	57.19	62.97	61.25
(3) Average Monthly Pension Benefit	\$ 1,337	\$ 1,521	\$ 1,438	\$ 1,541	\$ 1,868
Disability					
(1) Number	3	4	2	4	5
(2) Average Age at Commencement	44.87	50.61	50.53	48.14	45.41
(3) Average Monthly Pension Benefit	\$ 1,461	\$ 2,631	\$ 2,354	\$ 3,923	\$ 3,000
Total					
(1) Number	108	118	114	107	113
(2) Average Age at Commencement	56.24	56.88	56.51	57.87	57.10
(3) Average Monthly Pension Benefit	\$ 2,129	\$ 2,538	\$ 2,758	\$ 2,724	\$ 3,070

State of Alaska Public Employees' Retirement System

Section 5.5 (cont'd)

Summary of New Pension Benefit Recipients

Average Pension Benefit Payments – Peace Officer/Firefighter

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/12 - 6/30/13:							
Average Monthly Pension Benefit	\$ 0	\$ 865	\$ 1,779	\$ 2,762	\$ 3,793	\$ 4,983	\$ 4,911
Number of Recipients	0	9	8	19	31	18	4
Period 7/1/11 - 6/30/12:							
Average Monthly Pension Benefit	\$ 0	\$ 1,159	\$ 1,161	\$ 3,142	\$ 3,504	\$ 4,673	\$ 5,079
Number of Recipients	0	13	13	12	20	17	7
Period 7/1/10 - 6/30/11:							
Average Monthly Pension Benefit	\$ 525	\$ 880	\$ 1,469	\$ 2,666	\$ 3,743	\$ 4,806	\$ 5,661
Number of Recipients	1	8	18	10	24	16	8
Period 7/1/09 - 6/30/10:							
Average Monthly Pension Benefit	\$ 1,902	\$ 1,242	\$ 1,459	\$ 2,284	\$ 3,179	\$ 4,527	\$ 4,695
Number of Recipients	4	7	16	14	28	14	7
Period 7/1/08 - 6/30/09:							
Average Monthly Pension Benefit	\$ 489	\$ 820	\$ 979	\$ 2,466	\$ 3,152	\$ 4,213	\$ 4,894
Number of Recipients	2	17	11	18	23	7	5
Period 7/1/07 - 6/30/08:							
Average Monthly Pension Benefit	\$ 1,522	\$ 950	\$ 1,171	\$ 2,378	\$ 3,179	\$ 3,837	\$ 6,014
Number of Recipients	6	13	13	20	32	18	3
Period 7/1/06 - 6/30/07:							
Average Monthly Pension Benefit	\$ 925	\$ 858	\$ 1,304	\$ 2,385	\$ 3,180	\$ 4,198	\$ 4,942
Number of Recipients	4	13	9	26	40	12	4
Period 7/1/05 - 6/30/06:							
Average Monthly Pension Benefit	\$ 1,556	\$ 748	\$ 1,280	\$ 2,236	\$ 2,931	\$ 3,595	\$ 4,190
Number of Recipients	5	11	9	26	29	13	3
Period 7/1/04 - 6/30/05:							
Average Monthly Pension Benefit	\$ 277	\$ 700	\$ 1,209	\$ 1,823	\$ 2,852	\$ 3,804	\$ 3,846
Number of Recipients	1	14	20	23	66	13	3

“Average Monthly Pension Benefit” includes post-retirement pension adjustments and cost-of-living increases.

State of Alaska Public Employees' Retirement System

Section 5.5 (cont'd)

Summary of New Pension Benefit Recipients – Others

During the Year Ending June 30	2009	2010	2011	2012	2013
Service					
(1) Number	1,140	1,409	1,379	1,413	1,547
(2) Average Age at Commencement	58.10	58.74	59.19	59.68	59.94
(3) Average Monthly Pension Benefit	\$ 1,698	\$ 1,879	\$ 2,061	\$ 2,031	\$ 2,141
Survivor (including surviving spouse and QDROs)					
(1) Number	181	225	191	238	231
(2) Average Age at Commencement	64.33	65.35	66.04	65.26	66.07
(3) Average Monthly Pension Benefit	\$ 866	\$ 986	\$ 1,103	\$ 1,005	\$ 1,025
Disability					
(1) Number	19	33	25	25	30
(2) Average Age at Commencement	51.79	52.43	51.10	53.32	52.43
(3) Average Monthly Pension Benefit	\$ 1,264	\$ 1,662	\$ 1,550	\$ 1,553	\$ 1,809
Total					
(1) Number	1,340	1,667	1,595	1,676	1,808
(2) Average Age at Commencement	58.85	59.51	59.88	60.38	60.60
(3) Average Monthly Pension Benefit	\$ 1,579	\$ 1,754	\$ 1,938	\$ 1,878	\$ 1,993

State of Alaska Public Employees' Retirement System

Section 5.5 (cont'd)

Summary of New Pension Benefit Recipients

Average Pension Benefit Payments – Others

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/12 - 6/30/13:							
Average Monthly Pension Benefit	\$ 414	\$ 650	\$ 1,179	\$ 1,925	\$ 2,879	\$ 4,356	\$ 5,208
Number of Recipients	59	349	365	257	206	209	132
Period 7/1/11 - 6/30/12:							
Average Monthly Pension Benefit	\$ 407	\$ 610	\$ 1,147	\$ 1,931	\$ 2,805	\$ 4,214	\$ 5,076
Number of Recipients	67	351	314	204	208	188	106
Period 7/1/10 - 6/30/11:							
Average Monthly Pension Benefit	\$ 409	\$ 633	\$ 1,150	\$ 1,876	\$ 2,690	\$ 4,294	\$ 5,226
Number of Recipients	73	352	270	227	172	205	105
Period 7/1/09 - 6/30/10:							
Average Monthly Pension Benefit	\$ 485	\$ 579	\$ 1,116	\$ 1,763	\$ 2,674	\$ 4,008	\$ 5,039
Number of Recipients	93	367	273	217	218	200	74
Period 7/1/08 - 6/30/09:							
Average Monthly Pension Benefit	\$ 534	\$ 554	\$ 988	\$ 1,708	\$ 2,693	\$ 3,718	\$ 4,723
Number of Recipients	71	341	216	171	154	159	47
Period 7/1/07 - 6/30/08:							
Average Monthly Pension Benefit	\$ 586	\$ 548	\$ 1,044	\$ 1,655	\$ 2,668	\$ 3,642	\$ 4,561
Number of Recipients	69	315	249	222	172	170	56
Period 7/1/06 - 6/30/07:							
Average Monthly Pension Benefit	\$ 1,026	\$ 564	\$ 1,084	\$ 1,773	\$ 2,509	\$ 3,699	\$ 4,132
Number of Recipients	97	320	263	207	190	183	44
Period 7/1/05 - 6/30/06:							
Average Monthly Pension Benefit	\$ 519	\$ 536	\$ 950	\$ 1,464	\$ 2,212	\$ 3,247	\$ 3,837
Number of Recipients	72	319	271	246	197	184	50
Period 7/1/04 - 6/30/05:							
Average Monthly Pension Benefit	\$ 423	\$ 516	\$ 1,008	\$ 1,571	\$ 2,249	\$ 3,176	\$ 3,369
Number of Recipients	40	363	266	211	213	118	76

“Average Monthly Benefit” includes post-retirement pension adjustments and cost-of-living increases.

State of Alaska Public Employees' Retirement System

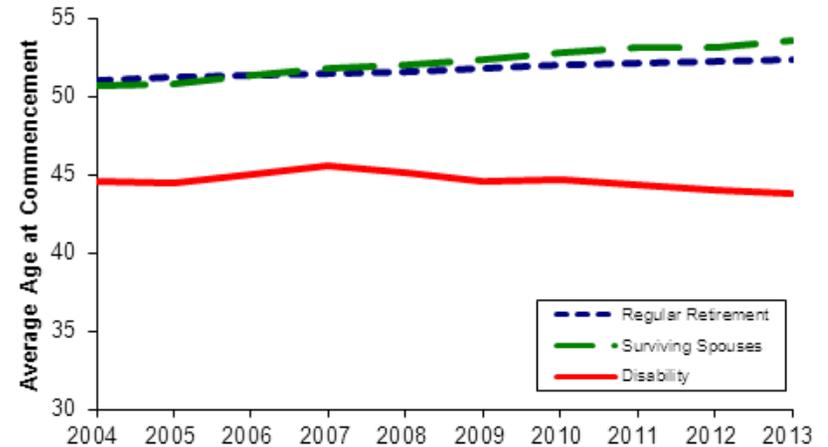
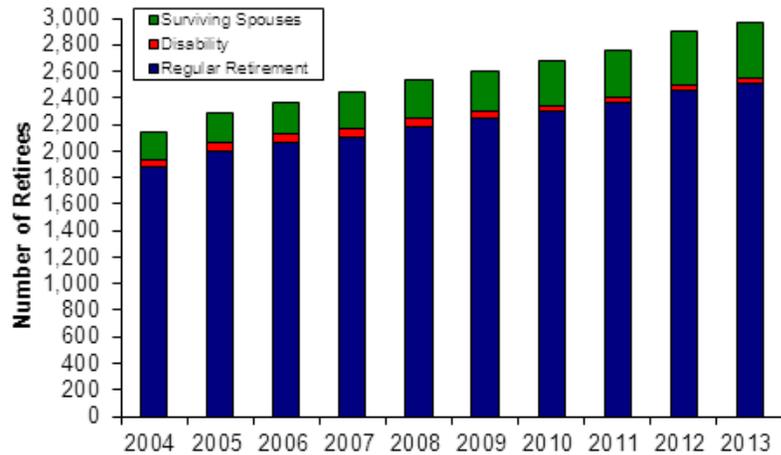
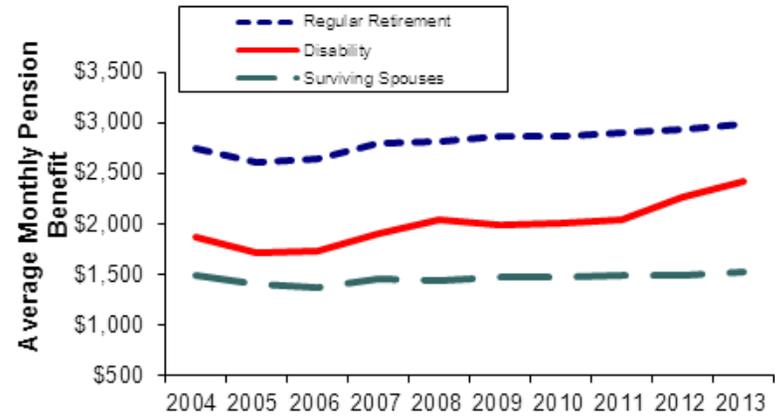
Section 5.6

Summary of All Pension Benefit Recipients

	Peace Officer/ Firefighter	Others
Service Retirements		
(1) Number, June 30, 2012	2,459	22,925
(2) Net Change During FY13	53	1,107
(3) Number, June 30, 2013	2,512	24,032
(3) Average Age At Commencement	52.38	57.19
(4) Average Current Age	65.24	68.01
(5) Average Monthly Pension Benefit	\$ 2,990	\$ 1,705
Survivors (including surviving spouses and QDROs)		
(1) Number, June 30, 2012	403	2,498
(2) Net Change During FY13	16	154
(3) Number, June 30, 2013	419	2,652
(4) Average Age At Commencement	53.60	60.26
(5) Average Current Age	64.16	69.72
(6) Average Monthly Pension Benefit	\$ 1,528	\$ 982
Disabilities		
(1) Number, June 30, 2012	34	221
(2) Net Change During FY13	2	(7)
(3) Number, June 30, 2013	36	214
(4) Average Age At Commencement	43.76	46.13
(5) Average Current Age	50.33	53.72
(6) Average Monthly Pension Benefit	\$ 2,417	\$ 1,592
Total		
(1) Number, June 30, 2012	2,896	25,644
(2) Net Change During FY13	71	1,254
(3) Number, June 30, 2013	2,967	26,898
(4) Average Age At Commencement	52.45	57.41
(5) Average Current Age	64.91	68.07
(6) Average Monthly Pension Benefit	\$ 2,777	\$ 1,633

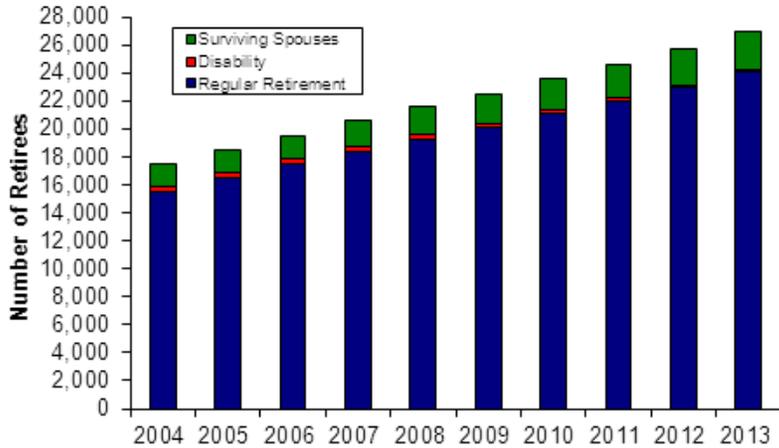
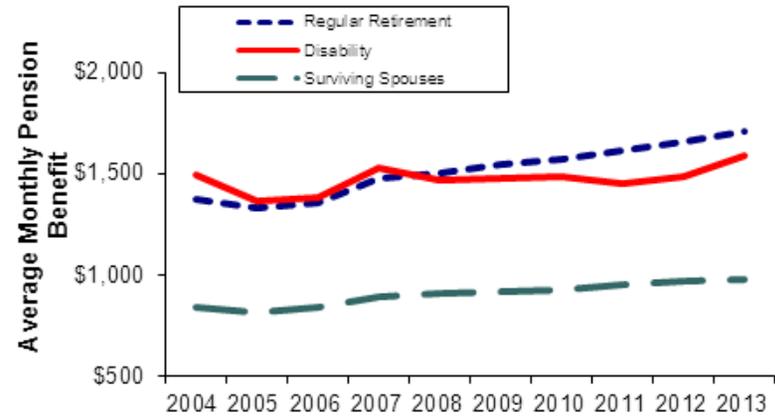
Summary of All Pension Benefit Recipients

Peace Officer/Firefighter



Summary of All Pension Benefit Recipients

Others



State of Alaska Public Employees' Retirement System

Section 5.6 (cont'd)

Summary of All Pension Benefit Recipients – Peace Officer/Firefighter

Annual Pension Benefit by Age

Age	Number	Total Annual Benefit	Average Annual Benefit
0 – 19	0	\$ 0	\$ 0
20 – 24	0	0	0
25 – 29	0	0	0
30 – 34	2	69,163	34,582
35 – 39	4	138,393	34,598
40 – 44	13	361,693	27,823
45 – 49	52	1,707,253	32,832
50 – 54	203	7,076,305	34,859
55 – 59	537	18,461,943	34,380
60 – 64	750	24,903,352	33,204
65 – 69	672	22,245,774	33,104
70 – 74	407	13,234,660	32,518
75+	327	10,647,943	32,563

Annual Pension Benefit by Years Since Commencement

Years Since Commencement	Number	Total Annual Benefit	Average Annual Benefit
0	112	\$ 4,121,964	\$ 36,803
1	109	3,484,384	31,967
2	114	3,732,006	32,737
3	115	3,672,376	31,934
4	121	3,214,918	26,570
0 – 4	571	18,225,648	31,919
5 – 9	684	20,472,080	29,930
10 – 14	716	22,891,491	31,971
15 – 19	491	18,015,307	36,691
20 – 24	221	7,362,657	33,315
25 – 29	203	9,078,996	44,724
30 – 34	58	2,164,362	37,317
35 – 39	20	592,000	29,600
40+	3	43,938	14,646

Total 2,967 \$ 98,846,479 \$ 33,315

Total 2,967 \$ 98,846,479 \$ 33,315

Years Since Benefit Commencement by Age

Age	Years Since Commencement									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
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	0	0	0	0	0	0	0	0	0	0
30 – 34	1	1	0	0	0	0	0	0	0	2
35 – 39	2	1	1	0	0	0	0	0	0	4
40 – 44	8	4	1	0	0	0	0	0	0	13
45 – 49	38	9	2	1	2	0	0	0	0	52
50 – 54	88	85	28	2	0	0	0	0	0	203
55 – 59	164	181	157	30	3	1	1	0	0	537
60 – 64	173	216	228	112	15	4	1	1	0	750
65 – 69	61	134	195	173	64	37	5	3	0	672
70 – 74	16	40	79	133	75	58	4	1	1	407
75+	20	13	25	40	62	103	47	15	2	327
Total	571	684	716	491	221	203	58	20	3	2,967

State of Alaska Public Employees' Retirement System

Section 5.6 (cont'd)

Summary of All Benefit Recipients – Others

Annual Pension Benefit by Age

Age	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0 – 19	0	\$ 0	\$ 0
20 – 24	1	33,311	33,311
25 – 29	0	0	0
30 – 34	3	42,677	14,226
35 – 39	6	74,871	12,479
40 – 44	23	289,609	12,592
45 – 49	82	1,193,858	14,559
50 – 54	604	14,280,529	23,643
55 – 59	3,458	82,424,885	23,836
60 – 64	6,920	143,421,090	20,726
65 – 69	6,115	117,495,557	19,214
70 – 74	4,259	76,349,433	17,927
75+	5,427	91,534,248	16,866
Total	26,898	\$ 527,140,068	\$ 19,598

Annual Pension Benefit by Years Since Commencement

Years Since Commencement	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0	1,749	\$ 41,884,171	\$ 23,947
1	1,650	37,217,110	22,556
2	1,574	36,378,325	23,112
3	1,520	32,563,375	21,423
4	1,343	25,949,450	19,322
0 – 4	7,836	173,992,431	22,204
5 – 9	6,672	132,734,368	19,894
10 – 14	5,131	94,927,941	18,501
15 – 19	3,342	60,947,980	18,237
20 – 24	1,924	29,557,182	15,362
25 – 29	1,444	26,503,662	18,354
30 – 34	407	6,383,966	15,685
35 – 39	131	1,863,170	14,223
40+	11	229,368	20,852
Total	26,898	\$ 527,140,068	\$ 19,598

Years Since Benefit Commencement by Age

Age	Years Since Commencement									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	0	1	0	0	0	0	0	0	0	1
25 – 29	0	0	0	0	0	0	0	0	0	0
30 – 34	2	1	0	0	0	0	0	0	0	3
35 – 39	3	3	0	0	0	0	0	0	0	6
40 – 44	13	7	3	0	0	0	0	0	0	23
45 – 49	40	25	13	3	1	0	0	0	0	82
50 – 54	482	69	30	14	8	1	0	0	0	604
55 – 59	2,535	814	69	22	13	3	2	0	0	3,458
60 – 64	2,878	2,890	1,055	75	12	7	2	1	0	6,920
65 – 69	1,155	1,825	2,262	818	38	12	4	1	0	6,115
70 – 74	413	695	1,055	1,362	600	116	13	3	2	4,259
75+	315	342	644	1,048	1,252	1,305	386	126	9	5,427
Total	7,836	6,672	5,131	3,342	1,924	1,444	407	131	11	26,898

State of Alaska Public Employees' Retirement System

Section 5.7

Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Elected – Peace Officer/Firefighter

Amount of Monthly Pension Benefit	Number of Recipients	Type of Pension Benefit			Option Selected				
		1	2	3	1	2	3	4	5
\$ 1 – \$ 300	53	30	23	0	28	11	1	3	10
301 – 600	171	110	60	1	84	40	25	9	13
601 – 900	156	89	64	3	89	39	8	12	8
901 – 1,200	170	115	54	1	89	38	19	13	11
1,201 – 1,500	172	124	46	2	93	39	21	7	12
1,501 – 1,800	135	108	26	1	55	41	20	12	7
1,801 – 2,100	168	129	35	4	67	51	30	13	7
2,101 – 2,400	196	153	35	8	83	67	24	14	8
2,401 – 2,700	218	197	18	3	69	88	33	18	10
2,701 – 3,000	250	230	18	2	69	110	44	16	11
3,001 – 3,300	215	196	14	5	60	97	31	15	12
3,301 – 3,600	202	189	11	2	55	104	25	14	4
3,601 – 3,900	192	187	3	2	54	89	24	16	9
3,901 – 4,200	158	155	2	1	40	80	21	13	4
Over \$ 4,200	511	500	10	1	108	281	60	46	16
Totals	2,967	2,512	419	36	1,043	1,175	386	221	142

Type of Pension Benefit

1. Regular retirement
2. Survivor payment
3. Disability

Option Selected

1. Whole Life Annuity
2. 75% Joint and Contingent Annuity
3. 50% Joint and Contingent Annuity
4. 66 2/3% Joint and Survivor Annuity
5. Level Income Option

State of Alaska Public Employees' Retirement System

Section 5.7 (cont'd)

Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Elected – Others

Amount of Monthly Pension Benefit	Number of Recipients	Type of Pension Benefit			Option Selected				
		1	2	3	1	2	3	4	5
\$ 1 – \$ 300	1,985	1,554	429	2	871	388	281	61	384
301 – 600	4,735	4,075	636	24	2,328	1,181	765	260	201
601 – 900	3,739	3,245	472	22	1,806	949	578	227	179
901 – 1,200	3,029	2,663	342	24	1,413	785	528	170	133
1,201 – 1,500	2,489	2,206	251	32	1,126	711	412	134	106
1,501 – 1,800	1,923	1,730	154	39	806	565	340	114	98
1,801 – 2,100	1,583	1,447	115	21	658	458	273	114	80
2,101 – 2,400	1,352	1,256	73	23	522	421	257	92	60
2,401 – 2,700	1,116	1,042	63	11	445	375	211	42	43
2,701 – 3,000	890	851	35	4	337	294	165	54	40
3,001 – 3,300	754	720	30	4	259	288	140	35	32
3,301 – 3,600	613	597	15	1	193	244	114	34	28
3,601 – 3,900	515	499	15	1	183	186	88	40	18
3,901 – 4,200	471	466	5	0	146	191	102	20	12
Over \$ 4,200	1,704	1,681	17	6	505	700	350	101	48
Totals	26,898	24,032	2,652	214	11,598	7,736	4,604	1,498	1,462

Type of Pension Benefit

1. Regular retirement
2. Survivor payment
3. Disability

Option Selected

1. Whole Life Annuity
2. 75% Joint and Contingent Annuity
3. 50% Joint and Contingent Annuity
4. 66 2/3% Joint and Survivor Annuity
5. Level Income Option

State of Alaska Public Employees' Retirement System

Section 5.8

Pension Benefit Recipients Added to and Removed from Rolls – Peace Officer/Firefighter

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		Percent Increase in Annual Pension Benefits	Average Annual Pension Benefit
	No. ¹	Annual Pension Benefits ¹	No. ¹	Annual Pension Benefits ¹	No.	Annual Pension Benefits		
June 30, 2013	113	\$ 4,162,920	42	\$ 240,775	2,967	\$ 98,846,479	4.1%	\$ 33,315
June 30, 2012	179	5,246,271	41	(177,568)	2,896	94,924,334	6.1%	32,778
June 30, 2011	114	3,772,720	33	116,090	2,758	89,500,495	4.3%	32,451
June 30, 2010	118	3,593,724	46	1,413,071	2,677	85,843,865	2.6%	32,067
June 30, 2009	108	2,759,299	39	(518,134)	2,605	83,663,212	4.1%	32,116
June 30, 2008	125	3,556,519	28	191,073	2,536	80,385,779	4.4%	31,698
June 30, 2007	138	3,930,564	67	(2,546,491)	2,439	77,020,333	9.2%	31,579
June 30, 2006	118	3,289,370	30	209,287	2,368	70,543,278	4.6%	29,790
June 30, 2005	145	3,904,737	5	3,332,357	2,280	67,463,195	8.9%	29,589
June 30, 2004	174	6,388,270	25	904,310	2,140	66,890,815	7.2%	31,257

¹ Numbers are estimated, and include other internal transfers.

State of Alaska Public Employees' Retirement System

Section 5.8 (cont'd)

Pension Benefit Recipients Added to and Removed from Rolls – Others

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		Percent Increase in Annual Pension Benefits	Average Annual Pension Benefit
	No. ¹	Annual Pension Benefits ¹	No. ¹	Annual Pension Benefits ¹	No.	Annual Pension Benefits		
June 30, 2013	1,808	\$ 43,247,667	554	\$ 4,861,626	26,898	\$527,140,068	7.9%	\$ 19,598
June 30, 2012	1,679	37,855,250	636	5,344,239	25,644	488,754,027	7.1%	19,059
June 30, 2011	1,595	37,100,217	554	6,897,899	24,601	456,243,016	7.1%	18,546
June 30, 2010	1,667	35,089,579	517	8,712,630	23,560	426,040,698	6.6%	18,083
June 30, 2009	1,340	25,402,811	476	28,773	22,410	399,663,749	6.8%	17,834
June 30, 2008	1,454	28,498,471	466	5,349,935	21,546	374,289,711	6.6%	17,372
June 30, 2007	1,479	28,985,748	454	(14,280,390)	20,558	351,141,175	14.1%	17,081
June 30, 2006	1,494	26,193,750	384	2,265,651	19,533	307,875,037	8.4%	15,762
June 30, 2005	1,287	22,966,842	296	17,019,851	18,423	283,946,938	2.1%	15,413
June 30, 2004	1,346	27,617,383	354	6,823,010	17,432	277,999,947	8.1%	15,948

¹ Numbers are estimated, and include other internal transfers.

Section 6

Basis of the Actuarial Valuation

Summary of Plan Provisions and Changes in Plan Provisions

(1) **Effective Date**

January 1, 1961, with amendments through June 30, 2008. Chapter 82, 1986 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under the PERS before July 1, 1986 (Tier 1) are eligible for different benefits than members hired after June 30, 1986 (Tier 2). Chapter 4, 1996 Session Laws of Alaska created a third tier for members who were first hired after June 30, 1996 (Tier 3). 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 Public Employees' 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 PERS funds.

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

(3) **Employers Included**

Currently there are 159 employers participating in the PERS, including the State of Alaska and 158 political subdivisions and public organizations.

(4) **Membership**

PERS membership is mandatory for all permanent full-time and part-time employees of the State of Alaska and participating political subdivisions and public organizations, unless they are specifically excluded by Alaska Statute or employer participation agreements. Employees participating in the University of Alaska's Optional Retirement Plan or other retirement plans funded by the State are not covered by the PERS. Elected officials may waive PERS membership.

Certain members of the Alaska Teachers' Retirement System (TRS) are eligible for PERS retirement benefits for their concurrent elected public official service with municipalities. In addition, employees who work half-time in the PERS and TRS simultaneously are eligible for half-time PERS and TRS 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.

Summary of Plan Provisions and Changes in Plan Provisions

(5) Credited Service

Permanent employees who work at least 30 hours a week earn full-time credit; part-time employees working between 15 and 30 hours a week earn partial credit based upon the number of hours worked. Members receiving PERS occupational disability benefits continue to earn PERS credit while disabled. Survivors who are receiving occupational death benefits continue to earn PERS service credit while occupational survivor benefits are being paid.

Members may claim other types of service, including:

- part-time State of Alaska service rendered after December 31, 1960, and before January 1, 1976;
- service with the State, former Territory of Alaska, or U.S. Government in Alaska before January 1, 1961;
- past Peace Officer, correctional officer, fire fighter, and special officer service after January 1, 1961;
- military service (not more than five years may be claimed);
- temporary service after December 31, 1960;
- elected official service before January 1, 1981;
- Alaska Bureau of Indian Affairs service;
- past service rendered by employees who worked half-time in the PERS and Teachers' Retirement System (TRS) simultaneously;
- leave without pay service after June 13, 1987, while receiving Workers' Compensation;
- Village Public Safety Officer service; and
- service as a temporary employee of the legislature before July 1, 1979, but this service must have been claimed no later than July 1, 2003, or by the date of retirement, if sooner (not more than 10 years may be claimed).

Except for service before January 1, 1961, with the State, former Territory of Alaska, or U.S. Government in Alaska, contributions are required for all past service.

Summary of Plan Provisions and Changes in Plan Provisions

Past employment with participating political subdivisions that occurred before the employers joined the PERS is creditable if the employers agree to pay the required contributions.

At the election of certain PERS members, certain service may be credited in the same fashion as members in the State of Alaska Teachers' Retirement System (TRS).

Members employed as dispatchers or within a state correctional facility may, at retirement, elect to convert their dispatcher or correctional facility service from "all other" service to Peace Officer/Firefighter service and retire under the 20 year retirement option. Members pay the full actuarial cost of conversion.

(6) Employer Contributions

PERS 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.

Pursuant to AS 39.35.255 effective July 1, 2008, each PERS employer will pay a simple uniform contribution rate of 22% of member payroll.

(7) Additional State Contributions

Pursuant to AS 39.35.280 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 (22% of total DB and DCR payroll, less employer contributions to DCR) will be sufficient to pay the total contribution rate adopted by The Alaska Retirement Management Board.

(8) Member Contributions

Mandatory Contributions: Peace Officer/Firefighter members are required to contribute 7.5% of their compensation; all Others contribute 6.75%. Those all Others who have elected to have their service calculated under the Teachers' Retirement System rules contribute 9.76% of their compensation. Members' contributions are deducted from gross wages before federal income taxes are withheld.

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

Summary of Plan Provisions and Changes in Plan Provisions

Voluntary Contributions: Members may voluntarily contribute up to 5% of their salary on an after-tax basis. Voluntary contributions are recorded in a separate account and are payable to the:

- (a) member in lump sum payment upon termination of employment;
- (b) member's beneficiary if the member dies; or
- (c) member in a lump sum, life annuity, or payments over a designated period of time when the member retires.

Interest: Members' contributions earn 4.5% interest, compounded semiannually on June 30 and December 31.

Refund of Contributions: Terminated members may receive refunds of their member contribution accounts which includes their mandatory and voluntary 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.

Reinstatement of Contributions: Refunded accounts and the corresponding PERS service may be reinstated upon reemployment in the PERS prior to July 1, 2010. Interest accrues on refunds until paid in full or members retire.

(9) Retirement Benefits

Eligibility:

- (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, 1986 (Tier 1), and 60 or early retirement at age 55 if they were hired after July 1, 1986 (Tiers 2 & 3). Additionally, they must have at least:
 - (i) five years of paid-up PERS service;
 - (ii) 60 days of paid-up PERS service as employees of the legislature during each of five legislative sessions and they were first hired by the legislature before May 30, 1987;

Summary of Plan Provisions and Changes in Plan Provisions

- (iii) 80 days of paid-up PERS service as employees of the legislature during each of five legislative sessions and they were first hired by the legislature after May 29, 1987;
 - (iv) two years of paid-up PERS service and they are vested in the Teachers' Retirement System; or
 - (v) two years of paid-up PERS service and a minimum three years of TRS service to qualify for a public service benefit.
- (b) Members may retire at any age when they have:
- (i) 20 paid-up years of PERS Peace Officer/Firefighter service; or
 - (ii) 30 paid-up years of PERS "all other" or "elected official" service.

Benefit Type: 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 under the "20 and out" or "30 and out" provisions. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

Members may elect an early retirement or a joint and survivor option. Members who entered the PERS prior to July 1, 1996 may also select a 66-2/3 last survivor option and a level income option. Under these options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

Benefit Calculations: Retirement benefits are calculated by multiplying the average monthly compensation (AMC) times credited PERS service times the percentage multiplier. The AMC is determined by averaging the salaries earned during the five highest (three highest for Peace Officer/Firefighter members or members hired prior to July 1, 1996) consecutive payroll years. Members must earn at least 115 days of credit in the last year worked to include it in the AMC calculation. The PERS pays a minimum benefit of \$25.00 per month for each year of service when the calculated benefit is less.

The percentage multipliers for Peace Officer/Firefighter members are 2% for the first ten years of service and 2.5% for all service over 10 years.

The percentage multipliers for all Others are 2% for the first ten years, 2.25% for the next ten years, and 2.5% for all remaining service earned on or after July 1, 1986. All service before that date is calculated at 2%.

Summary of Plan Provisions and Changes in Plan Provisions

Indebtedness: Members who terminate and refund their PERS contributions are not eligible to retire, unless they return to PERS employment and pay back their refunds plus interest or accrue additional service which qualifies them for retirement. PERS refunds must be paid in full if the corresponding service is to count toward the minimum service requirements for retirement. Refunded PERS service is included in total service for the purpose of calculating retirement benefits. However, if a member is otherwise eligible to retire, 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

Retirement and retiree healthcare benefits are suspended while retired members are reemployed under the PERS. During reemployment, members earn additional PERS service and contributions are withheld from their wages. A member who retired with a normal retirement benefit can elect to waive payment of PERS contributions. The waiver allows the member to continue receiving the retirement benefit during the period of reemployment. Members who elect the waiver option do not earn additional PERS service. The Waiver Option first became effective July 1, 2005 and applies to reemployment periods after that date. The Waiver Option is not available to members who retired early or under the Retirement Incentive Programs (RIPs). The Waiver Option is no longer available after June 30, 2009.

Members retired under the Retirement Incentive Programs (RIPs) who return to employment under the PERS, Teachers' Retirement System (TRS), or the University of Alaska's Optional Retirement Plan will:

- (a) forfeit the three years of incentive credits that they received;
- (b) owe the PERS 150% of the benefits that they received for state and political subdivision members, and 110% for school district employees, under the 1996-2000 RIP, which may include costs for health insurance, excluding amounts that they paid to participate for the 1986 and 1989 RIPs. Under prior RIPs, the penalty is 110% of the benefits received; 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.

Summary of Plan Provisions and Changes in Plan Provisions

(11) Postemployment Healthcare Benefits

Major medical benefits are provided to retirees and their surviving spouses by the PERS for all employees hired before July 1, 1986 (Tier 1) and disabled retirees. Employees hired after June 30, 1986 (Tier 2) and their surviving spouses with five years of credited service (or ten years of credited service for those first hired after June 30, 1996 (Tier 3)) must pay the full monthly premium if they are under age sixty and will receive benefits paid by the PERS if they are over age sixty. Tier 3 Members with between five and ten years of credited service must pay the full monthly premium regardless of their age. Tier 2 and Tier 3 Members with less than five years of credited service are not eligible for postemployment healthcare benefits. Tier 2 Members who are receiving a conditional benefit and are age eligible are eligible for postemployment healthcare benefits. In addition, Peace Officers and their surviving spouses with twenty-five years of Peace Officer membership service and Other employees and their surviving spouses with thirty years of membership service receive benefits paid by the PERS, regardless of their age or date of hire. Peace Officers / Firefighters who are disabled between 20 and 25 years must pay the full monthly premium.

(12) Disability Benefits

Monthly disability benefits are paid to permanently disabled members until they die, recover or become eligible for normal retirement. Members are appointed to normal retirement on the first of the month after they become eligible.

Occupational Disability: Members are not required to satisfy age or service requirements to be eligible for occupational disability. Monthly benefits are equal to 40% of their gross monthly compensation on the date of their disability. Members on occupational disability continue to earn PERS service until they become eligible for normal retirement. Peace Officer/Firefighter members may elect to retain the disability benefit formula for the calculation of their normal retirement benefits.

Nonoccupational Disability: Members must be vested (five paid-up years of PERS service) to be eligible for nonoccupational disability benefits. Monthly benefits are calculated based on the member's average monthly compensation and PERS service on the date of termination from employment because of disability. Members do not earn PERS service while on nonoccupational disability.

(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 occupational and nonoccupational death provisions, the designated beneficiary receives the lump sum benefit described below.

Summary of Plan Provisions and Changes in Plan Provisions

Occupational Death: When an active member (vested or nonvested) dies from occupational causes, a monthly survivor's pension may be paid to the spouse. The pension equals 40% of the member's gross monthly compensation 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 salary on the date of death and service, including service accumulated from the date of the member's death to the normal retirement date. Survivors of Peace Officer/Firefighter members receive the greater of 50% of the member's gross monthly compensation on the date of death or disability, or 75% of the member's monthly normal retirement benefit (including service projected to Normal Retirement). If the member is unmarried with no children, a refund of contributions is payable to the estate.

Death after Occupational Disability: When a member dies while occupationally disabled, benefits are paid as described above in Occupational Death.

Nonoccupational Death: 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. The monthly benefit is calculated on the member's average monthly compensation and PERS service at the time of termination or death.

Lump Sum Nonoccupational Death Benefit: Upon the death of a member who has less than one year of service, the designated beneficiary receives the member's contribution account, which includes mandatory and voluntary contributions, indebtedness payments, and interest earned. If the member has more than one year of PERS service or is vested, the beneficiary also receives \$1,000 and \$100 for each year of PERS service.

Death After Retirement: When a retired member dies, the designated beneficiary receives the member's contribution account, less any benefits already paid and the member's last benefit check. If the member selected a survivor option at retirement, the eligible spouse receives continuing, lifetime monthly benefits.

(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 PERS 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 has been receiving benefits for at least five years.

Summary of Plan Provisions and Changes in Plan Provisions

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who first entered the PERS before July 1, 1986 (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 or \$50, whichever is more. The following benefit recipients are eligible:

- (a) members who first entered the PERS before July 1, 1986 (Tier 1) and their survivors;
- (b) members who first entered the PERS after June 30, 1986 (Tiers 2 & 3) 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.

Description of Actuarial Methods and Valuation Procedures

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.

(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 dollar amount. The initial unfunded accrued liability was established on June 30, 2002 and amortized over a closed 25-year period. Any changes in the unfunded accrued liability established after June 30, 2002 due to changes in plan provisions, actuarial methods or assumptions, or actuarial experience are amortized over a 25-year period from the date established. 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.

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 payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The 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.

Description of Actuarial Methods and Valuation Procedures

(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 fair value of assets.

Changes in Methods Since the Prior Valuation

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

(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 Public Employees' Retirement System postemployment healthcare plan. Note that methodology reflects the results of our annual experience rate update for the period July 1, 2012 to June 30, 2013.

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 HealthSmart management level reporting for fiscal 2010 through 2013 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 for fiscal 2010 through 2012. Fiscal 2013 management level reporting includes the percentage of claims attributable to both groups but does not address enrollment by group. DB Tier retiree census supplied by the Division was split into under and over age 65 counts as a proxy for fiscal 2013 Medicare and non-Medicare enrollment. Historical claim level reporting and estimated impacts of Medicare coordination and plan design were used to augment cost data by Medicare status.

Description of Actuarial Methods and Valuation Procedures

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 HealthSmart, 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 and/or re-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 incurred 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 deemed incurred claim data from HealthSmart management reports to be complete for fiscal 2010, 2011 and 2012. Fiscal 2013 medical claim data was completed using a factor of 0.82; fiscal 2013 prescription claim data was completed using a factor of 0.90 – these factors were derived from historic completion patterns for AlaskaCare retiree claims. Incurred claim cost rates are projected forward to the valuation year using a blend of Alaska plan-specific trend and national trend rates over the same period, with Alaska experience receiving 75% weight, national trend 25%. These weighted trend factors for this purpose for the current valuation are as follows:

Experience Period	Alaska-Specific and National Average Weighted Trend from Experience Period to Valuation Year		Weighting Factors
	Medical	Prescription	
FY2010 to FY2011	13.0%	9.6%	10%
FY2011 to FY2012	8.1%	4.5%	20%
FY2012 to FY2013	8.3%	5.1%	40%
FY2013 to FY2014	8.9%	7.1%	30%

Description of Actuarial Methods and Valuation Procedures

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 other than noted fees 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 disclosure, Buck estimated the year in which the tax would potentially affect Alaska to be sufficiently far into the future to produce a minimal impact. Buck determined the impact to be immaterial based on a blend of pre-Medicare and Medicare retirees.

Patient-centered outcomes research fees and transitional reinsurance fees are included in the admin fees.

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.

State of Alaska Public Employees' Retirement System

Section 6.2 (cont'd)

Description of Actuarial Methods and Valuation Procedures

June 30, 2013 Valuation – FY 2014 Claims Cost Rates

	Medical			Prescription Drugs			Total
	Pre-Medicare	Medicare A&B	Medicare B Only	Pre-Medicare	Medicare A&B	Medicare B Only	
Fiscal 2010 Incurred Claims	\$ 233,601,103	\$ 60,082,942	\$ 1,421,948	\$ 59,287,225	\$ 69,463,204	\$ 394,011	\$ 424,250,433
Membership	32,026	27,915	156	32,026	27,915	156	60,097
Paid Claims Cost Rate	\$ 7,294	\$ 2,152	\$ 9,115	\$ 1,851	\$ 2,488	\$ 2,526	\$ 7,059
Trend to FY2014	1.441	1.441	1.441	1.289	1.289	1.289	
FY 2014 Paid Cost Rate	\$ 10,514	\$ 3,102	\$ 13,138	\$ 2,387	\$ 3,208	\$ 3,256	\$ 9,848
Improved Provider Contracting Factor	0.970	0.970	0.970	0.993	0.993	0.993	
FY 2014 Incurred Cost Rate	\$ 10,200	\$ 3,010	\$ 12,747	\$ 2,370	\$ 3,186	\$ 3,233	\$ 9,618
Fiscal 2011 Incurred Claims	\$ 232,732,266	\$ 55,615,233	\$ 849,185	\$ 48,403,436	\$ 85,633,319	\$ 393,948	\$ 423,627,387
Membership	31,362	29,997	138	31,362	29,997	138	61,497
Paid Claims Cost Rate	\$ 7,421	\$ 1,854	\$ 6,154	\$ 1,543	\$ 2,855	\$ 2,855	\$ 6,889
Trend to FY2014	1.275	1.275	1.275	1.176	1.176	1.176	
FY 2014 Paid Cost Rate	\$ 9,463	\$ 2,364	\$ 7,847	\$ 1,816	\$ 3,358	\$ 3,358	\$ 8,568
Improved Provider Contracting Factor	0.970	0.970	0.970	0.993	0.993	0.993	
FY 2014 Incurred Cost Rate	\$ 9,181	\$ 2,294	\$ 7,613	\$ 1,803	\$ 3,335	\$ 3,335	\$ 8,372
Fiscal 2012 Incurred Claims	\$ 233,633,045	\$ 71,443,709	\$ 1,586,219	\$ 50,486,235	\$ 95,369,339	\$ 589,833	\$ 453,108,380
Membership	29,500	33,631	208	29,500	33,631	208	63,339
Paid Claims Cost Rate	\$ 7,920	\$ 2,124	\$ 7,626	\$ 1,711	\$ 2,836	\$ 2,836	\$ 7,154
Trend to FY2014	1.180	1.180	1.180	1.126	1.126	1.126	
FY 2014 Paid Cost Rate	\$ 9,343	\$ 2,506	\$ 8,997	\$ 1,927	\$ 3,193	\$ 3,193	\$ 8,315
Improved Provider Contracting Factor	0.970	0.970	0.970	0.993	0.993	0.993	
FY 2014 Incurred Cost Rate	\$ 9,065	\$ 2,431	\$ 8,728	\$ 1,913	\$ 3,170	\$ 3,170	\$ 8,126

State of Alaska Public Employees' Retirement System

Section 6.2 (cont'd)

Description of Actuarial Methods and Valuation Procedures

June 30, 2013 Valuation – FY 2014 Claims Cost Rates

	Medical			Prescription Drugs			Total
	Pre-Medicare	Medicare A&B	Medicare B Only	Pre-Medicare	Medicare A&B	Medicare B Only	
Fiscal 2013 Incurred Claims	\$ 245,965,030	\$ 75,299,373	\$ 1,948,514	\$ 57,036,466	\$ 107,792,216	\$ 616,977	\$ 488,658,576
Membership	27,036	37,912	217	27,036	37,912	217	65,165
Paid Claims Cost Rate	\$ 9,098	\$ 1,986	\$ 8,979	\$ 2,110	\$ 2,843	\$ 2,843	\$ 7,499
Trend to FY2014	1.089	1.089	1.089	1.071	1.071	1.071	
FY 2014 Paid Cost Rate	\$ 9,911	\$ 2,164	\$ 9,783	\$ 2,259	\$ 3,045	\$ 3,045	\$ 8,123
Improved Provider Contracting Factor	0.970	0.970	0.970	0.993	0.993	0.993	
FY 2014 Incurred Cost Rate	\$ 9,616	\$ 2,099	\$ 9,491	\$ 2,244	\$ 3,024	\$ 3,024	\$ 7,943
Weighted Average 7/1/2013-6/30/2014 Incurred Claims Cost Rates:							
At average age	\$ 9,367	\$ 2,362	\$ 9,136	\$ 2,036	\$ 3,161	\$ 3,166	\$ 8,362
At age 65	\$ 11,125	\$ 1,726	\$ 6,676	\$ 2,621	\$ 2,621	\$ 2,621	\$ 8,208

Description of Actuarial Methods and Valuation Procedures

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:

**Distribution of Per Capita Claims Cost by Age
for the Period July 1, 2013 through June 30, 2014**

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug	Medicare Retiree Drug Subsidy
45	\$ 6,161	\$ 6,161	\$ 1,383	\$ 0
50	6,971	6,971	1,642	0
55	7,887	7,887	1,950	0
60	9,367	9,367	2,261	0
65	1,726	6,676	2,621	502
70	2,100	8,122	2,824	541
75	2,493	9,645	3,012	577
80	2,686	10,390	3,088	591

Summary of Actuarial Assumptions and Changes in Assumptions

The demographic and economic assumptions used in the June 30, 2013 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.

Investment Return / Discount Rate	8.00% per year (geometric), compounded annually, net of expenses.
Salary Scale	Inflation – 3.12% per year. Productivity – 0.50% 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)*	<u>Peace Officer/Firefighter:</u> Based upon the 2005-2009 actual mortality experience (see Table 2). 1994 Group Annuity Mortality (GAM) Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 80% of the male table for males and 60% of the female table for females. <u>Others:</u> Based upon the 2005-2009 actual mortality experience (see Table 3). 1994 GAM Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 75% of the male table for males and 55% of the female table for females. Deaths are assumed to be occupational 75% of the time for Peace Officer/Firefighter, 55% of the time for Others.
Mortality (Post-termination)*	1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year set-forward for females. (See Table 4.)
Total Turnover	Based upon the 2005-2009 actual withdrawal experience. (See Table 5.)
Disability	Incidence rates based upon the 2005-2009 actual experience, in accordance with Table 6. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table. Disabilities are assumed to be occupational 75% of the time for Peace Officer/Firefighter, 55% of the time for Others.
Retirement	Retirement rates based upon the 2005-2009 actual experience in accordance with Tables 7 and 8. Deferred vested members are assumed to retire at their earliest unreduced retirement date for Others. For Peace Officer/Firefighter, Tier 1 deferred vested members are assumed to retire at age 53 and Tiers 2 and 3 deferred vested members are assumed to retire at age 57.
Marriage and Age Difference	Wives are assumed to be three years younger than husbands. 80% of male members and 70% of female members are assumed to be married.

*The mortality assumptions include an allowance for expected future mortality improvement. The mortality table used was set in 2010 with an Actual Deaths to Expected Deaths ratio of 109%.

Summary of Actuarial Assumptions and Changes in Assumptions

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	15% 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.	
COLA	Of those benefit recipients who are eligible for the COLA, 70% are assumed to remain in Alaska and receive the COLA.	
Post-Retirement Pension Adjustment	50% and 75% of assumed inflation, or 1.56% and 2.34% respectively, is valued for the annual automatic Post-Retirement Pension Adjustment (PRPA) as specified in the statute.	
Expenses	All expenses are net of the investment return assumption.	
Part-Time Status	Part-time employees are assumed to earn 1.00 years of credited service per year for Peace Officer/Firefighter and 0.65 years of credited service per year for Other members.	
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 adjusted to age 65 for FY14 medical and prescription are shown below:	
	Medical	Prescription Drugs
	Pre-Medicare	\$ 2,621
	Medicare Parts A & B	\$ 2,621
	Medicare Part B Only	\$ 2,621
	Medicare Part D	\$ 502
Third Party Administrator Fees	\$177.57 per person per year; assumed trend rate of 5% per year.	
Medicare Part B Only	For actives and retirees not yet Medicare-eligible, participation is set based on whether the employee/retiree will have 40 quarters of employment after March 31, 1986, depending upon date of hire and/or re-hire.	

Section 6.3 (cont'd)

**Summary of Actuarial Assumptions
and Changes in Assumptions**

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, 8.7% is applied to the FY14 pre-Medicare medical claims cost to get the FY15 medical claims cost.

	Medical Pre-65	Medical Post-65	Prescription Drugs
FY14	8.7%	6.4%	6.3%
FY15	8.5%	6.3%	6.2%
FY16	8.0%	6.3%	6.2%
FY17	7.5%	6.2%	6.1%
FY18	7.0%	6.1%	6.0%
FY19	6.6%	6.1%	5.8%
FY20	6.4%	6.1%	5.8%
FY25	6.0%	6.0%	5.7%
FY50	5.0%	5.0%	5.0%
FY100	4.5%	4.5%	4.5%

For the June 30, 2012 valuations and later, the updated 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. This model has been adopted by the Society of Actuaries, and has been populated with assumptions that are specific to the State of Alaska.

Aging Factors

	Medical	Prescription Drugs
Age		
0-44	2.0%	4.5%
45-54	2.5%	3.5%
55-64	3.5%	3.0%
65-73	4.0%	1.5%
74-83	1.5%	0.5%
84-93	0.5%	0.0%
94+	0.0%	0.0%

Summary of Actuarial Assumptions and Changes in Assumptions

Retired Member Contributions
for Medical Benefits

Currently contributions are required for PERS members who are under age 60 and have less than 30 years of service (25 for Peace Officer/Firefighter). Eligible Tier 1 members are exempt from contribution requirements. Annual FY14 contributions based on monthly rates shown below for calendar 2013 and 2014 are assumed based on the coverage category for current retirees. The composite rate shown is used for current active and inactive members in tier 2 or 3 who are assumed to retire prior to age 60 with less than 30 years of service and who are not disabled.

Coverage Category	Calendar 2014 Annual Contribution	Calendar 2014 Monthly Contribution	Calendar 2013 Monthly Contribution
Retiree Only	\$ 9,876	\$ 823	\$ 807
Retiree and Spouse	\$ 19,764	\$ 1,647	\$ 1,615
Retiree and Child(ren)	\$ 13,956	\$ 1,163	\$ 1,140
Retiree and Family	\$ 23,844	\$ 1,987	\$ 1,948
Composite	\$ 14,676	\$ 1,223	\$ 1,200

Trend Rate for Retired Member Medical
Contributions

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, 8.2% is applied to the FY14 retired member medical contributions to get the FY15 retired member medical contributions.

FY14	8.2%
FY15	8.0%
FY16	7.6%
FY17	7.2%
FY18	6.7%
FY19	6.4%
FY25	5.9%
FY50	5.0%
FY100	4.5%

Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2012 valuation. Note that actual FY14 retired member medical contributions are reflected in the valuation so trend on such contribution during FY14 is not applicable.

Healthcare Participation

100% system paid of members and their spouses are assumed to elect the 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.

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 1
Alaska PERS
Salary Scale**

Peace Officer/Firefighter:

Year of Employment	Percent Increase
1-4	6.36%
5	6.11
6	5.61
7+	4.12

Others:

Year of Employment	Percent Increase
1	9.60%
2	7.60
3	6.61
4	6.11
5	5.61
6+	Age-based

Rates vary slightly by age after 5 years of employment.

Age	Percent Increase
25	5.11%
30	4.99
35	4.86
40	4.70
45	4.53
50	4.61
55	4.24
60+	3.62

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 2
Alaska PERS Peace Officer/Firefighter
Mortality Table (Pre-termination)**

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.0303%	0.0135%
21	0.0323	0.0133
22	0.0345	0.0135
23	0.0380	0.0138
24	0.0419	0.0141
25	0.0470	0.0144
26	0.0534	0.0151
27	0.0569	0.0155
28	0.0590	0.0161
29	0.0609	0.0170
30	0.0627	0.0187
31	0.0642	0.0207
32	0.0656	0.0220
33	0.0663	0.0229
34	0.0664	0.0239
35	0.0666	0.0250
36	0.0674	0.0262
37	0.0697	0.0277
38	0.0721	0.0295
39	0.0753	0.0316
40	0.0792	0.0344
41	0.0837	0.0372
42	0.0890	0.0400
43	0.0943	0.0425
44	0.0997	0.0447
45	0.1059	0.0462
46	0.1133	0.0481
47	0.1226	0.0508
48	0.1331	0.0551
49	0.1445	0.0598
50	0.1571	0.0665
51	0.1716	0.0745
52	0.1883	0.0856
53	0.2100	0.0978
54	0.2331	0.1111
55	0.2644	0.1270
56	0.3015	0.1474
57	0.3466	0.1712
58	0.3989	0.1970
59	0.4489	0.2266
60	0.5050	0.2604

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 3
Alaska PERS Others
Mortality Table (Pre-termination)**

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.0284%	.0123%
21	.0303	.0122
22	.0324	.0123
23	.0356	.0127
24	.0392	.0129
25	.0441	.0132
26	.0501	.0138
27	.0533	.0142
28	.0553	.0148
29	.0571	.0156
30	.0588	.0171
31	.0602	.0189
32	.0615	.0202
33	.0622	.0210
34	.0623	.0219
35	.0624	.0229
36	.0632	.0240
37	.0653	.0254
38	.0676	.0271
39	.0706	.0289
40	.0742	.0315
41	.0785	.0341
42	.0834	.0366
43	.0884	.0389
44	.0935	.0409
45	.0993	.0423
46	.1063	.0441
47	.1149	.0466
48	.1248	.0505
49	.1354	.0548
50	.1473	.0610
51	.1609	.0683
52	.1765	.0784
53	.1969	.0897
54	.2186	.1018
55	.2479	.1164
56	.2827	.1352
57	.3249	.1570
58	.3739	.1806
59	.4208	.2077
60	.4734	.2387

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 4
Alaska PERS
Mortality Table (Post-termination)**

<u>Age</u>	<u>Male</u>	<u>Female</u>
50	0.1964%	0.1241%
51	0.2145	0.1426
52	0.2354	0.1631
53	0.2625	0.1851
54	0.2914	0.2117
55	0.3305	0.2457
56	0.3769	0.2854
57	0.4333	0.3284
58	0.4986	0.3777
59	0.5611	0.4339
60	0.6312	0.4979
61	0.7251	0.5701
62	0.8188	0.6527
63	0.9436	0.7450
64	1.0644	0.8442
65	1.1956	0.9476
66	1.3618	1.0523
67	1.5123	1.1499
68	1.6336	1.2424
69	1.7873	1.3422
70	1.9147	1.4342
71	2.0940	1.5830
72	2.2981	1.7260
73	2.5175	1.9177
74	2.7475	2.0940
75	3.0609	2.3377
76	3.0609	2.6690
77	3.7879	2.9853
78	4.2924	3.3273
79	4.8681	3.7068
80	5.5102	4.1355
81	6.2135	4.6249
82	6.9722	5.1616
83	7.6164	5.7377
84	8.4319	6.4966
85	9.1495	7.3658

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 5
Alaska PERS
Total Turnover Assumptions**

Peace Officer/Firefighter:

Select Rates of Turnover During the First 5 Years of Employment	
Year of Employment	Unisex Rates
1	15.00%
2	10.00
3	8.00
4	7.00
5	6.00

Ultimate Rates of Turnover After the First 5 Years of Employment		
Age	Male	Female
20	4.11%	5.19%
25	4.08	5.17
30	4.04	5.14
35	4.02	5.09
40	3.95	5.00
45	3.78	4.85
50	3.49	4.58
55	2.91	4.06
60	1.57	2.64
65+	4.32	5.40

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 5
Alaska PERS
Total Turnover Assumptions**

Others:

Year of Employment	Age at Hire	
	20-34	35+
	Unisex Rates	Unisex Rates
1	29.00%	20.00%
2	25.00	17.00
3	20.00	14.00
4	16.00	11.00
5	13.00	10.00

**Ultimate Rates of Turnover
After the First 5 Years of Employment**

Age	Male	Female
20	9.50%	13.68%
25	9.50	13.67
30	9.50	12.60
35	7.00	9.30
40	5.90	7.35
45	5.24	6.04
50	5.09	5.94
55	4.80	5.74
60	4.19	5.23
65+	5.50	6.25

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 6
Alaska PERS
Disability Table**

<u>Age</u>	<u>Peace Officer/ Firefighter Rate</u>	<u>Other Member Rate</u>	
		<u>Male</u>	<u>Female</u>
20	.088%	.031%	.024%
21	.089	.031	.024
22	.090	.032	.024
23	.091	.032	.024
24	.093	.033	.025
25	.094	.033	.025
26	.095	.033	.025
27	.098	.034	.026
28	.100	.035	.027
29	.103	.036	.028
30	.105	.037	.029
31	.108	.037	.029
32	.110	.038	.029
33	.113	.039	.030
34	.116	.041	.031
35	.120	.042	.032
36	.124	.044	.034
37	.129	.045	.035
38	.134	.047	.036
39	.139	.048	.037
40	.144	.050	.039
41	.150	.052	.040
42	.159	.056	.043
43	.170	.059	.045
44	.185	.065	.050
45	.203	.071	.055
46	.220	.077	.059
47	.239	.083	.064
48	.259	.091	.070
49	.279	.097	.075
50	.300	.105	.081
51	.325	.114	.087
52	.358	.125	.096
53	.398	.139	.107
54	.444	.155	.119
55	.500	.175	.134
56	.574	.201	.155
57	.668	.234	.180
58	.763	.267	.205
59	.900	.315	.242
60	1.054	.368	.283

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 7
Alaska PERS Peace Officer/Firefighter
Retirement Table**

Age at Retirement	Retirement Rate	
	Reduced Unisex Rates	Unreduced Unisex Rates
<50	N/A	11.00%
50	10.00%	18.50
51	10.00	18.50
52	10.00	18.50
53	10.00	18.50
54	11.00	18.50
55	10.00	25.00
56	10.00	25.00
57	10.00	25.00
58	10.00	25.00
59	11.00	25.00
60	N/A	30.00
61	N/A	25.00
62	N/A	30.00
63	N/A	25.00
64-74	N/A	50.00
75	N/A	100.00

**Summary of Actuarial Assumptions
and Changes in Assumptions**

**Table 8
Alaska PERS Others
Retirement Table**

Age at Retirement	Retirement Rate	
	Reduced	Unreduced
	Unisex Rates	Unisex Rates
<50	N/A	10.00%
50	8.00%	30.00
51	8.00	30.00
52	8.00	30.00
53	8.00	30.00
54	13.00	30.00
55	8.00	30.00
56	8.00	17.50
57	8.00	17.50
58	8.00	16.50
59	12.00	16.50
60	N/A	20.50
61	N/A	16.50
62	N/A	24.50
63	N/A	20.50
64	N/A	22.50
65	N/A	26.00
66	N/A	26.00
67	N/A	26.00
68	N/A	27.50
69	N/A	30.00
70-89	N/A	50.00
90		100.00

Summary of Actuarial Assumptions and Changes in Assumptions

Changes in Actuarial Assumptions Since the Prior Valuation

There have been no changes in actuarial assumptions since the prior valuation.

State of Alaska Public Employees' Retirement System

Glossary of Terms

Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension plan for a group of plan members to the years of service that give rise to that cost.
Actuarial Present Value of Projected Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual Required Contribution	Disclosure measure of annual pension cost.
GASB 25 and 27	Governmental Accounting Standards Board Statement Number 25 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 27 which specifies Employer reporting of Pension Cost.
GASB 43 and 45	Governmental Accounting Standards Board Statement Number 43 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 45 which specifies Employer reporting of Other Post-Employment Benefit (OPEB) Cost.
Liquidity Factor	Is calculated as the average annual Fair Value of Assets divided by the total annual benefit payments. This measures the approximate number of years that assets will cover benefit payments without contributions or investment return. Trend shows solvency risk.
Maturity Ratio	The ratio of the actuarial accrued liability for members who are no longer active to the total actuarial accrued liability. A ratio of over 50% indicates a mature plan. The higher the maturity ratio, the more volatile the contribution rate will be from year to year given actuarial gains and losses.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the plan as a whole.
Unfunded Actuarial Accrued Liability (UAAL)	The portion of the actuarial accrued liability not offset by plan assets.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.