



State of Alaska  
Public Employees'  
Retirement System

Actuarial Valuation Report as of June 30, 2007



Submitted By:  
Buck Consultants  
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July 17, 2008

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

Dear Members of the Board:

### **Actuarial Certification**

The annual actuarial valuation required for the State of Alaska Public Employees' Retirement System has been prepared as of June 30, 2007 by Buck Consultants. The purposes of the report include:

- (1) a presentation of the valuation results of the Plan as of June 30, 2007;
- (2) a review of experience under the Plan for the year ended June 30, 2007;
- (3) a determination of the appropriate contribution rate for each employer in the System which will be applied for the fiscal year ending June 30, 2010; and
- (4) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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

- (1) Summary of actuarial assumptions and methods (Section 2.3)
- (2) Schedule of active member valuation data (Section 2.2(d) and (f))
- (3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(p) and 2.2(q))
- (4) Solvency test (Section 3.3)
- (5) Analysis of financial experience (Section 3.1)
- (6) Summary of GASB No. 25 and 43 disclosure information (Section 3.2)

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the Division of Retirement and Benefits and financial information provided in the financial statements audited by KPMG LLP, to determine a sound value for the System liability. The employee data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data. The actuarial assumptions are based on the results of an experience study presented to and adopted by the Board in October 2006. Actuarial methods, medical cost trend, and assumed blended medical premiums were also reviewed and revised during the experience study.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY08 and a fixed 25-year amortization as level percentage of payroll of the initial unfunded accrued liability and subsequent gains/losses. The payroll used to determine the contribution rates is the total payroll of all active members in the system, including those hired after July 1, 2006 who are in the Defined Contribution Retirement (DCR) Plan. The amortization period is set by the Board. Contribution levels are recommended by the Actuary and adopted by the Board each year. The ratio of valuation assets to liabilities increased from 62.8% to 68.0% during the year. This report provides an analysis of the factors that led to the increase. This report also provides a history of the funding ratio of the System.

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

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

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

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

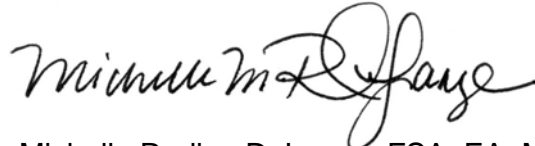
We believe that the assumptions and methods used for funding purposes and for the disclosures presented in this report satisfy the parameter requirements set forth in the Government Accounting Standards Board (GASB) Statement Nos. 25 and 43.

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

Sincerely,

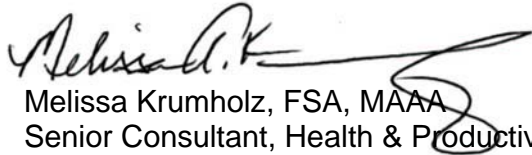


David H. Sliskinsky, ASA, EA, MAAA  
Principal, Consulting Actuary



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

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



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

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## Report Highlights

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

- (1) Present the results of a valuation of the Alaska Public Employees' Retirement System as of June 30, 2007;
- (2) Review experience under the plan for the year ended June 30, 2007;
- (3) Determine the appropriate contribution rate for each employer in the System; and
- (4) Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

This report is divided into three sections. Section 1 contains the results of the valuation. It includes the experience of the plan during Fiscal Year 2007, the current annual costs, and reporting and disclosure information.

Section 2 describes the basis of the valuation. It summarizes the plan provisions, provides information relating to the plan participants, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

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

The principal results are as follows:

<b>Funding Status as of June 30<sup>1</sup></b>	<b>2006</b>	<b>2007</b>
(a) Valuation Assets <sup>2</sup>	\$ 9,040,908	\$ 9,900,960
(b) Accrued Liability <sup>2</sup>	\$ 14,388,413	\$ 14,570,933
(c) Unfunded Accrued Liability <sup>2</sup>	\$ 5,347,505	\$ 4,669,973
(d) Funding Ratio based on Valuation Assets, (a) ÷ (b)	62.8%	68.0%
(e) Market Value of Assets <sup>2</sup>	\$ 9,379,471	\$ 10,929,964
(f) Funding Ratio based on Market Assets, (e) ÷ (b)	65.2%	75.0%

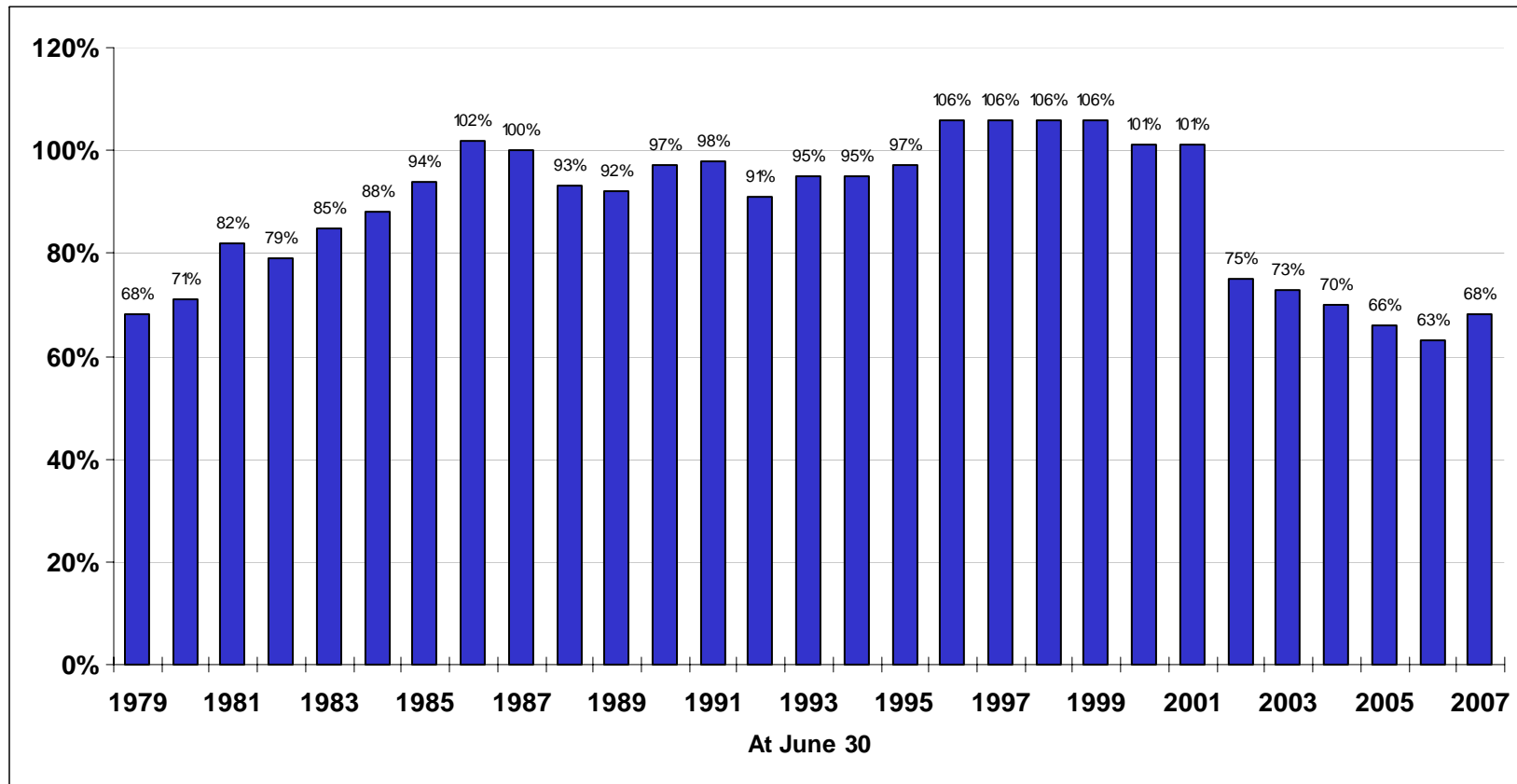
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<sup>1</sup> Includes pension and postemployment healthcare benefits.

<sup>2</sup> In thousands.

## Report Highlights *(continued)*

### PERS Funding Ratio History (Based on Valuation Assets)





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## Report Highlights *(continued)*

<b>Total Employer Contribution Rates for Fiscal Year:</b>	<b>2009</b>	<b>2010<sup>1</sup></b>
(a) Consolidated Employer Normal Cost Rate	13.72%	9.46%
(b) Average Past Service Rate	21.50%	18.19%
(c) Average Employer Contribution Rate <i>(a) + (b)</i>	35.22%	27.65%
(d) Board Adopted Average Employer Contribution Rate	35.22%	27.65%

<b>Employer Contribution Rates for Pension for Fiscal Year:</b>	<b>2009</b>	<b>2010<sup>1</sup></b>
(a) Consolidated Employer Normal Cost Rate	3.82%	2.91%
(b) Average Past Service Rate	7.09%	7.34%
(c) Average Employer Contribution Rate <i>(a) + (b)</i>	10.91%	10.25%

<b>Employer Contribution Rates for Postemployment Healthcare for Fiscal Year:</b>	<b>2009</b>	<b>2010<sup>1</sup></b>
(a) Consolidated Normal Cost Rate	9.90%	6.55%
(b) Average Past Service Rate	14.41%	10.85%
(c) Average Employer Contribution Rate <i>(a) + (b)</i>	24.31%	17.40%

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

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<sup>1</sup> Contribution rates are based on total salaries for DB and DCR plan members, combined.

## Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio based on valuation assets as of June 30, 2007 has increased from 62.8% to 68.0%, an increase of 5.2%. The average calculated employer contribution rate has decreased from 35.22% of payroll for FY09 to 27.65% for FY10, a decrease of 7.6% of payroll. The reasons for the change in the funded status and average 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%

As shown in the above table, the monthly retiree medical premium for the January 1, 2008 to December 31, 2008 time period will remain at \$876. Although this represents no change over the previous year's medical premium, our expectation is that medical costs will increase at higher rates in the future. The health cost trend rates used for this valuation are described in Section 2.3. Over the last 10 years, annual premium rate changes have ranged from no change to up to 20%. Also, over the last ten years, the increase in the premium rate has been about 9.1% compounded annually.

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## Analysis of the Valuation *(continued)*

To help avoid the volatility in the funding and solvency of the System from bringing large health-related gains and losses into the System every year, the health cost trend assumption was being used to determine actuarial liabilities for retiree medical benefits. On June 30, 2002, the assumed total blended premium was reset to the actual total blended premium for FY03.

Effective with the 2004 valuation, the assumptions used to value liabilities for retiree medical benefits were changed. The revised methods and assumptions more accurately measured retiree medical liabilities and incorporated the expected impact on System liabilities due to changes in the Medicare program. In particular, changes were made to the following elements in calculating medical liabilities:

- Claims cost methodology and development
- Offset for Medicare
- Aging factors
- Trend rates

An analysis of medical costs was completed based on claims information provided by Aetna and enrollment data provided by the Division of Retirement and Benefits. 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 2007 valuation, we updated claims cost and Medicare offset analyses using additional claims and enrollment information, and the same methodology as used for the 2005 Experience Analysis. This methodology differs from that used for the 2005 valuation to better reflect Medicare offsets based on eligibility for Medicare Parts A and B. We developed assumptions regarding the number of members with Medicare Part B only coverage and associated claims costs. A lower average claims cost was applied to retirees assumed to be covered by both Medicare Part A and B vs. retirees assumed to be covered only by Medicare Part B. The assumed lag used to adjust claims data from a paid to incurred basis reflects the results of our June 30, 2007 lag study. Assumed lag from incurred date to paid claim is approximately 2.3 months for medical and prescription claims and 0.6 months for prescription claims. Composite lag for combined medical claims is about 2.0 months, similar to the 2-month composite lag assumption used for our 2006 valuation. The trend assumption varies by year, declining to an ultimate rate equal to inflation (3.5%) plus 1.5%, or 5%, for FY15 and later. We recommend no changes to the healthcare trend assumption used for 2005 and 2006, nor the contribution trend rate assumption used for 2006.

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## Analysis of the Valuation *(continued)*

Individual claim level detail from Aetna and Premera were obtained for calendar years 2004, 2005 and 2006. This data was reviewed and compared to management level reporting supplied by both Aetna and Premera. For the 2007 valuation, we have not modified any management level reporting information used to develop per capita claim cost rates. However, we will continue to compare data from both sources and potentially modify future claims cost rate derivation to reflect salient information at the individual claimant level that may enhance global management level data. We used individual claimant detail to develop age-graded cost rates for the 2004-2006 period and compared these to the morbidity assumptions in place from the 2004 valuation. For the 2007 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. The portion of retirees assumed to be eligible for Medicare Parts A and B and for Part B only was modified based on analysis of individual claims, decreasing the Part B only proportion of all Medicare retirees from 7.5% to 5.0%. Finally, explicit third-party administration (TPA) costs were added to medical and prescription claims cost rates. Per-member TPA costs are derived from the current Premera contract and are projected to increase at the assumed rate of 5%.

Since 2004, the funding valuation also reflects the impact of the Medicare Part D Retiree Drug Subsidy (RDS) in the projection of prescription drug benefit costs. Buck's actuaries have attested that the prescription drug benefits meet the actuarial equivalence requirements and the plan qualifies to receive the RDS under the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) for calendar 2007 and 2008. Based on current plan provisions and utilization data, we anticipate the plan will continue to qualify for RDS payments. The State has received RDS payments for calendar 2006; final reconciliation of all such payments for calendar 2006 is underway. In future valuations, reconciled RDS amounts will be used to refine our assumptions of base year and future RDS payments. 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 significantly favorable. Part of this favorable experience is attributable to greater hospital and other provider discounts included in the Premera network effective July 1, 2006, as compared to Aetna contracted amounts reflected in claims data for prior periods. While improved provider discounts were anticipated, we explicitly excluded any claims cost reduction assumptions in this regard from the 2006 valuation and recommended a wait-and-see approach instead. Improved provider discounts are now reflected in the most recent 12 months of the data used to estimate claims costs. This most recent experience period also includes favorable utilization rates and patterns as compared to prior years. As with the 2005 Experience Analysis and 2006 valuation methodology, the 2007 valuation mitigates recent favorable experience by equally weighting each of the four 12-month experience periods used. In future valuations, as Premera-specific data gains credibility, we will assess giving more recent experience greater weight in the overall claims cost rate development process. While continuing to explicitly dampen weighting given to more recent experience periods, we have modified

## Analysis of the Valuation *(continued)*

trend rates used to roll prior data forward to the valuation date, thereby more closely reflecting Alaska-specific experience. In the 2006 valuation, we used only the set of trend assumptions historically used for projection purposes to bring prior year forward to the valuation year. For 2007, we averaged these national trend assumptions with more favorable Alaska-specific trend during the experience period. In total, favorable claim experience and assumption changes drive most of the 6.82% decrease in the employer contribution rate from the 2006 valuation.

The following table summarizes data sources and assumptions and the relative impact changes in each have on healthcare cost projections for 2007 as compared to 2006:

<b>Healthcare Cost Rate Data Source or Assumption Change, 2007 vs. 2006</b>	<b>Gain / Loss Impact on 2007 Valuation Results</b>
Claim lag specific to medical and prescription experience (2.3 months for medical and 0.6 months for Rx versus 2.0 months combined)	Negligible
Individual claims level data	<ul style="list-style-type: none"> <li>– No impact on cost data used for 2007, though potentially a source of future modifications</li> <li>– No impact on morbidity assumptions used for 2007, though potentially a source of future modifications</li> <li>– Moderate loss from decreasing the assumed Part B only proportion of all Medicare retirees from 7.5% to 5.0%</li> </ul>
Explicit TPA fees	Modest loss
Actual RDS payments received (final reconciliation in process)	No impact on cost data used for 2007, though potentially a source of future modifications
Favorable Premera provider discounts and favorable utilization July 2006 through June 2007	Significant gain
Weighting of prior experience periods used to derive base claims during the valuation year (equal weighting for all four periods is unchanged from 2006)	Dampens the gain from favorable provider discounts and utilization since June 2006 but may be modified in future valuations
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	Moderate gain

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## Analysis of the Valuation *(continued)*

### (2) Investment Experience

The approximate FY07 investment return based on market values was 18.5% compared to the expected investment return of 8.25%. This resulted in a gain of approximately \$959 million to the System from investment experience. The asset valuation method recognizes 20 percent of this gain (\$191.7 million) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY03 investment loss, 20 percent of the FY04 investment gain, 20% of the FY05 investment gain, and 20% of the FY06 investment gain were recognized this year. The approximate FY07 investment return based on actuarial values was 11.6%, compared to the expected investment return of 8.25%. The net result was an investment gain which increased the funding ratio by 2.03% and decreased the average employer contribution rate by 1.03%.

### (3) Salary Increase

During the period from June 30, 2006 to June 30, 2007, salary increases for continuing active members were more than anticipated in the valuation assumptions. Higher accrued liabilities caused the funding ratio to decrease by 0.88%. The net effect of the salary loss was an increase of 0.23% in the average employer contribution rate.

### (4) Demographic Experience

Section 2.2 provides statistics on active participants. The number of active participants decreased 8.0%, from 34,071 at June 30, 2006 to 31,362 at June 30, 2007 due to the closure of the plan to new entrants as of July 1, 2006. The average age of active participants increased from 45.04 to 46.06 and average credited service increased from 8.92 to 9.66 years.

The number of benefit recipients increased 5.0%, from 21,901 to 22,997, and their average age increased from 65.40 to 65.69. There was a 2.9% increase in the number of vested terminated participants, from 6,219 to 6,398. Their average age increased from 48.76 to 49.07.

The overall effect of these participant data changes, along with the healthcare experience and using total payroll, was an actuarial gain to the System, resulting in a decrease in the average employer contribution rate equal to 5.81% of total payroll. The gain/loss by decrement on the accrued liability is shown on the summary page.

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## Analysis of the Valuation *(continued)*

### (5) Contribution Shortfall Compared to Average Employer Calculated Rate

As of June 30, 2006, the average employer calculated rate was 35.22% for FY09 employer contributions. Since average employer contribution rates are determined two years prior to the fiscal year, the June 30, 2004 average employer rate of 21.77% was contributed during FY07. The difference between the two calculated rates, 35.22% and 21.77%, created a contribution shortfall to the System. This shortfall increased the average employer contribution rate by 0.94%.

### (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 1.5, Actuarial Projections, contains the results of this analysis.

This type of information can be especially useful to multi-tiered systems, such as PERS. No new plan entrants are anticipated. As you can see in Section 1.5, based on the actuarial assumptions and asset valuation method, contribution rates are expected to decrease going forward.

### (7) Changes in Methods from the Prior Valuation

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

### (8) Changes in Assumptions from the Prior Valuation

There were no changes in assumptions from the prior valuation, except for assumptions regarding future net healthcare benefit costs to the plan described above in item (1), which are:

- Decreasing the assumed Part B only proportion of all Medicare retirees from 7.5% to 5.0%.
- Addition of explicit TPA fees, assumed to increase with inflation.

### (9) Changes in Derivation of Base-Year Healthcare Claims Costs

There were no changes in the derivation of base year claims costs from the prior valuation, except for changes described above in item (1), which are:

- Use of 2.3 months lag for medical claims and 0.6 months lag for prescription claims vs. 2.0 months for both types of claims combined.
- Partially reflecting Alaska-specific trend during the experience period used to develop base-year claims cost rates.

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## Analysis of the Valuation *(continued)*

### (10) Changes in Benefit Provisions Since the Prior Valuation

There have been no changes in benefit provisions since the prior valuation. SB 123 was passed in 2007 which clarified and revised statutory language to comply with federal law, created the Alaska retiree health care trust, and defined total compensation paid to the employer's active employees for purposes of determining the employer contribution rate.



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## Analysis of the Valuation *(continued)*

### Summary

The following table summarizes the sources of change in the average employer contribution rate:

	<u>Pension</u>	<u>Healthcare</u>	<u>Total</u>
1. Last year's average employer contribution rate	10.91%	24.31%	35.22%
2. Change due to:			
a. Change rate by using total payroll	(0.72)%	(1.18)%	(1.90)%
b. Contribution shortfall compared to average employer contribution rate	0.11%	0.83%	0.94%
c. Investment experience	(0.11)%	(0.92)%	(1.03)%
d. Salary increases	0.23%	N/A	0.23%
e. Demographic and medical experience <sup>1</sup>	(0.17)%	(5.64)%	(5.81)%
3. Average employer contribution rate this year	10.25%	17.40%	27.65%

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

	<u>Amount</u>
- Retirement Experience	\$ (2,716)
- Termination Experience	(7,627)
- Mortality Experience	(6,426)
- Disability Experience	(267)
- Other Demographic Experience	(61,451)
- Salary Increases	(65,045)
- Medical Experience	<u>844,548</u>
- Total	\$ 701,016

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<sup>1</sup> Includes changes in healthcare assumptions.

## Section 1

This section sets forth the results of the actuarial valuation.

- Section 1.1(a) Statement of net assets.
- Section 1.1(b) Statement of changes in net assets during FY07 and investment return during FY07.
- Section 1.1(c) Actuarial value of assets.
- Section 1.2(a) Actuarial present values for Peace Officer/Firefighter.
- Section 1.2(b) Actuarial present values for Others.
- Section 1.2(c) Actuarial present values for All Members.
- Section 1.3(a) Average employer contribution rate for Peace Officer/Firefighter for FY10.
- Section 1.3(b) Average employer contribution rate for Others for FY10.
- Section 1.3(c) Average employer contribution rate for all members for FY10.
- Section 1.4 Development of actuarial gain or loss for FY07.
- Section 1.5(a) Actuarial Projections –Projections at Calculated Rate.  
Based on Total DB and DCR Payroll.
- Section 1.5(b) Actuarial Projections – Projections at Current Rate.  
Based on Total DB and DCR Payroll.
- Section 1.5(c) Actuarial Projections – Effect of Economic Scenarios.  
Based on Total DB and DCR Payroll.

**1.1(a) Statement of Net Assets**

<b>As of June 30, 2007 (in thousands)</b>	<b>Pension</b>	<b>Postemployment Healthcare</b>	<b>Total Market Value</b>
Cash and Cash Equivalents	\$ 12,170	\$ 8,582	\$ 20,752
Domestic Equity Pool	3,346,520	604,618	3,951,138
Domestic Fixed Income Pool	1,140,609	804,265	1,944,874
International Equity Pool	1,084,261	764,533	1,848,794
Real Estate Pool	695,894	490,688	1,186,582
International Fixed Income Pool	118,280	83,402	201,682
Private Equity Pool	427,896	301,717	729,613
Emerging Markets Equity Pool	166,513	117,411	283,924
Absolute Return Pool	248,137	174,966	423,103
High Yield Pool	113,398	79,959	193,357
Other Investments Pool	74,947	52,847	127,794
Loans and Mortgages (Net of Reserves)	2	2	4
Net Accrued Receivables	10,760	7,587	18,347
Net Assets	<u>\$ 7,439,387</u>	<u>\$ 3,490,577</u>	<u>\$ 10,929,964</u>

**1.1(b) Statement of Changes in Net Assets**

Fiscal Year 2007 (in thousands)	Pension	Postemployment Healthcare	Total Market Value
(1) Net Assets, June 30, 2006 (market value)	\$ 6,568,150	\$ 2,811,321	\$ 9,379,471
(2) Additions:			
(a) Plan Member Contributions	\$ 71,023	\$ 50,080	\$ 121,103
(b) Employer Contributions	207,539	146,339	353,878
(c) Interest and Dividend Income	212,759	150,021	362,780
(d) Net Appreciation in Fair Value of Investments	814,276	574,161	1,388,437
(e) Other	<u>1,598</u>	<u>1,127</u>	<u>2,725</u>
(f) Total Additions	\$ 1,307,195	\$ 921,728	\$ 2,228,923
(3) Deductions:			
(a) Medical Benefits	\$ 0	\$ 224,553	\$ 224,553
(b) Retirement Benefits	410,545	0	410,545
(c) Refunds of Contributions	8,575	6,046	14,621
(d) Investment Expenses	13,175	9,290	22,465
(e) Administrative Expenses	<u>3,663</u>	<u>2,583</u>	<u>6,246</u>
(f) Total Deductions	\$ 435,958	\$ 242,472	\$ 678,430
(4) Net Assets, June 30, 2007 (market value)	\$ 7,439,387	\$ 3,490,577	\$10,929,964

Approximate Market Value Investment Return Rate During  
FY07, Net of All Expenses

18.5%

### 1.1(c) Actuarial Value of Assets

The actuarial value of assets was set equal to the market value at June 30, 2002. Future investment gains and losses will be recognized 20% per year over 5 years. In no event may valuation assets be less than 80% or more than 120% of market value as of the current valuation date.

	<b>In Thousands</b>
<b>(1) Deferral of Investment Return for FY07</b>	
(a) Market Value, June 30, 2006	\$ 9,379,471
(b) Contributions for FY07	474,981
- <i>Weighted for Timing</i>	237,491
(c) Benefit Payments for FY07	649,719
- <i>Weighted for Timing</i>	324,860
(d) Actual Investment Return ( <i>net of expenses</i> )	1,725,231
(e) Expected Return Rate ( <i>net of expenses</i> )	8.25%
(f) Expected Return - Weighted for Timing [(a. + b. - c.) x e.]	766,598
(g) Investment Gain/(Loss) for the Year (d. - f.)	958,633
(h) Deferred Investment Return <sup>1</sup>	1,029,004
<b>(2) Actuarial Value, June 30, 2007</b>	
(a) Market Value, June 30, 2007	\$ 10,929,964
(b) 2007 Deferred Investment Return	1,029,004
(c) Preliminary Actuarial Value, June 30, 2007 (a. - b.)	9,900,960
(d) Upper Limit: 120% of Market Value, June 30, 2007	13,115,957
(e) Lower Limit: 80% of Market Value, June 30, 2007	8,743,971
(f) Actuarial Value, June 30, 2007 (c. limited by d. and e.)	\$ 9,900,960
(g) Ratio of Actuarial Valuation of Assets to Market Value of Assets	90.59%
(h) Pension Actuarial Value of Assets	6,739,004
(i) Healthcare Actuarial Value of Assets	3,161,956
(j) Approximate Actuarial Value Investment Return Rate During FY07, Net of All Expenses	11.6%

<sup>1</sup> The table below shows the development of gain/(loss) to be recognized in the current year.

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2003	\$ (369,782)	\$ (295,824)	\$ (73,958)	\$ 0
6/30/2004	\$ 460,952	\$ 276,570	\$ 92,190	\$ 92,192
6/30/2005	\$ 23,969	\$ 9,588	\$ 4,794	\$ 9,587
6/30/2006	\$ 267,197	\$ 53,439	\$ 53,439	\$ 160,319
6/30/2007	\$ 958,633	\$ 0	\$ 191,727	\$ 766,906
<b>Total</b>	<b>\$ 1,340,969</b>	<b>\$ 43,733</b>	<b>\$ 268,192</b>	<b>\$ 1,029,004</b>

## 1.2(a) Actuarial Present Values - Peace Officer/Firefighter

As of June 30, 2007 (in thousands)	Normal Cost	Accrued Liability
<b>Active Members</b>		
Retirement Benefits	\$ 18,521	\$ 397,571
Termination Benefits	2,605	12,498
Disability Benefits	1,348	7,298
Death Benefits	859	4,871
Return of Contributions	1,464	(3,153)
Medical and Prescription Drug Benefits	11,789	207,767
Medicare Part D Subsidy	(686)	(9,744)
Indebtedness	N/A	(7,824)
Subtotal	\$ 35,900	\$ 609,284
<b>Inactive Members</b>		
Not Vested		\$ 1,771
Vested Terminations	- Retirement Benefits	17,881
	- Medical and Prescription Drug Benefits	25,916
	- Medicare Part D Subsidy	(800)
	- Indebtedness	(563)
Retirees & Beneficiaries	- Retirement Benefits	932,793
	- Medical and Prescription Drug Benefits	389,061
	- Medicare Part D Subsidy	(26,993)
Subtotal		\$ 1,339,066
<b>Total</b>	<b>\$ 35,900</b>	<b>\$ 1,948,350</b>
<b>Total Pension</b>	<b>\$ 24,797</b>	<b>\$ 1,363,143</b>
<b>Total Medical, Net of Part D Subsidy</b>	<b>\$ 11,103</b>	<b>\$ 585,207</b>

**1.2(a) Actuarial Present Values – Peace Officer/Firefighter**  
*(continued)*

As of June 30, 2007 (in thousands)	Normal Cost	Accrued Liabilities
<b>By Tier</b>		
Tier 1		
- Pension	\$ 3,156	\$ 1,016,180
- Medical, Net of Part D Subsidy	1,751	410,453
Tier 2		
- Pension	7,517	240,748
- Medical, Net of Part D Subsidy	2,390	107,521
Tier 3		
- Pension	14,124	106,215
- Medical, Net of Part D Subsidy	6,962	67,233
<b>Total</b>	<b>\$ 35,900</b>	<b>\$ 1,948,350</b>

## 1.2(b) Actuarial Present Values - Others

As of June 30, 2007 (in thousands)	Normal Cost	Accrued Liability
<b>Active Members</b>		
Retirement Benefits	\$ 95,020	\$ 2,863,833
Termination Benefits	22,494	166,736
Disability Benefits	3,965	49,740
Death Benefits	1,863	23,931
Return of Contributions	20,281	(68,187)
Medical and Prescription Drug Benefits	114,391	2,128,863
Medicare Part D Subsidy	(7,292)	(103,183)
Indebtedness	N/A	(67,122)
Subtotal	\$ 250,722	\$ 4,994,611
<b>Inactive Members</b>		
Not Vested		\$ 58,348
Vested Terminations	- Retirement Benefits	439,657
	- Medical and Prescription Drug Benefits	975,007
	- Medicare Part D Subsidy	(34,884)
	- Indebtedness	(12,424)
Retirees & Beneficiaries	- Retirement Benefits	3,844,669
	- Medical and Prescription Drug Benefits	2,574,181
	- Medicare Part D Subsidy	(216,582)
Subtotal		\$ 7,627,972
<b>Total</b>	<b>\$ 250,722</b>	<b>\$ 12,622,583</b>
<b>Total Pension</b>	<b>\$ 143,623</b>	<b>\$ 7,299,181</b>
<b>Total Medical, Net of Part D Subsidy</b>	<b>\$ 107,099</b>	<b>\$ 5,323,402</b>



**1.2(b) Actuarial Present Values - Others**  
*(continued)*

As of June 30, 2007 (in thousands)	Normal Cost	Accrued Liabilities
<b>By Tier</b>		
Tier 1		
- Pension	\$ 36,520	\$ 5,339,288
- Medical, Net of Part D Subsidy	30,560	3,511,033
Tier 2		
- Pension	37,518	1,396,684
- Medical, Net of Part D Subsidy	21,134	1,155,260
Tier 3		
- Pension	69,585	563,209
- Medical, Net of Part D Subsidy	55,405	657,109
<b>Total</b>	<b>\$ 250,722</b>	<b>\$ 12,622,583</b>

## 1.2(c) Actuarial Present Values – All Members

As of June 30, 2007 (in thousands)	Normal Cost	Accrued Liability
<b>Active Members</b>		
Retirement Benefits	\$ 113,541	\$ 3,261,404
Termination Benefits	25,099	179,234
Disability Benefits	5,313	57,038
Death Benefits	2,722	28,802
Return of Contributions	21,745	(71,340)
Medical and Prescription Drug Benefits	126,180	2,336,630
Medicare Part D Subsidy	(7,978)	(112,927)
Indebtedness	N/A	(74,946)
Subtotal	\$ 286,622	\$ 5,603,895
<b>Inactive Members</b>		
Not Vested		\$ 60,119
Vested Terminations	- Retirement Benefits	457,538
	- Medical and Prescription Drug Benefits	1,000,923
	- Medicare Part D Subsidy	(35,684)
	- Indebtedness	(12,987)
Retirees & Beneficiaries	- Retirement Benefits	4,777,462
	- Medical and Prescription Drug Benefits	2,963,242
	- Medicare Part D Subsidy	(243,575)
Subtotal		\$ 8,967,038
<b>Total</b>	<b>\$ 286,622</b>	<b>\$ 14,570,933</b>
<b>Total Pension</b>	<b>\$ 168,420</b>	<b>\$ 8,662,324</b>
<b>Total Medical, Net of Part D Subsidy</b>	<b>\$ 118,202</b>	<b>\$ 5,908,609</b>

**1.2(c) Actuarial Present Values – All Members**  
*(continued)*

As of June 30, 2007 (in thousands)	Normal Cost	Accrued Liabilities
<b>By Tier</b>		
Tier 1		
- Pension	\$ 39,676	\$ 6,355,468
- Medical, Net of Part D Subsidy	32,311	3,921,486
Tier 2		
- Pension	45,035	1,637,432
- Medical, Net of Part D Subsidy	23,524	1,262,781
Tier 3		
- Pension	83,709	669,424
- Medical, Net of Part D Subsidy	62,367	724,342
<b>Total</b>	<b>\$ 286,622</b>	<b>\$ 14,570,933</b>

**1.3(a) Average Employer Contribution Rate – FY10 Peace  
Officer/Firefighter  
(in thousands)**

<b>Consolidated Normal Cost Rate</b>	<b>Pension</b>	<b>Healthcare</b>	<b>Total</b>
(1) Total Normal Cost	\$ 24,797	\$ 11,103	\$ 35,900
(2) DB Member Salaries	201,639	201,639	201,639
(3) DCR Member Salaries	8,509	8,509	8,509
(4) Total Salaries	210,148	210,148	210,148
(5) Normal Cost Rate for Peace Officer/Firefighter			
a. Based on DB Member Salaries, (1) ÷ (2)	12.30%	5.51%	17.80%
b. Based on Total Salaries, (1) ÷ (4)	11.80%	5.28%	17.08%
(6) Member Contribution Rate (Peace Officer/Firefighter) <sup>1</sup>	7.20%	0.00%	7.20%
(7) Consolidated Employer Normal Cost Rate For Peace Officer/Firefighter, (5b) – (6)	4.60%	5.28%	9.88%
<b>Past Service Rate</b>			
(1) Accrued Liability	\$ 1,363,143	\$ 585,207	\$ 1,948,350
(2) Valuation Assets <sup>2</sup>	1,060,480	313,170	1,373,650
(3) Unfunded Liability, (1) – (2)	302,663	272,037	574,700
(4) Past Service Cost Amortization Payment <sup>3</sup>	20,839	19,400	40,239
(5) Total Salaries	210,148	210,148	210,148
(6) Past Service Rate, (4) ÷ (5)	9.92%	9.23%	19.15%
<b>Average Employer Contribution Rate</b>	<b>14.52%</b>	<b>14.51%</b>	<b>29.03%</b>
<b>Normal Cost Rate by Tier (Total Employer and Member)</b>			
Tier 1 <sup>4</sup>	13.24%	7.35%	20.59%
Tier 2 <sup>4</sup>	11.96%	3.81%	15.77%
Tier 3 <sup>4</sup>	12.28%	6.05%	18.33%

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

<sup>2</sup> Allocated between Peace Officer/Firefighters and Others in proportion to accrued liability.

<sup>3</sup> Amortized on a level percentage of pay basis.

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

**1.3(a) Average Employer Contribution Rate – FY10 Peace  
Officer/Firefighter (continued)**

**Schedule of Past Service Cost Amortizations – Peace Officer/Firefighter**

<b>Pension</b>						
	<b>Amortization Period</b>		<b>Balances</b>		<b>Beginning-of-Year Payment</b>	
	<b>Date Created</b>	<b>Years Left</b>	<b>Initial</b>	<b>Outstanding</b>		
Initial Unfunded Liability	6/30/2002	20	\$ 137,169	\$ 145,566	\$ 10,503	
FY03 Loss	6/30/2003	21	9,777	10,290	720	
FY04 Loss	6/30/2004	22	25,832	26,904	1,829	
FY05 Loss	6/30/2005	23	48,970	50,376	3,334	
Change in Assumptions/ Methods	6/30/2006	24	65,436	66,369	4,283	
FY06 Gain	6/30/2006	24	(19,153)	(19,426)	(1,254)	
FY07 Loss	6/30/2007	25	22,584	22,584	1,424	
<b>Total</b>				<b>\$ 302,663</b>	<b>\$ 20,839</b>	

<b>Healthcare</b>						
	<b>Amortization Period</b>		<b>Balances</b>		<b>Beginning-of-Year Payment</b>	
	<b>Date Created</b>	<b>Years Left</b>	<b>Initial</b>	<b>Outstanding</b>		
Initial Unfunded Liability	6/30/2002	20	\$ 175,533	\$ 186,278	\$ 13,441	
FY03 Loss	6/30/2003	21	12,512	13,168	921	
FY04 Loss	6/30/2004	22	33,056	34,429	2,340	
FY05 Loss	6/30/2005	23	62,666	64,466	4,266	
Change in Assumptions/ Methods	6/30/2006	24	83,737	84,931	5,481	
FY06 Gain	6/30/2006	24	(24,510)	(24,860)	(1,604)	
FY07 Gain	6/30/2007	25	(86,375)	(86,375)	(5,445)	
<b>Total</b>				<b>\$ 272,037</b>	<b>\$ 19,400</b>	

**1.3(a) Average Employer Contribution Rate – FY10 Peace  
Officer/Firefighter (continued)**

**Schedule of Past Service Cost Amortizations – Peace Officer/Firefighter**

	Total				
	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
Initial Unfunded Liability	6/30/2002	20	\$ 312,702	\$ 331,844	\$ 23,944
FY03 Loss	6/30/2003	21	22,289	23,458	1,641
FY04 Loss	6/30/2004	22	58,888	61,333	4,169
FY05 Loss	6/30/2005	23	111,636	114,842	7,600
Change in Assumptions/ Methods	6/30/2006	24	149,173	151,300	9,764
FY06 Gain	6/30/2006	24	(43,663)	(44,286)	(2,858)
FY07 Gain	6/30/2007	25	(63,791)	(63,791)	(4,021)
<b>Total</b>				<b>\$ 574,700</b>	<b>\$ 40,239</b>

The amortization factor for 25 years is 15.864073. The weighted average amortization factor is 14.282164. The amortization method is on a level percent of pay basis.

The equivalent single amortization period is 21 years.

### 1.3(b) Average Employer Contribution Rate – FY10 Others (in thousands)

Consolidated Normal Cost Rate	Pension	Healthcare	Total
(1) Total Normal Cost	\$ 143,623	\$ 107,099	\$ 250,722
(2) DB Member Salaries	1,488,330	1,488,330	1,488,330
(3) DCR Member Salaries	106,820	106,820	106,820
(4) Total Salaries	1,595,150	1,595,150	1,595,150
(5) Normal Cost Rate for Others			
a. Based on DB Member Salaries, (1) ÷ (2)	9.65%	7.20%	16.85%
b. Based on Total Salaries, (1) ÷ (4)	9.01%	6.71%	15.72%
(6) Member Contribution Rate (Others) <sup>1</sup>	6.31%	0.00%	6.31%
(7) Consolidated Employer Normal Cost Rate For Others, (5b) – (6)	2.70%	6.71%	9.41%
<b>Past Service Rate</b>			
(1) Accrued Liability	\$ 7,299,181	\$ 5,323,402	\$ 12,622,583
(2) Valuation Assets <sup>2</sup>	5,678,524	2,848,786	8,527,310
(3) Unfunded Liability, (1) – (2)	1,620,657	2,474,616	4,095,273
(4) Past Service Cost Amortization Payment <sup>3</sup>	111,580	176,474	288,054
(5) Total Salaries	1,595,150	1,595,150	1,595,150
(6) Past Service Rate, (4) ÷ (5)	7.00%	11.06%	18.06%
<b>Average Employer Contribution Rate</b>	<b>9.70%</b>	<b>17.77%</b>	<b>27.47%</b>
<b>Normal Cost Rate by Tier (Total Employer and Member)</b>			
Tier 1 <sup>4</sup>	10.15%	8.49%	18.64%
Tier 2 <sup>4</sup>	9.45%	5.32%	14.77%
Tier 3 <sup>4</sup>	9.51%	7.58%	17.09%

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

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

<sup>3</sup> Amortized on a level percentage of pay basis.

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

**1.3(b) Average Employer Contribution Rate – FY10 Others (continued)****Schedule of Past Service Cost Amortizations – Others**

<b>Pension</b>						
	<b>Amortization Period</b>		<b>Balances</b>		<b>Beginning-of-Year Payment</b>	
	<b>Date Created</b>	<b>Years Left</b>	<b>Initial</b>	<b>Outstanding</b>		
Initial Unfunded Liability	6/30/2002	20	\$ 734,495	\$ 779,453	\$ 56,240	
FY03 Loss	6/30/2003	21	52,354	55,098	3,854	
FY04 Loss	6/30/2004	22	138,320	144,065	9,792	
FY05 Loss	6/30/2005	23	262,218	269,747	17,850	
Change in Assumptions/Methods	6/30/2006	24	350,386	355,385	22,934	
FY06 Gain	6/30/2006	24	(102,558)	(104,021)	(6,712)	
FY07 Loss	6/30/2007	25	120,930	120,930	7,622	
<b>Total</b>				<b>\$ 1,620,657</b>	<b>\$ 111,580</b>	

<b>Healthcare</b>						
	<b>Amortization Period</b>		<b>Balances</b>		<b>Beginning-of-Year Payment</b>	
	<b>Date Created</b>	<b>Years Left</b>	<b>Initial</b>	<b>Outstanding</b>		
Initial Unfunded Liability	6/30/2002	20	\$ 1,596,753	\$ 1,694,493	\$ 122,263	
FY03 Loss	6/30/2003	21	113,814	119,784	8,380	
FY04 Loss	6/30/2004	22	300,702	313,189	21,289	
FY05 Loss	6/30/2005	23	570,049	586,419	38,805	
Change in Assumptions/Methods	6/30/2006	24	761,720	772,585	49,858	
FY06 Gain	6/30/2006	24	(222,957)	(226,137)	(14,594)	
FY07 Gain	6/30/2007	25	(785,717)	(785,717)	(49,527)	
<b>Total</b>				<b>\$ 2,474,616</b>	<b>\$ 176,474</b>	



## 1.3(b) Average Employer Contribution Rate – FY10 Others (continued)

## Schedule of Past Service Cost Amortizations – Others

	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
	Total				
Initial Unfunded Liability	6/30/2002	20	\$ 2,331,248	\$ 2,473,946	\$ 178,503
FY03 Loss	6/30/2003	21	166,168	174,882	12,234
FY04 Loss	6/30/2004	22	439,022	457,254	31,081
FY05 Loss	6/30/2005	23	832,267	856,166	56,655
Change in Assumptions/ Methods	6/30/2006	24	1,112,106	1,127,970	72,792
FY06 Gain	6/30/2006	24	(325,515)	(330,158)	(21,306)
FY07 Gain	6/30/2007	25	(664,787)	(664,787)	(41,905)
<b>Total</b>				<b>\$ 4,095,273</b>	<b>\$ 288,054</b>

The amortization factor for 25 years is 15.864073. The weighted average amortization factor is 14.217032. The amortization method is on a level percent of pay basis.

The equivalent single amortization period is 21 years.

### 1.3(c) Average Employer Contribution Rate – FY10 All Members (in thousands)

Consolidated Normal Cost Rate	Pension	Healthcare	Total
(1) Total Normal Cost	\$ 168,420	\$ 118,202	\$ 286,622
(2) DB Member Salaries	1,689,969	1,689,969	1,689,969
(3) DCR Member Salaries	115,329	115,329	115,329
(4) Total Salaries	1,805,298	1,805,298	1,805,298
(5) Normal Cost Rate for All Members			
a. Based on DB Member Salaries, (1) ÷ (2)	9.97%	6.99%	16.96%
b. Based on Total Salaries, (1) ÷ (4)	9.33%	6.55%	15.88%
(6) Average Member Contribution Rate <sup>1</sup>	6.42%	0.00%	6.42%
(7) Consolidated Employer Normal Cost Rate For All Members, (5b) – (6)	2.91%	6.55%	9.46%
<b>Past Service Rate</b>			
(1) Accrued Liability	\$ 8,662,324	\$ 5,908,609	\$ 14,570,933
(2) Valuation Assets	6,739,004	3,161,956	9,900,960
(3) Total Unfunded Liability, (1) – (2)	1,923,320	2,746,653	4,669,973
(4) Past Service Cost Amortization Payment <sup>2</sup>	132,419	195,874	328,293
(5) Total Salaries	1,805,298	1,805,298	1,805,298
(6) Past Service Rate, (4) ÷ (5)	7.34%	10.85%	18.19%
<b>Average Employer Contribution Rate</b>	<b>10.25%</b>	<b>17.40%</b>	<b>27.65%</b>
<b>Normal Cost Rate by Tier (Total Employer and Member)</b>			
Tier 1 <sup>3</sup>	10.34%	8.42%	18.76%
Tier 2 <sup>3</sup>	9.80%	5.11%	14.91%
Tier 3 <sup>3</sup>	9.89%	7.37%	17.26%

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

<sup>2</sup> Amortized as a level percent of pay.

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

**1.3(c) Average Employer Contribution Rate – FY10 All Members (continued)****Schedule of Past Service Cost Amortizations – All Members**

<b>Pension</b>					
	<b>Amortization Period</b>		<b>Balances</b>		<b>Beginning-of-Year Payment</b>
	<b>Date Created</b>	<b>Years Left</b>	<b>Initial</b>	<b>Outstanding</b>	
Initial Unfunded Liability <sup>1</sup>	6/30/2002	20	\$ 871,664	\$ 925,019	\$ 66,743
FY03 Loss <sup>1</sup>	6/30/2003	21	62,131	65,388	4,574
FY04 Loss <sup>1</sup>	6/30/2004	22	164,152	170,969	11,621
FY05 Loss <sup>1</sup>	6/30/2005	23	311,188	320,123	21,184
Change in Assumptions/ Methods <sup>1</sup>	6/30/2006	24	415,822	421,754	27,217
FY06 Gain <sup>1</sup>	6/30/2006	24	(121,711)	(123,447)	(7,966)
FY07 Loss	6/30/2007	25	143,514	143,514	9,046
<b>Total</b>				<b>\$ 1,923,320</b>	<b>\$ 132,419</b>

<b>Healthcare</b>					
	<b>Amortization Period</b>		<b>Balances</b>		<b>Beginning-of-Year Payment</b>
	<b>Date Created</b>	<b>Years Left</b>	<b>Initial</b>	<b>Outstanding</b>	
Initial Unfunded Liability <sup>1</sup>	6/30/2002	20	\$ 1,772,286	\$ 1,880,771	\$ 135,704
FY03 Loss <sup>1</sup>	6/30/2003	21	126,326	132,952	9,301
FY04 Loss <sup>1</sup>	6/30/2004	22	333,758	347,618	23,629
FY05 Loss <sup>1</sup>	6/30/2005	23	632,715	650,885	43,071
Change in Assumptions/ Methods <sup>1</sup>	6/30/2006	24	845,457	857,516	55,339
FY06 Gain <sup>1</sup>	6/30/2006	24	(247,467)	(250,997)	(16,198)
FY07 Gain	6/30/2007	25	(872,092)	(872,092)	(54,972)
<b>Total</b>				<b>\$ 2,746,653</b>	<b>\$ 195,874</b>

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

**1.3(c) Average Employer Contribution Rate – FY10 All Members (continued)****Schedule of Past Service Cost Amortizations – All Members**

	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
	<b>Total</b>				
Initial Unfunded Liability	6/30/2002	20	\$ 2,643,950	\$ 2,805,790	\$ 202,447
FY03 Loss	6/30/2003	21	188,457	198,340	13,875
FY04 Loss	6/30/2004	22	497,910	518,587	35,250
FY05 Loss	6/30/2005	23	943,903	971,008	64,255
Change in Assumptions/ Methods	6/30/2006	24	1,261,279	1,279,270	82,556
FY06 Gain	6/30/2006	24	(369,178)	(374,444)	(24,164)
FY07 Gain	6/30/2007	25	(728,578)	(728,578)	(45,926)
<b>Total</b>				<b>\$ 4,669,973</b>	<b>\$ 328,293</b>

The amortization factor for 25 years is 15.864073. The weighted average amortization factor is 14.225015. The amortization method is on a level percent of pay basis.

The equivalent single amortization period is 21 years.

## 1.4 Development of Actuarial Gain/(Loss) for FY07 In Thousands

	Pension	Healthcare	Total
(1) Expected Actuarial Accrued Liability			
(a) Accrued Liability, June 30, 2006	\$ 8,094,043	\$ 6,294,370	\$14,388,413
(b) Normal Cost for FY07	178,660	165,924	344,584
(c) Interest on (a) and (b) at 8.25%	682,498	532,974	1,215,472
(d) Benefit Payments for FY07	410,545	224,553	635,098
(e) Refund of Contributions for FY07	8,575	6,046	14,621
(f) Interest on (d) and (e) at 8.25% for one-half year	17,289	9,512	26,801
(g) Expected Accrued Liability as of June 30, 2007 (a) + (b) + (c) - (d) - (e) - (f)	8,518,792	6,753,157	15,271,949
(2) Actual Accrued Liability, June 30, 2007	8,662,324	5,908,609	14,570,933
<b>(3) Liability Gain/(Loss), (1)(g) - (2)</b>	<b>\$ (143,532)</b>	<b>\$ 844,548</b>	<b>\$ 701,016</b>
(4) Expected Actuarial Asset Value			
(a) Actuarial Asset Value, June 30, 2006	\$ 6,331,065	\$ 2,709,843	\$ 9,040,908
(b) Interest on (a) at 8.25%	522,313	223,562	745,875
(c) Employee Contributions for FY07	71,023	50,080	121,103
(d) Employer Contributions for FY07	207,539	146,339	353,878
(e) Interest on (c) and (d) at 8.25% for one-half year	11,491	8,102	19,593
(f) Benefit Payments for FY07	410,545	224,553	635,098
(g) Refund of Contributions for FY07	8,575	6,046	14,621
(h) Interest on (f) and (g) at 8.25% for one-half year	17,289	9,512	26,801
(i) Expected Actuarial Asset Value, June 30, 2007 (a) + (b) + (c) + (d) + (e) - (f) - (g) - (h)	6,707,022	2,897,815	9,604,837
(5) Actuarial Asset Value, June 30, 2007	6,739,004	3,161,956	9,900,960
<b>(6) Actuarial Asset Gain/(Loss), (5) - (4)(i)</b>	<b>\$ 31,982</b>	<b>\$ 264,141</b>	<b>\$ 296,123</b>
<b>(7) Actuarial Gain/(Loss), (3) + (6)</b>	<b>\$ (111,550)</b>	<b>\$ 1,108,689</b>	<b>\$ 997,139</b>
<b>(8) (Shortfall) Between Actuarial and Actual Contributions</b>	<b>\$ (31,964)</b>	<b>\$ (236,597)</b>	<b>\$ (268,561)</b>
<b>(9) FY07 Gain/(Loss) to be Amortized, (7) + (8)</b>	<b>\$ (143,514)</b>	<b>\$ 872,092</b>	<b>\$ 728,578</b>

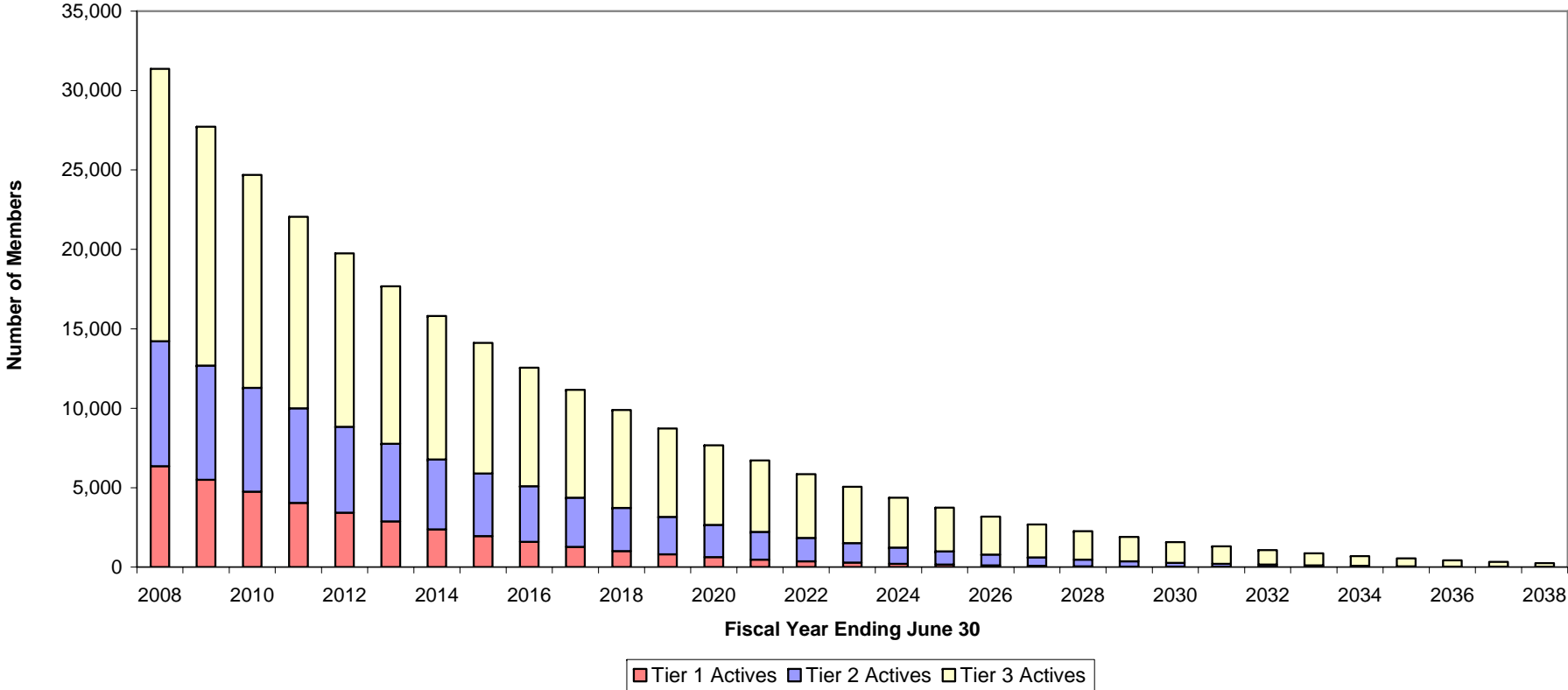
## 1.5(a) Actuarial Projections – Projections at Calculated Rate Based on Total DB and DC Payroll

### Key Assumptions

- 8.25% investment return on the Market Value of Assets in all years.
- The Actuarial Value of Assets reflects the deferred gains and losses generated by the smoothing method. The current deferred amounts are recognized in the first four years of the projections.
- Actuarial assumptions and methods as described in Section 2.3.
- The actuarially calculated contribution rate with a two-year lag is adopted each year.
- No new DB Plan entrants into Tiers 1, 2 and 3.

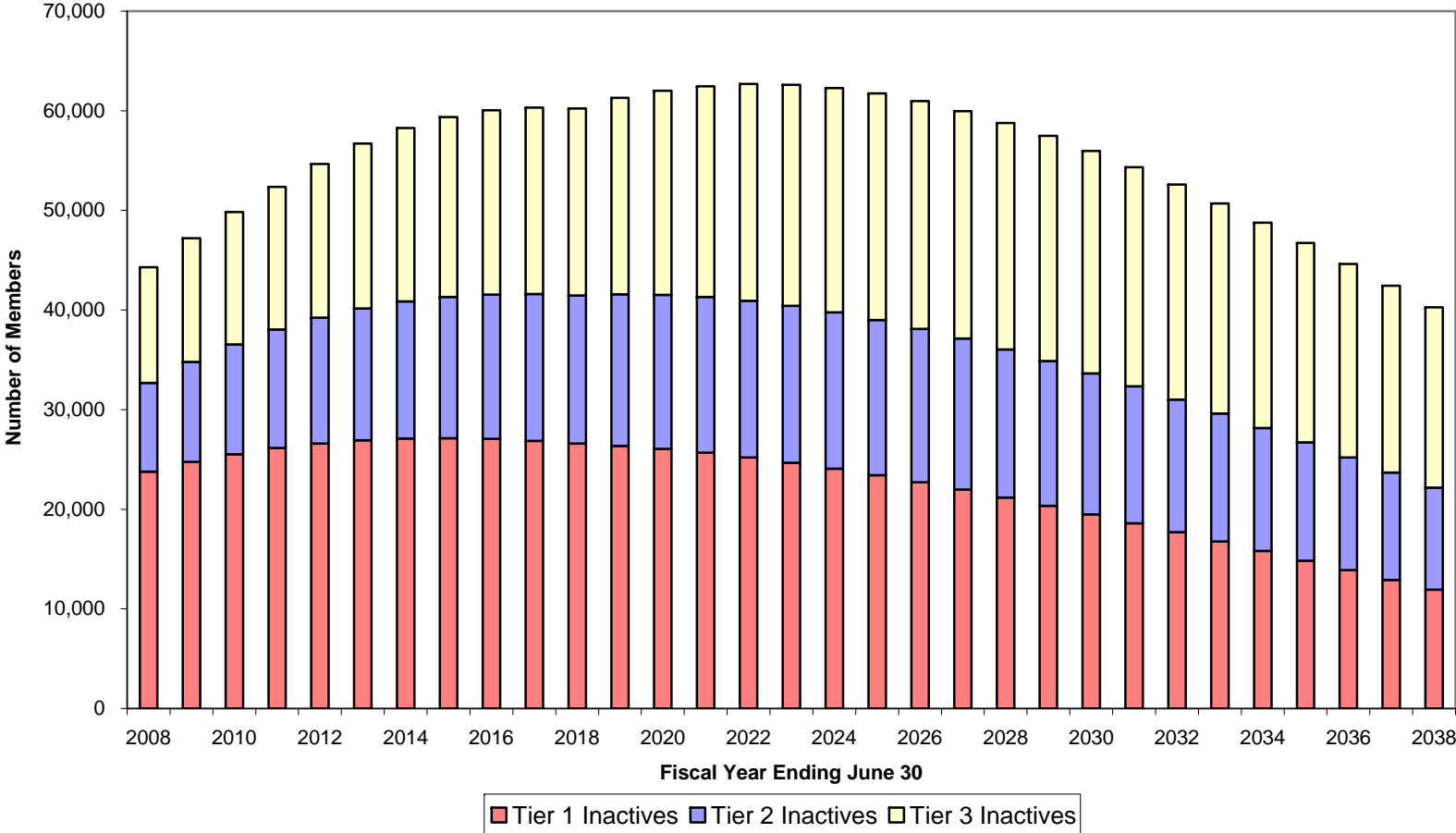
**1.5(a) Actuarial Projections – Projections at Calculated Rate  
Based on Total DB and DC Payroll (continued)**

**Projected Active Member Count**



1.5(a) Actuarial Projections – Projections at Calculated Rate  
Based on Total DB and DC Payroll (continued)

Projected Inactive Member Count





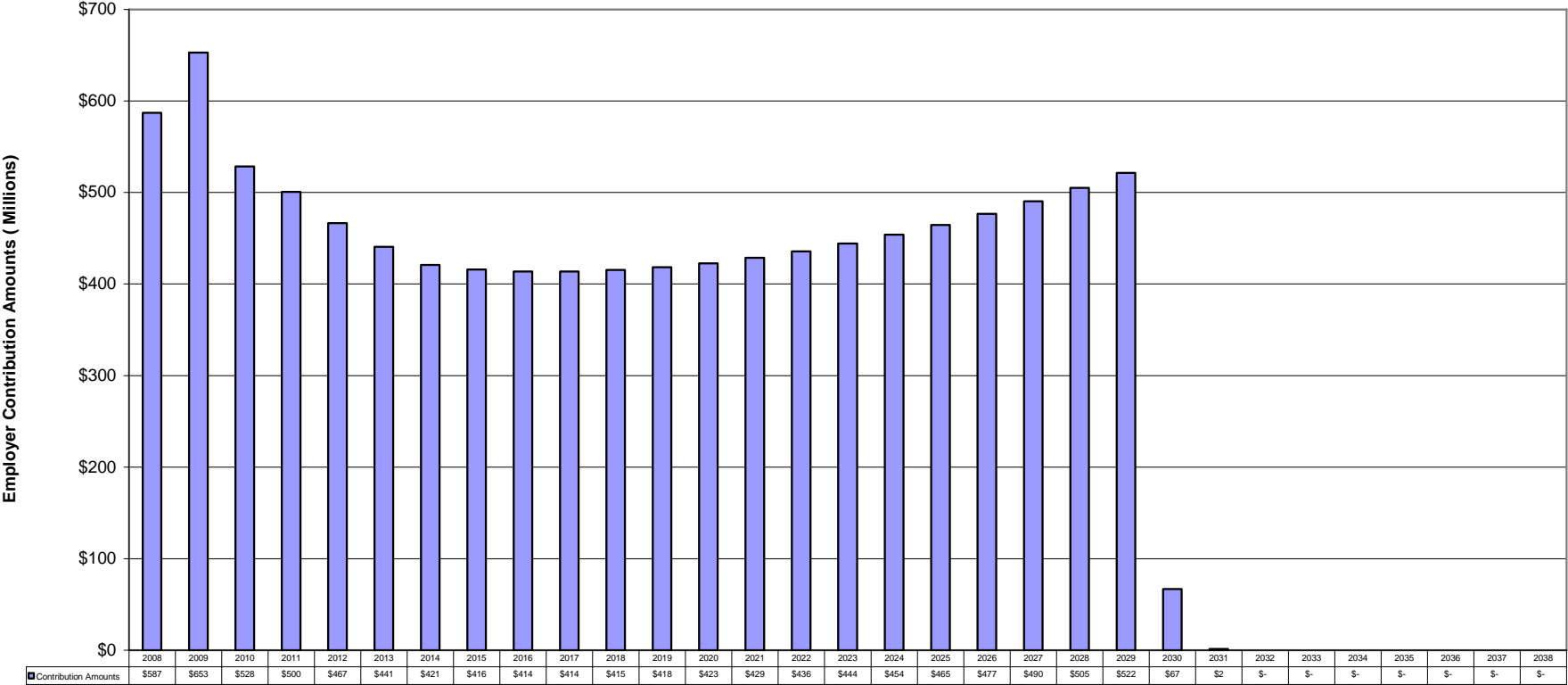
### 1.5(a) Actuarial Projections – Projections at Calculated Rate Based on Total DB and DC Payroll

#### Observations

- Contribution amounts have been shown instead of rates. The actual contribution amount provides a more meaningful illustration of the contributions due.
- Contribution amounts decrease until FY16 and then start to steadily increase from FY17 through FY29, before dropping off significantly when the June 30, 2002 unfunded liability amortization base is paid off.
- Contributions become \$0 towards the end of the projection period upon completion of 25-year amortizations of recent losses.
- Funding ratios improve through the projection period.

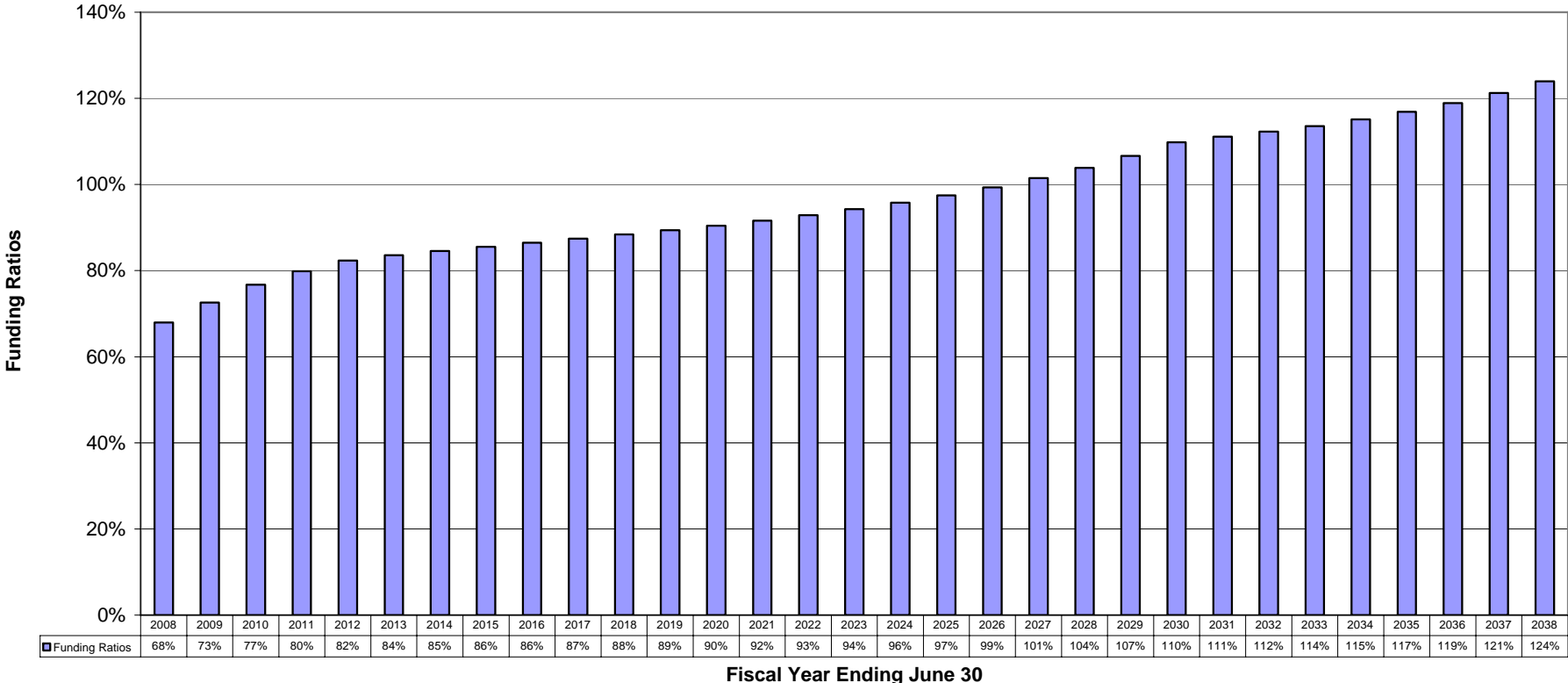
**1.5(a) Actuarial Projections – Projections at Calculated Rate  
Based on Total DB and DC Payroll (continued)**

**Projected Employer Contribution Amounts**



**1.5(a) Actuarial Projections – Projections at Calculated Rate  
Based on Total DB and DC Payroll (continued)**

**Projected Funding Ratios**



**1.5(a) Actuarial Projections – Projections at Calculated Rate  
Based on Total DB and DC Payroll (continued)**

State of Alaska PERS  
Financial Projections (in Thousands)

As of June 30	Investment Return: 8.25%				Flow Amounts During Following 12 Months								Recognized Asset Gain	Ending Actuarial Assets
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2008	\$9,900,960	\$14,570,933	67.95%	(\$4,669,973)	\$1,805,298	32.51%	\$586,902	\$125,089	\$711,991	\$722,139	(\$10,148)	\$901,312	\$342,150	\$11,134,274
2009	11,134,274	15,338,297	72.59%	(4,204,023)	1,853,433	35.22%	652,779	110,603	763,382	789,818	(26,436)	974,174	249,960	12,331,972
2010	12,331,972	16,075,391	76.71%	(3,743,419)	1,910,667	27.65%	528,299	104,504	632,803	855,789	(222,987)	1,044,416	245,166	13,398,567
2011	13,398,567	16,780,656	79.85%	(3,382,090)	1,973,521	25.36%	500,498	98,827	599,325	924,868	(325,543)	1,108,037	191,727	14,372,787
2012	14,372,787	17,450,109	82.37%	(3,077,321)	2,042,890	22.84%	466,508	93,648	560,156	994,285	(434,129)	1,168,202	0	15,106,860
2013	15,106,860	18,082,710	83.54%	(2,975,850)	2,117,772	20.81%	440,786	88,713	529,499	1,065,971	(536,472)	1,224,625	0	15,795,013
2014	15,795,013	18,674,220	84.58%	(2,879,207)	2,199,211	19.14%	420,980	83,988	504,968	1,137,349	(632,381)	1,277,520	0	16,440,152
2015	16,440,152	19,222,827	85.52%	(2,782,675)	2,285,703	18.20%	416,038	79,560	495,598	1,205,476	(709,879)	1,327,610	0	17,057,884
2016	17,057,884	19,729,662	86.46%	(2,671,778)	2,376,709	17.41%	413,669	75,292	488,961	1,271,149	(782,188)	1,375,650	0	17,651,346
2017	17,651,346	20,194,879	87.41%	(2,543,533)	2,473,261	16.73%	413,686	71,305	484,991	1,335,387	(850,397)	1,421,852	0	18,222,801
2018	18,222,801	20,617,415	88.39%	(2,394,614)	2,575,157	16.13%	415,422	53,207	468,629	1,397,463	(928,835)	1,465,826	0	18,759,793
2019	18,759,793	20,992,654	89.36%	(2,232,861)	2,683,383	15.59%	418,316	48,952	467,268	1,454,219	(986,951)	1,507,778	0	19,280,619
2020	19,280,619	21,317,574	90.44%	(2,036,954)	2,796,380	15.11%	422,641	44,805	467,446	1,517,732	(1,050,286)	1,548,185	0	19,778,519
2021	19,778,519	21,591,239	91.60%	(1,812,720)	2,914,952	14.71%	428,665	40,801	469,466	1,580,001	(1,110,535)	1,586,826	0	20,254,810
2022	20,254,810	21,811,676	92.86%	(1,556,866)	3,040,257	14.33%	435,601	36,988	472,589	1,643,758	(1,171,169)	1,623,669	0	20,707,310
2023	20,707,310	21,973,822	94.24%	(1,266,512)	3,172,795	14.00%	444,200	33,324	477,524	1,704,871	(1,227,347)	1,658,728	0	21,138,691
2024	21,138,691	22,076,135	95.75%	(937,444)	3,313,221	13.70%	454,023	29,860	483,883	1,765,982	(1,282,099)	1,692,104	0	21,548,696
2025	21,548,696	22,114,685	97.44%	(565,989)	3,459,858	13.43%	464,649	26,552	491,201	1,824,050	(1,332,849)	1,723,877	0	21,939,724
2026	21,939,724	22,087,784	99.33%	(148,060)	3,615,821	13.19%	476,882	23,463	500,345	1,875,793	(1,375,448)	1,754,414	0	22,318,690
2027	22,318,690	21,997,514	101.46%	321,176	3,780,591	12.97%	490,440	20,622	511,062	1,925,173	(1,414,111)	1,784,116	0	22,688,695
2028	22,688,695	21,841,861	103.88%	846,834	3,955,195	12.77%	505,121	17,965	523,086	1,970,587	(1,447,501)	1,813,291	0	23,054,486
2029	23,054,486	21,620,041	106.63%	1,434,445	4,141,286	12.59%	521,575	15,605	537,180	2,008,857	(1,471,677)	1,842,491	0	23,425,301
2030	23,425,301	21,334,933	109.80%	2,090,368	4,334,003	1.55%	66,994	13,432	80,426	2,039,817	(1,959,391)	1,853,364	0	23,319,273
2031	23,319,273	20,989,578	111.10%	2,329,695	4,535,622	0.03%	1,505	11,526	13,031	2,070,405	(2,057,373)	1,840,655	0	23,102,555
2032	23,102,555	20,580,072	112.26%	2,522,483	4,746,783	-2.66%	0	9,797	9,797	2,092,388	(2,082,591)	1,821,756	0	22,841,720
2033	22,841,720	20,110,467	113.58%	2,731,254	4,968,912	-6.32%	0	8,230	8,230	2,103,717	(2,095,487)	1,799,716	0	22,545,950
2034	22,545,950	19,587,484	115.10%	2,958,466	5,202,519	-9.77%	0	6,851	6,851	2,110,579	(2,103,728)	1,774,982	0	22,217,203
2035	22,217,203	19,011,634	116.86%	3,205,570	5,444,099	-7.99%	0	5,620	5,620	2,107,108	(2,101,488)	1,747,951	0	21,863,666
2036	21,863,666	18,389,812	118.89%	3,473,854	5,699,277	-6.91%	0	4,571	4,571	2,094,157	(2,089,587)	1,719,265	0	21,493,345
2037	21,493,345	17,728,536	121.24%	3,764,809	5,966,545	-5.93%	0	3,669	3,669	2,075,590	(2,071,921)	1,689,428	0	21,110,852
2038	21,110,852	17,030,596	123.96%	4,080,255	6,247,669	-5.28%	0	2,865	2,865	2,045,923	(2,043,059)	1,659,039	0	20,726,832

## **1.5(b) Actuarial Projections – Projections at Current Rate Based on Total DB and DC Payroll**

### **Key Assumptions**

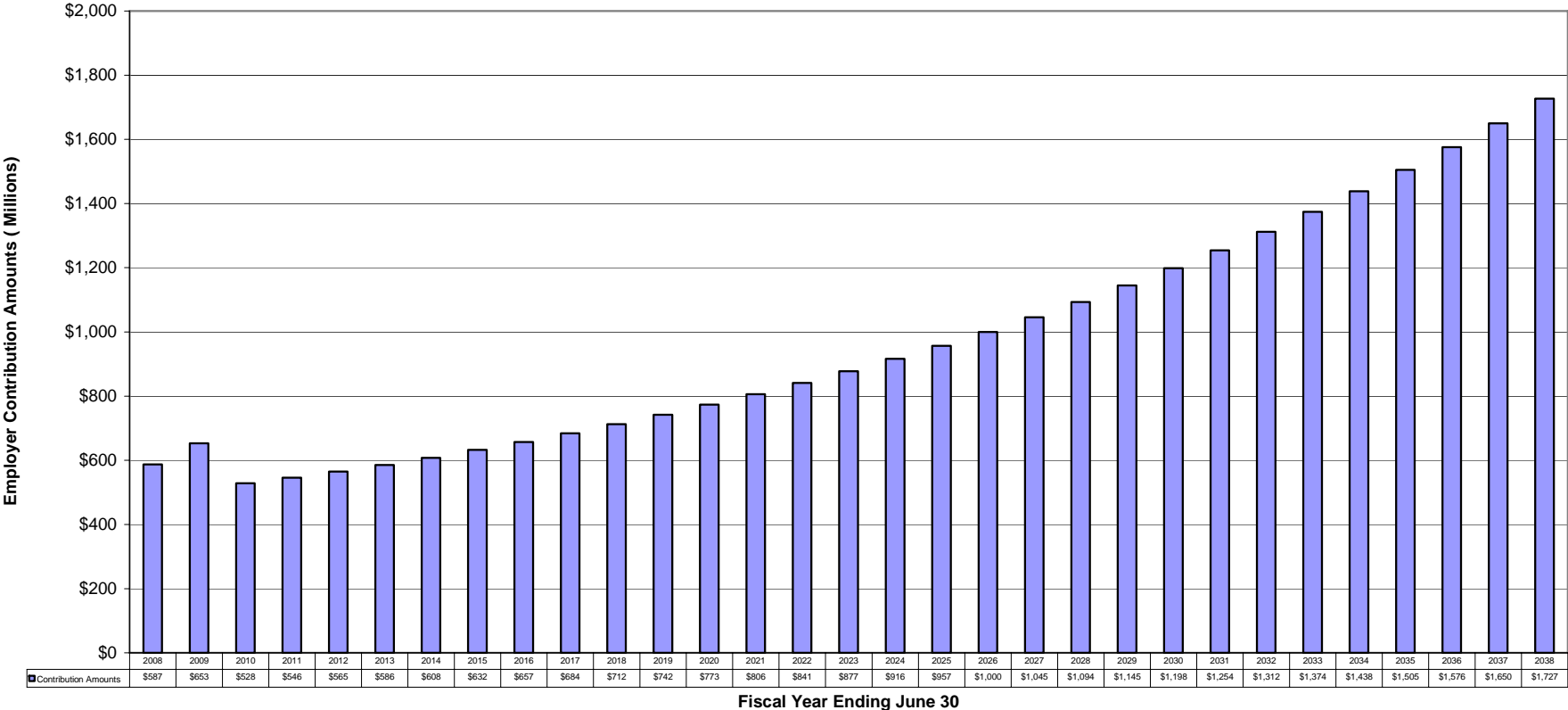
- All assumptions and methods are the same as Section 1.5(a), except adopted contribution rate is maintained at the FY10 level for all future years.

### **Observations**

- Contribution amounts increase through the projection period.
- Funded ratios improve through the projection period.

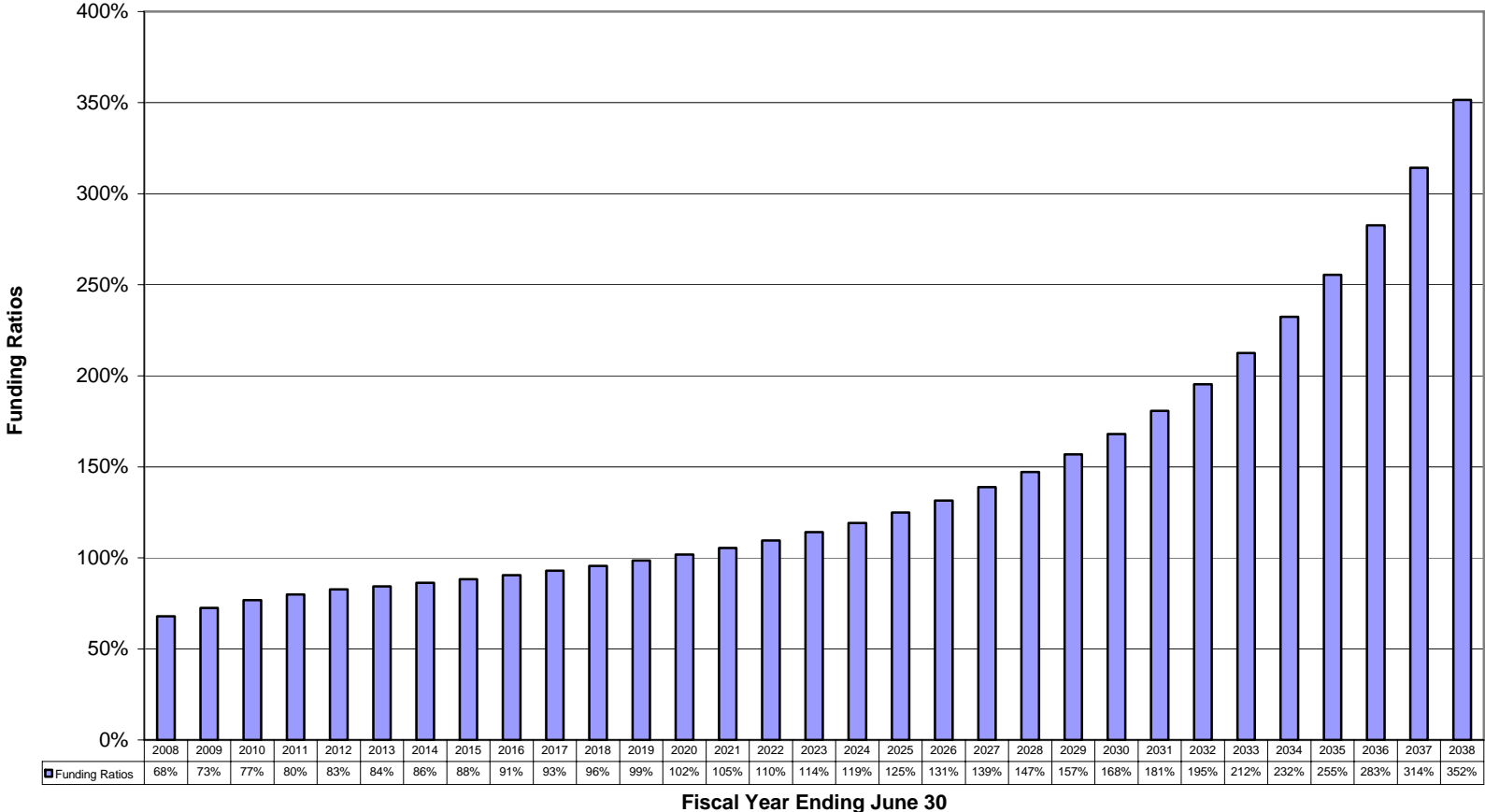
**1.5(b) Actuarial Projections – Projections at Current Rate  
Based on Total DB and DC Payroll (continued)**

**Projected Employer Contribution Amounts**



**1.5(b) Actuarial Projections – Projections at Current Rate  
Based on Total DB and DC Payroll (continued)**

**Projected Funding Ratios**



**1.5(b) Actuarial Projections – Projections at Current Rate  
Based on Total DB and DC Payroll (continued)**

State of Alaska PERS  
Financial Projections (in Thousands)

As of June 30	Investment Return: 8.25%				Flow Amounts During Following 12 Months								Recognized Asset Gain	Ending Actuarial Assets
	Valuation Amounts on July 1				Total Salaries	Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)										
2008	\$9,900,960	\$14,570,933	67.95%	(\$4,669,973)	\$1,805,298	32.51%	\$586,902	\$125,089	\$711,991	\$722,139	(\$10,148)	\$901,312	\$342,150	\$11,134,274
2009	11,134,274	15,338,297	72.59%	(4,204,023)	1,853,433	35.22%	652,779	110,603	763,382	789,818	(26,436)	974,174	249,960	12,331,972
2010	12,331,972	16,075,391	76.71%	(3,743,419)	1,910,667	27.65%	528,299	104,504	632,803	855,789	(222,987)	1,044,416	245,166	13,398,567
2011	13,398,567	16,780,656	79.85%	(3,382,090)	1,973,521	27.65%	545,679	98,827	644,506	924,868	(280,362)	1,109,864	191,727	14,419,795
2012	14,419,795	17,450,109	82.63%	(3,030,314)	2,042,890	27.65%	564,859	93,648	658,507	994,285	(335,778)	1,176,057	0	15,260,074
2013	15,260,074	18,082,710	84.39%	(2,822,636)	2,117,772	27.65%	585,564	88,713	674,277	1,065,971	(391,694)	1,243,119	0	16,111,499
2014	16,111,499	18,674,220	86.28%	(2,562,721)	2,199,211	27.65%	608,082	83,988	692,070	1,137,349	(445,279)	1,311,195	0	16,977,415
2015	16,977,415	19,222,827	88.32%	(2,245,412)	2,285,703	27.65%	631,997	79,560	711,557	1,205,476	(493,920)	1,380,666	0	17,864,161
2016	17,864,161	19,729,662	90.54%	(1,865,501)	2,376,709	27.65%	657,160	75,292	732,452	1,271,149	(538,697)	1,452,013	0	18,777,477
2017	18,777,477	20,194,879	92.98%	(1,417,402)	2,473,261	27.65%	683,857	71,305	755,162	1,335,387	(580,226)	1,525,682	0	19,722,933
2018	19,722,933	20,617,415	95.66%	(894,482)	2,575,157	27.65%	712,031	53,207	765,238	1,397,463	(632,226)	1,601,580	0	20,692,287
2019	20,692,287	20,992,654	98.57%	(300,366)	2,683,383	27.65%	741,955	48,952	790,907	1,454,219	(663,312)	1,680,294	0	21,709,269
2020	21,709,269	21,317,574	101.84%	391,696	2,796,380	27.65%	773,199	44,805	818,004	1,517,732	(699,728)	1,762,723	0	22,772,264
2021	22,772,264	21,591,239	105.47%	1,181,026	2,914,952	27.65%	805,984	40,801	846,785	1,580,001	(733,216)	1,849,066	0	23,888,114
2022	23,888,114	21,811,676	109.52%	2,076,438	3,040,257	27.65%	840,631	36,988	877,619	1,643,758	(766,139)	1,939,793	0	25,061,768
2023	25,061,768	21,973,822	114.05%	3,087,946	3,172,795	27.65%	877,278	33,324	910,602	1,704,871	(794,269)	2,035,482	0	26,302,981
2024	26,302,981	22,076,135	119.15%	4,226,846	3,313,221	27.65%	916,106	29,860	945,966	1,765,982	(820,016)	2,136,841	0	27,619,806
2025	27,619,806	22,114,685	124.89%	5,505,121	3,459,858	27.65%	956,651	26,552	983,203	1,824,050	(840,847)	2,244,636	0	29,023,595
2026	29,023,595	22,087,784	131.40%	6,935,811	3,615,821	27.65%	999,775	23,463	1,023,238	1,875,793	(852,555)	2,359,976	0	30,531,016
2027	30,531,016	21,997,514	138.79%	8,533,501	3,780,591	27.65%	1,045,333	20,622	1,065,955	1,925,173	(859,218)	2,484,068	0	32,155,866
2028	32,155,866	21,841,861	147.22%	10,314,005	3,955,195	27.65%	1,093,611	17,965	1,111,576	1,970,587	(859,011)	2,618,127	0	33,914,983
2029	33,914,983	21,620,041	156.87%	12,294,942	4,141,286	27.65%	1,145,066	15,605	1,160,671	2,008,857	(848,186)	2,763,692	0	35,830,489
2030	35,830,489	21,334,933	167.94%	14,495,556	4,334,003	27.65%	1,198,352	13,432	1,211,784	2,039,817	(828,033)	2,922,536	0	37,924,991
2031	37,924,991	20,989,578	180.68%	16,935,413	4,535,622	27.65%	1,254,099	11,526	1,265,625	2,070,405	(804,779)	3,096,273	0	40,216,484
2032	40,216,484	20,580,072	195.41%	19,636,412	4,746,783	27.65%	1,312,485	9,797	1,322,282	2,092,388	(770,106)	3,286,723	0	42,733,101
2033	42,733,101	20,110,467	212.49%	22,622,634	4,968,912	27.65%	1,373,904	8,230	1,382,134	2,103,717	(721,583)	3,496,305	0	45,507,824
2034	45,507,824	19,587,484	232.33%	25,920,340	5,202,519	27.65%	1,438,497	6,851	1,445,348	2,110,579	(665,231)	3,727,499	0	48,570,091
2035	48,570,091	19,011,634	255.48%	29,558,457	5,444,099	27.65%	1,505,293	5,620	1,510,913	2,107,108	(596,195)	3,982,927	0	51,956,823
2036	51,956,823	18,389,812	282.53%	33,567,011	5,699,277	27.65%	1,575,850	4,571	1,580,421	2,094,157	(513,737)	4,265,666	0	55,708,753
2037	55,708,753	17,728,536	314.23%	37,980,217	5,966,545	27.65%	1,649,750	3,669	1,653,419	2,075,590	(422,171)	4,578,903	0	59,865,485
2038	59,865,485	17,030,596	351.52%	42,834,888	6,247,669	27.65%	1,727,480	2,865	1,730,345	2,045,923	(315,579)	4,926,143	0	64,476,049



### 1.5(c) Actuarial Projections – Effect of Economic Scenarios Based on Total DB and DC Payroll

#### Key Assumptions

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

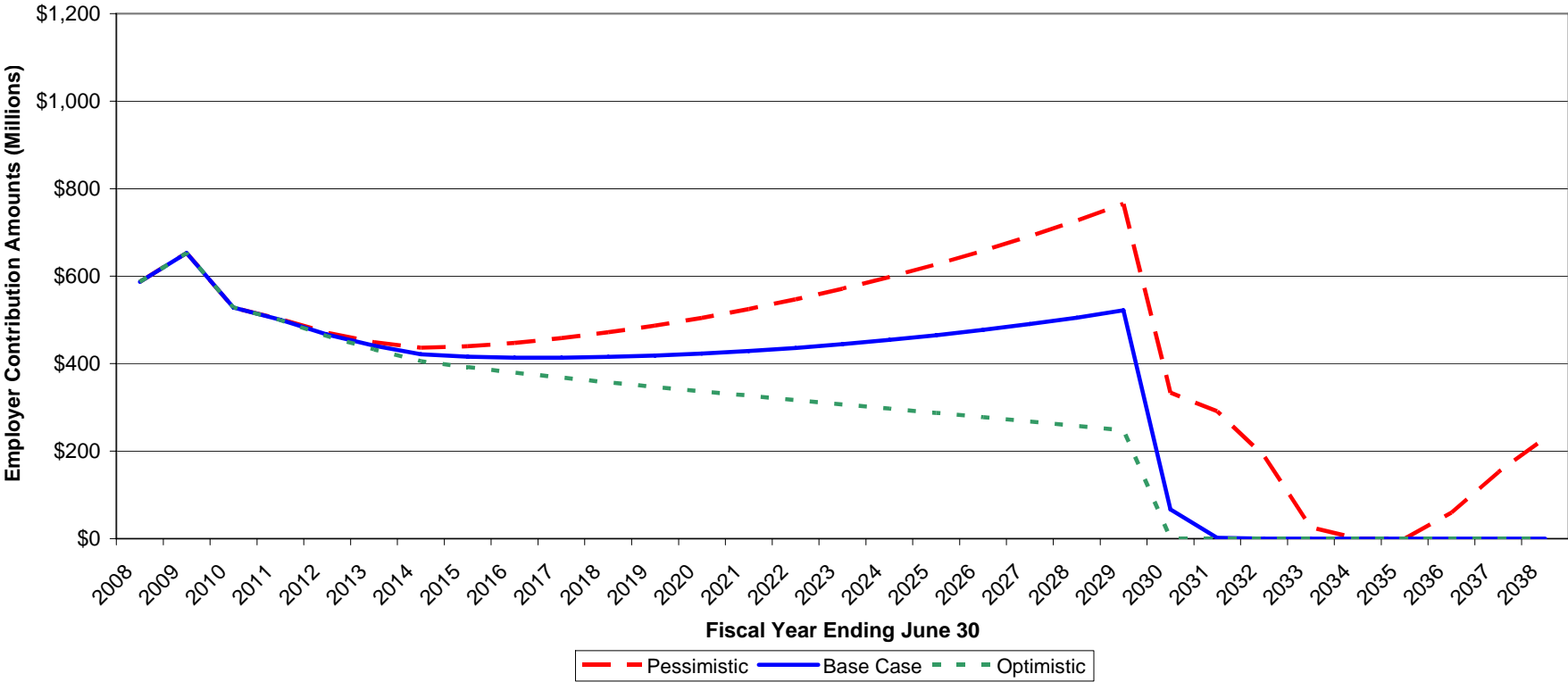
Base Case:	8.25% for all future years
Optimistic:	9.00% for all future years
Pessimistic:	7.50% for all future years
  
- In all cases, liabilities have been projected using 8.25% as the discount rate for future benefit payments. These scenarios are intended to illustrate the impact if investment rates are different than the 8.25% assumed investment return. They do not illustrate the effect of changing the assumed discount rate for determining liabilities.

#### Observations

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

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

**Projected Employer Contribution Amounts**



## **Section 2**

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

A summary of plan provisions is provided in Section 2.1 and participant census information is shown in Section 2.2.

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

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

## **2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions**

### **(1) Effective Date**

January 1, 1961, with amendments through June 30, 2007. 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. Members who were first hired after June 30, 1996 (Tier 3) have a 10-year requirement for system paid health benefits and non-Peace Officer/Firefighter members have a different Final Average Earnings calculation than members from the other tiers. 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 160 employers participating in the PERS, including the State of Alaska and 159 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.

## **2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions** *(continued)*

### **(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.

## **2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions** *(continued)*

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**

Individual contribution rates are established for PERS employers based on the consolidated normal cost and their past service rates.

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

The past service rate is determined separately for each employer to amortize their 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 consolidated normal cost rate.

### **(7) 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.

## 2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions *(continued)*

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. Accounts attached to satisfy claims under Alaska Statute 09.38.065 or a federal tax levy may be reinstated at any time. Interest accrues on refunds until paid in full or members retire.

### (8) 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 under the PERS before May 30, 1987;

## 2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions *(continued)*

- (iii) 80 days of paid-up PERS service as employees of the legislature during each of five legislative sessions and they were first hired under the PERS 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, 1986 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%.



## 2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions *(continued)*

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.

### (9) 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.

## 2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions *(continued)*

### (10) Postemployment Healthcare Benefits

Major medical benefits are provided to retirees by the PERS for all employees hired before July 1, 1986 (Tier 1). Employees hired after June 30, 1986 (Tier 2) 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. In addition, Peace Officers with twenty-five years of Peace Officer service and other employees with thirty years of membership service receive benefits paid by the PERS, regardless of their age or date of hire.

### (11) 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.

### (12) 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.

## 2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions *(continued)*

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).

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.

### (13) Postretirement Pension Adjustments

Postretirement pension adjustments (PRPAs) are granted annually to eligible benefit recipients when the consumer price index (CPI) 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.

## **2.1 Summary of the Alaska Public Employees' Retirement System Plan Provisions** *(continued)*

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.

### **(14) 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. SB 123 was passed in 2007 which clarified and revised statutory language to comply with federal law, created the Alaska retiree health care trust, and defined total compensation paid to the employer's active employees for purposes of determining the employer contribution rate.

**2.2(a) Member Census Information – Total PERS**

As of June 30	2003	2004	2005	2006	2007
<b>Active Members</b>					
(1) Number	34,065	33,612	33,730	34,071	31,362
(2) Average Age	44.23	44.64	44.82	45.04	46.06
(3) Average Credited Service	8.51	8.70	8.72	8.92	9.66
(4) Average Entry Age	35.72	35.94	36.10	36.12	36.40
(5) Average Annual Earnings	\$ 42,882	\$ 43,823	\$ 44,860	\$ 46,688	\$ 51,203
(6) Number Vested	18,108	18,337	19,349	19,032	19,587
(7) Percent Who Are Vested	53.2%	54.6%	57.4%	55.9%	62.5%
<b>Retirees and Beneficiaries</b>					
(1) Number	18,431	19,572	20,703	21,901	22,997
(2) Average Age	64.81	64.99	65.21	65.40	65.69
(3) Average Monthly Pension Benefit					
Base	\$ 1,139	\$ 1,163	\$ 1,193	\$ 1,217	\$ 1,242
COLA	79	80	82	83	84
P.R.P.A.	221	224	221	222	226
Adjustment	1	1	1	1	0
Total	\$ 1,440	\$ 1,468	\$ 1,497	\$ 1,523	\$ 1,552
<b>Vested Terminations (vested at time of termination, not refunded contributions or commenced benefits)</b>					
(1) Number	5,841	5,965	6,105	6,219	6,398
(2) Average Age	47.85	48.13	48.46	48.76	49.07
(3) Average Monthly Pension Benefit	\$ 772	\$ 779	\$ 582	\$ 590	\$ 786
<b>Non-Vested Terminations With Account Balances (not vested at termination, not refunded contributions)</b>					
(1) Number <sup>1</sup>	10,798	11,860	12,761	14,155	14,902
(2) Average Account Balance	\$ 3,618	\$ 3,766	\$ 3,832	\$ 3,876	\$ 4,035

<sup>1</sup> Includes deceased members with account balances.

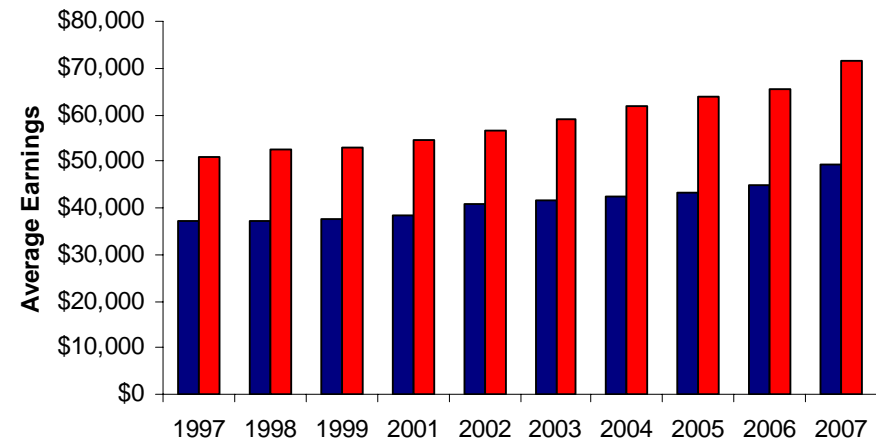
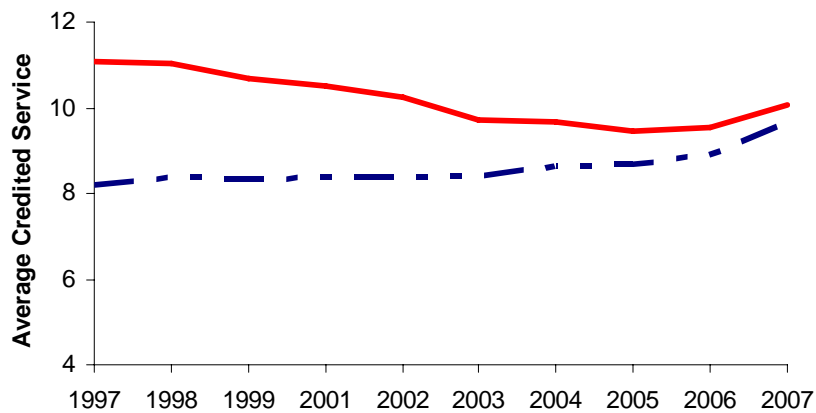
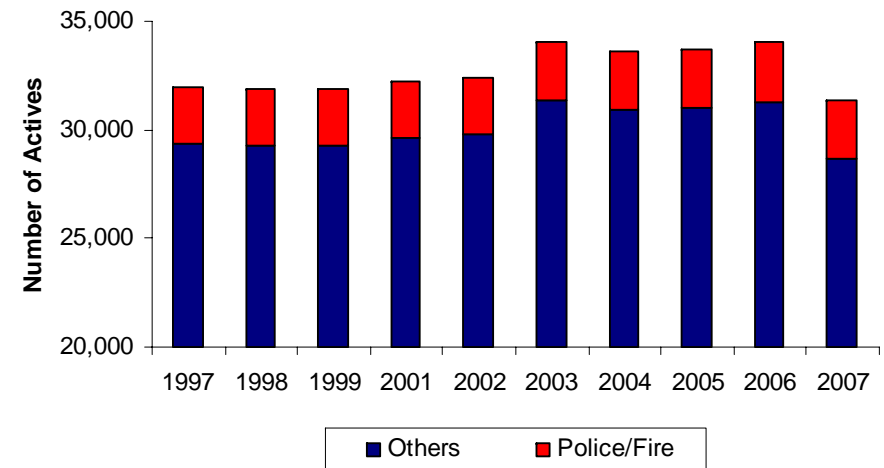
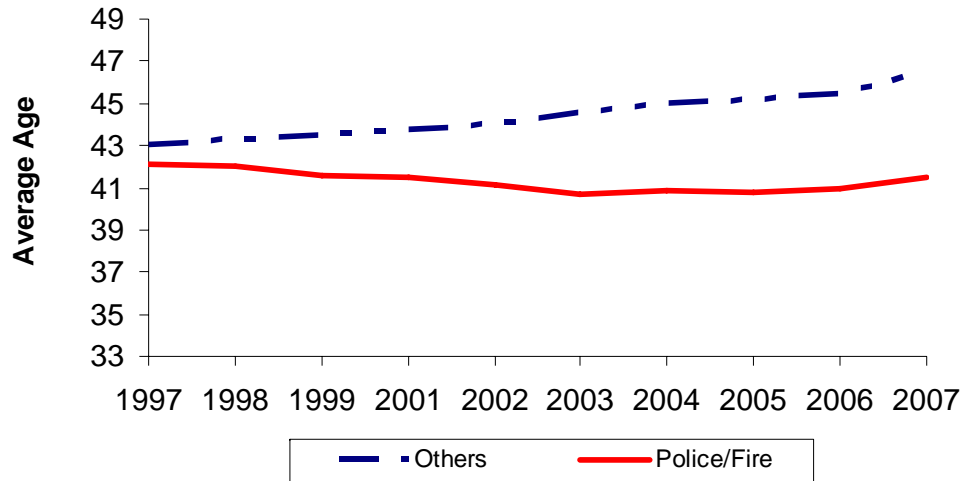
**2.2(a) Member Census Information – Total PERS (continued)**

As of June 30, 2007	Tier 1	Tier 2	Tier 3	Total
<b>Retirees and Beneficiaries</b>				
(1) Number	19,804	2,885	308	22,997
(2) Average Age	65.94	64.35	62.20	65.69
(3) Average Monthly Pension Benefit				
Base	\$ 1,319	\$ 775	\$ 641	\$ 1,242
COLA	93	25	25	85
P.R.P.A.	255	48	19	226
Adjustment	1	0	0	1
Total	\$ 1,668	\$ 848	\$ 685	\$ 1,554

**2.2(b) Additional Information – Active Members**

As of June 30	2003	2004	2005	2006	2007
<b>Peace Officer/Firefighter</b>					
(1) Number	2,727	2,705	2,733	2,785	2,687
(2) Average Age	40.72	40.89	40.82	40.94	41.48
(3) Average Credited Service	9.70	9.68	9.46	9.54	10.05
(4) Average Entry Age	31.02	31.21	31.36	31.40	31.43
(5) Average Annual Earnings	\$ 58,945	\$ 61,855	\$ 63,723	\$ 65,289	\$ 71,334
(6) Number Vested	1,739	1,730	1,799	1,811	1,892
(7) Percent Who Are Vested	63.8%	64.0%	65.8%	65.0%	70.4%
<b>Others</b>					
(1) Number	31,338	30,907	30,997	31,286	28,675
(2) Average Age	44.53	44.97	45.17	45.40	46.49
(3) Average Credited Service	8.41	8.61	8.65	8.86	9.62
(8) Average Entry Age	36.12	36.36	36.52	36.54	36.87
(4) Average Annual Earnings	\$ 41,484	\$ 42,245	\$ 43,197	\$ 45,032	\$ 49,316
(5) Number Vested	16,369	16,607	17,550	17,221	17,695
(6) Percent Who Are Vested	52.2%	53.7%	56.6%	55.0%	61.7%
<b>Total</b>					
(1) Number	34,065	33,612	33,730	34,071	31,362
(2) Average Age	44.23	44.64	44.82	45.04	46.06
(3) Average Credited Service	8.51	8.70	8.72	8.92	9.66
(9) Average Entry Age	35.72	35.94	36.10	36.12	36.40
(4) Average Annual Earnings	\$ 42,882	\$ 43,823	\$ 44,860	\$ 46,688	\$ 51,203
(5) Number Vested	18,108	18,337	19,349	19,032	19,587
(6) Percent Who Are Vested	53.2%	54.6%	57.4%	55.9%	62.5%

2.2(b) Additional Information – Active Members (continued)





## 2.2(c) 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	7	\$ 281,285	\$ 40,184
20 – 24	63	3,773,137	59,891	1	251	14,215,231	56,634
25 – 29	252	16,639,149	66,028	2	206	13,714,021	66,573
30 – 34	429	29,863,373	69,612	3	138	9,091,350	65,879
35 – 39	538	39,353,901	73,149	4	153	10,361,793	67,724
40 – 44	459	34,091,224	74,273	0 – 4	755	47,663,680	63,131
45 – 49	377	27,690,331	73,449	5 – 9	784	55,874,578	71,269
50 – 54	317	22,464,039	70,864	10 – 14	528	40,375,701	76,469
55 – 59	184	13,267,834	72,108	15 – 19	341	26,474,388	77,638
60 – 64	63	4,202,089	66,700	20 – 24	182	13,753,794	75,570
65 – 69	5	328,609	65,722	25 – 29	83	6,401,793	77,130
70 – 74	0	0	0	30 – 34	13	1,039,184	79,937
75+	0	0	0	35 – 39	1	90,568	90,568
				40+	0	0	0
<b>Total</b>	<b>2,687</b>	<b>\$ 191,673,686</b>	<b>\$ 71,334</b>	<b>Total</b>	<b>2,687</b>	<b>\$ 191,673,686</b>	<b>\$ 71,334</b>

### 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	63	0	0	0	0	0	0	0	0	63
25 – 29	187	64	1	0	0	0	0	0	0	252
30 – 34	155	219	55	0	0	0	0	0	0	429
35 – 39	123	203	170	40	2	0	0	0	0	538
40 – 44	85	137	108	103	25	1	0	0	0	459
45 – 49	67	80	81	75	55	19	0	0	0	377
50 – 54	44	48	62	62	60	36	5	0	0	317
55 – 59	23	20	43	44	33	19	2	0	0	184
60 – 64	8	13	6	15	7	7	6	1	0	63
65 – 69	0	0	2	2	0	1	0	0	0	5
70 – 74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>755</b>	<b>784</b>	<b>528</b>	<b>341</b>	<b>182</b>	<b>83</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>2,687</b>

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

**2.2(d) Schedule of Active Member Valuation Data – Peace Officer/Firefighter**

Valuation Date	Number	Annual Earnings (000's)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2007	2,687	\$ 191,674 <sup>1</sup>	\$ 71,334	9.3%	160
June 30, 2006	2,785	181,830 <sup>1</sup>	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
June 30, 2003	2,727	160,743	58,945	0.8%	160
June 30, 2002	2,695	157,632	58,490	3.4%	161
June 30, 2001	2,683	151,701	56,542	3.9%	158
June 30, 1999	2,624	142,843	54,437	2.7%	148
June 30, 1998	2,617	138,653	52,982	1.0%	148
June 30, 1997	2,587	135,702	52,455	2.8%	156

<sup>1</sup> Prior to June 30, 2006, unannualized earnings were used. Starting June 30, 2006, annualized earnings are used.

2.2(e) 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	9	\$ 364,978	\$ 40,553	0	569	\$ 20,614,934	\$ 36,230
20 – 24	598	22,031,373	36,842	1	2,950	114,723,761	38,889
25 – 29	1,688	68,734,828	40,720	2	2,533	104,392,234	41,213
30 – 34	2,233	101,644,245	45,519	3	1,967	83,063,099	42,228
35 – 39	2,868	133,714,953	46,623	4	2,134	93,010,532	43,585
40 – 44	3,932	187,659,713	47,726	0 – 4	10,153	415,804,560	40,954
45 – 49	5,517	275,494,534	49,936	5 – 9	7,529	358,003,322	47,550
50 – 54	6,010	316,185,486	52,610	10 – 14	4,318	227,319,491	52,645
55 – 59	3,809	205,219,574	53,878	15 – 19	3,312	193,223,650	58,340
60 – 64	1,556	81,287,326	52,241	20 – 24	1,982	125,537,154	63,339
65 – 69	361	17,898,357	49,580	25 – 29	1,157	78,227,419	67,612
70 – 74	71	3,127,963	44,056	30 – 34	197	13,944,865	70,786
75+	23	781,856	33,994	35 – 39	25	1,933,177	77,327
				40+	2	151,548	75,774
<b>Total</b>	<b>28,675</b>	<b>\$ 1,414,145,186</b>	<b>\$ 49,316</b>	<b>Total</b>	<b>28,675</b>	<b>\$ 1,414,145,186</b>	<b>\$ 49,316</b>

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	9	0	0	0	0	0	0	0	0	9
20 – 24	592	6	0	0	0	0	0	0	0	598
25 – 29	1,431	257	0	0	0	0	0	0	0	1,688
30 – 34	1,310	793	128	2	0	0	0	0	0	2,233
35 – 39	1,305	1,069	371	116	7	0	0	0	0	2,868
40 – 44	1,454	1,207	679	461	123	8	0	0	0	3,932
45 – 49	1,523	1,433	955	810	540	246	10	0	0	5,517
50 – 54	1,251	1,387	1,092	949	727	538	66	0	0	6,010
55 – 59	815	867	730	661	393	258	72	13	0	3,809
60 – 64	346	392	289	249	150	91	30	7	2	1,556
65 – 69	85	96	63	53	31	14	15	4	0	361
70 – 74	23	16	9	7	10	1	4	1	0	71
75+	9	6	2	4	1	1	0	0	0	23
<b>Total</b>	<b>10,153</b>	<b>7,529</b>	<b>4,318</b>	<b>3,312</b>	<b>1,982</b>	<b>1,157</b>	<b>197</b>	<b>25</b>	<b>2</b>	<b>28,675</b>

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

**2.2(f) Schedule of Active Member Valuation Data – Others**

Valuation Date	Number	Annual Earnings (000's)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2007	28,675	\$ 1,414,145 <sup>1</sup>	\$ 49,316	9.5%	160
June 30, 2006	31,286	1,408,863 <sup>1</sup>	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
June 30, 2003	31,338	1,300,041	41,484	1.8%	160
June 30, 2002	30,547	1,245,055	40,759	0.3%	161
June 30, 2001	29,758	1,208,700	40,618	5.4%	158
June 30, 1999	29,590	1,140,706	38,550	3.0%	148
June 30, 1998	29,293	1,096,786	37,442	0.2%	148
June 30, 1997	29,267	1,093,433	37,361	0.7%	156

<sup>1</sup> Prior to June 30, 2006, unannualized earnings were used. Starting June 30, 2006, annualized earnings are used.

## 2.2(g) Statistics on New Benefit Recipients – Peace Officer/Firefighter

During the Year Ending June 30	2003	2004	2005	2006	2007
<b>Service</b>					
(1) Number	114	150	121	91	97
(2) Average Age at Commencement	51.72	52.43	52.98	54.50	54.23
(3) Average Monthly Pension Benefit	\$ 2,835	\$ 2,761	\$ 2,435	\$ 2,415	\$ 2,692
<b>Survivor (including surviving spouse and QDROs)</b>					
(1) Number	19	19	12 <sup>1</sup>	22 <sup>1</sup>	30 <sup>1</sup>
(2) Average Age at Commencement	56.54	57.46	49.41	56.72	57.01
(3) Average Monthly Pension Benefit	\$ 1,265	\$ 1,544	\$ 876	\$ 993	\$ 1,388
<b>Disability</b>					
(1) Number	10	5	12	5	11
(2) Average Age at Commencement	49.86	47.50	47.42	47.21	48.51
(3) Average Monthly Pension Benefit	\$ 1,945	\$ 1,938	\$ 1,691	\$ 2,032	\$ 2,253
<b>Total</b>					
(1) Number	143	174	145	118	138
(2) Average Age at Commencement	52.22	52.84	52.23	54.61	54.38
(3) Average Monthly Pension Benefit	\$ 2,564	\$ 2,604	\$ 2,244	\$ 2,134	\$ 2,374

<sup>1</sup> Does not include new beneficiaries that were retirees or disabled retirees as of the prior valuation date.

## 2.2(h) Schedule of Average Pension Benefit Payments – New Benefit Recipients – Peace Officer/Firefighter

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/06 - 6/30/07: <sup>1</sup>							
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: <sup>1</sup>							
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: <sup>1</sup>							
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
Period 7/1/03 - 6/30/04:							
Average Monthly Pension Benefit	\$ 1,644	\$ 2,392	\$ 2,298	\$ 2,093	\$ 2,435	\$ 2,895	\$ 2,546
Number of Recipients	4	78	46	43	61	30	8
Period 7/1/02 - 6/30/03:							
Average Monthly Pension Benefit	\$ 1,594	\$ 697	\$ 1,131	\$ 2,043	\$ 3,013	\$ 4,079	\$ 4,313
Number of Recipients	1	9	20	20	79	11	3
Period 7/1/01 - 6/30/02:							
Average Monthly Pension Benefit	\$ 1,903	\$ 466	\$ 1,056	\$ 1,561	\$ 2,567	\$ 3,447	\$ 5,996
Number of Recipients	1	6	12	19	85	32	2
Period 7/1/00 - 6/30/01:							
Average Monthly Pension Benefit	\$ 1,416	\$ 927	\$ 1,249	\$ 1,704	\$ 2,824	\$ 2,892	\$ 2,702
Number of Recipients	2	13	34	61	143	57	18
Period 7/1/98 - 6/30/00:							
Average Monthly Pension Benefit	\$ 1,879	\$ 698	\$ 1,214	\$ 1,808	\$ 2,849	\$ 3,713	\$ 4,097
Number of Recipients	22	8	23	29	61	17	3
Period 7/1/97 - 6/30/98:							
Average Monthly Pension Benefit	\$ 1,472	\$ 723	\$ 1,177	\$ 2,091	\$ 3,199	\$ 3,548	\$ 3,380
Number of Recipients	13	8	13	40	64	22	4

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

<sup>1</sup> Does not include new beneficiaries that were retirees or disabled retirees as of the prior valuation date.

**2.2(i) Statistics on New Benefit Recipients – Others**

During the Year Ending June 30	2003	2004	2005	2006	2007
<b>Service</b>					
(1) Number	1,247	1,155	1,200	1,308	1,270
(2) Average Age at Commencement	56.85	57.16	57.09	57.41	57.70
(3) Average Monthly Pension Benefit	\$ 1,525	\$ 1,526	\$ 1,524	\$ 1,539	\$ 1,731
<b>Survivor (including surviving spouse and QDROs)</b>					
(1) Number	136	151	43 <sup>1</sup>	155 <sup>1</sup>	175 <sup>1</sup>
(2) Average Age at Commencement	63.24	60.54	55.11	62.33	62.74
(3) Average Monthly Pension Benefit	\$ 879	\$ 758	\$ 602	\$ 852	\$ 847
<b>Disability</b>					
(1) Number	62	40	44	31	34
(2) Average Age at Commencement	49.53	43.22	50.26	49.93	50.60
(3) Average Monthly Pension Benefit	\$ 1,396	\$ 1,268	\$ 1,354	\$ 1,222	\$ 2,026
<b>Total</b>					
(1) Number	1,445	1,346	1,287	1,494	1,479
(2) Average Age at Commencement	57.14	57.08	56.79	57.77	58.13
(3) Average Monthly Pension Benefit	\$ 1,459	\$ 1,430	\$ 1,487	\$ 1,461	\$ 1,633

<sup>1</sup> Does not include new beneficiaries that were retirees or disabled retirees as of the prior valuation date.

## 2.2(j) Schedule of Average Pension Benefit Payments – New Benefit Recipients – Others

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/06 - 6/30/07: <sup>1</sup>							
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: <sup>1</sup>							
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: <sup>1</sup>							
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
Period 7/1/03 - 6/30/04:							
Average Monthly Pension Benefit	\$ 659	\$ 745	\$ 806	\$ 968	\$ 917	\$ 1,163	\$ 1,488
Number of Recipients	28	300	231	218	234	109	58
Period 7/1/02 - 6/30/03:							
Average Monthly Pension Benefit	\$ 984	\$ 678	\$ 1,022	\$ 1,601	\$ 2,201	\$ 3,116	\$ 4,004
Number of Recipients	202	379	290	219	179	99	77
Period 7/1/01 - 6/30/02:							
Average Monthly Pension Benefit	\$ 488	\$ 500	\$ 886	\$ 1,428	\$ 2,020	\$ 2,663	\$ 3,653
Number of Recipients	15	283	246	227	198	94	72
Period 7/1/00 - 6/30/01:							
Average Monthly Pension Benefit	\$ 602	\$ 577	\$ 791	\$ 1,129	\$ 1,392	\$ 1,771	\$ 1,949
Number of Recipients	8	174	289	594	542	438	297
Period 7/1/98 - 6/30/00:							
Average Monthly Pension Benefit	\$ 653	\$ 518	\$ 894	\$ 1,477	\$ 2,129	\$ 2,853	\$ 3,813
Number of Recipients	55	237	249	225	157	86	44
Period 7/1/97 - 6/30/98:							
Average Monthly Pension Benefit	\$ 943	\$ 511	\$ 935	\$ 1,512	\$ 2,090	\$ 3,007	\$ 3,700
Number of Recipients	107	246	281	282	175	86	42

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

<sup>1</sup> Does not include new beneficiaries that were retirees or disabled retirees as of the prior valuation date.

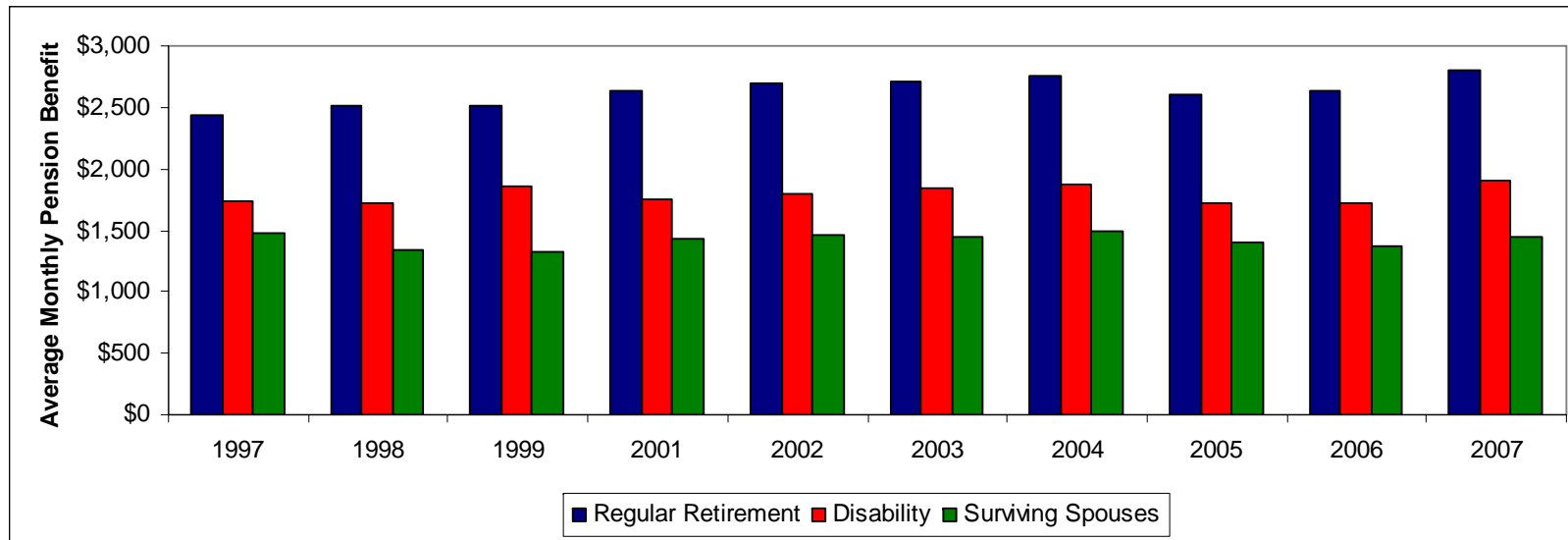
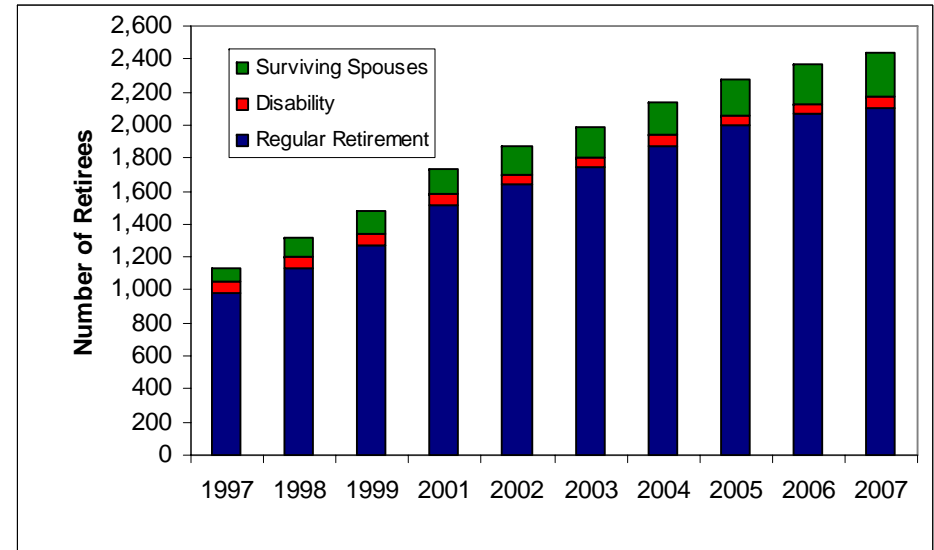
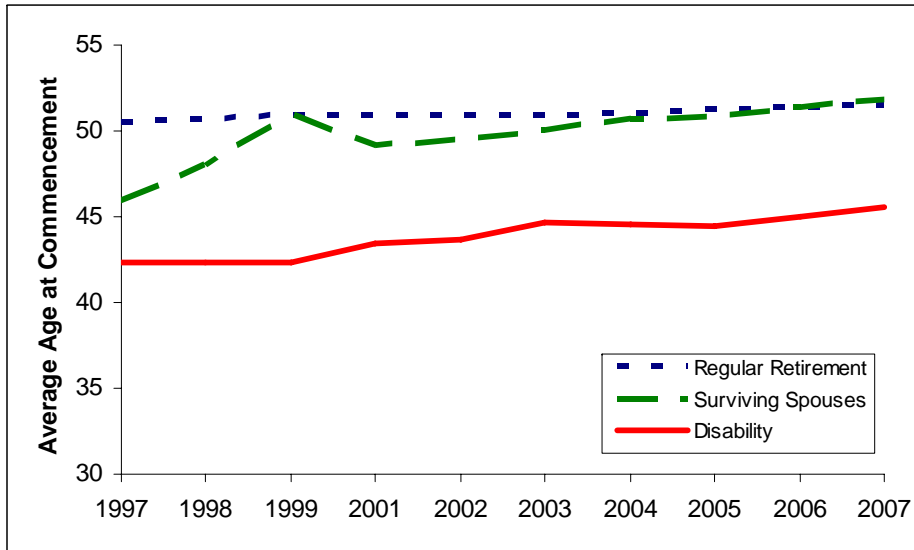


**2.2(k) Statistics on All Benefit Recipients**

	<u>Peace Officer/ Firefighter</u>	<u>Others</u>
<b>Service Retirements</b>		
(1) Number, June 30, 2006	2,068	17,462
(2) Net Change During FY07	39	923
(3) Number, June 30, 2007	2,107	18,385
(3) Average Age At Commencement	51.41	56.62
(4) Average Current Age	61.35	66.37
(5) Average Monthly Pension Benefit	\$ 2,805	\$ 1,475
<b>Survivors (including surviving spouses and QDROs)</b>		
(1) Number, June 30, 2006	243	1,722
(2) Net Change During FY07	28	118
(3) Number, June 30, 2007	271	1,840
(4) Average Age At Commencement	51.76	58.12
(5) Average Current Age	59.62	67.61
(6) Average Monthly Pension Benefit	\$ 1,448	\$ 888
<b>Disabilities</b>		
(1) Number, June 30, 2006	57	349
(2) Net Change During FY07	4	(16)
(3) Number, June 30, 2007	61	333
(4) Average Age At Commencement	45.51	45.30
(5) Average Current Age	51.73	52.05
(6) Average Monthly Pension Benefit	\$ 1,903	\$ 1,532
<b>Total</b>		
(1) Number, June 30, 2006	2,368	19,533
(2) Net Change During FY07	71	1,025
(3) Number, June 30, 2007	2,439	20,558
(4) Average Age At Commencement	51.30	56.57
(5) Average Current Age	60.92	66.25
(6) Average Monthly Pension Benefit	\$ 2,632	\$ 1,423

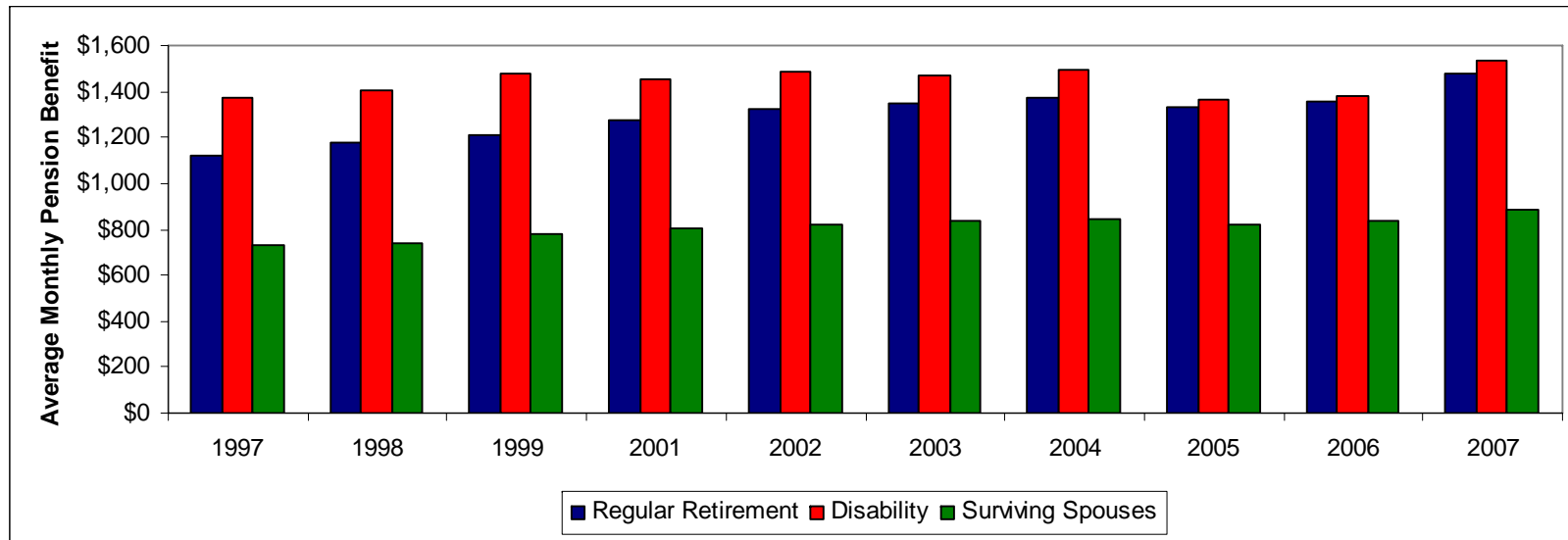
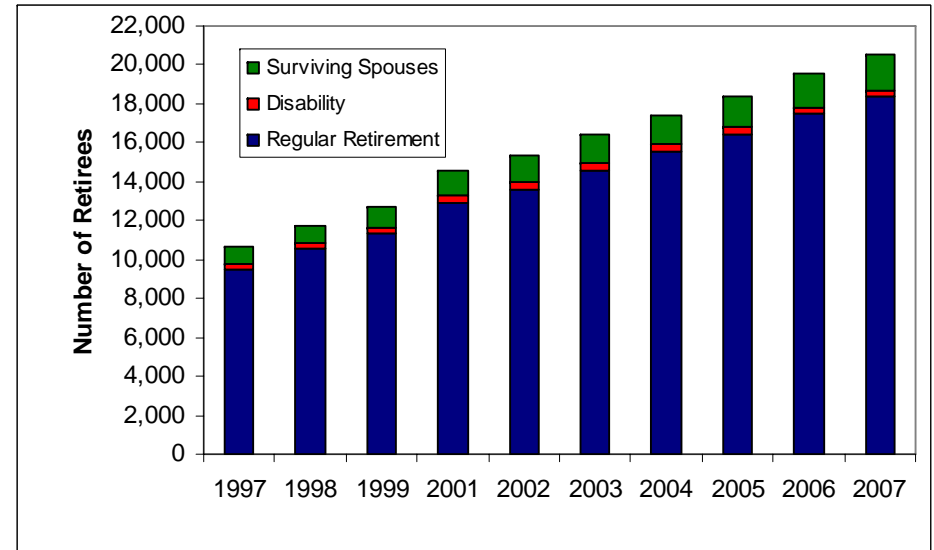
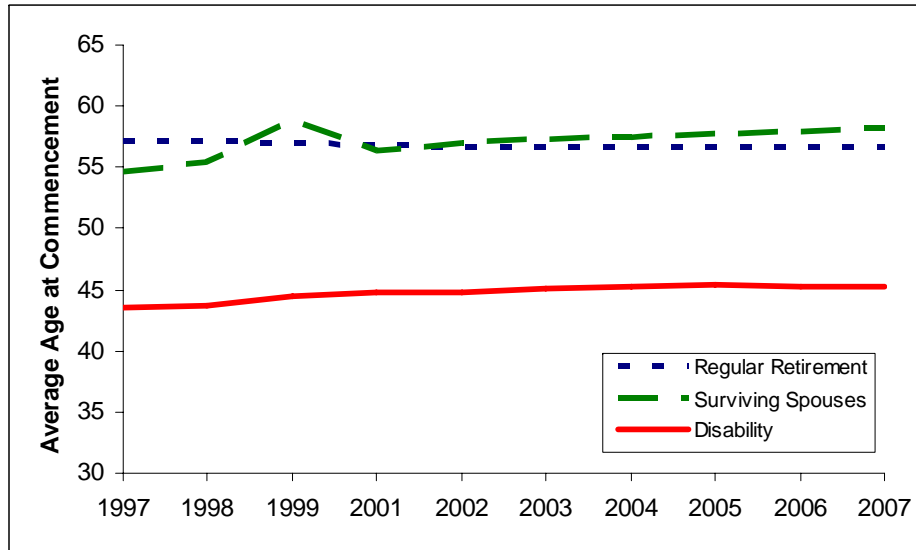
2.2(k) Statistics on All Pension Benefit Recipients (continued)

Peace Officer/Firefighter



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

Others



**2.2(I) Distribution of Annual Pension Benefits for 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	44,116	22,058
35 – 39	4	68,512	17,128
40 – 44	22	615,307	27,969
45 – 49	142	4,736,789	33,358
50 – 54	412	13,863,279	33,649
55 – 59	595	19,345,126	32,513
60 – 64	582	18,453,628	31,707
65 – 69	365	10,367,428	28,404
70 – 74	170	5,288,489	31,109
75+	145	4,237,659	29,225
<b>Total</b>	<b>2,439</b>	<b>\$ 77,020,333</b>	<b>\$ 31,579</b>

**Annual Pension Benefit by Years Since Commencement**

Years Since Commencement	Number	Total Annual Benefit	Average Annual Benefit
0	134	\$ 3,882,195	\$ 28,972
1	119	3,336,435	28,037
2	154	4,342,118	28,196
3	176	5,336,855	30,323
4	127	3,863,810	30,424
0 – 4	710	20,761,413	29,241
5 – 9	761	23,315,210	30,638
10 – 14	444	14,589,259	32,859
15 – 19	256	8,599,839	33,593
20 – 24	188	7,403,192	39,379
25 – 29	60	1,813,925	30,232
30 – 34	18	483,572	26,865
35 – 39	2	53,923	26,962
40+	0	0	0
<b>Total</b>	<b>2,439</b>	<b>\$ 77,020,333</b>	<b>\$ 31,579</b>

**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	2	0	0	0	0	0	0	0	4
40 – 44	15	4	1	2	0	0	0	0	0	22
45 – 49	101	37	4	0	0	0	0	0	0	142
50 – 54	210	164	31	4	1	1	1	0	0	412
55 – 59	228	237	97	30	3	0	0	0	0	595
60 – 64	109	211	157	67	31	4	2	1	0	582
65 – 69	28	78	120	77	55	3	4	0	0	365
70 – 74	8	20	26	54	50	11	1	0	0	170
75+	8	7	8	22	48	41	10	1	0	145
<b>Total</b>	<b>710</b>	<b>761</b>	<b>444</b>	<b>256</b>	<b>188</b>	<b>60</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>2,439</b>

**2.2(m) Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Selected – 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	46	27	19	0	24	9	2	0	11
301 – 600	129	91	35	3	56	32	16	12	13
601 – 900	115	72	39	4	64	31	5	8	7
901 – 1,200	153	103	47	3	79	28	19	8	19
1,201 – 1,500	136	110	22	4	56	36	18	14	12
1,501 – 1,800	123	96	19	8	47	31	22	15	8
1,801 – 2,100	176	133	27	16	73	54	22	14	13
2,101 – 2,400	181	152	20	9	57	78	22	13	11
2,401 – 2,700	212	189	16	7	60	89	36	14	13
2,701 – 3,000	232	220	8	4	49	121	32	17	13
3,001 – 3,300	185	178	6	1	52	88	24	11	10
3,301 – 3,600	172	166	5	1	38	88	22	18	6
3,601 – 3,900	149	147	1	1	32	72	21	13	11
3,901 – 4,200	144	142	2	0	24	85	14	14	7
Over \$ 4,200	286	281	5	0	55	166	32	22	11
Totals	2,439	2,107	271	61	766	1,008	307	193	165

**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

## 2.2(n) Distribution of Annual Pension Benefits for Benefit Recipients – Others

Annual Pension Benefit by Age

Age	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0 – 19	1	\$ 25,417	\$ 25,417
20 – 24	0	0	0
25 – 29	0	0	0
30 – 34	3	37,338	12,446
35 – 39	10	112,049	11,205
40 – 44	41	539,840	13,167
45 – 49	144	2,203,931	15,305
50 – 54	1,128	20,689,851	18,342
55 – 59	4,247	82,838,334	19,505
60 – 64	4,895	86,381,392	17,647
65 – 69	3,792	61,370,736	16,184
70 – 74	2,691	41,969,953	15,596
75+	3,606	54,972,334	15,245
<b>Total</b>	<b>20,558</b>	<b>\$ 351,141,175</b>	<b>\$ 17,081</b>

Annual Pension Benefit by Years Since Commencement

Years Since Commencement	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0	1,440	\$ 28,207,067	\$ 19,588
1	1,476	28,077,417	19,023
2	1,383	25,943,209	18,759
3	1,321	23,553,915	17,830
4	1,300	22,672,862	17,441
0 – 4	6,920	128,454,470	18,563
5 – 9	5,345	93,188,117	17,435
10 – 14	3,289	53,169,185	16,166
15 – 19	2,452	35,551,436	14,499
20 – 24	1,706	29,061,985	17,035
25 – 29	607	8,181,761	13,479
30 – 34	230	3,341,257	14,527
35 – 39	8	156,015	19,502
40+	1	36,949	36,949
<b>Total</b>	<b>20,558</b>	<b>\$ 351,141,175</b>	<b>\$ 17,081</b>

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	1	0	0	0	0	0	0	0	0	1
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	3	0	0	0	0	0	0	0	0	3
35 – 39	5	3	1	1	0	0	0	0	0	10
40 – 44	23	13	4	1	0	0	0	0	0	41
45 – 49	74	38	20	11	0	1	0	0	0	144
50 – 54	943	111	44	23	6	1	0	0	0	1,128
55 – 59	2,998	1,131	85	19	6	6	2	0	0	4,247
60 – 64	1,802	2,228	764	87	10	4	0	0	0	4,895
65 – 69	684	1,082	1,229	683	92	15	5	2	0	3,792
70 – 74	228	492	669	865	418	10	7	1	1	2,691
75+	159	247	473	762	1,174	570	216	5	0	3,606
<b>Total</b>	<b>6,920</b>	<b>5,345</b>	<b>3,289</b>	<b>2,452</b>	<b>1,706</b>	<b>607</b>	<b>230</b>	<b>8</b>	<b>1</b>	<b>20,558</b>

## 2.2(o) Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Selected – 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	1,753	1,422	322	9	766	349	246	68	324
301 – 600	3,863	3,332	487	44	1,820	973	602	234	234
601 – 900	3,088	2,715	338	35	1,433	784	458	212	201
901 – 1,200	2,539	2,259	236	44	1,121	681	400	167	170
1,201 – 1,500	1,982	1,770	164	48	824	575	301	132	150
1,501 – 1,800	1,554	1,411	100	43	609	462	262	108	113
1,801 – 2,100	1,295	1,185	68	42	489	402	216	95	93
2,101 – 2,400	977	896	47	34	340	342	160	55	80
2,401 – 2,700	757	715	27	15	262	244	137	64	50
2,701 – 3,000	601	578	17	6	207	206	115	33	40
3,001 – 3,300	525	506	15	4	151	219	88	33	34
3,301 – 3,600	358	347	9	2	104	142	56	33	23
3,601 – 3,900	319	313	4	2	100	135	50	19	15
3,901 – 4,200	239	235	2	2	63	111	42	12	11
Over \$ 4,200	708	701	4	3	194	302	120	61	31
Totals	20,558	18,385	1,840	333	8,483	5,927	3,253	1,326	1,569

**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

## 2.2(p) Schedule of 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. <sup>1</sup>	Annual Pension Benefits <sup>1</sup>	No. <sup>1</sup>	Annual Pension Benefits <sup>1</sup>	No.	Annual Pension Benefits		
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	0.9%	29,589
June 30, 2004	174	6,388,270	25	904,310	2,140	66,890,815	8.9%	31,257
June 30, 2003	143	4,923,581	21	802,499	1,991	61,406,855	7.2%	30,842
June 30, 2002	157	6,155,365	19	744,917	1,869	57,285,773	10.4%	30,650
June 30, 2001	328	12,637,854	75	2,889,753	1,731	51,875,325	23.1%	29,968
June 30, 1999	163	4,761,117	8	233,673	1,478	42,127,224	12.0%	28,503
June 30, 1998	195	6,096,918	2	62,532	1,323	37,599,780	19.1%	28,420
June 30, 1997	161	6,672,261 <sup>2</sup>	9	372,984 <sup>2</sup>	1,130	31,565,394	24.9%	27,934

<sup>1</sup> Numbers are estimated, and include other internal transfers.

<sup>2</sup> Includes additional benefits to current retirees from a one-time retroactive ad-hoc Post-Retirement Pension Adjustment.



*Basis of the Valuation*

**2.2(q) Schedule of 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. <sup>1</sup>	Annual Pension Benefits <sup>1</sup>	No. <sup>1</sup>	Annual Pension Benefits <sup>1</sup>	No.	Annual Pension Benefits		
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
June 30, 2003	1,445	27,802,265	351	6,507,821	16,440	257,205,574	9.0%	15,645
June 30, 2002	1,135	27,484,388	332	8,039,486	15,346	235,911,130	9.0%	15,373
June 30, 2001	2,342	46,880,694	506	10,128,792	14,543	216,466,228	20.5%	14,885
June 30, 1999	1,053	19,402,623	124	2,284,829	12,707	179,714,326	10.5%	14,143
June 30, 1998	1,219	25,116,364	113	2,328,260	11,778	162,596,532	16.3%	13,805
June 30, 1997	830	23,255,081 <sup>2</sup>	101	2,829,835 <sup>2</sup>	10,672	139,808,955	7.2%	13,101

<sup>1</sup> Numbers are estimated, and include other internal transfers.

<sup>2</sup> Includes additional benefits to current retirees from a one-time retroactive ad-hoc Post-Retirement Pension Adjustment.

## **2.3 Summary of Actuarial Assumptions, Methods and Procedures**

The demographic and economic assumptions used in the June 30, 2007 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board in October 2006. These assumptions were the result of an experience study performed as of June 30, 2005. The funding method used in this valuation was adopted by the Board in October 2006. The asset smoothing method used to determine valuation assets was changed effective June 30, 2002.

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

### **Valuation of Liabilities**

#### **(A) Actuarial Method – Entry Age Actuarial Cost**

Liabilities and contributions shown in the report are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 25 years as a level percent of pay. Payroll is assumed to increase 4.0% per year for this purpose. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined. However, for GASB disclosure requirements, the net amortization period will not exceed 30 years and the level dollar amortization method is used since the defined benefit plan membership was closed effective July 1, 2006.

Projected pension and postemployment healthcare benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for pension benefits (constant dollar amount for healthcare benefits) from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total 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.

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

### Changes in Methods from the Prior Valuation

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

#### (B) Valuation of Assets

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

#### (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 Experience Study for the period July 1, 2001 to June 30, 2005.

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 coverage is not available by individual, nor is this status incorporated into historical claim data.

We analyzed Aetna and Premera management level reporting for calendar 2003 through fiscal 2007, as well as Aetna and Premera claim level data for calendar 2004, 2005 and 2006, and derived recommended base claims cost rates as described in the following steps:

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

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

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 and enrollment 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 larger the no-Part A population, the more accrued liabilities will decrease.

Current retiree census does not include date of hire, although the Tier indicator does imply that Tier I PERS retirees should probably be considered as no-Part A retirees. After analysis of active employee data, including individual claim records, and accounting for retirees who return to work and therefore pay Medicare taxes, we assume that 5.0% of the active and inactive workforce will not qualify for free Part A coverage when they retire. Similarly, we assume 5.0% of the current Medicare retiree population does not receive Part A coverage.

We are working with the State to compile census records for no-Part A members to build an historic claim database isolating no-Part A members.

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

4. The steps above result in separate paid claims cost rates for medical and prescription benefits for non-Medicare, Medicare Part B only and Medicare Part A&B members for the past four calendar years. Medical claims cost rates reflect differing average ages and levels of Medicare coordination for each group. Prescription claims cost rates reflect differing average ages. We converted paid claim data to incurred cost rates projected from each historical data period to the valuation year using an average of national and Alaska-specific trend factors and developed weighted average incurred claims cost rates. The assumed lag between medical claim incurred and paid dates is approximately 2.3 months for medical claims and 0.6 months for prescription claims. This “trend and blend” methodology differs mechanically from the method used for 2004 and 2005 that essentially averaged three years of paid claims before projecting forward to an incurred basis for the valuation year. During transition to a trended blended average basis, we recommend weighting each year’s data in the 4-year experience period at 25%. We also incorporated actual administrative costs that are projected to increase at 5%.

## 2.3 Summary of Actuarial Assumptions and Methods (continued)

### June 30, 2007 Valuation – FY 2008 Claims Cost Rates

	Medical			Prescription Drugs			
	Pre-Medicare	Medicare A&B	Medicare B Only	Pre-Medicare	Medicare A&B	Medicare B Only	Total
<b>Calendar 2004 Paid Claims</b>	<b>\$ \$125,222,188</b>	<b>\$ \$20,330,785</b>	<b>\$ \$2,955,315</b>	<b>\$ \$37,938,758</b>	<b>\$ \$29,894,935</b>	<b>\$ \$1,689,411</b>	<b>\$ \$218,031,392</b>
Membership	32,858	17,558	924	32,858	17,558	924	51,340
Paid Claims Cost Rate	\$ 3,811	\$ 1,158	\$ 3,198	\$ 1,155	\$ 1,703	\$ 1,828	\$ 4,247
Trend to FY2008	1.286	1.286	1.286	1.400	1.400	1.400	
FY 2008 Paid Cost Rate	\$ 4,901	\$ 1,489	\$ 4,112	\$ 1,616	\$ 2,383	\$ 2,559	\$ 5,615
Paid to Incurred Factor**	1.013	1.013	1.013	1.004	1.004	1.004	
<b>FY 2008 Incurred Cost Rate</b>	<b>\$ 4,966</b>	<b>\$ 1,509</b>	<b>\$ 4,167</b>	<b>\$ 1,622</b>	<b>\$ 2,391</b>	<b>\$ 2,568</b>	<b>\$ 5,671</b>
<b>Calendar 2005 Paid Claims</b>	<b>\$ 146,356,647</b>	<b>\$ 25,618,571</b>	<b>\$ 3,976,509</b>	<b>\$ 42,812,358</b>	<b>\$ 35,481,585</b>	<b>\$ 1,999,302</b>	<b>\$ 256,244,972</b>
Membership	33,343	18,603	979	33,343	18,603	979	52,925
Paid Claims Cost Rate	\$ 4,389	\$ 1,377	\$ 4,061	\$ 1,284	\$ 1,907	\$ 2,042	\$ 4,842
Trend to FY2008	1.188	1.188	1.188	1.258	1.258	1.258	
FY 2008 Paid Cost Rate	\$ 5,214	\$ 1,636	\$ 4,824	\$ 1,615	\$ 2,399	\$ 2,569	\$ 5,857
Paid to Incurred Factor**	1.013	1.013	1.013	1.004	1.004	1.004	
<b>FY 2008 Incurred Cost Rate</b>	<b>\$ 5,283</b>	<b>\$ 1,657</b>	<b>\$ 4,888</b>	<b>\$ 1,621</b>	<b>\$ 2,408</b>	<b>\$ 2,578</b>	<b>\$ 5,917</b>
<b>Fiscal 2006 Paid Claims</b>	<b>\$ 150,287,171</b>	<b>\$ 24,546,905</b>	<b>\$ 4,079,223</b>	<b>\$ 45,461,356</b>	<b>\$ 39,644,399</b>	<b>\$ 2,235,948</b>	<b>\$ 266,255,002</b>
Membership	33,473	19,490	1,026	33,473	19,490	1,026	53,989
Paid Claims Cost Rate	\$ 4,490	\$ 1,259	\$ 3,977	\$ 1,358	\$ 2,034	\$ 2,180	\$ 4,932
Trend to FY2008	1.142	1.142	1.142	1.195	1.195	1.195	
FY 2008 Paid Cost Rate	\$ 5,128	\$ 1,438	\$ 4,542	\$ 1,622	\$ 2,430	\$ 2,604	\$ 5,717
Paid to Incurred Factor**	1.013	1.013	1.013	1.004	1.004	1.004	
<b>FY 2008 Incurred Cost Rate</b>	<b>\$ 5,196</b>	<b>\$ 1,458</b>	<b>\$ 4,602</b>	<b>\$ 1,628</b>	<b>\$ 2,439</b>	<b>\$ 2,613</b>	<b>\$ 5,774</b>
<b>Fiscal 2007 Paid Claims</b>	<b>\$ 129,762,975</b>	<b>\$ 22,677,328</b>	<b>\$ 3,524,812</b>	<b>\$ 46,176,199</b>	<b>\$ 42,348,638</b>	<b>\$ 2,391,089</b>	<b>\$ 246,881,041</b>
Membership	33,446	20,315	1,069	33,446	20,315	1,069	54,830
Paid Claims Cost Rate	\$ 3,880	\$ 1,116	\$ 3,297	\$ 1,381	\$ 2,085	\$ 2,236	\$ 4,503
Trend to FY2008	1.063	1.063	1.063	1.083	1.083	1.083	
FY 2008 Paid Cost Rate	\$ 4,122	\$ 1,186	\$ 3,503	\$ 1,495	\$ 2,257	\$ 2,421	\$ 4,817
Paid to Incurred Factor**	1.013	1.013	1.013	1.004	1.004	1.004	
<b>FY 2008 Incurred Cost Rate</b>	<b>\$ 4,177</b>	<b>\$ 1,202</b>	<b>\$ 3,549</b>	<b>\$ 1,500</b>	<b>\$ 2,265</b>	<b>\$ 2,430</b>	<b>\$ 4,864</b>
Weighted Average 7/1/2007-6/30/2008 Incurred Claims Cost Rates:							
At average age	\$ 4,905	\$ 1,456	\$ 4,302	\$ 1,593	\$ 2,376	\$ 2,547	\$ 5,517
At age 65*	\$ 7,196	\$ 1,151	\$ 2,805	\$ 2,173	\$ 2,173	\$ 2,173	\$ 7,131

\* Final Medicare rates are adjusted so that net plan cost for members with Parts A & B are one-half of net plan costs for members with Part B only. Also, prior methodology did not include separate Part B only analysis; applicable rates above are determined so that the composite Medicare rate equates to separate A&B and B only rates based on the 7.5% of membership assumed to lack Part A.

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

## 2.3 Summary of Actuarial Assumptions and Methods *(continued)*

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, 2007 through June 30, 2008**

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug and Medicare Retiree Drug Subsidy
45	\$ 3,928	\$ 3,928	\$ 1,169
50	4,444	4,444	1,388
55	5,077	5,077	1,641
60	6,030	6,030	1,902
65	1,151	2,805	1,708
70	1,400	3,413	1,840
75	1,663	4,053	1,962
80	1,791	4,366	2,012

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

### (D) Actuarial Assumptions

Investment Return / Discount Rate	8.25% per year, compounded annually, net of expenses.
Salary Scale	Inflation – 3.5% per year Peace Officer/Firefighter: Merit – 2.5% per year for the first 6 years of employment, 0.5% thereafter. Productivity – 0.5% per year Others: Merit – 5.5% per year grading down to 1.5% after 5 years; for more than 6 years of service, 1.0% grading down to 0%. Productivity – 0.5% per year
Payroll Growth	4.0% per year
Total Inflation	Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.5% annually.
Mortality (Pre-retirement)	Peace Officer/Firefighters: 1994 Group Annuity Mortality Basic Table for males and females, 1994 Base Year. Others: Based upon the 2001-2005 actual mortality experience (see Table 1). 42% of the 1994 Group Annuity Table, 1994 Base Year for males and females. Deaths are assumed to be occupational 75% of the time for Peace Officer/Firefighter, 50% of the time for Others.
Mortality (Post-retirement)	1994 Group Annuity Mortality Basic Table for males and females, 1994 Base Year.
Total Turnover	Based upon the 2001-2005 actual withdrawal experience. (See Table 2).
Disability	Incidence rates based upon the 2001-2005 actual experience, in accordance with Table 3. Post-disability mortality in accordance with the 1979 Pension Benefit Guaranty Corporation Disability Mortality Table to reflect mortality of those receiving disability benefits under Social Security. Disabilities are assumed to be occupational 75% of the time for Peace Officer/ Firefighter, 50% of the time for Others.
Retirement	Retirement rates based upon the 2001-2005 actual experience in accordance with Tables 4 and 5. Deferred vested members are assumed to retire at their earliest retirement date.
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.
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% if terminated members are assumed to have their contributions refunded.

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

### (D) Actuarial Assumptions *(continued)*

COLA	Of those benefit recipients who are eligible for the COLA, 60% are assumed to remain in Alaska and receive the COLA.															
Post-Retirement Pension Adjustment	50% and 75% of assumed inflation, or 1.75% and 2.625% respectively, is valued for the annual automatic Post-Retirement Pension Adjustment (PRPA) as specified in the statute. Disability benefits are loaded by 9% to account for the immediate COLA of 75% of assumed inflation or 2.625%.															
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/Firefighters and 0.65 years of credited service per year for Other members.															
Per Capita Claims Cost	Sample claims cost rates for FY08 medical and prescription are shown below:															
	<table border="1"> <thead> <tr> <th></th> <th>Medical</th> <th>Prescription Drugs</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td>\$ 7,196</td> <td>\$ 2,173</td> </tr> <tr> <td>Medicare Parts A &amp; B</td> <td>\$ 1,151</td> <td>N/A</td> </tr> <tr> <td>Medicare Part B Only</td> <td>\$ 2,805</td> <td>N/A</td> </tr> <tr> <td>Medicare Part D</td> <td>N/A</td> <td>\$ 465</td> </tr> </tbody> </table>		Medical	Prescription Drugs	Total	\$ 7,196	\$ 2,173	Medicare Parts A & B	\$ 1,151	N/A	Medicare Part B Only	\$ 2,805	N/A	Medicare Part D	N/A	\$ 465
	Medical	Prescription Drugs														
Total	\$ 7,196	\$ 2,173														
Medicare Parts A & B	\$ 1,151	N/A														
Medicare Part B Only	\$ 2,805	N/A														
Medicare Part D	N/A	\$ 465														
Third Party Administrator Fees	\$146.18 per person per year; assumed trend rate of 5% per year.															

#### 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, 8.5% is applied to the FY08 rate claims costs to get the FY09 claims costs.

	Medical	Prescription Drugs
FY08	8.5%	12%
FY09	8.0%	11%
FY10	7.5%	10%
FY11	7.0%	9%
FY12	6.5%	8%
FY13	6.0%	7%
FY14	5.5%	6%
FY15	5.0%	5%
FY16 and later	5.0%	5%

For the June 30, 2005 valuation, graded Healthcare Cost Trend Rates (HCCTR) were reinitialized. A survey of healthcare trends in the past year has revealed a general lowering of HCCTR. No reinitialization is required this year, so the trend rates will follow the same pattern as for the 2005 and 2006 valuations.



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

### (D) Actuarial Assumptions *(continued)*

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

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 FY08 contributions based on monthly rates shown below for calendar 2007 and 2008 are assumed based on the coverage category for current retirees. The composite rate shown is used for current active and inactive members assumed to retire prior to age 60 with less than 30 years of service.

Coverage Category	FY08 Annual Contribution	Calendar 2008 Monthly Contribution	Calendar 2007 Monthly Contribution
Retiree Only	\$ 7,080	\$ 590	\$ 590
Retiree and Spouse	\$ 14,148	\$ 1,179	\$ 1,179
Retiree and Child(ren)	\$ 9,996	\$ 883	\$ 883
Retiree and Family	\$ 17,076	\$ 1,423	\$ 1,423
Composite	\$ 10,512	\$ 876	\$ 876

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

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### (D) Actuarial Assumptions *(continued)*

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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, 7.7% is applied to the FY08 retired member medical contributions to get the FY09 retired member medical contributions.

FY08	7.7%
FY09	7.3%
FY10	7.0%
FY11	6.7%
FY12	6.3%
FY13	6.0%
FY14	5.7%
FY15	5.3%
FY16	5.0%
FY17 and later	5.0%

Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2005 valuation. A study of the required contribution history along with assumptions related to the impact of recent accounting regulations leads us to recommend the new rates above for the contribution trends. Note that actual FY07 retired member medical contributions are reflected in the valuation so trend on such contribution during FY07 is not applicable.

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Healthcare Participation

100% of members are assumed to elect the healthcare benefits as soon as they are eligible.

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

**Table 1**  
**Alaska PERS Others**  
**Mortality Table (Preretirement)**

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.0229%	.0128%
21	.0239	.0129
22	.0251	.0131
23	.0266	.0131
24	.0282	.0131
25	.0299	.0131
26	.0315	.0133
27	.0328	.0136
28	.0341	.0142
29	.0352	.0150
30	.0362	.0158
31	.0371	.0168
32	.0379	.0179
33	.0383	.0191
34	.0383	.0202
35	.0384	.0216
36	.0389	.0231
37	.0402	.0249
38	.0424	.0270
39	.0452	.0294
40	.0484	.0320
41	.0522	.0347
42	.0565	.0373
43	.0611	.0396
44	.0659	.0417
45	.0713	.0439
46	.0778	.0467
47	.0858	.0502
48	.0949	.0545
49	.1050	.0591
50	.1165	.0645
51	.1297	.0708
52	.1451	.0783
53	.1619	.0861
54	.1797	.0941
55	.1998	.1036
56	.2235	.1157
57	.2252	.1318
58	.2845	.1517
59	.3202	.1745
60	.3602	.2005

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

**Table 2**  
**Alaska PERS**  
**Total Turnover Assumptions**

Select Rates of Turnover During the First 5 Years of Employment			Ultimate Rates of Turnover After the First 5 Years of Employment		
<b>Peace Officer/Firefighter:</b>					
Year of Employment	Male	Female	Age	Male	Female
1	11%	12%	20	4.57%	5.76%
2	9	10	25	4.54	5.75
3	7	8	30	4.49	5.71
4	6	7	35	4.46	5.66
5	5	6	40	4.39	5.56
			45	4.20	5.38
			50	3.88	5.09
			55	3.24	4.51
			60	1.74	2.94
			65+	4.80	6.00

Select rates vary slightly by age.

**Others:**

Year of Employment	Age at Hire				Age	Male	Female
	20-34		35+				
	Male	Female	Male	Female			
1	25%	26%	15%	16%	20	12.01%	13.68%
2	23	24	15	16	25	11.99	13.67
3	20	21	13	14	30	11.97	13.66
4	16	17	12	12	35	8.66	9.89
5	15	16	11	11	40	6.42	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

Select rates vary slightly by age.

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

**Table 3**  
**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%	.032%	.029%
21	.089	.032	.029
22	.090	.033	.031
23	.091	.033	.031
24	.093	.035	.032
25	.094	.035	.032
26	.095	.035	.032
27	.098	.036	.033
28	.100	.037	.034
29	.103	.038	.035
30	.105	.039	.036
31	.108	.039	.036
32	.110	.040	.037
33	.113	.041	.038
34	.116	.043	.039
35	.120	.044	.040
36	.124	.046	.042
37	.129	.047	.043
38	.134	.050	.045
39	.139	.051	.046
40	.144	.053	.048
41	.150	.055	.050
42	.159	.059	.054
43	.170	.062	.057
44	.185	.068	.062
45	.203	.075	.068
46	.220	.081	.074
47	.239	.087	.080
48	.259	.096	.087
49	.279	.102	.094
50	.300	.110	.101
51	.325	.120	.109
52	.353	.131	.120
53	.398	.146	.133
54	.444	.163	.149
55	.500	.184	.168
56	.574	.212	.193
57	.668	.246	.225
58	.763	.281	.256
59	.900	.331	.302
60	1.054	.388	.354

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

**Table 4**  
**Alaska PERS Peace Officer/Firefighter**  
**Retirement Table**

Age at Retirement	Retirement Rate			
	Reduced		Unreduced	
	Male	Female	Male	Female
<50	N/A	N/A	10.40%	10.40%
50	10.50%	6.30%	40.00	40.00
51	14.80	10.00	27.50	27.50
52	15.00	10.00	27.50	27.50
53	19.70	10.00	25.00	25.00
54	19.60	10.00	25.00	25.00
55	8.80	15.60	30.00	30.00
56	9.60	13.00	22.75	22.75
57	13.00	13.00	22.75	22.75
58	12.70	13.00	15.60	15.60
59	13.00	13.00	15.60	15.60
60	N/A	N/A	25.00	25.00
61	N/A	N/A	25.00	25.00
62	N/A	N/A	26.00	26.00
63	N/A	N/A	25.00	25.00
64	N/A	N/A	25.00	25.00
65	N/A	N/A	100.00	100.00

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

**Table 5**  
**Alaska PERS Others**  
**Retirement Table**

Age at Retirement	Retirement Rate			
	Reduced		Unreduced	
	Male	Female	Male	Female
<50	N/A	N/A	7.10%	7.20%
50	6.00%	7.30%	20.00	20.00
51	6.20	7.50	17.50	20.00
52	7.50	7.50	20.00	15.00
53	7.50	8.90	18.00	24.00
54	6.00	5.40	30.00	21.00
55	7.90	8.20	30.00	30.00
56	9.50	9.20	17.50	17.50
57	9.60	9.10	17.50	17.50
58	9.50	9.10	15.00	17.50
59	4.70	3.80	15.00	17.50
60	N/A	N/A	20.00	21.00
61	N/A	N/A	17.50	15.00
62	N/A	N/A	30.00	18.75
63	N/A	N/A	22.50	18.75
64	N/A	N/A	26.25	18.75
65	N/A	N/A	27.00	25.00
66	N/A	N/A	27.00	25.00
67	N/A	N/A	27.00	25.00
68	N/A	N/A	30.00	25.00
69	N/A	N/A	30.00	30.00
70	N/A	N/A	100.00	100.00

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

### Changes in Actuarial Assumptions Since the Prior Valuation

	June 30, 2006	June 30, 2007
Healthcare	Included effect of Medicare Part A & B vs. Medicare Part B only. Active employees hired after April 1, 1986 are assumed to be covered by Medicare Parts A & B. 7.5% of current retirees are assumed to be covered by Part B only. Change assumed lag between medical claim incurred and paid dates from 3 months to 2 lag months. Changed trend rate table for retiree medical contributions to start at 8.0% and grade down to 5%.	5.0% of current retirees are assumed to be covered by Part B only. Change assumed lag between medical claim incurred and paid dates from 2 months for medical and prescription combined to 2.3 months for medical and 0.6 months for prescription. Added explicit TPA fees based on current admin contract and assumed to increase at 5%. Partially reflected Alaska-specific trend rates to bring forward experience period claims to the base year.



**Section 3**

Section 3.1	Analysis of Financial Experience.
Section 3.2(a)	Summary of Accrued and Unfunded Accrued Liabilities – Total.
Section 3.2(b)	Schedule of Employer Contributions.
Section 3.2(c)	Actuarial Assumptions, Methods and Additional Information Under GASB.
Section 3.3	Solvency Test.

### 3.1 Analysis of Financial Experience

**Change in Average Employer 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 Contribution Rate During Fiscal Year			
	Pension		Healthcare	
	2006	2007	2006	2007
(1) Health Experience	N/A	N/A	(4.06)%	(5.64)%
(2) Salary Experience	0.02%	0.23%	N/A	N/A
(3) Investment Experience	0.19%	(0.11)%	(0.48)%	(0.92)%
(4) Demographic Experience	1.05%	(0.17)%	N/A	N/A
(5) Contribution Shortfall	(0.81)%	0.11%	1.82%	0.83%
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	0.45%	0.06%	(2.72)%	(5.73)%
<b>Non-recurring Changes</b>				
(7) Asset Valuation Method	0.00%	0.00%	0.00%	0.00%
(8) Past Service Amortization Change	0.00%	0.00%	0.00%	0.00%
(9) Assumption and Method Changes*	1.51%	(0.72)%	3.47%	(1.18)%
(10) System Benefit Changes	0.00%	0.00%	0.00%	0.00%
(11) Addition of 102% Target Funding Ratio	0.00%	0.00%	0.00%	0.00%
(12) Elimination of 102% Target Funding Ratio	0.00%	0.00%	0.00%	0.00%
(13) Ad hoc PRPA	0.00%	0.00%	0.00%	0.00%
(14) Change due to revaluation of plan liabilities as of June 30, 2004	0.00%	0.00%	0.00%	0.00%
(15) Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13) + (14)	1.96%	(0.66)%	0.75%	(6.91)%
(16) Beginning Average Employer Contribution Rate	8.95%	10.91%	23.56%	24.31%
(17) Ending Average Employer Contribution Rate, (15) + (16)	10.91%	10.25%	24.31%	17.40%
(18) Fiscal Year Above Rate is Applied	FY09	FY10	FY09	FY10

\*Includes change in rate by using total payroll.

### 3.1 Analysis of Financial Experience (continued)

**Change in Average Employer 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 Contribution Rate During Fiscal Year				
	2003	2004	2005	2006	2007
(1) Health Experience	0.00%	0.00%	1.49%	(4.06)%	(5.64)%
(2) Salary Experience	(0.19)%	0.08%	(0.32)%	0.02%	0.23%
(3) Investment Experience	0.31%	0.02%	(0.02)%	(0.29)%	(1.03)%
(4) Demographic Experience	0.40%	0.54%	0.01%	1.05%	(0.17)%
(5) Contribution Shortfall	1.10%	0.89%	0.98%	1.01%	0.94%
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	1.62%	1.53%	2.14%	(2.27)%	(5.67)%
<b>Non-recurring Changes</b>					
(7) Asset Valuation Method	0.00%	0.00%	0.00%	0.00%	0.00%
(8) Past Service Amortization Change	0.00%	0.00%	0.00%	0.00%	0.00%
(9) Assumption and Method Changes	0.00%	1.03%	0.00%	4.98%	(1.90)%
(10) System Benefit Changes*	0.00%	0.00%	0.00%	0.00%	0.00%
(11) Addition of 102% Target Funding Ratio	0.00%	0.00%	0.00%	0.00%	0.00%
(12) Elimination of 102% Target Funding Ratio	(0.90)%	0.00%	0.00%	0.00%	0.00%
(13) Ad hoc PRPA	0.00%	0.00%	0.00%	0.00%	0.00%
(14) Change due to revaluation of plan liabilities as of June 30, 2004	0.00%	0.00%	2.18%	0.00%	0.00%
(15) Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13) + (14)	0.72%	2.56%	4.32%	2.71%	(7.57)%
(16) Beginning Average Employer Contribution Rate	24.91%	25.63%	28.19%	32.51%	35.22%
(17) Ending Average Employer Contribution Rate, (15) + (16)	25.63%	28.19%	32.51%	35.22%	27.65%
(18) Fiscal Year Above Rate is Applied	FY06	FY07	FY08	FY09	FY10

\*Includes change in rate by using total payroll.

### 3.2(a) Summary of Accrued and Unfunded Accrued Liabilities – Total

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

Valuation Date	Aggregate Accrued Liability (000's)	Valuation Assets (000's)	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL) (000's)	Annual Active Member Payroll (000's)	UAL as a Percent of Annual Active Member Payroll
June 30, 2007	\$ 8,662,324	\$ 6,739,004	77.8%	\$ 1,923,320	\$ 1,605,819	119.8%
June 30, 2006	\$ 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 (000's)	Valuation Assets (000's)	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL) (000's)	Annual Active Member Payroll (000's)	UAL as a Percent of Annual Active Member Payroll
June 30, 2007	\$ 11,108,553	\$ 3,161,956	28.5%	\$ 7,946,597	\$ 1,605,819	494.9%
June 30, 2006	\$ 11,455,015	\$ 2,709,843	23.7%	\$ 8,745,172	\$ 1,590,693	549.8%

For illustration, the exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy discounted at 8.25% and at 4.50% per annum under GASB No. 43. These values show the minimum and maximum accrued liability amounts depending on the portion of ARC actually contributed.

Valuation Date	Aggregate Accrued Liability (000's)	Valuation Assets (000's)	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL) (000's)	Annual Active Member Payroll (000's)	UAL as a Percent of Annual Active Member Payroll
June 30, 2007 – 8.25%	\$ 6,300,795	\$ 3,161,956	50.2%	\$ 3,138,839	\$ 1,605,819	195.5%
June 30, 2007 – 4.50%	\$ 11,108,553	\$ 3,161,956	28.5%	\$ 7,946,597	\$ 1,605,819	494.9%

**3.2(a) Summary of Accrued and Unfunded Accrued Liabilities – Total** *(continued)*

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

Valuation Date	Aggregate Accrued Liability (000's)	Valuation Assets (000's)	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL) (000's)	Annual Active Member Payroll (000's)	UAL as a Percent of Annual Active Member Payroll
June 30, 2005	\$ 12,844,841	\$ 8,442,919	65.7%	\$ 4,401,922	\$ 1,513,117	290.9%
June 30, 2004 <sup>2 3</sup>	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 <sup>1 2 3</sup>	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 <sup>2 3</sup>	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 <sup>1 2 3</sup>	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

<sup>1</sup> Change in Asset Valuation Method

<sup>2</sup> Change of Assumptions

<sup>3</sup> Change in Methods

### 3.2(b) Schedule of Employer Contributions

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.

<b>Fiscal Year Ended June 30</b>	<b>Total Annual Required Contribution</b>	<b>Total Percentage Contributed</b>
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.

<b>Fiscal Year Ended June 30</b>	<b>Total Annual Required Contribution</b>	<b>Total Percentage Contributed</b>
2007	\$268,742	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.

<b>Fiscal Year Ended June 30</b>	<b>Total Annual Required Contribution</b>	<b>Total Percentage Contributed</b>
2007	\$189,495	77.3%

**3.2(b) Schedule of Employer Contributions (continued)**

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

Valuation Date	Fiscal Year	ARC (% of Pay)		
		Pension	Healthcare	Total
June 30, 2005	FY08	10.72%	53.96%	64.68%
June 30, 2006	FY09	13.49%	55.87%	69.36%
June 30, 2007	FY10	13.72%	49.98%	63.70%

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

Valuation Date	June 30, 2007
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	21 years
Asset Valuation Method	5-year smoothed market
Actuarial Assumptions:	
Investment rate of return*	8.25% for pension, 4.50% for healthcare.
Projected salary increases	Peace Officer/Firefighter: Merit – 2.5% per year for the first 6 years of employment, 0.5% thereafter. Productivity – 0.5% per year. Others: Merit – 5.5% per year grading down to 1.5% after 5 years; for more than 6 years of service, 1.0% grading down to 0%. Productivity – 0.5% per year.
*Includes inflation at	3.5%
Cost-of-living adjustment	Post-retirement Pension Adjustment as described in Section 2.1, item (13)

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 4.50% as of June 30, 2007, to be used for fiscal 2008 disclosure.

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

#### **Investment Returns**

Plan Assets (Long-Term Return)	=	8.25%
Employer Assets (Estimated Short-Term Return)	=	4.50%

#### **Based on Percentage of ARC Contributed\***

1. Contribution Allocated to Healthcare	=	4.80%
2. Annual Required Contribution, Funding Assumptions	=	19.08%
3. Pay-as-you-go Contribution	=	6.72%
4. Portion of ARC Contributed: [(1-3) / (2-3), not less than 0%]	=	0.00%
5. Multiplied by long-term investment return	=	0.00%
6. Portion of ARC not Contributed: [100% - (4)]	=	100.00%
7. Multiplied by short-term investment return	=	4.50%
8. Total: (5) + (7)	=	4.50%

\*It is assumed that fiscal 2003 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, 2005 valuation (fiscal 2006), which in turn drives the fiscal 2008 GASB 43 ARC.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2008 employer ARC rate for accounting purposes is 53.96% of pay for healthcare benefits and 64.68% of pay for healthcare and pension benefits combined.



### 3.3 Solvency Test

Valuation Date	Aggregate Accrued Liability For:			Valuation Assets (000's)	Portion of Accrued Liabilities Covered by Assets		
	(1) Active Member Contributions (000's)	(2) Inactive Members (000's)	(3) Active Members (Employer-Financed Portion) (000's)		(1)	(2)	(3)
June 30, 2007	\$ 1,203,007	\$ 8,967,038	\$ 4,400,888	\$ 9,900,960	100.0%	97.0%	0.0%
June 30, 2006 <sup>2 3</sup>	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 <sup>2</sup>	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 <sup>1 2 3</sup>	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%
June 30, 2000 <sup>2 3</sup>	892,949	4,588,201	1,895,762	7,454,758	100.0%	100.0%	100.0%
June 30, 1999	854,497	3,961,063	1,833,113	7,016,340	100.0%	100.0%	100.0%
June 30, 1998 <sup>1 2 3</sup>	819,226	3,610,352	1,774,413	6,571,562	100.0%	100.0%	100.0%

<sup>1</sup> Change in Asset Valuation Method

<sup>2</sup> Change in Assumptions

<sup>3</sup> Change in Methods

Healthcare liabilities are calculated using the funding assumptions (i.e., 8.25% investment return and net of Medicare Part D subsidy).