

# State of Alaska Public Employees' Retirement System

Actuarial Valuation Report  
as of June 30, 2014

October 2015



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October 6, 2015

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

**Certification of Actuarial Valuation**

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

This report summarizes the annual actuarial valuation results of the State of Alaska Public Employees' Retirement System (PERS) as of June 30, 2014 performed by Buck Consultants, LLC.

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP and member data provided by the Division of Retirement and Benefits and summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2014. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

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

The State of Alaska Public Employees' Retirement System is funded by Employer, State, and Member Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board) and as required by Alaska state statutes. The funding objective for the State of Alaska Public Employees' Retirement System is to pay required contributions that remain level as a percent of total PERS Compensation. The Board has also established a funding policy objective that the required contributions be sufficient to pay the Normal Costs of active plan members, System expenses, and amortize the Unfunded Actuarial Accrued Liability as a level percentage of payroll over a closed 25-year period and as required by Alaska state statutes.

In accordance with Senate Bill 119, signed into law May 28, 2014, and HB 385, signed into law June 23, 2014, the following changes are effective for this June 30, 2014 actuarial valuation:

- The amortization method used for funding changed from the level dollar amount method to the level percentage of payroll method, and the amortization period was re-initialized to a closed 25-year period as of June 30, 2014.
- The additional state contribution for fiscal year ending June 30, 2015 is exactly \$1,000,000,000.
- The two-year rate setting time lag is intended to be eliminated. The two-year lag in the setting of contribution rates is replaced by a two-year roll forward of liabilities and projected normal costs and a one-year roll forward of June 30, 2015 assets.
- The Actuarial Value of Assets is reset to the Fair Value of Assets as of June 30, 2014. The five-year smoothing method with grow-in will be implemented over the next five years.
- The 20% corridor over/under the Fair Value of Assets is eliminated in the calculation of the Actuarial Value of Assets.

The compensation used to determine required contributions is the total compensation of all active members in PERS, including those hired after July 1, 2006 who are members of the Defined Contribution Retirement (DCR) Plan. This objective is currently being met and is projected to continue to be met.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the System and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the System. The actuary performs an analysis of System experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed in 2014 covering experience for the period July 1, 2009 to June 30, 2013. Changes in actuarial assumptions were recommended by the actuary as a result of the 2014 experience analysis and adopted by the Board. A review of the healthcare assumptions was performed for this actuarial valuation and changes were made to the healthcare cost trend rates and the per capita claim cost rates effective June 30, 2014 to better reflect expected future healthcare experience. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 6.

The assumptions and methods used to calculate the Actuarially Determined Contribution (ADC) of the Employers to the State of Alaska Public Employees' Retirement System as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statements No. 67, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Based on member data and asset information provided by the Division of Retirement and Benefits, we have prepared the trend data schedule under GASB No. 43 that is included in the Financial Section of the CAFR. We have also prepared the member



data tables shown in Section 5 of this report for the Statistical Section of the CAFR, and the summary of actuarial assumptions, solvency test, and analysis of financial experience for the Actuarial Section of the CAFR.

Both of the undersigned are Associates of the Society of Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David H. Slushinsky".

David H. Slushinsky, ASA, MAAA, FCA  
Principal, Consulting Actuary

A handwritten signature in black ink, appearing to read "Todd D. Kanaster".

Todd D. Kanaster, ASA, MAAA, FCA  
Senior Consultant

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.

A handwritten signature in black ink, appearing to read "Melissa A. Bissett".

Melissa A. Bissett, FSA, MAAA  
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# Executive Summary

## Overview

The State of Alaska Public Employees' Retirement System provides pension and postemployment healthcare benefits to eligible participants. The Commissioner of the Department of Administration is responsible for administering the System. The Alaska Retirement Management Board has fiduciary responsibility over the assets of the System. This report presents the results of the actuarial valuation of the System benefits as of the valuation date of June 30, 2014.

## Purpose

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

1. To determine the Employer/State contribution necessary to meet the Board's funding policy for the System;
2. To disclose the funding assets and liability measures as of the valuation date;
3. To disclose the accounting measures for the System required by GASB Nos. 67 and 43 as of the end of the last fiscal year;
4. To review the current funded status of the System;
5. To compare actual and expected experience under the System during the last fiscal year;
6. And to report trends in contributions, assets, liabilities, and funded status over the last several years.

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

Future actuarial valuation measurements and projections may differ from the current measurements presented in this report to such factors as: plan experience different from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. The sensitivity analysis shown in Section 4.7 is an example of the differences which can occur in projected contribution amounts when actual investment returns are different than assumed, but does not include the impact of all possible future differences that can impact future measurements.

## Funding Status

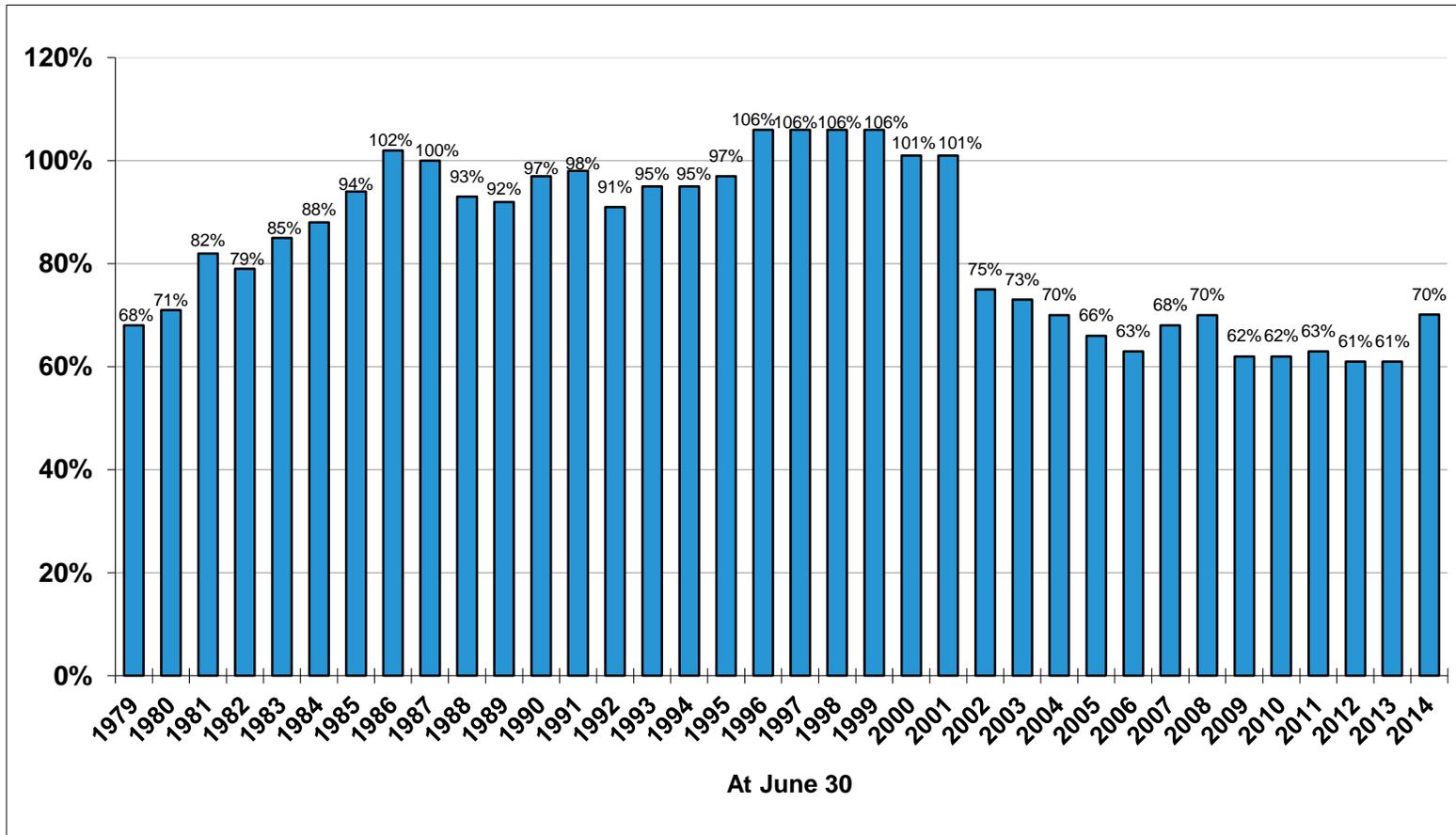
The funding status is a measure of the progress that has been made in funding the plan as of the valuation date. It is determined as a ratio of the actuarial value of assets divided by the total actuarial accrued liability on the valuation date. A ratio of over 100% represents a plan that is ahead in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

Funding Status as of June 30	2013	2014
<b>Pension</b>		
a. Accrued Liability <sup>1</sup>	\$ 11,945,881	\$ 12,947,759
b. Valuation Assets <sup>1</sup>	<u>6,510,749</u>	<u>7,731,438</u>
c. Unfunded Accrued Liability <sup>1</sup> , (a) – (b)	\$ 5,435,132	\$ 5,216,321
d. Funding Ratio based on Valuation Assets, (b) ÷ (a)	54.5%	59.7%
e. Fair Value of Assets <sup>1</sup>	\$ 6,694,482	\$ 7,731,438
f. Funding Ratio based on Fair Assets, (e) ÷ (a)	56.0%	59.7%
<b>Healthcare</b>		
a. Accrued Liability <sup>1</sup>	\$ 8,046,878	\$ 7,949,613
b. Valuation Assets <sup>1</sup>	<u>5,651,877</u>	<u>6,913,160</u>
c. Unfunded Accrued Liability <sup>1</sup> , (a) – (b)	\$ 2,395,001	\$ 1,036,453
d. Funding Ratio based on Valuation Assets, (b) ÷ (a)	70.2%	87.0%
e. Fair Value of Assets <sup>1</sup>	\$ 5,829,571	\$ 6,913,161
f. Funding Ratio based on Fair Assets, (e) ÷ (a)	72.4%	87.0%
<b>Total</b>		
a. Accrued Liability <sup>1</sup>	\$ 19,992,759	\$ 20,897,372
b. Valuation Assets <sup>1</sup>	<u>12,162,626</u>	<u>14,644,598</u>
c. Unfunded Accrued Liability <sup>1</sup> , (a) – (b)	\$ 7,830,133	\$ 6,252,774
d. Funding Ratio based on Valuation Assets, (b) ÷ (a)	60.8%	70.1%
e. Fair Value of Assets <sup>1</sup>	\$ 12,524,053	\$ 14,644,598
f. Funding Ratio based on Fair Assets, (e) ÷ (a)	62.6%	70.1%

<sup>1</sup> In thousands.

# PERS Funding Ratio History

(Based on Valuation Assets)



As shown previously, the funding ratio based on valuation assets as of June 30, 2014 has increased from 60.8% to 70.1%, an increase of 9.3%. The calculated Employer/State contribution rate has decreased from 40.28% of total payroll as of June 30, 2013 to 24.64% as of June 30, 2014, a decrease of 15.64% of total payroll. The reasons for the change in the funded status and contribution rate are explained in the Comparative Summary of Key Actuarial Valuation Results.

## 1. Retiree Medical Costs and Assumptions

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

Time Period	Monthly Premium Per Retiree For Health Coverage	Annual Percentage Change	Average Compound Annual Increase Since FY78
2/1/77-1/31/78	\$ 57.64	66%	-
2/1/78-1/31/79	69.10	20%	20%
2/1/79-1/31/80	64.70	-6%	6%
2/1/80-1/31/81	96.34	49%	19%
2/1/81-1/31/82	96.34	0%	14%
2/1/82-1/31/83	115.61	20%	15%
2/1/83-1/31/84	156.07	35%	18%
2/1/84-1/31/85	191.85	23%	19%
2/1/85-1/31/86	168.25	-12%	14%
2/1/86-1/31/87	165.00	-2%	12%
2/1/87-1/31/88	140.25	-15%	9%
2/1/88-1/31/89	211.22	51%	13%
2/1/89-1/31/90	252.83	20%	13%
2/1/90-1/31/91	243.98	-4%	12%
2/1/91-1/31/92	243.98	0%	11%
2/1/92-1/31/93	226.90	-7%	10%
2/1/93-1/31/94	309.72	37%	11%
2/1/94-1/31/95	336.05	9%	11%
2/1/95-1/31/96	350.50	4%	11%
2/1/96-1/31/97	350.50	0%	10%
2/1/97-1/31/98	368.00	5%	10%
2/1/98-12/31/98	368.00	0%	9%
1/1/99-12/31/99	442.00	20%	10%
1/1/00-12/31/00	530.00	20%	10%
1/1/01-12/31/01	610.00	15%	10%
1/1/02-12/31/02	668.00	10%	10%
1/1/03-12/31/03	720.00	8%	10%
1/1/04-12/31/04	806.00	12%	10%
1/1/05-12/31/05	850.00	5%	10%
1/1/06-12/31/06	876.00	3%	10%
1/1/07-12/31/07	876.00	0%	10%
1/1/08-12/31/08	876.00	0%	9%
1/1/09-12/31/09	937.00	7%	9%
1/1/10-12/31/10	1,068.00	14%	9%
1/1/11-12/31/11	1,176.00	10%	9%
1/1/12-12/31/12	1,200.00	2%	9%
1/1/13-12/31/13	1,223.00	2%	9%
1/1/14-12/31/14	1,223.00	0%	9%
1/1/15-12/31/15	1,223.00	0%	8%

As shown in the above table, the monthly retiree medical premium for the January 1, 2015 to December 31, 2015 time period will remain at \$1,223. This represents an increase of 0% from the previous year's medical premium. The health cost trend rates used for this valuation are described in Section 6.3. Over the last 10 years, annual premium rate changes have ranged 0% to 14%. Also, over the last ten years, the increase in the premium rate has been about 4.3% compounded annually.

An analysis of medical costs was completed based on claims information and enrollment data provided by HealthSmart (formerly Wells Fargo Insurance Services) and Aetna. 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 2014 valuation, we updated incurred claims cost and Medicare offset analyses using fiscal 2014 incurred claims and enrollment information through June 2014. For Medicare Part B only participants, we were provided a census, from Aetna, of all current retirees that do not have Medicare Part A. A lower average claims cost was applied to retirees covered by both Medicare Part A and B vs. retirees covered only by Medicare Part B. 2014 experience rates were developed using historical incurred claims for fiscal years 2011 - 2014. The trend assumption is based on the proposed Society of Actuaries' Healthcare Cost Trend Model updated for 2014. The trend rate varies by year declining to 4.5% over 100 years pre-Medicare and 4% for Medicare. The trends vary by medical, pre-Medicare and Medicare, and aggregate prescription drugs. Use of the updated trend rate model for 2014 resulted in a reduction in the ultimate trend rate. See Section 6.3 for a description of the change in healthcare cost trend rates.

This data was reviewed and compared to management level reporting supplied by HealthSmart and Aetna. For the 2014 valuation, we have not modified any management level reporting information used to develop per capita claim cost rates. We will continue to compare data from multiple sources and potentially modify future claims cost rate derivation to reflect salient information at the individual claimant level that may enhance global management level data. For the 2014 valuation, we do not recommend any changes to morbidity assumptions used to project increasing claims costs as members age. However, we will continue to compare age-based claims costs derived from individual claimant data to the current morbidity curve and potentially modify the assumed aging impact on claims costs in future valuations. Finally, explicit third-party administration (TPA) and applicable healthcare legislation costs were added to medical and prescription claims cost rates. Per-member TPA costs are derived from the current Aetna contract and are projected to increase at the assumed rate of 5%.

Based upon variations in medical cost trends between Medicare-eligible and pre-Medicare populations, Buck's practice is to use separate healthcare cost trends for these populations. This, in conjunction with updates to legislation, long-term trend models and time since prior assumptions were set, indicated a need to re-set this assumption for the 2014 valuation.

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 2014 and 2015. Based on current plan provisions and utilization data, we anticipate the plan will continue to qualify for RDS payments. The State has shared its payments for calendar 2006 through September 2014 and this information was used to estimate future RDS payments in this valuation. Please note, Part D subsidies are not reflected for accounting purposes under GASB No. 43.

Utilization and claims cost data indicate that healthcare experience emerging since the prior valuation is increasing slightly in the aggregate, but still favorably, compared to industry and aggregate trend expectations. Non-Medicare claims are trending higher recently and this was considered in updating the trend assumptions. Some of the favorable experience can be attributed to the lower than anticipated Medical costs in the Medicare population. With the introduction of a health improvement

plan for State employees, as well as disease management provided by the TPA, it is hoped that the incidence of the most severe and costly chronic conditions can be mitigated to a more manageable and stable level. As with the prior valuation, a weighting methodology is employed, where each of the experience years is weighted appropriately, with more emphasis on the most recent two years, when calculating the claims costs. This has the effect of preventing any one year from unduly influencing the claims costs. In the current valuation, we averaged national trend assumptions with Alaska-specific trend, with 75% weight to Alaska-specific trend and 25% to national trend, during the experience period to give more credibility to Alaska-specific experience while still reflecting national trends.

The following table summarizes data sources and assumptions and the relative impact changes in each have on healthcare cost projections for 2014 as compared to 2013:

Healthcare Cost Rate Data Source or Assumption Change, 2014 vs. 2013	Gain / Loss Impact on 2014 Valuation Results
Claim lag specific to medical and prescription experience	Negligible
Individual claims level data	<ul style="list-style-type: none"> <li>– No impact on cost data used for 2014, though potentially a source of future modifications</li> <li>– No impact on morbidity assumptions used for 2014, though potentially a source of future modifications</li> </ul>
Explicit TPA fees	Negligible
Actual RDS payments received	Negligible
Experience Study	Moderate loss due to updated demographic assumptions
Updated healthcare cost trend assumptions	Gain due to lower ultimate trend rates; particularly for the Medicare population
Aggregate claims data	Moderate gain due to experience; mainly Medicare eligible, but dampened by weighting methodology
Census Data	Loss due to updated census

## 2. Investment Experience

The actuarial asset value was reinitialized to equal Fair Value of Assets as of June 30, 2014. Beginning in 2015, the asset value method will recognize 20% of the gain or loss each year, for a period of 5 years. The approximate FY14 investment return based on fair values was 18.2% compared to the expected investment return of 8.00%. This resulted in a gain of approximately \$1,284 million to the System from investment experience. Due to the immediate recognition of deferred gains, the approximate FY14 investment return based on actuarial values was 21.9%, compared to the expected investment return of 8.00%.

## 3. Salary Increase

During the period from June 30, 2013 to June 30, 2014, salary increases for continuing active members were less than anticipated in the valuation assumptions. Salary gains of \$36.7 million lowered accrued liabilities, which increased the funding ratio by 0.20%. The net effect of the salary gain was a decrease of 0.19% in the Employer/State contribution rate.

#### **4. Demographic Experience**

Section 5 provides statistics on active participants. The number of active participants decreased 7.9%, from 20,955 at June 30, 2013 to 19,297 at June 30, 2014 due to members retiring and terminating during the year and the closure of the plan to new entrants as of July 1, 2006. The average age of active participants increased from 50.39 to 50.90 and average credited service increased from 14.00 to 14.64 years.

The number of benefit recipients increased 4.1%, from 29,865 to 31,099, and their average age increased from 67.76 to 68.15. There was a 1.0% decrease in the number of vested terminated participants from 6,230 to 6,167. Their average age increased from 50.84 to 51.15.

The overall effect of these participant data changes along with the healthcare experience was an actuarial gain to the System, resulting in a decrease in the Employer/State contribution rate equal to 0.89% of total payroll. Most of this gain is due to spreading the unfunded contribution over a larger payroll base, a lower than expected PRPA increase and a smaller than expected growth in the per capita claims cost rates for healthcare. As a result, expected benefit payments for FY14 and future years are reduced. The gain/loss by decrement on the accrued liability is shown in the summary on page 10.

#### **5. Effect of the Two-Year Delay in the Contribution Rate**

As of June 30, 2013, the actuarially calculated rate was 40.28% for FY16 Employer/State contributions. Since Employer/State contribution rates are determined two years prior to the fiscal year, the June 30, 2011 employer rate of 32.31% was contributed during FY14. The difference between the two calculated rates, 40.28% and 32.31%, or an actuarial contribution rate of 7.97% less than the actuarial rate, created a contribution deficit to the System. This deficit increased the Employer/State contribution rate by 0.67%.

#### **6. Actuarial Projections**

At the Fall 1991 Board Meetings, the PERS Board approved the use of an enhanced actuarial projection system. The same actuarial cost method is used, but the enhanced system projects the associated liabilities 30 years into the future. By also projecting plan assets, this report in effect produces an actuarial valuation for each of the next 30 years. Section 4, Actuarial Funding Projections, contains the results of this analysis.

This type of information can be especially useful to multi-tiered systems, such as PERS. No new DB plan entrants are anticipated. The total active population is expected to grow at 0.5% per year (decreased from 1% last year) and all future demographic assumptions are expected to be exactly realized.

## **7. Changes in Methods Since the Prior Valuation**

In accordance with Senate Bill 119, signed into law May 28, 2014, and HB 385, signed into law June 23, 2014, the following changes are effective for this June 30, 2014 actuarial valuation:

- The amortization method used for funding changed from the level dollar amount method to the level percentage of payroll method, and the amortization period was re-initialized to a closed 25-year period as of June 30, 2014.
- The additional state contribution for fiscal year ending June 30, 2015 is exactly \$1,000,000,000.
- The two-year rate setting time lag is intended to be eliminated. The two-year lag in the setting of contribution rates is replaced by a two-year roll forward of liabilities and projected normal costs and a one-year roll forward of June 30, 2015 assets.
- The Actuarial Value of Assets is reset to the Fair Value of Assets as of June 30, 2014. The five-year smoothing method with grow-in will be implemented over the next five years.
- The 20% corridor over/under the Fair Value of Assets is eliminated in the calculation of the Actuarial Value of Assets.

## **8. Changes in Assumptions Since the Prior Valuation**

Effective for the June 30, 2014 valuation, the board adopted the changes to the demographic assumptions recommended by the actuary based on the results of an experience analysis performed on the population experience from July 1, 2009 through June 30, 2013. The changes in assumptions were adopted by the Board during the December 2014 Board meeting. In addition, changes in the healthcare cost trend rates are included in the actuarial valuation results effective June 30, 2014.

## **9. Changes in Benefit Provisions Since the Prior Valuation**

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

# Comparative Summary of Key Actuarial Valuation Results

Employer/State Contribution Rates for Pension for Fiscal Year:	2016	2017
a. Normal Cost Rate Net of Member Contributions	2.38%	3.06%
b. Past Service Rate	<u>22.46%</u>	<u>12.92%</u>
c. Total Employer/State Contribution Rate (a) + (b)*	24.84%	15.98%
Employer/State Contribution Rates for Postemployment Healthcare for Fiscal Year:	2016	2017
a. Normal Cost Rate	3.73%	2.70%
b. Past Service Rate	<u>11.71%</u>	<u>3.10%</u>
c. Total Employer/State Contribution Rate (a) + (b)*	15.44%	5.80%
Total Employer/State Contribution Rates for Fiscal Year:	2016	2017
a. Normal Cost Rate Net of Member Contributions	6.11%	5.76%
b. Past Service Rate	<u>34.17%</u>	<u>16.02%</u>
c. Total Employer/State Contribution Rate (a) + (b)*	40.28%	21.78%
d. Board Adopted Total Employer/State Contribution Rate**	22.58%	21.78%
e. Defined Contribution Retirement (DCR) Rate Paid by Employers	<u>4.61%</u>	<u>4.36%</u>
f. Board Adopted Total Rate, Including DCR Rate Paid by Employers (d) + (e)	27.19%	26.14%

\* The contribution rates for fiscal year ending June 30, 2017 are to be determined using new methodology in accordance with 2014 legislation under HB 385 and SB 119 which change the amortization methodology to a closed 25-year period as a level percentage of pay and eliminate the time lag on the contribution rate calculation using a "roll-forward" approach and assuming 0% population growth. Liabilities are rolled forward two years and assets as of June 30, 2015 are rolled forward one year with gains and losses smoothed over five years.

\*\* Contribution rates for FY16 were recalculated after the 2013 actuarial valuation was performed in accordance with the new methodology required under HB 385 and SB 119, and adopted by the Board.

Contribution rates are based on total salaries for DB and DC plan members, combined. The rates shown above are for funding purposes which may differ from the Annual Required Contribution for GASB Nos. 67 and 43 reporting purposes. Under GASB No. 43, postemployment healthcare liabilities are gross of the retiree drug subsidy and are calculated with a discount rate for a partially funded plan. Under GASB No. 43, the amortization of the unfunded liabilities is calculated as a level dollar amount.

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

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

The following table summarizes the sources of change in the total Employer/State contribution rate determined as of June 30, 2014 based on DB and DCR payroll combined:

	Pension	Healthcare	Total
1. Last year's total Employer/State contribution rate	24.84%	15.44%	40.28%
2. Change due to:			
a. Effect of two-year delay in the contribution rate	0.63%	0.04%	0.67%
b. Investment experience	(2.40)%	(2.23)%	(4.63)%
c. Salary increases	(0.19)%	N/A	(0.19)%
d. Demographic and medical experience <sup>1</sup>	(0.04)%	(0.85)%	(0.89)%
e. Change in actuarial assumptions and methodology	<u>(6.86)%</u>	<u>(6.60)%</u>	<u>(13.46)%</u>
f. Total change (a + b + c + d + e)	(8.86)%	(9.64)%	(18.50)%
3. Total Employer/State contribution rate this year (1) + (2f)	15.98%	5.80%	21.78%

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

	Pension	Healthcare	Total	% of Total Expected Accrued Liability
Retirement Experience	\$ (14,713)	\$ (16,221)	\$ (30,934)	(0.1%)
Termination Experience	(23,435)	(3,541)	(26,976)	(0.1%)
Active Mortality Experience	7,584	(2,194)	5,390	nil
Inactive Mortality Experience	(10,713)	5,794	(4,919)	nil
Disability Experience	(1,163)	(2,680)	(3,843)	nil
Rehires	(29,681)	(14,325)	(44,006)	(0.2%)
Other Demographic Experience <sup>2</sup>	23,781	56,638	80,419	0.4%
Salary Increases	36,677	N/A	36,677	0.2%
Alaska COLA	7,026	N/A	7,026	nil
PRPA Other Than Expected	(3,978)	N/A	(3,978)	nil
Medical Claims Costs	N/A	279,808	279,808	1.3%
Total	\$ (8,615)	\$ 303,279	\$ 294,664	1.4%

<sup>1</sup> Includes changes in future healthcare claims costs.

<sup>2</sup> Reflects data and programming changes.

# Section 1 Actuarial Funding Results

## Section 1.1

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

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>Active Members</b>		
Retirement Benefits	\$ 947,522	\$ 742,246
Termination Benefits	22,125	9,297
Disability Benefits	4,875	(537)
Death Benefits	9,946	5,637
Return of Contributions	3,680	(7,941)
Medical and Prescription Drug Benefits	382,871	324,090
Medicare Part D Subsidy	(13,015)	(11,123)
Indebtedness	<u>(6,409)</u>	<u>(6,409)</u>
Subtotal	\$ 1,351,595	\$ 1,055,260
<b>Inactive Members</b>		
Not Vested	\$ 2,649	\$ 2,649
Vested Terminations		
- Retirement Benefits	24,637	24,637
- Medical and Prescription Drug Benefits	30,584	30,584
- Medicare Part D Subsidy	(1,136)	(1,136)
- Indebtedness	(477)	(477)
Retirees & Beneficiaries		
- Retirement Benefits	1,230,641	1,230,641
- Medical and Prescription Drug Benefits	544,704	544,704
- Medicare Part D Subsidy	<u>(32,913)</u>	<u>(32,913)</u>
Subtotal	\$ 1,798,689	\$ 1,798,689
<b>Total</b>	<b>\$ 3,150,284</b>	<b>\$ 2,853,949</b>
<b>Total Pension</b>	<b>\$ 2,239,189</b>	<b>\$ 1,999,743</b>
<b>Total Medical, Net of Part D Subsidy</b>	<b>\$ 911,095</b>	<b>\$ 854,206</b>
<b>Total Medical, Gross of Part D Subsidy</b>	<b>\$ 958,159</b>	<b>\$ 899,378</b>

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>By Tier</b>		
Tier 1		
- Pension	\$ 1,108,408	\$ 1,102,047
- Medical, Net of Part D Subsidy	452,073	449,652
Tier 2		
- Pension	540,878	491,844
- Medical, Net of Part D Subsidy	209,589	200,653
Tier 3		
- Pension	589,903	405,852
- Medical, Net of Part D Subsidy	<u>249,433</u>	<u>203,901</u>
<b>Total</b>	<b>\$ 3,150,284</b>	<b>\$ 2,853,949</b>
As of June 30, 2014	Normal Cost	
<b>Active Members</b>		
Retirement Benefits		\$ 26,246
Termination Benefits		1,705
Disability Benefits		717
Death Benefits		583
Return of Contributions		1,549
Medical and Prescription Drug Benefits		9,183
Medicare Part D Subsidy		<u>(306)</u>
Subtotal		\$ 39,677
<b>Total</b>		<b>\$ 39,677</b>
<b>Total Pension</b>		<b>\$ 30,800</b>
<b>Total Medical, Net of Part D Subsidy</b>		<b>\$ 8,877</b>
<b>Total Medical, Gross of Part D Subsidy</b>		<b>\$ 9,183</b>
<b>By Tier</b>		
Tier 1		
- Pension		\$ 1,683
- Medical, Net of Part D Subsidy		687
Tier 2		
- Pension		8,815
- Medical, Net of Part D Subsidy		1,819
Tier 3		
- Pension		20,302
- Medical, Net of Part D Subsidy		<u>6,371</u>
<b>Total</b>		<b>\$ 39,677</b>

## Actuarial Liabilities and Normal Cost – Others

(\$'s in 000's)

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>Active Members</b>		
Retirement Benefits	\$ 4,675,791	\$ 3,874,618
Termination Benefits	299,370	141,533
Disability Benefits	15,954	1,449
Death Benefits	66,440	45,632
Return of Contributions	31,441	(62,022)
Medical and Prescription Drug Benefits	2,704,828	2,294,845
Medicare Part D Subsidy	(131,753)	(113,313)
Indebtedness	<u>(60,427)</u>	<u>(60,427)</u>
Subtotal	\$ 7,601,644	\$ 6,122,315
<b>Inactive Members</b>		
Not Vested	\$ 70,636	\$ 70,636
Vested Terminations		
- Retirement Benefits	498,257	498,257
- Medical and Prescription Drug Benefits	852,071	852,071
- Medicare Part D Subsidy	(34,665)	(34,665)
- Indebtedness	(12,664)	(12,664)
Retirees & Beneficiaries		
- Retirement Benefits	6,451,004	6,451,004
- Medical and Prescription Drug Benefits	4,391,952	4,391,952
- Medicare Part D Subsidy	<u>(295,483)</u>	<u>(295,483)</u>
Subtotal	\$ 11,921,108	\$ 11,921,108
<b>Total</b>	<b>\$ 19,522,752</b>	<b>\$ 18,043,423</b>
<b>Total Pension</b>	<b>\$ 12,035,802</b>	<b>\$ 10,948,016</b>
<b>Total Medical, Net of Part D Subsidy</b>	<b>\$ 7,486,950</b>	<b>\$ 7,095,407</b>
<b>Total Medical, Gross of Part D Subsidy</b>	<b>\$ 7,948,851</b>	<b>\$ 7,538,868</b>

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>By Tier</b>		
Tier 1		
- Pension	\$ 6,508,503	\$ 6,391,272
- Medical, Net of Part D Subsidy	4,118,500	4,034,780
Tier 2		
- Pension	3,024,517	2,730,448
- Medical, Net of Part D Subsidy	1,811,323	1,726,052
Tier 3		
- Pension	2,502,783	1,826,296
- Medical, Net of Part D Subsidy	<u>1,557,126</u>	<u>1,334,575</u>
<b>Total</b>	<b>\$ 19,522,752</b>	<b>\$ 18,043,423</b>
As of June 30, 2014		Normal Cost
<b>Active Members</b>		
Retirement Benefits		\$ 117,097
Termination Benefits		19,323
Disability Benefits		1,928
Death Benefits		2,953
Return of Contributions		12,611
Medical and Prescription Drug Benefits		75,443
Medicare Part D Subsidy		<u>(3,384)</u>
Subtotal		\$ 225,971
<b>Total</b>		<b>\$ 225,971</b>
<b>Total Pension</b>		<b>\$ 153,912</b>
<b>Total Medical, Net of Part D Subsidy</b>		<b>\$ 72,059</b>
<b>Total Medical, Gross of Part D Subsidy</b>		<b>\$ 75,443</b>
<b>By Tier</b>		
Tier 1		
- Pension		\$ 27,439
- Medical, Net of Part D Subsidy		21,743
Tier 2		
- Pension		44,458
- Medical, Net of Part D Subsidy		15,499
Tier 3		
- Pension		82,015
- Medical, Net of Part D Subsidy		<u>34,817</u>
<b>Total</b>		<b>\$ 225,971</b>

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

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>Active Members</b>		
Retirement Benefits	\$ 5,623,313	\$ 4,616,864
Termination Benefits	321,495	150,830
Disability Benefits	20,829	912
Death Benefits	76,386	51,269
Return of Contributions	35,121	(69,963)
Medical and Prescription Drug Benefits	3,087,699	2,618,935
Medicare Part D Subsidy	(144,768)	(124,436)
Indebtedness	<u>(66,836)</u>	<u>(66,836)</u>
Subtotal	\$ 8,953,239	\$ 7,177,575
<b>Inactive Members</b>		
Not Vested	\$ 73,285	\$ 73,285
Vested Terminations		
- Retirement Benefits	522,894	522,894
- Medical and Prescription Drug Benefits	882,655	882,655
- Medicare Part D Subsidy	(35,801)	(35,801)
- Indebtedness	(13,141)	(13,141)
Retirees & Beneficiaries		
- Retirement Benefits	7,681,645	7,681,645
- Medical and Prescription Drug Benefits	4,936,656	4,936,656
- Medicare Part D Subsidy	<u>(328,396)</u>	<u>(328,396)</u>
Subtotal	\$ 13,719,797	\$ 13,719,797
<b>Total</b>	<b>\$ 22,673,036</b>	<b>\$ 20,897,372</b>
<b>Total Pension</b>	<b>\$ 14,274,991</b>	<b>\$ 12,947,759</b>
<b>Total Medical, Net of Part D Subsidy</b>	<b>\$ 8,398,045</b>	<b>\$ 7,949,613</b>
<b>Total Medical, Gross of Part D Subsidy</b>	<b>\$ 8,907,010</b>	<b>\$ 8,438,246</b>

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
<b>By Tier</b>		
Tier 1		
- Pension	\$ 7,616,911	\$ 7,493,319
- Medical, Net of Part D Subsidy	4,570,573	4,484,432
Tier 2		
- Pension	3,565,395	3,222,292
- Medical, Net of Part D Subsidy	2,020,912	1,926,705
Tier 3		
- Pension	3,092,686	2,232,148
- Medical, Net of Part D Subsidy	<u>1,806,559</u>	<u>1,538,476</u>
<b>Total</b>	<b>\$ 22,673,036</b>	<b>\$ 20,897,372</b>
As of June 30, 2014	Normal Cost	
<b>Active Members</b>		
Retirement Benefits		\$ 143,343
Termination Benefits		21,028
Disability Benefits		2,645
Death Benefits		3,536
Return of Contributions		14,160
Medical and Prescription Drug Benefits		84,626
Medicare Part D Subsidy		<u>(3,690)</u>
Subtotal		\$ 265,648
<b>Total</b>		<b>\$ 265,648</b>
<b>Total Pension</b>		<b>\$ 184,712</b>
<b>Total Medical, Net of Part D Subsidy</b>		<b>\$ 80,936</b>
<b>Total Medical, Gross of Part D Subsidy</b>		<b>\$ 84,626</b>
<b>By Tier</b>		
Tier 1		
- Pension		\$ 29,122
- Medical, Net of Part D Subsidy		22,430
Tier 2		
- Pension		53,273
- Medical, Net of Part D Subsidy		17,318
Tier 3		
- Pension		102,317
- Medical, Net of Part D Subsidy		<u>41,188</u>
<b>Total</b>		<b>\$ 265,648</b>

## Section 1.2 Actuarial Contributions as of June 30, 2014 – Peace Officer/Firefighter

(\$'s in 000's)

Normal Cost Rate	Pension	Healthcare	Total
1. Total Normal Cost	\$ 30,800	\$ 8,877	\$ 39,677
2. DB Member Salaries Projected for FY15	202,637	202,637	202,637
3. DCR Member Salaries Projected for FY15	97,954	97,954	97,954
4. Total Salaries Projected for FY15	300,591	300,591	300,591
5. Normal Cost Rate for Peace Officer/Firefighter			
a. Based on DB Member Salaries, (1) ÷ (2)	15.20%	4.38%	19.58%
b. Based on Total Salaries, (1) ÷ (4)	10.25%	2.95%	13.20%
6. Member Contribution Rate (Peace Officer/Firefighter) <sup>1</sup>	5.06%	0.00%	5.06%
7. Employer Normal Cost Rate For Peace Officer/Firefighter, (5b) – (6)	5.19%	2.95%	8.14%
<b>Past Service Rate</b>			
1. Accrued Liability	\$ 1,999,743	\$ 854,206	\$ 2,853,949
2. Valuation Assets <sup>2</sup>	<u>1,194,098</u>	<u>742,837</u>	<u>1,936,935</u>
3. Unfunded Liability, (1) – (2)	\$ 805,645	\$ 111,369	\$ 917,014
4. Funded Ratio, (2) ÷ (1)	59.7%	87.0%	67.9%
5. Past Service Cost Amortization Payment <sup>3</sup>	50,674	7,005	57,679
6. Total Salaries Projected for FY15	300,591	300,591	300,591
7. Past Service Rate, (5) ÷ (6)	16.86%	2.33%	19.19%
<b>Total Employer/State Contribution Rate</b>	<b>22.05%</b>	<b>5.28%</b>	<b>27.33%</b>
<b>Normal Cost Rate by Tier (Total Employer and Member)<sup>4</sup></b>			
Tier 1	16.62%	6.79%	23.41%
Tier 2	14.98%	3.09%	18.07%
Tier 3	15.19%	4.77%	19.96%
Maturity Ratio	62.9%	63.4%	63.0%

<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/Firefighter.

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

<sup>3</sup> Amortized on a level percent of pay basis over 25 years.

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

## Actuarial Contributions as of June 30, 2014 – Others

(\$'s in 000's)

Normal Cost Rate	Pension	Healthcare	Total
1. Total Normal Cost	\$ 153,912	\$ 72,059	\$ 225,971
2. DB Member Salaries Projected for FY15	1,209,600	1,209,600	1,209,600
3. DCR Member Salaries Projected for FY15	767,192	767,192	767,192
4. Total Salaries Projected for FY15	1,976,792	1,976,792	1,976,792
5. Normal Cost Rate for Others			
a. Based on DB Member Salaries, (1) ÷ (2)	12.72%	5.96%	18.68%
b. Based on Total Salaries, (1) ÷ (4)	7.79%	3.65%	11.44%
6. Member Contribution Rate (Others) <sup>1</sup>	4.18%	0.00%	4.18%
7. Employer/State Normal Cost Rate For Others, (5b) – (6)	3.61%	3.65%	7.26%
<b>Past Service Rate</b>			
1. Accrued Liability	\$ 10,948,016	\$ 7,095,407	\$ 18,043,423
2. Valuation Assets <sup>2</sup>	<u>6,537,340</u>	<u>6,170,323</u>	<u>12,707,663</u>
3. Unfunded Liability, (1) – (2)	\$ 4,410,676	\$ 925,084	\$ 5,335,760
4. Funded Ratio, (2) ÷ (1)	59.7%	87.0%	70.4%
5. Past Service Cost Amortization Payment <sup>3</sup>	277,423	58,186	335,609
6. Total Salaries Projected for FY15	1,976,792	1,976,792	1,976,792
7. Past Service Rate, (5) ÷ (6)	14.03%	2.94%	16.97%
<b>Total Employer/State Contribution Rate</b>	<b>17.64%</b>	<b>6.59%</b>	<b>24.23%</b>
<b>Normal Cost Rate by Tier (Total Employer and Member)<sup>4</sup></b>			
Tier 1	14.45%	11.45%	25.90%
Tier 2	12.34%	4.30%	16.64%
Tier 3	12.44%	5.28%	17.72%
Maturity Ratio	64.0%	69.3%	66.1%

<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 percent of pay basis over 25 years.

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

## Actuarial Contributions as of June 30, 2014 – All Members

(\$'s in 000's)

Normal Cost Rate	Pension	Healthcare	Total
1. Total Normal Cost	\$ 184,712	\$ 80,936	\$ 265,648
2. DB Member Salaries Projected for FY15	1,412,237	1,412,237	1,412,237
3. DCR Member Salaries Projected for FY15	865,146	865,146	865,146
4. Total Salaries Projected for FY15	2,277,383	2,277,383	2,277,383
5. Normal Cost Rate for All Members			
a. Based on DB Member Salaries, (1) ÷ (2)	13.08%	5.73%	18.81%
b. Based on Total Salaries, (1) ÷ (4)	8.11%	3.55%	11.66%
6. Average Member Contribution Rate <sup>1</sup>	4.29%	0.00%	4.29%
7. Employer Normal Cost Rate For All Members, (5b) – (6)	3.82%	3.55%	7.37%
<b>Past Service Rate</b>			
1. Accrued Liability	\$ 12,947,759	\$ 7,949,613	\$ 20,897,372
2. Valuation Assets <sup>2</sup>	<u>7,731,438</u>	<u>6,913,160</u>	<u>14,644,598</u>
3. Total Unfunded Liability, (1) – (2)	\$ 5,216,321	\$ 1,036,453	\$ 6,252,774
4. Funded Ratio, (2) ÷ (1)	59.7%	87.0%	70.1%
5. Past Service Cost Amortization Payment <sup>3</sup>	328,097	65,191	393,288
6. Total Salaries Projected for FY15	2,277,383	2,277,383	2,277,383
7. Past Service Rate, (5) ÷ (6)	14.41%	2.86%	17.27%
<b>Total Employer/State Contribution Rate</b>	<b>18.23%</b>	<b>6.41%</b>	<b>24.64%</b>
<b>Normal Cost Rate by Tier (Total Employer and Member)<sup>4</sup></b>			
Tier 1	14.56%	11.21%	25.77%
Tier 2	12.71%	4.13%	16.84%
Tier 3	12.90%	5.19%	18.09%
Maturity Ratio	63.8%	68.6%	65.7%

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

<sup>3</sup> Amortized on a level percent of pay basis over 25 years.

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

## Section 1.3

### Roll Forward Contribution Rate Calculation

(\$'s in 000's)

	Pension	Healthcare	Total
<b>1. Liability Roll Forward</b>			
<b>a. Total Accrued Liability as of June 30, 2014</b>	<b>\$ 12,947,759</b>	<b>\$ 7,949,613</b>	<b>\$ 20,897,372</b>
b. Normal Cost	184,712	80,936	265,648
c. Interest on (a) and (b) at 8%	1,050,598	642,444	1,693,042
d. Actual Benefit Payments	(703,225)	(375,681)	(1,078,906)
e. Interest on (d) at 8%, paid monthly	<u>(29,935)</u>	<u>(15,992)</u>	<u>(45,927)</u>
<b>f. Expected Total Accrued Liability as of June 30, 2015</b>	<b>\$ 13,449,909</b>	<b>\$ 8,281,320</b>	<b>\$ 21,731,229</b>
g. Projected Normal Cost	174,951	72,400	247,351
h. Interest on (f) and (g) at 8%	1,089,989	668,298	1,758,287
i. Estimated Benefit Payments	(754,645)	(450,588)	(1,205,233)
j. Interest on (i) at 8%, paid monthly	<u>(32,124)</u>	<u>(19,181)</u>	<u>(51,305)</u>
<b>k. Expected Total Accrued Liability as of June 30, 2016</b>	<b>\$ 13,928,080</b>	<b>\$ 8,552,249</b>	<b>\$ 22,480,329</b>
<b>2. Asset Roll Forward</b>			
<b>a. Actuarial Value of Assets as of June 30, 2014</b>	<b>\$ 7,731,438</b>	<b>\$ 6,913,160</b>	<b>\$ 14,644,598</b>
b. Interest on (a) at 3.3%	255,137	228,134	483,271
c. Actual Employee Contributions	94,910	657	95,567
d. Actual Employer Contributions	214,453	162,195	376,648
e. State Assistance	1,000,000	0	1,000,000
f. Medicare Part D Subsidy	0	0	0
g. Interest on (c) – (f) at 3.3%*	25,602	2,665	28,267
h. Actual Benefit payments	(703,225)	(375,681)	(1,078,906)
i. (Gain)/Loss deferred	306,526	255,002	561,529
j. Interest on (h) at 3.3%, paid monthly	<u>(12,477)</u>	<u>(6,665)</u>	<u>(19,142)</u>
<b>k. Expected Actuarial Value of Assets as of June 30, 2015</b>	<b>\$ 8,912,364</b>	<b>\$ 7,179,467</b>	<b>\$ 16,091,832</b>
l. Interest on (j) at 8%	712,989	574,357	1,287,346
m. Employee Contributions	104,647	0	104,647
n. Employer Contributions	262,478	160,160	422,638
o. State Assistance	88,586	37,934	126,520
p. Medicare Part D Subsidy	0	0	0
q. Interest on (l) – (o) at 8%*	21,489	9,318	30,807
r. Estimated Benefit payments	(754,645)	(450,588)	(1,205,233)
s. Recognition of Gain/(Loss) from prior year	(76,632)	(63,751)	(140,382)
t. Interest on (q) at 8%, paid monthly	<u>(32,124)</u>	<u>(19,181)</u>	<u>(51,305)</u>
<b>u. Expected Actuarial Value of Assets as of June 30, 2016</b>	<b>\$ 9,239,152</b>	<b>\$ 7,427,716</b>	<b>\$ 16,666,870</b>

	Pension	Healthcare	Total
<b>3. Unfunded Liability Roll Forward</b>			
<b>a. Unfunded Liability as of June 30, 2014</b>	<b>\$ 5,216,321</b>	<b>\$ 1,036,453</b>	<b>\$ 6,252,774</b>
b. Normal Cost	184,712	80,936	265,648
c. Interest on (a) and (b)	795,461	414,310	1,209,771
d. Actual Employee Contributions	(94,910)	(657)	(95,567)
e. Actual Employer Contributions	(214,453)	(162,195)	(376,648)
f. State Assistance	(1,000,000)	0	(1,000,000)
g. Gain/(Loss) deferred	(306,526)	(255,002)	(561,529)
h. Interest on (d) – (g)*	<u>(43,060)</u>	<u>(11,992)</u>	<u>(55,052)</u>
<b>i. Expected Unfunded Liability as of June 30, 2015</b>	<b>\$ 4,537,545</b>	<b>\$ 1,101,853</b>	<b>\$ 5,639,397</b>
j. Projected Normal Cost	174,951	72,400	247,351
k. Interest on (i) and (j) at 8%	377,000	93,940	470,940
l. Employee Contributions	(104,647)	0	(104,647)
m. Employer Contributions	(262,478)	(160,910)	(422,638)
n. State Assistance	(88,586)	(37,934)	(126,520)
o. Recognition of Gain/(Loss) from prior year	76,632	63,751	140,382
p. Interest on (l) – (o) at 8%*	<u>(21,489)</u>	<u>(9,318)</u>	<u>(30,807)</u>
<b>q. Expected Unfunded Liability as of June 30, 2016</b>	<b>\$ 4,688,928</b>	<b>\$ 1,124,532</b>	<b>\$ 5,813,458</b>
<b>4. Expected Annual Salary for FY17</b>			
a. Defined Benefit Members			\$ 1,282,135
b. Defined Contribution Retirement Members			<u>1,114,077</u>
<b>c. Total Salary</b>			<b>\$ 2,396,146</b>
<b>5. Expected FY17 Contribution Rate Calculation</b>			
a. Projected Normal Cost for FY17	\$ 165,447	\$ 64,642	\$ 230,089
b. Projected Normal Cost Rate for FY17	6.90%	2.70%	9.60%
c. Member Contribution Rate for FY17	(3.84%)	0.00%	(3.84%)
<b>d. Expected Employer Normal Cost Rate for FY17</b>	<b>3.06%</b>	<b>2.70%</b>	<b>5.76%</b>
e. Expected Unfunded Liability as of June 30, 2016	\$ 4,688,928	\$ 1,124,532	\$ 5,813,460
f. 23 Year Amortization of Expected Unfunded Liability	309,651	74,263	383,914
<b>g. Expected Past Service Cost Contribution Rate for FY17</b>	<b>12.92%</b>	<b>3.10%</b>	<b>16.02%</b>
<b>h. Expected Total Contribution Rate for FY17</b>	<b>15.98%</b>	<b>5.80%</b>	<b>21.78%</b>

\* Employee and Employer Contributions are paid throughout the year. State Assistance is paid in three equal installments on July 15<sup>th</sup>, November 15<sup>th</sup>, and March 15<sup>th</sup> for FY15 and the beginning of the year thereafter.

## Section 1.4 Actuarial Gain/(Loss) for FY14 (\$'s in 000's)

	Pension	Healthcare	Total
1. Expected Actuarial Accrued Liability			
a. Accrued Liability, June 30, 2013	\$ 11,945,881	\$ 8,046,878	\$ 19,992,759
b. Normal Cost for FY14	160,828	86,333	247,161
c. Interest on (a) and (b) at 8.00%	968,537	650,657	1,619,194
d. Benefit Payments for FY14	640,518	355,487	996,005
e. Refund of Contributions for FY14	11,399	0	11,399
f. Interest on (d) and (e) at 8.00% for one-half year	25,575	13,946	39,521
g. Change in Actuarial Assumptions	541,390	277,322	818,712
h. Change in Healthcare Cost Trend Rates	<u>N/A</u>	<u>(438,865)</u>	<u>(438,865)</u>
i. Expected Accrued Liability as of June 30, 2014 (a) + (b) + (c) – (d) – (e) – (f) + (g) + (h)	\$ 12,939,144	\$ 8,252,892	\$ 21,192,036
2. Actual Accrued Liability, June 30, 2014	<u>12,947,759</u>	<u>7,949,613</u>	<u>20,897,372</u>
<b>3. Liability Gain/(Loss), (1)(h) – (2)</b>	<b>\$ (8,615)</b>	<b>\$ 303,279</b>	<b>\$ 294,664</b>
4. Expected Actuarial Asset Value			
a. Actuarial Asset Value, June 30, 2013	\$ 6,510,749	\$ 5,651,877	\$ 12,162,626
b. Interest on (a) at 8.00%	520,860	452,150	973,010
c. Employee Contributions for FY14	106,565	717	107,282
d. Employer Contributions for FY14	206,204	204,779	410,983
e. Employer Legislative Relief for FY14	176,794	135,679	312,473
f. Medicare Part D Subsidy	0	17,349	17,349
g. Interest on (c), (d), (e) and (f) at 8.00% for one-half year	19,206	14,065	33,271
h. Benefit Payments for FY14	640,518	355,487	996,005
i. Refund of Contributions for FY14	11,399	0	11,399
j. Interest on (h) and (i) at 8.00% for one-half year	<u>25,575</u>	<u>13,946</u>	<u>39,521</u>
k. Expected Actuarial Asset Value, June 30, 2014 (a)+(b)+(c)+(d)+(e)+(f)+(g)-(h)-(i)-(j)	\$ 6,862,886	\$ 6,107,183	\$ 12,970,069
5. Actuarial Asset Value, June 30, 2014	<u>7,731,438</u>	<u>6,913,160</u>	<u>14,644,598</u>
<b>6. Actuarial Asset Gain/(Loss), (5) – (4)(k)</b>	<b>\$ 868,552</b>	<b>\$ 805,977</b>	<b>\$ 1,674,529</b>
<b>7. Actuarial Gain/(Loss), (3) + (6)</b>	<b>\$ 859,937</b>	<b>\$ 1,109,256</b>	<b>\$ 1,969,193</b>
<b>8. Effect of the 2-Year Delay on Contributions</b>	<b>\$ (226,820)</b>	<b>\$ (13,684)</b>	<b>\$ (240,504)</b>
<b>9. FY14 Gain/(Loss), (7) + (8)</b>	<b>\$ 633,117</b>	<b>\$ 1,095,572</b>	<b>\$ 1,728,689</b>

## Section 1.5 Development of Change in Unfunded Liability During FY14

	Pension	Healthcare	Total
1. 2013 Unfunded Liability	\$ 5,435,132	\$ 2,395,001	\$ 7,830,133
a. Interest on unfunded liability	\$ 434,811	\$ 191,600	\$ 626,411
b. Normal cost	160,828	86,333	247,161
c. Employee contributions	(106,565)	(717)	(107,282)
d. Employer contributions	(206,204)	(204,779)	(410,983)
e. State relief under SB 125	(176,794)	(135,679)	(312,473)
f. Medicare Part D subsidy	-	(17,349)	(17,349)
g. Interest on b., c., d., e., and f.	(6,340)	(7,158)	(13,498)
h. Change in Actuarial Assumptions	541,390	277,322	818,712
i. Change in Healthcare Cost Trend Rates	<u>N/A</u>	<u>(438,865)</u>	<u>(438,865)</u>
j. Expected change in unfunded liability during FY14	\$ 641,126	\$ (249,292)	\$ 391,834
2. Expected 2014 Unfunded Liability	\$ 6,076,258	\$ 2,145,709	\$ 8,221,967
a. Liability (gains)/losses	\$ 8,615	\$ (303,279)	\$ (294,664)
b. Assets (gains)/losses	<u>(868,552)</u>	<u>(805,977)</u>	<u>(1,674,529)</u>
c. Changes in unfunded liability during FY14	\$ (859,937)	\$ (1,109,256)	\$ (1,969,193)
3. Actual 2014 Unfunded Liability	\$ 5,216,321	\$ 1,036,453	\$ 6,252,774

## Section 1.6 Analysis of Financial Experience

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

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	2010	2011	2012	2013	2014
	<b>Pension</b>				
1. Health Experience	N/A	N/A	N/A	N/A	N/A
2. Salary Experience	0.06%	0.31%	0.23%	0.23%	(0.19)%
3. Investment Experience	(0.19)%	0.00%	2.40%	1.43%	(2.40)%
4. Demographic Experience	(0.30)%	0.29%	(1.00)%	(0.84)%	(0.04)%
5. Contribution Shortfall	<u>0.36%</u>	<u>0.42%</u>	<u>0.25%</u>	<u>0.78%</u>	<u>0.63%</u>
6. (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	(0.07)%	1.02%	1.88%	1.60%	(2.00)%
<b>Non-recurring Changes</b>					
7. Assumption and Method Changes	0.87%	0.00%	4.89%	0.00%	(6.86)%
8. System Benefit Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
9. Composite (Gain) or Loss During Year, (6) + (7) + (8)	0.80%	1.02%	6.77%	1.60%	(8.86)%
10. Beginning Valuation Year Employer/State Contribution Rate	<u>14.65%</u>	<u>15.45%</u>	<u>16.47%</u>	<u>23.24%</u>	<u>24.84%</u>
11. Ending Valuation Year Employer/State Contribution Rate, (9) + (10)	15.45%	16.47%	23.24%	24.84%	15.98%
12. Fiscal Year Rates					
a. Fiscal Year Employer/State Contribution Rate	15.45%	16.47%	16.29%	14.43%	15.98%*
b. Fiscal Year for Which Rate Applies	FY13	FY14	FY15	FY16	FY17

\*Expected. Actual Rate to be determined.

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

Change in Employer/State Contribution Rate During Fiscal Year					
Type of (Gain) or Loss	Healthcare				
	2010	2011	2012	2013	2014
1. Health Experience	0.24%	(1.82)%	(2.97)%	(1.51)%	(0.85)%
2. Salary Experience	N/A	N/A	N/A	N/A	N/A
3. Investment Experience	0.47%	0.26%	0.71%	0.33%	(2.23)%
4. Demographic Experience	N/A	N/A	N/A	N/A	N/A
5. Contribution Shortfall	<u>(1.03)%</u>	<u>0.02%</u>	<u>(0.04)%</u>	<u>0.01%</u>	<u>0.04%</u>
6. (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	(0.32)%	(1.54)%	(2.30)%	(1.17)%	(3.04)%
<b>Non-recurring Changes</b>					
7. Assumption and Method Changes	1.59%	0.00%	3.07%	0.00%	(6.60)%
8. System Benefit Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
9. Composite (Gain) or Loss During Year, (6) + (7) + (8)	1.27%	(1.54)%	0.77%	(1.17)%	(9.64)%
10. Beginning Valuation Year Employer/State Contribution Rate	<u>16.11%</u>	<u>17.38%</u>	<u>15.84%</u>	<u>16.61%</u>	<u>15.44%</u>
11. Ending Valuation Year Employer/State Contribution Rate, (9) + (10)	17.38%	15.84%	16.61%	15.44%	5.80%
12. Fiscal Year Rates					
a. Fiscal Year Employer/State Contribution Rate	17.38%	15.84%	11.43%	8.15%	5.80%*
b. Fiscal Year for Which Rate Applies	FY13	FY14	FY15	FY16	FY17

\*Expected. Actual Rate to be determined.

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

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	2010	2011	2012	2013	2014
	<b>Total</b>				
1. Health Experience	0.24%	(1.82)%	(2.97)%	(1.51)%	(0.85)%
2. Salary Experience	0.06%	0.31%	0.23%	0.23%	(0.19)%
3. Investment Experience	0.28%	0.26%	3.11%	1.76%	(4.63)%
4. Demographic Experience	(0.30)%	0.29%	(1.00)%	(0.84)%	(0.04)%
5. Contribution Shortfall	<u>(0.67)%</u>	<u>0.44%</u>	<u>0.21%</u>	<u>0.79%</u>	<u>0.67%</u>
6. (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	(0.39)%	(0.52)%	(0.42)%	0.43%	(5.04)%
<b>Non-recurring Changes</b>					
7. Assumption and Method Changes	2.46%	0.00%	7.96%	0.00%	(13.46)%
8. System Benefit Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
9. Composite (Gain) or Loss During Year, (6) + (7) + (8)	2.07%	(0.52)%	7.54%	0.43%	(18.50)%
10. Beginning Valuation Year Employer/State Contribution Rate	<u>30.76%</u>	<u>32.83%</u>	<u>32.31%</u>	<u>39.85%</u>	<u>40.28%</u>
11. Ending Valuation Year Employer/State Contribution Rate, (9) + (10)	32.83%	32.31%	39.85%	40.28%	21.78%
12. Fiscal Year Rates					
a. Fiscal Year Employer/State Contribution Rate	32.83%	32.31%	27.72%	22.58%	21.78%*
b. Fiscal Year for Which Rate Applies	FY13	FY14	FY15	FY16	FY17

\*Expected. Actual Rate to be determined.

## Section 1.7 History of UAAL and Funded Ratio (\$'s in 000's)

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)
June 30, 2003	10,561,653	7,687,281	72.8%	2,874,372
June 30, 2004	11,443,916	8,030,414	70.2%	3,413,502
June 30, 2005	12,844,841	8,442,919	65.7%	4,401,922
June 30, 2006	14,388,413	9,040,908	62.8%	5,347,505
June 30, 2007	14,570,933	9,900,960	68.0%	4,669,973
June 30, 2008	15,888,141	11,040,106	69.5%	4,848,035
June 30, 2009	16,579,371	10,242,978	61.8%	6,336,393
June 30, 2010	18,132,492	11,157,464	61.5%	6,975,028
June 30, 2011	18,740,550	11,813,774	63.0%	6,926,776
June 30, 2012	19,292,361	11,832,030	61.3%	7,460,331
June 30, 2013	19,992,759	12,162,626	60.8%	7,830,133
June 30, 2014	20,897,372	14,644,598	70.1%	6,252,774

# Section 2 Plan Assets

## Section 2.1 Summary of Fair Value of Assets (\$'s in 000's)

As of June 30, 2014	Pension	Healthcare	Total Fair Value	Allocation Percent
<b>Cash and Short-Term Investments</b>				
- Cash and Cash Equivalents	\$ 252,123	\$ 224,003	\$ 476,126	3.2%
- Subtotal	\$ 252,123	\$ 224,003	\$ 476,126	3.2%
<b>Fixed Income Investments</b>				
- Domestic Fixed Income Pool	\$ 530,612	\$ 477,777	\$ 1,008,389	6.9%
- International Fixed Income Pool	137,828	124,104	261,932	1.8%
- High Yield Pool	205,815	185,321	391,136	2.7%
- Treasury Inflation Protection Pool	12,768	11,497	24,265	0.2%
- Emerging Debt Pool	<u>55,938</u>	<u>50,368</u>	<u>106,306</u>	<u>0.7%</u>
- Subtotal	\$ 942,961	\$ 849,067	\$ 1,792,028	12.2%
<b>Equity Investments</b>				
- Domestic Equity Pool	\$ 2,423,279	\$ 2,181,984	\$ 4,605,263	31.4%
- International Equity Pool	1,622,209	1,460,679	3,082,888	21.0%
- Frontier Market Pool	35,974	32,392	68,366	0.5%
- Private Equity Pool	630,826	568,012	1,198,838	8.2%
- Emerging Markets Equity Pool	<u>226,359</u>	<u>203,820</u>	<u>430,179</u>	<u>2.9%</u>
- Subtotal	\$ 4,938,647	\$ 4,446,887	\$ 9,385,534	64.0%
<b>Other Investments</b>				
- Real Estate Pool	\$ 618,670	\$ 556,884	\$ 1,175,554	8.0%
- Other Investments Pool	668,184	601,650	1,269,834	8.7%
- Absolute Return Pool	299,756	269,909	569,665	3.9%
- Other Assets	<u>20</u>	<u>4,345</u>	<u>4,365</u>	<u>nil</u>
- Subtotal	\$ <u>1,586,630</u>	\$ <u>1,432,788</u>	\$ <u>3,019,418</u>	<u>20.6%</u>
<b>Total Cash and Investments</b>	\$ 7,720,361	\$ 6,952,745	\$ 14,673,106	100.0%
<b>Net Accrued Receivables</b>	<u>11,077</u>	<u>(39,585)</u>	<u>(28,508)</u>	
<b>Net Assets</b>	\$ 7,731,438	\$ 6,913,160	\$ 14,644,598	

## Section 2.2 Changes in Fair Value of Assets (\$'s in 000's)

Fiscal Year 2014	Pension	Healthcare	Total Fair Value
1. Net Assets, June 30, 2013 (fair value)	\$ 6,694,482	\$ 5,829,571	\$ 12,524,053
2. Additions:			
a. Plan Member Contributions	\$ 106,565	\$ 717	\$ 107,282
b. Employer Contributions	206,204	204,779	410,983
c. Employer Legislative Relief	176,794	135,679	312,473
d. Interest and Dividend Income	132,304	117,574	249,878
e. Net Appreciation/(Depreciation) in Fair Value of Investments	1,106,071	974,673	2,080,744
f. Medicare Part D Subsidy	0	17,349	17,349
g. Other	<u>49</u>	<u>19</u>	<u>68</u>
h. Total Additions	\$ 1,727,987	\$ 1,450,790	\$ 3,178,777
3. Deductions:			
a. Medical Benefits	\$ 0	\$ 355,487	\$ 355,487
b. Retirement Benefits	640,518	0	640,518
c. Refunds of Contributions	11,399	0	11,399
d. Investment Expenses	30,891	35	30,926
e. Administrative Expenses	<u>8,223</u>	<u>11,679</u>	<u>19,902</u>
f. Total Deductions	\$ 691,031	\$ 367,201	\$ 1,058,232
4. Net Assets, June 30, 2014 (fair value)	\$ 7,731,438	\$ 6,913,160	\$ 14,644,598
Approximate Fair Value Investment Return Rate During FY14 Net of All Expense	18.1%	18.4%	18.2%
Liquidity Factor	11.1	17.9	13.5

## Section 2.3 Actuarial Value of Assets (\$'s in 000's)

The actuarial value of assets was set equal to the fair value at June 30, 2014 and the 20% corridor was eliminated. Future investment gains and losses will be recognized 20% per year over 5 years.

	Pension	Healthcare	Total
1. Deferral of Investment Return/(Loss) for FY14			
a. Fair Value, June 30, 2013	\$ 6,694,482	\$ 5,829,571	\$ 12,524,053
b. Contributions for FY14	489,563	341,175	830,738
c. Medicare Part D Subsidy	0	17,349	17,349
d. Benefit Payments for FY14	651,917	355,487	1,007,404
e. Actual Investment Return (net of expenses)	1,199,310	1,080,552	2,279,862
f. Expected Return Rate (net of expenses)	8.00%	8.00%	8.00%
g. Expected Return - Weighted for Timing	529,189	466,485	995,674
h. Investment Gain/(Loss) for the Year (e. – g.)	670,121	614,067	1,284,188
i. Deferred Investment Return/(Loss)	0	0	0
2. Actuarial Value, June 30, 2014			
a. Fair Value, June 30, 2014	\$ 7,731,438	\$ 6,913,160	\$ 14,644,598
b. 2014 Deferred Investment Return/(Loss)	0	0	0
c. Actuarial Value, June 30, 2014 (a. – b.)	\$ 7,731,438	\$ 6,913,160	\$ 14,644,598
d. Ratio of Actuarial Value of Assets to Fair Value of Assets	100.0%	100.0%	100.0%
e. Approximate Actuarial Value Investment Return Rate During FY14 Net of All Expenses	21.5%	22.3%	21.9%

## Section 2.4 Historical Asset Rate of Return

Year Ending	Actuarial Value		Fair Value	
	Annual	Cumulative	Annual	Cumulative
June 30, 2005	8.7%	8.7%	8.5%	8.5%
June 30, 2006	9.3%	9.0%	11.4%	9.9%
June 30, 2007	11.6%	9.9%	18.5%	12.7%
June 30, 2008	10.0%	9.9%	(3.1)%	8.5%
June 30, 2009	(7.3)%	6.2%	(20.5)%	2.0%
June 30, 2010	7.2%	6.4%	10.2%	3.3%
June 30, 2011	7.2%	6.5%	20.4%	5.6%
June 30, 2012	1.2%	5.8%	0.2%	4.9%
June 30, 2013	4.0%	5.6%	12.1%	5.7%
June 30, 2014	21.9%	7.1%	18.2%	6.9%

# Section 3 Accounting Information

## Section 3.1 Historical Exhibits – Total PERS (\$'s in 000's)

### Schedule of Employer Contributions

This exhibit below shows the pension disclosure under GASB No. 25 for fiscal years ending in 2007 through 2013.

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

### Schedule of Funding Progress

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

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

## Section 3.2 Pension – GASB 67

### Notes to the Financial Statements for the Year Ended June 30, 2014

#### Summary of Significant Accounting Policies

*Method used to value investments.* Investments are reported at fair value.

#### Plan Description

*Plan administration.* The State of Alaska administers the Public Employees' Retirement System (PERS), a cost-sharing multiple-employer defined benefit pension plan that provides pensions for all full-time employees of participating employers. The plan was closed to new members on July 1, 2006.

Management of the Plan is vested in the Alaska Retirement Management Board.

*Plan membership.* At June 30, 2013, pension plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits	29,865
Inactive plan members entitled to but not yet receiving benefits	19,392
Active plan members	<u>20,955</u>
Total	70,212

*Benefits provided.* Please see Section 6.1 for a summary of plan provisions.

*Contributions.* The Board establishes contributions based on an actuarially determined contribution rate recommended by an independent actuary pursuant to State statutes. The actuarially determined contribution rate is the estimated amount as a percentage of payroll necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. For the year ended June 30, 2014, the participating employers and the State contributed \$382,998,000 to the plan.

#### Investments

*Rate of return.* For the year ended June 30, 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 18.06%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

#### Receivables

N/A.

## Net Pension Liability

The components of the net pension liability at June 30, 2014, were as follows (\$ in thousands):

Total pension liability	\$	12,395,578
Plan fiduciary net position		<u>(7,731,438)</u>
Employers net pension liability	\$	4,664,140
Plan fiduciary net position as a percentage of the total pension liability		62.37%

## Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2013, using the following actuarial assumptions, applied to all periods included in the measurement, and rolled forward to the measurement date of June 30, 2014:

Inflation	3.12%
Salary increases	Graded by service, from 6.36% to 4.12% for Peace Officer/Firefighter Graded by age and service, from 9.60% to 3.62% for All Others
Investment rate of return	8.00%, net of pension plan investment expenses. This is based on an average inflation rate of 3.12% and a real rate of return of 4.88%.

Mortality rates were based on the 1994 Group Annuity Mortality (GAM) Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 80% of the male table for males and 60% of the female table for females for pre-termination mortality for Peace Officer/Firefighter, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 75% of the male table for males and 55% of the female table for females for pre termination mortality for All Others and the 1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year set-forward for females for post-termination mortality.

The actuarial assumptions used in the June 30, 2013 actuarial valuation were based on the results of an actuarial experience study for the period from July 1, 2005 to June 30, 2009, resulting in changes in actuarial assumptions adopted by the Alaska Retirement Management Board to better reflect expected future experience.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2010 are summarized in the following table (note that the rates shown below exclude the inflation component):

<b><u>Asset Class</u></b>	<b><u>Long-Term Expected Real Rate of Return</u></b>
Domestic Equity	6.77%
International Equity	7.50%
Private Equity	10.86%
Fixed Income	2.05%
Real Estate	3.63%
Absolute Return	4.80%

*Discount rate.* The discount rate used to measure the total pension liability was 8.00%. The projection of cash flows used to determine the discount rate assumed that Employer and State contributions will continue to follow the current funding policy which meets State statutes. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

*Sensitivity of the net pension liability to changes in the discount rate.* The following presents the net pension liability, calculated using the discount rate of 8.00%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate (\$ in thousands):

	<b>1% Decrease (7.0%)</b>	<b>Current Discount Rate (8.0%)</b>	<b>1% Increase (9.0%)</b>
Net Pension Liability	\$ 6,115,582	\$ 4,664,140	\$ 3,441,889

## Schedules of Required Supplementary Information

### Schedule of Changes in the Net Pension Liability and Related Ratios (\$ in thousands)

		FYE June 30, 2014
<b>Total pension liability</b>		
Service cost	\$	160,828
Interest		940,786
Changes of benefit terms		0
Differences between expected and actual experience		0
Changes of assumptions		0
Benefit payments		<u>(651,917)</u>
Net change in total pension liability	\$	449,697
Total pension liability-beginning		<u>11,945,881</u>
Total pension liability-ending (a)	\$	12,395,578
<b>Plan fiduciary net pension</b>		
Contributions - employers	\$	382,998
Contributions – members		106,565
Net investment income		1,207,484
Benefit payments, including refunds of member contributions		(651,917)
Administrative expenses		(8,223)
Other		<u>49</u>
Net change in Plan fiduciary net position	\$	1,036,956
Plan fiduciary net position-beginning		<u>6,694,482</u>
Plan fiduciary net position-ending (b)	\$	7,731,438
Plan’s net pension liability-ending (a)-(b)	\$	4,664,140
Plan fiduciary net position as a percentage of the total pension liability		62.37%
Covered-employee payroll	\$	1,405,198
Net pension liability as a percentage of covered-employee payroll		331.92%

#### Notes to Schedule

*Benefit changes.* None.

*Changes of assumptions.* None.

## Schedule of Employer Contributions

	FYE June 30, 2014
Actuarially determined contribution	\$ 358,718
Contributions related to the actuarially determined contribution	<u>382,998</u>
Contribution deficiency (excess)	\$ (24,280)
Covered employee payroll	\$ 1,405,198
Contributions as a percentage of covered employee payroll	27.26%

### Notes to Schedule

Valuation date: June 30, 2013

Actuarially determined contribution rates are calculated as of June 30th, two years prior to the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial cost method:	Entry Age Normal.
Amortization method	Level dollar, closed.
Amortization period	25 years, layered.
Equivalent single amortization period	17 years.
Asset valuation method	Actuarial value that smooth's investment gains and losses over 5 years, constrained to a range of 80% - 120% of fair value.
Inflation	3.12% per annum.
Salary increases	Ranges from 6.36% to 4.12% based on service for Peace Officer/Firefighter. Ranges from 9.60% to 3.62% based on age and service for All Others.
Investment rate of return	8.00%, net of pension plan investment expenses. This is based on an average inflation rate of 3.12% and a real rate of return of 4.88%.
Retirement age	An age-related assumption is used for participants not yet receiving payments.

Mortality

1994 Group Annuity Mortality (GAM) Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 80% of the male table for males and 60% of the female table for females for pre-termination mortality for Peace Officer/Firefighter, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 75% of the male table for males and 55% of the female table for females for pre-termination mortality for All Others and the 1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year set-forward for females for post-termination mortality.

Other information

Please see Section 6 of the 2013 actuarial report.

## Section 3.3 Postemployment Healthcare

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

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll <sup>1</sup>	UAL as a Percent of Annual Active Member Payroll
June 30, 2014 <sup>2</sup> – 4.90%	\$ 12,758,985	\$ 6,913,160	54.2%	\$ 5,845,825	\$ 1,491,583	391.9%
June 30, 2013 – 5.41% <sup>2</sup>	\$ 12,281,372	\$ 5,651,877	46.0%	\$ 6,629,495	\$ 1,534,665	432.0%
June 30, 2012 <sup>2</sup> – 6.88%	\$ 9,812,274	\$ 5,301,609	54.0%	\$ 4,510,665	\$ 1,522,399	296.3%
June 30, 2011 – 7.43%	\$ 9,091,034	\$ 5,051,625	55.6%	\$ 4,039,409	\$ 1,559,938	258.9%
June 30, 2010 <sup>2</sup> – 7.48%	\$ 9,304,504	\$ 4,687,632	50.4%	\$ 4,616,872	\$ 1,586,697	291.0%
June 30, 2009 – 4.70%	\$ 12,770,990	\$ 4,134,450	32.4%	\$ 8,636,540	\$ 1,585,490	544.7%
June 30, 2008 <sup>2</sup> – 4.50%	\$ 13,013,450	\$ 3,829,334	29.4%	\$ 9,184,116	\$ 1,577,846	582.1%
June 30, 2007 – 4.50%	\$ 11,108,553	\$ 3,161,956	28.5%	\$ 7,946,597	\$ 1,605,819	494.9%
June 30, 2006 <sup>2</sup> – 4.50%	\$ 11,455,015	\$ 2,709,843	23.7%	\$ 8,745,172	\$ 1,590,693	549.8%

## Schedule of Funding Progress – Total PERS

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

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2014 – 8.00%	\$ 8,438,246	\$ 6,913,160	81.9%	\$ 1,525,086	\$ 1,491,583	102.2%
June 30, 2014 – 4.25%	\$ 14,753,927	\$ 6,913,160	46.9%	\$ 7,840,767	\$ 1,491,583	525.7%

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

<sup>2</sup> Change in assumptions

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

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

Fiscal Year Ended June 30	Total Annual Required Contribution	Percentage Contributed		
		By Employer	By State	Total
2014	\$ 783,827	26.1%	19.5%	45.6%
2013	\$ 612,792	37.5%	25.1%	62.6%
2012	\$ 498,433	44.8%	28.8%	73.6%
2011	\$ 525,075	49.8%	21.6%	71.4%
2010*	\$ 790,793	31.6%	54.8%	86.4%
2009	\$ 391,321	68.1%	41.4%	109.5%
2008	\$ 370,456	71.2%	36.2%	107.4%
2007	\$ 189,495	73.2%	4.1%	77.3%

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

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

Valuation Date	Fiscal Year	ARC (% of Pay)	
		Healthcare	Healthcare Discount Rate
June 30, 2005	FY08	53.96%	4.50%
June 30, 2006	FY09	55.87%	4.50%
June 30, 2007	FY10	49.98%	4.70%
June 30, 2008	FY11	33.66%	7.48%
June 30, 2009	FY12	32.74%	7.43%
June 30, 2010*	FY13	39.93%	6.88%
June 30, 2011	FY14	52.55%	5.41%
June 30, 2012	FY15	55.07%	4.90%
June 30, 2013	FY16	58.73%	4.55%
June 30, 2014	FY17	56.64%	4.30%

\* Change in discount rate assumptions effective June 30, 2010

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

## Notes to Trend Data

### Actuarial Assumptions, Methods and Additional Information Under GASB

Valuation Date	June 30, 2014
Actuarial Cost Method	Entry Age Normal Level Dollar for Healthcare
Amortization Method	Level dollar, closed
Equivalent Single Amortization Period	25 years
Asset Valuation Method	5-year smoothed fair value (re-initialized to Fair Value as of June 30, 2014)
Actuarial Assumptions:	
Investment rate of return*	8.00% for pension, 4.90% for healthcare.
Projected salary increases	Peace Officer/Firefighter: Merit – 2.75% per year for the first 4 years of employment, grading down to 0.5% at 7 years and thereafter. Productivity – 0.5% per year. Others: Merit – 6.00% per year grading down to 2.00% after 5 years; for more than 6 years of service, 1.50% grading down to 0%. Productivity – 0.5% per year.

\*Includes inflation at 3.12%

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 4.90% as of June 30, 2013, to be used for fiscal 2015 disclosure.

The development of the discount rate used for the FY15 healthcare liabilities valuation disclosure purposes is summarized below:

**Investment Returns**

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

**Based on Percentage of ARC Contributed During FY12\***

Contribution Allocated to Healthcare	=	22.06%
Annual Required Contribution, Funding Assumptions	=	32.74%
Pay-as-you-go Contribution	=	19.81%
Portion of ARC Contributed: $[(1-3) / (2-3), \text{not less than } 0\%, \text{not greater than } 100\%]$	=	17.38%
Multiplied by long-term investment return	=	1.39%
Portion of ARC not Contributed: $[100\% - (4)]$	=	82.62%
Multiplied by short-term investment return	=	3.51%
Total: (5) + (7)	=	4.90%

\*It is assumed that fiscal 2010 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, 2012 valuation (fiscal 2013), which in turn drives the fiscal 2015 GASB 43 ARC.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2015 employer ARC rate for accounting purposes is 55.07% of pay for healthcare benefits and 88.12% of pay for healthcare and pension benefits combined.

## Section 3.4 Solvency Test

(\$'s in 000's)

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

Valuation Date	Pension Aggregate Accrued Liability For:			Pension Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2014	\$ 1,486,335	\$ 8,264,683	\$ 3,196,741	\$ 7,731,438	100.0%	75.6%	0.0%
June 30, 2013	1,479,538	7,514,255	2,952,088	6,510,749	100.0%	67.0%	0.0%
June 30, 2012	1,459,943	7,057,967	2,911,034	6,530,421	100.0%	71.8%	0.0%
June 30, 2011	1,421,967	6,657,517	2,839,563	6,762,149	100.0%	80.2%	0.0%
June 30, 2010 <sup>19</sup>	1,388,029	6,268,461	2,715,182	6,469,832	100.0%	81.1%	0.0%
June 30, 2009	1,315,924	5,914,959	2,471,203	6,108,528	100.0%	81.0%	0.0%
June 30, 2008	1,242,288	5,606,402	2,305,592	7,210,772	100.0%	100.0%	15.7%
June 30, 2007	1,203,007	5,282,132	2,177,185	6,739,004	100.0%	100.0%	11.7%
June 30, 2006 <sup>1 20</sup>	1,157,755	4,933,609	2,002,679	6,331,065	100.0%	100.0%	12.0%
June 30, 2005	1,104,821	4,627,467	1,354,903	6,016,713 <sup>21</sup>	100.0%	100.0%	21.0%

<sup>19</sup> Change in Assumptions

<sup>20</sup> Change in Methods

<sup>21</sup> The pension and postemployment healthcare valuation assets were allocated using a ratio of fair value of assets as of June 30, 2005

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

Valuation Date	Postemployment Healthcare Aggregate Accrued Liability For:			Postemployment Healthcare Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2014 <sup>1</sup>	\$ 0	\$ 5,455,114	\$ 2,494,499	\$ 6,913,160	100.0%	100.0%	58.5%
June 30, 2013 <sup>1</sup>	0	5,298,380	2,748,498	5,651,877	100.0%	100.0%	12.9%
June 30, 2012 <sup>1</sup>	0	5,026,080	2,837,337	5,301,609	100.0%	100.0%	9.7%
June 30, 2011	0	4,812,845	3,008,658	5,051,625	100.0%	100.0%	7.9%
June 30, 2010 <sup>1</sup>	0	4,581,806	3,179,014	4,687,632	100.0%	100.0%	3.3%
June 30, 2009	0	4,232,394	2,644,891	4,134,450	100.0%	97.7%	0.0%
June 30, 2008 <sup>1</sup>	0	4,166,270	2,567,589	3,829,334	100.0%	91.9%	0.0%
June 30, 2007	0	3,684,906	2,223,703	3,161,956	100.0%	85.8%	0.0%
June 30, 2006 <sup>1,2</sup>	0	3,990,202	2,304,168	2,709,843	100.0%	67.9%	0.0%
June 30, 2005	0	4,039,591	1,718,059	2,426,206 <sup>3</sup>	100.0%	60.1%	0.0%

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

<sup>1</sup> Change in Assumptions

<sup>2</sup> Change in Methods

<sup>3</sup> The postemployment healthcare valuation assets were allocated using a ratio of fair value of assets as of June 30, 2005.

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

Valuation Date	Aggregate Accrued Liability For:			Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2010 <sup>25</sup>	\$ 1,388,029	\$ 10,850,267	\$ 5,894,196	\$ 11,157,464	100.0%	90.0%	0.0%
June 30, 2009	1,315,924	10,147,353	5,116,094	10,242,978	100.0%	88.0%	0.0%
June 30, 2008 <sup>1</sup>	1,242,288	9,772,672	4,873,181	11,040,106	100.0%	100.0%	0.5%
June 30, 2007	1,203,007	8,967,038	4,400,888	9,900,960	100.0%	97.0%	0.0%
June 30, 2006 <sup>1 26</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>1</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 27</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%

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

<sup>25</sup> Change in Assumptions

<sup>26</sup> Change in Methods

<sup>27</sup> Change in Asset Valuation Method

# Section 4 Projections

## Section 4.1 Projection Assumptions and Methods

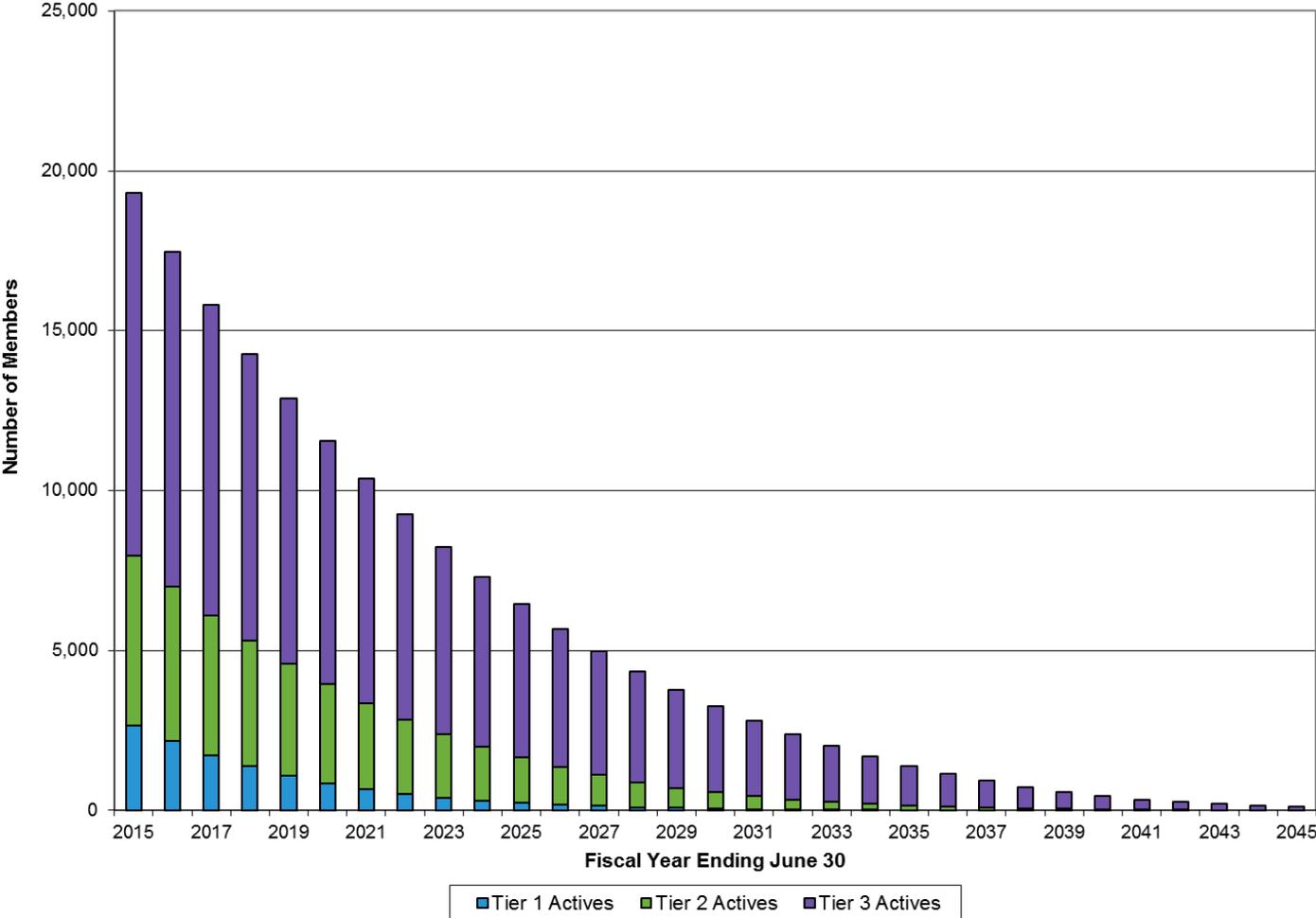
### Key Assumptions

- 8.00% investment return on the Fair Value of Assets in all future years.
- The Actuarial Value of Assets is re-initialized to Fair Value as of June 30, 2014. Future values of the Actuarial Value of Assets will reflect the deferred gains and losses generated by the smoothing method. There are currently no deferred amounts and none are projected since the assumed investment return of 8% per year is expected to be exactly realized.
- Actuarial assumptions and methods as described in Section 6. All future demographic experience is assumed to be exactly realized.
- The actuarially calculated contribution rate using a two-year roll-forward approach is adopted each year.
- No new DB Plan members enter into Tiers 1,2 and 3.
- Projections assume a 0% increase in the total active member population. All new members are expected to enter the DCR plan and contribution rates are determined as a percent of total DB and DCR payroll, combined.
- For the Sensitivity Analysis, all assumptions and methods are the same except investment returns on the Fair Value of Assets are assumed as follows:
  - Base Case: 8.00% for all future years
  - Optimistic: 8.75% for all future years
  - Pessimistic: 7.25% for all future years

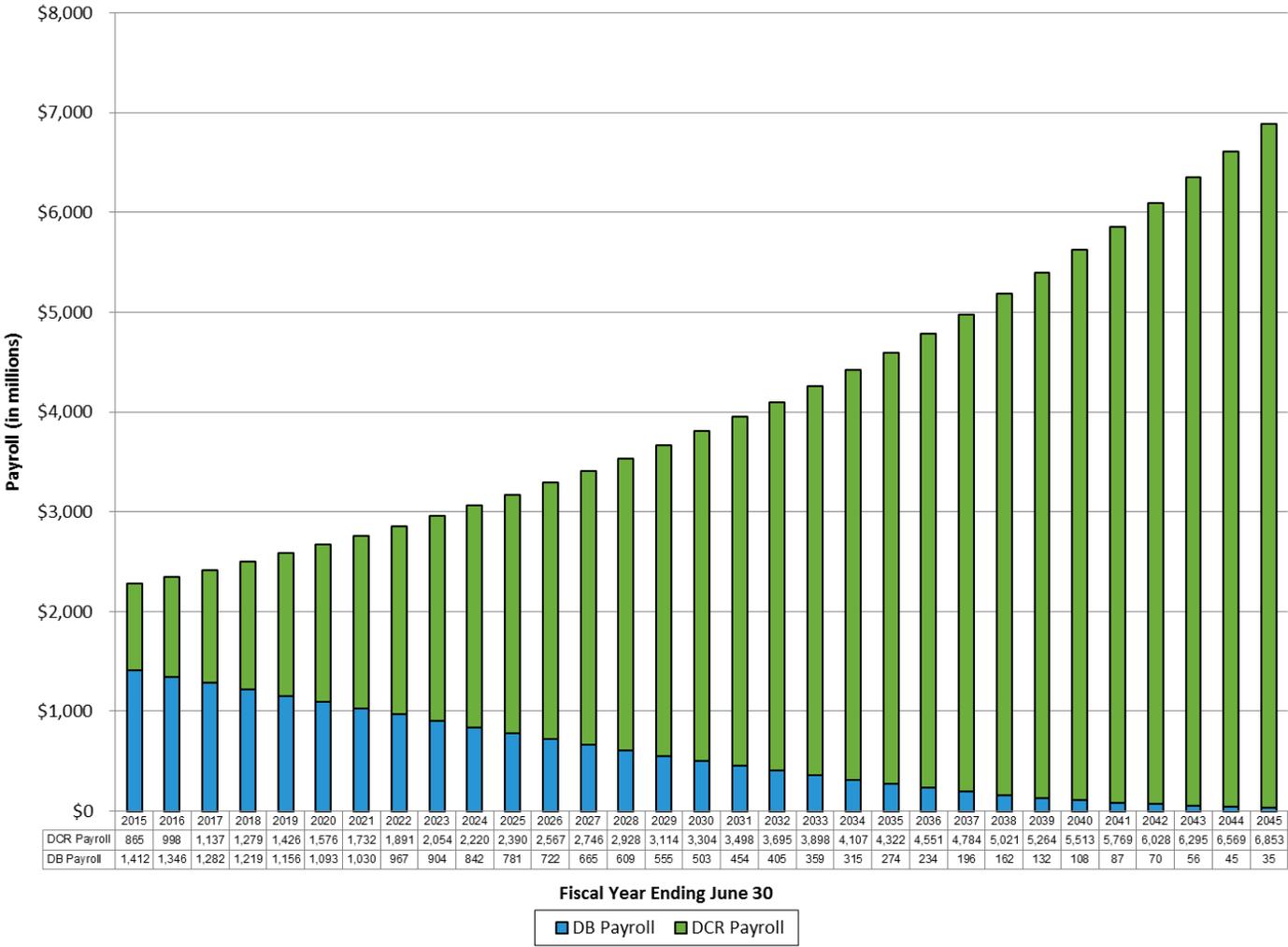
In each case, liabilities have been projected using 8.00% as the discount rate for future benefit payments. These scenarios are intended to illustrate the impact if investment rates are different than the 8.00% assumed investment return. They do not illustrate the effect of changing the assumed discount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

# Section 4.2 Membership Projection

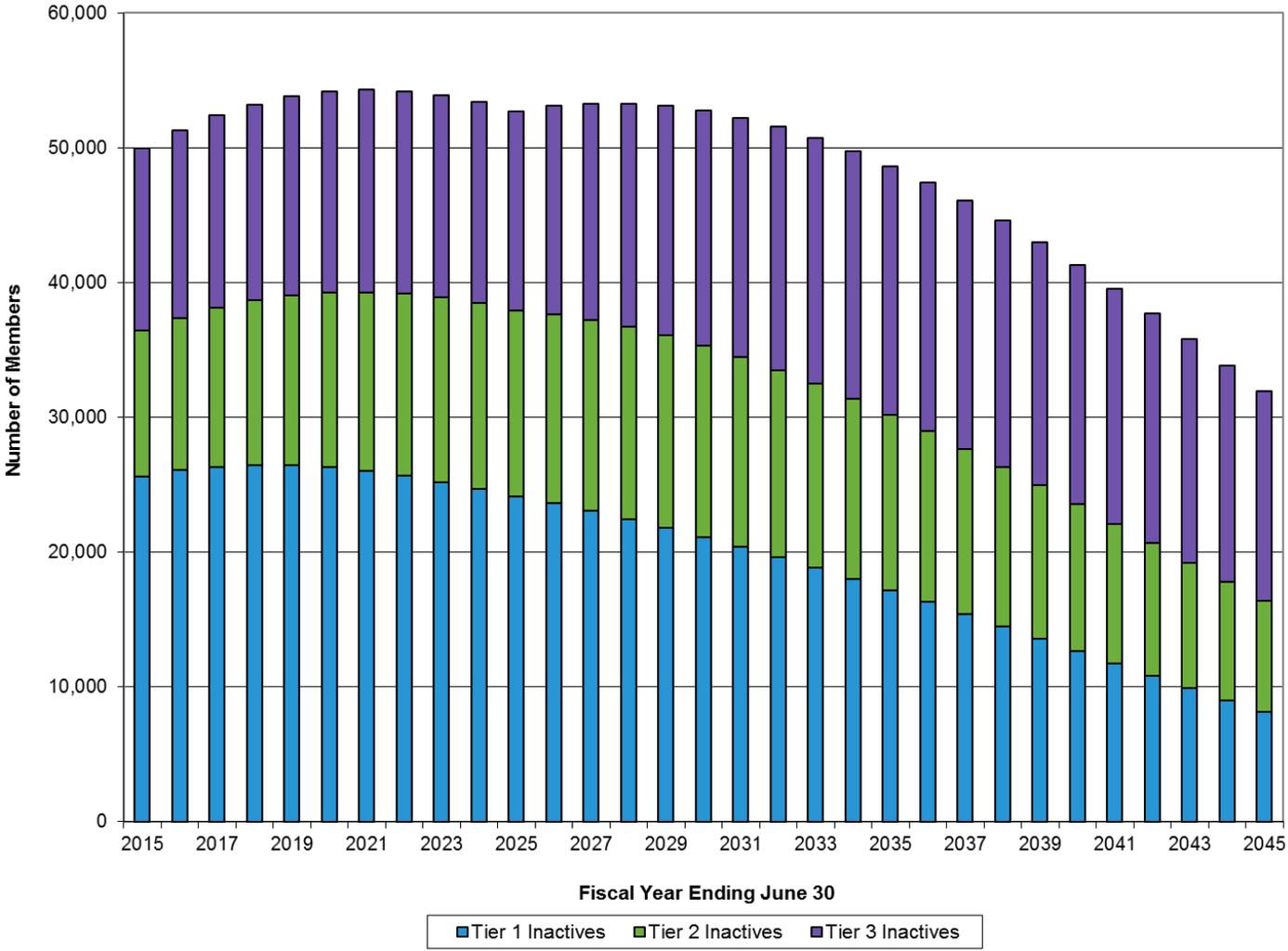
## Projected Active Member Count



# Projected DB and DCR Payroll

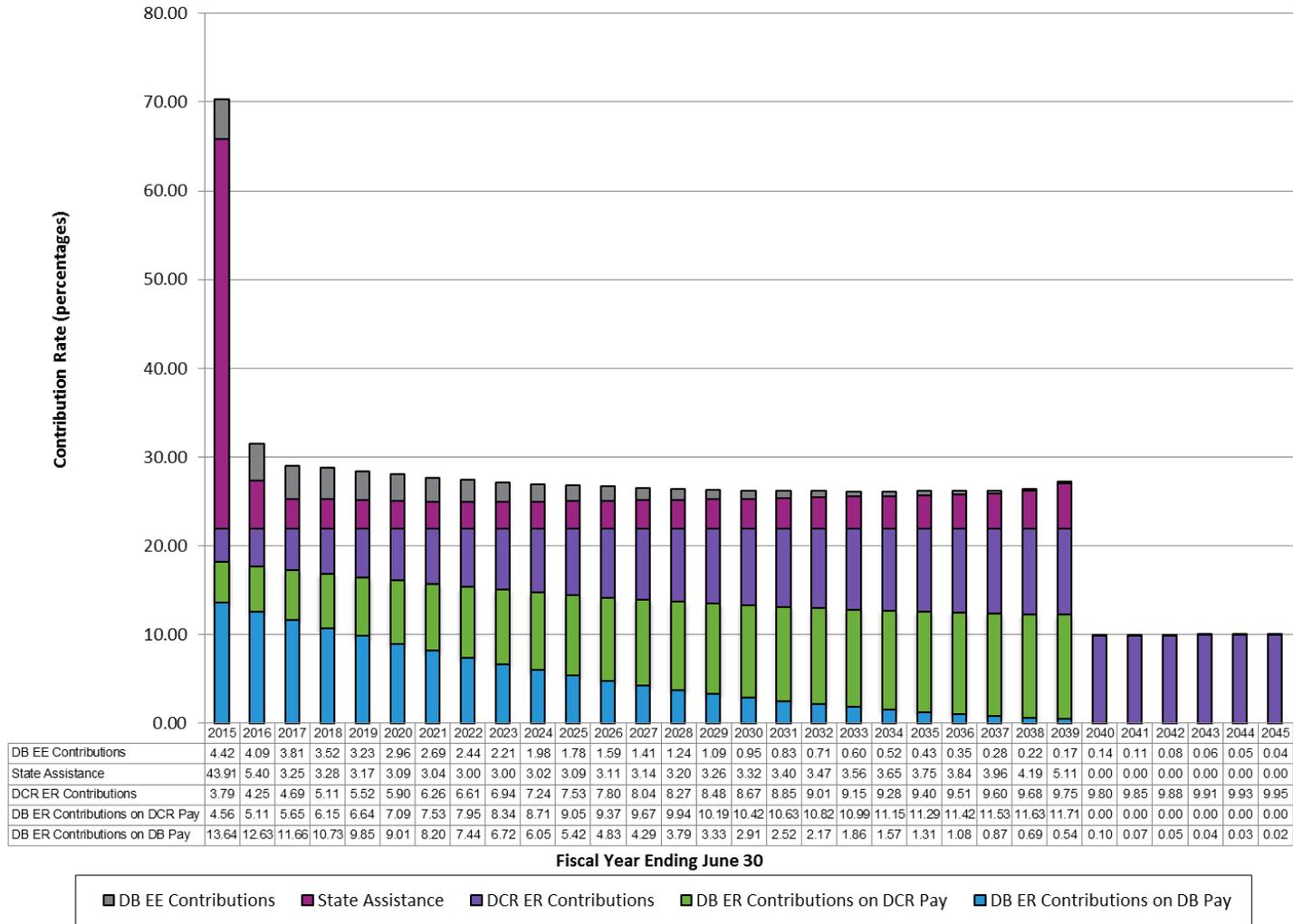


# Projected Inactive Member Count

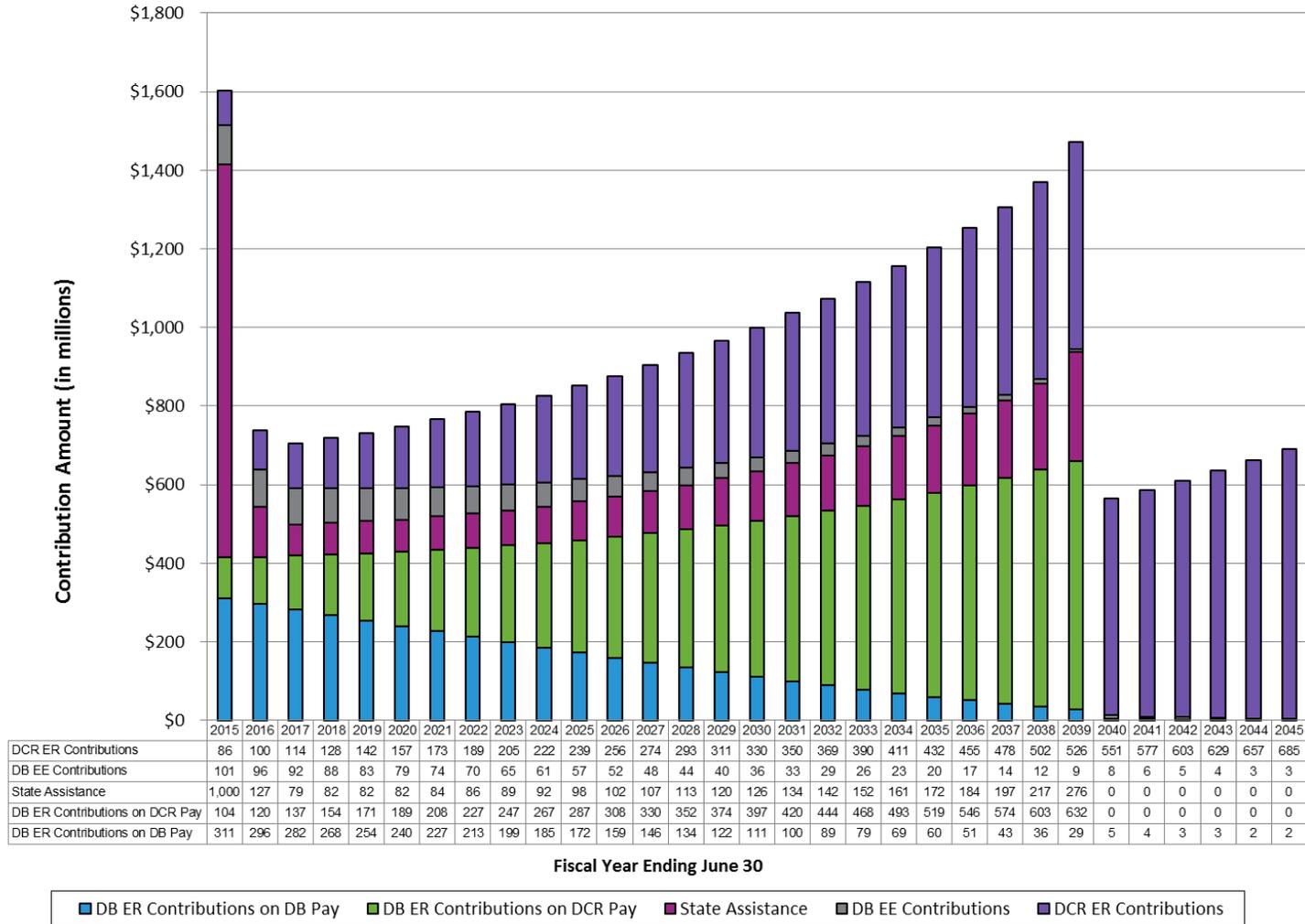


## Section 4.3 Projected Employer/State Contribution Rates

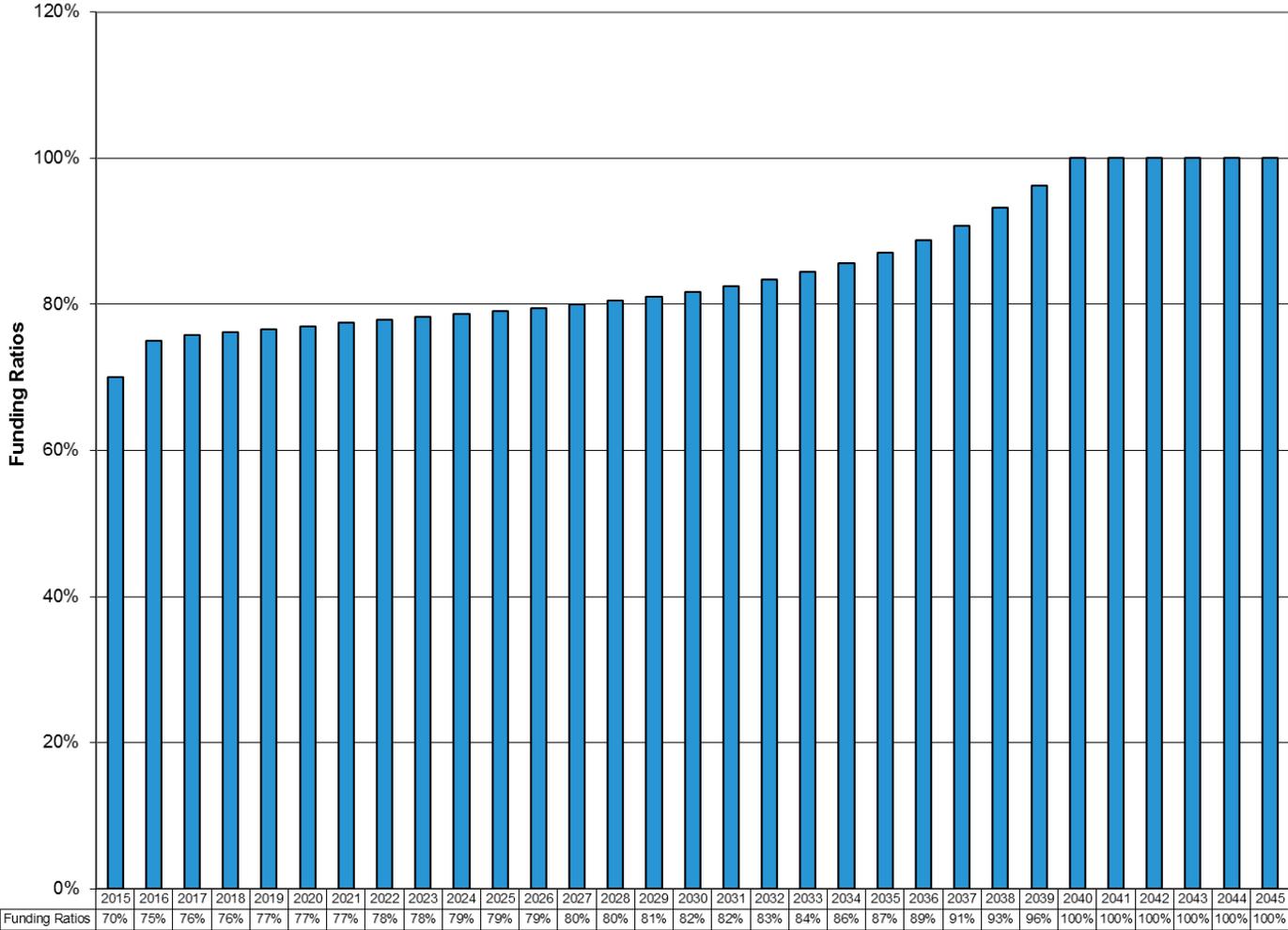
(Based on Total DB and DCR Payroll)



## Section 4.4 Projected Employer/State Contribution Amounts



# Section 4.5 Projection of Funding Ratios



Fiscal Year Ending June 30

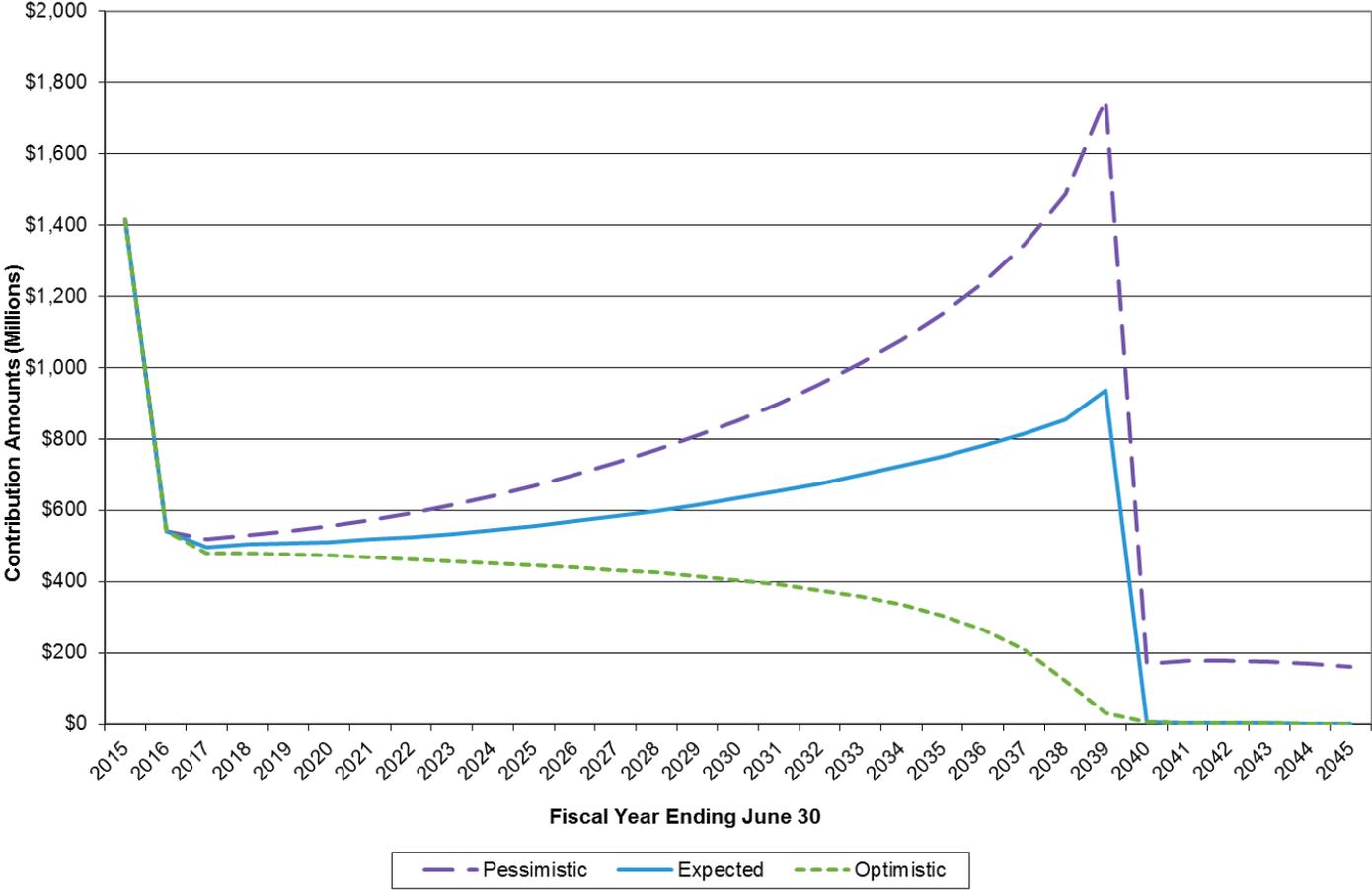
## Section 4.6 Table of Projected Actuarial Results

### State of Alaska PERS Financial Projections (\$ in Thousands)

Fiscal Year End	FY 15 Investment Return 8.00% Valuation Amounts on July 1 (Beginning of Fiscal Year)				Flow Amounts During Following 12 Months												Recognized Asset Gain/(Loss)	Ending Actuarial Assets	
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Er/State Ctb Rate	DCR Ctb Rate	Total Ctb Rate	Employer Contribs	State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings				
2015	\$14,644,598	\$20,897,373	70.1%	(\$6,252,775)	\$2,277,383	62.12%	3.79%	65.91%	\$414,605	\$1,000,000	\$108,968	\$1,523,573	\$1,118,717	\$404,856	\$1,224,486	\$0	\$16,273,940		
2016	16,273,940	21,689,723	75.0%	(5,415,783)	2,344,661	23.14%	4.25%	27.39%	416,120	126,520	104,647	647,287	1,205,233	(557,946)	1,281,162	0	16,997,156		
2017	16,997,156	22,435,502	75.8%	(5,438,346)	2,418,712	20.55%	4.69%	25.24%	418,614	78,546	101,114	598,274	1,287,476	(689,202)	1,331,640	0	17,639,594		
2018	17,639,594	23,162,858	76.2%	(5,523,264)	2,498,486	20.17%	5.11%	25.28%	421,902	82,058	97,415	601,375	1,367,268	(765,893)	1,379,903	0	18,253,604		
2019	18,253,604	23,830,226	76.6%	(5,576,622)	2,581,702	19.65%	5.52%	25.17%	425,584	81,721	93,257	600,562	1,447,217	(846,655)	1,425,575	0	18,832,524		
2020	18,832,524	24,451,257	77.0%	(5,618,733)	2,668,847	19.19%	5.90%	25.09%	429,759	82,448	89,233	601,440	1,527,855	(926,415)	1,468,520	0	19,374,629		
2021	19,374,629	25,022,527	77.4%	(5,647,898)	2,761,743	18.78%	6.26%	25.04%	434,638	83,894	85,155	603,687	1,607,350	(1,003,663)	1,508,651	0	19,879,617		
2022	19,879,617	25,542,380	77.8%	(5,662,763)	2,858,098	18.39%	6.61%	25.00%	439,921	85,762	81,175	606,858	1,688,289	(1,081,431)	1,545,806	0	20,343,992		
2023	20,343,992	26,006,011	78.2%	(5,662,019)	2,958,040	18.06%	6.94%	25.00%	445,622	88,673	77,052	611,347	1,768,941	(1,157,594)	1,579,817	0	20,766,215		
2024	20,766,215	26,409,284	78.6%	(5,643,069)	3,062,078	17.77%	7.24%	25.01%	451,888	92,380	60,766	605,034	1,847,543	(1,242,509)	1,610,152	0	21,133,858		
2025	21,133,858	26,750,527	79.0%	(5,616,669)	3,171,109	17.56%	7.53%	25.09%	458,880	97,925	56,515	613,320	1,913,139	(1,299,819)	1,637,323	0	21,471,362		
2026	21,471,362	27,025,159	79.4%	(5,553,797)	3,288,892	17.31%	7.80%	25.11%	467,133	102,303	52,271	621,707	1,987,383	(1,365,676)	1,661,670	0	21,767,356		
2027	21,767,356	27,232,448	79.9%	(5,465,092)	3,410,736	17.10%	8.04%	25.14%	475,989	107,206	47,995	631,190	2,059,912	(1,428,722)	1,682,834	0	22,021,468		
2028	22,021,468	27,368,769	80.5%	(5,347,301)	3,536,954	16.92%	8.27%	25.19%	485,518	113,095	44,035	642,648	2,130,685	(1,488,037)	1,700,840	0	22,234,271		
2029	22,234,271	27,431,673	81.1%	(5,197,402)	3,669,113	16.78%	8.48%	25.26%	496,016	119,531	39,875	655,422	2,199,009	(1,543,587)	1,715,719	0	22,406,403		
2030	22,406,403	27,418,100	81.7%	(5,011,697)	3,807,328	16.65%	8.67%	25.32%	507,393	126,457	36,155	670,005	2,264,651	(1,594,646)	1,727,550	0	22,539,307		
2031	22,539,307	27,325,213	82.5%	(4,785,906)	3,951,954	16.55%	8.85%	25.40%	519,773	134,173	32,620	686,566	2,329,710	(1,643,144)	1,736,377	0	22,632,540		
2032	22,632,540	27,147,808	83.4%	(4,515,268)	4,100,578	16.47%	9.01%	25.48%	532,780	142,398	29,234	704,412	2,389,782	(1,685,370)	1,742,314	0	22,689,484		
2033	22,689,484	26,886,446	84.4%	(4,196,962)	4,257,537	16.41%	9.15%	25.56%	546,998	151,664	25,717	724,379	2,445,092	(1,720,713)	1,745,676	0	22,714,447		
2034	22,714,447	26,538,798	85.6%	(3,824,351)	4,422,001	16.36%	9.28%	25.64%	562,325	161,315	22,817	746,457	2,492,487	(1,746,030)	1,746,915	0	22,715,332		
2035	22,715,332	26,106,885	87.0%	(3,391,553)	4,595,728	16.35%	9.40%	25.75%	579,028	172,227	19,775	771,030	2,532,693	(1,761,663)	1,746,684	0	22,700,353		
2036	22,700,353	25,591,806	88.7%	(2,891,453)	4,784,893	16.34%	9.51%	25.85%	597,765	183,935	16,602	798,302	2,566,125	(1,767,823)	1,745,609	0	22,678,139		
2037	22,678,139	24,994,485	90.7%	(2,316,346)	4,979,618	16.36%	9.60%	25.96%	617,338	197,228	14,106	828,672	2,591,251	(1,762,579)	1,744,496	0	22,660,056		
2038	22,660,056	24,318,871	93.2%	(1,658,815)	5,182,512	16.51%	9.68%	26.19%	638,237	217,234	11,503	866,974	2,603,525	(1,736,551)	1,744,845	0	22,668,350		
2039	22,668,350	23,571,698	96.2%	(903,348)	5,396,082	17.35%	9.75%	27.10%	660,942	275,502	9,231	945,675	2,605,659	(1,659,984)	1,750,881	0	22,759,247		
2040	22,759,247	22,758,488	100.0%	759	5,620,630	0.10%	9.80%	9.90%	5,382	0	7,858	13,240	2,593,454	(2,580,214)	1,710,860	0	21,889,893		
2041	21,889,893	21,889,536	100.0%	357	5,856,023	0.07%	9.85%	9.92%	4,369	0	6,427	10,796	2,570,518	(2,559,722)	1,642,192	0	20,972,363		
2042	20,972,363	20,971,997	100.0%	366	6,098,062	0.05%	9.88%	9.93%	3,260	0	4,860	8,120	2,534,559	(2,526,439)	1,570,216	0	20,016,140		
2043	20,016,140	20,016,107	100.0%	33	6,351,181	0.04%	9.91%	9.95%	2,761	0	3,739	6,500	2,486,874	(2,480,374)	1,495,684	0	19,031,450		
2044	19,031,450	19,031,447	100.0%	3	6,614,204	0.03%	9.93%	9.96%	2,214	0	3,205	5,419	2,423,551	(2,418,132)	1,419,562	0	18,032,880		
2045	18,032,880	18,032,325	100.0%	555	6,888,254	0.02%	9.95%	9.97%	1,537	0	2,703	4,240	2,350,897	(2,346,657)	1,342,723	0	17,028,946		
<b>Totals:</b>										\$12,464,291	\$4,104,195	\$1,386,025	\$17,954,511						

# Section 4.7 Sensitivity Analysis

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



# Section 5 Member Data

## Section 5.1 Summary of Members Included

### Total PERS

As of June 30	2010	2011	2012	2013	2014
<b>Active Members</b>					
1. Number	26,442	24,393	22,730	20,955	19,297
2. Average Age	48.58	49.22	49.85	50.39	50.90
3. Average Credited Service	11.84	12.60	13.32	14.00	14.64
4. Average Entry Age	36.74	36.62	36.53	36.39	36.26
5. Average Annual Earnings	\$ 60,007	\$ 63,201	\$ 66,119	\$ 69,211	\$ 71,651
6. Number Vested	21,477	21,640	20,842	19,670	18,381
7. Percent Who Are Vested	81.2%	88.7%	91.7%	93.9%	95.3%
<b>Retirees, Disabilitants and Beneficiaries</b>					
1. Number	26,237	27,359	28,540	29,865	31,099
2. Average Age	66.71	67.05	67.41	67.76	68.15
3. Average Monthly Pension Benefit					
Base	\$ 1,309	\$ 1,345	\$ 1,375	\$ 1,415	\$ 1,454
COLA	86	88	89	90	91
P.R.P.A.	231	229	241	242	255
Adjustment	0	0	0	0	0
Total	\$ 1,626	\$ 1,662	\$ 1,705	\$ 1,747	\$ 1,800
<b>Vested Terminations (vested at time of termination, not refunded contributions or commenced benefits)</b>					
1. Number	6,253	6,414	6,294	6,230	6,167
2. Average Age	49.90	50.29	50.55	50.84	51.15
3. Average Monthly Pension Benefit	\$ 805	\$ 821	\$ 844	\$ 863	\$ 897
<b>Non-Vested Terminations With Account Balances (not vested at termination, not refunded contributions)</b>					
1. Number	14,543	14,028	13,552	13,162	12,713
2. Average Account Balance	\$ 4,895	\$ 5,074	\$ 5,373	\$ 5,578	\$ 5,765
<b>Total Number of Members</b>	<b>73,475</b>	<b>72,194</b>	<b>71,116</b>	<b>70,212</b>	<b>69,276</b>

## Summary of Members Included – Total PERS

As of June 30, 2014	DB				DCR	Grand Total
	Tier 1	Tier 2	Tier 3	Total	Tier 4	
<b>Active Members</b>						
1. Number	2,661	5,313	11,323	19,297	15,800	35,097
2. Average Age	58.1	53.49	47.99	50.9	39.74	45.88
3. Average Credited Service	20.79	19	11.16	14.64	2.97	9.39
4. Average Entry Age	37.31	34.49	36.83		36.77	36.49
5. Annual Earnings						
(a) Amount (000's)	\$ 196,835,874	\$409,691,696	\$ 776,126,852	\$1,382,654,422	\$ 857,150,491	\$2,239,804,914
(b) Average	\$ 73,971	\$ 77,111	\$ 68,544	\$ 71,651	\$ 54,250	\$ 63,817

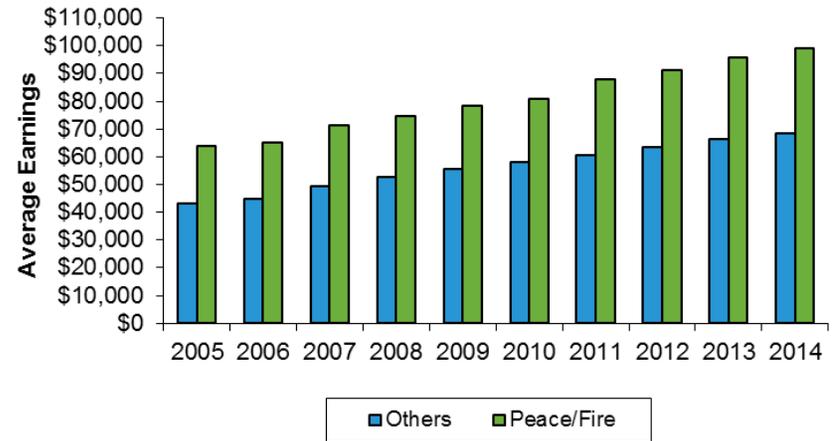
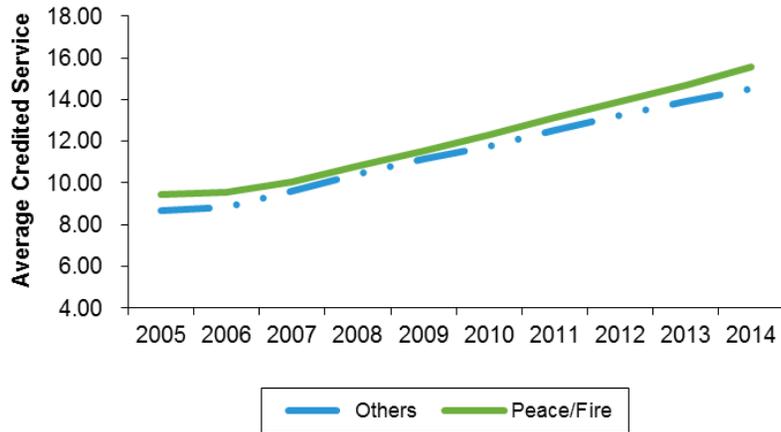
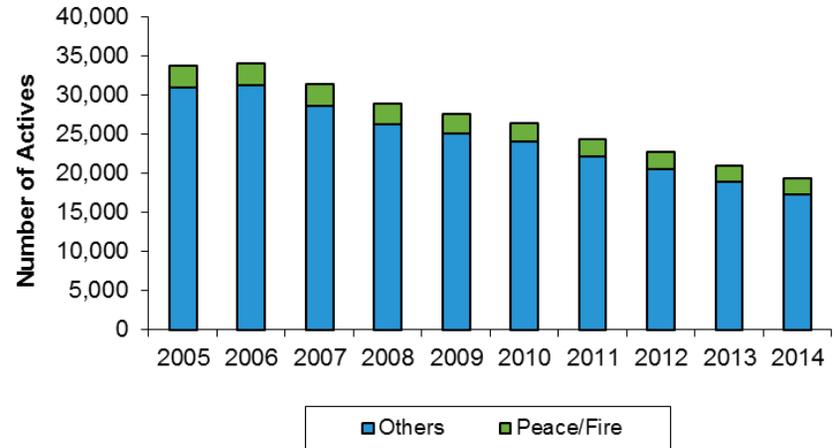
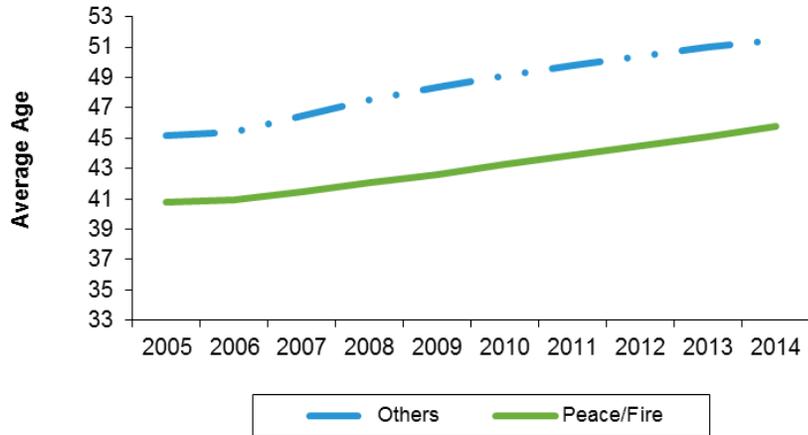
As of June 30, 2014	Tier 1	Tier 2	Tier 3	Total
<b>Retirees, Disabilitants and Beneficiaries</b>				
4. Number	23,427	5,687	1,985	31,099
5. Average Age	68.70	67.00	65.04	68.15
6. Average Monthly Pension Benefit				
Base	\$ 1,562	\$ 1,209	\$ 890	\$ 1,454
COLA	109	39	31	91
P.R.P.A.	313	94	39	255
Adjustment	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
Total	\$ 1,984	\$ 1,343	\$ 960	\$ 1,800

## Summary of Members Included

### Active Members – DB Only

As of June 30	2010	2011	2012	2013	2014
<b>Peace Officer/Firefighter</b>					
1. Number	2,388	2,275	2,164	2,065	1,958
2. Average Age	43.25	43.86	44.48	45.09	45.74
3. Average Credited Service	12.32	13.13	13.90	14.71	15.55
4. Average Entry Age	30.93	30.73	30.58	30.38	30.19
5. Average Annual Earnings	\$ 80,777	\$ 87,709	\$ 91,286	\$ 95,658	\$ 98,946
6. Number Vested	2,102	2,183	2,098	2,018	1,934
7. Percent Who Are Vested	88.0%	96.0%	97.0%	97.7%	98.8%
<b>Others</b>					
1. Number	24,054	22,118	20,566	18,890	17,339
2. Average Age	49.11	49.77	50.41	50.97	51.48
3. Average Credited Service	11.79	12.55	13.26	13.92	14.54
4. Average Entry Age	37.32	37.22	37.15	37.05	36.94
5. Average Annual Earnings	\$ 57,945	\$ 60,680	\$ 63,471	\$ 66,320	\$ 68,569
6. Number Vested	19,375	19,457	18,744	17,652	16,447
7. Percent Who Are Vested	80.5%	88.0%	91.1%	93.4%	94.9%
<b>Total</b>					
1. Number	26,442	24,393	22,730	20,955	19,297
2. Average Age	48.58	49.22	49.85	50.39	50.90
3. Average Credited Service	11.84	12.60	13.32	14.00	14.64
4. Average Entry Age	36.74	36.62	36.53	36.39	36.26
5. Average Annual Earnings	\$ 60,007	\$ 63,201	\$ 66,119	\$ 69,211	\$ 71,651
6. Number Vested	21,477	21,640	20,842	19,670	18,381
7. Percent Who Are Vested	81.2%	88.7%	91.7%	93.9%	95.3%

## Summary of Members Included – Active Members as of June 30



## Section 5.2 Age and Service Distribution of Active Members

### Peace Officer/Firefighter

**Annual Earnings by Age**

Age	Number	Total Annual Earnings	Average Annual Earnings
0 – 19	0	\$ 0	\$ 0
20 – 24	0	0	0
25 – 29	15	1,175,843	78,390
30 – 34	158	15,120,716	95,701
35 – 39	323	32,288,992	99,966
40 – 44	458	46,192,968	100,858
45 – 49	424	43,231,677	101,962
50 – 54	320	31,536,656	98,552
55 – 59	177	16,617,418	93,884
60 – 64	69	6,442,604	93,371
65 – 69	13	1,069,310	82,255
70 – 74	1	60,726	60,726
75+	0	0	0

Total 1,958 \$ 193,736,910 \$ 98,946

**Annual Earnings by Credited Service**

Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0	1	\$ 45,623	\$ 45,623
1	0	166,261	0
2	3	210,857	70,286
3	3	539,396	179,799
4	6	962,137	160,356
0 – 4	13	962,137	74,011
5 – 9	396	35,636,879	89,992
10 – 14	619	59,067,863	95,425
15 – 19	511	52,895,576	103,514
20 – 24	286	30,960,949	108,255
25 – 29	98	10,385,272	105,972
30 – 34	30	3,138,028	104,601
35 – 39	5	690,206	138,041
40+	0	0	0

Total 1,958 \$ 193,736,910 \$ 98,946

**Years of Credited Service by Age**

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	0	0	0	0	0	0	0	0	0	0
25 – 29	1	14	0	0	0	0	0	0	0	15
30 – 34	2	105	50	1	0	0	0	0	0	158
35 – 39	3	89	170	61	0	0	0	0	0	323
40 – 44	1	63	162	172	59	1	0	0	0	458
45 – 49	4	48	106	124	122	20	0	0	0	424
50 – 54	1	42	88	85	54	46	4	0	0	320
55 – 59	0	23	33	47	38	21	14	1	0	177
60 – 64	1	10	9	19	10	7	10	3	0	69
65 – 69	0	2	1	2	2	3	2	1	0	13
70 – 74	0	0	0	0	1	0	0	0	0	1
75+	0	0	0	0	0	0	0	0	0	0
Total	13	396	619	511	286	98	30	5	0	1,958

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

## Age and Service Distribution of Active Members – Others

### Annual Earnings by Age

Age	Number	Total Annual Earnings	Average Annual Earnings
0 – 19	0	\$ 0	\$ 0
20 – 24	0	0	0
25 – 29	115	6,456,747	56,146
30 – 34	775	49,260,226	63,562
35 – 39	1,389	93,506,206	67,319
40 – 44	1,901	134,764,084	70,891
45 – 49	2,563	175,350,554	68,416
50 – 54	3,901	267,856,807	68,664
55 – 59	3,804	262,033,185	68,884
60 – 64	2,084	144,001,484	69,099
65 – 69	616	43,094,822	69,959
70 – 74	157	10,473,708	66,712
75+	34	2,119,689	62,344

Total 17,339 \$1,188,917,512 \$ 68,569

### Annual Earnings by Credited Service

Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0	41	\$ 2,153,884	\$ 52,534
1	82	4,226,645	51,544
2	121	6,599,671	54,543
3	184	9,253,766	50,292
4	274	14,668,629	53,535
0 – 4	702	36,902,595	52,568
5 – 9	4,402	263,451,260	59,848
10 – 14	5,414	358,965,391	66,303
15 – 19	3,165	227,542,867	71,893
20 – 24	2,104	167,319,444	79,524
25 – 29	1,131	95,527,434	84,463
30 – 34	337	31,321,946	92,943
35 – 39	64	5,764,953	90,077
40+	20	2,121,622	106,081

Total 17,339 \$1,188,917,512 \$ 68,569

### 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	0
20 – 24	0	0	0	0	0	0	0	0	0	0	0
25 – 29	40	71	4	0	0	0	0	0	0	0	115
30 – 34	96	484	191	4	0	0	0	0	0	0	775
35 – 39	86	585	610	105	3	0	0	0	0	0	1,389
40 – 44	81	601	780	373	62	4	0	0	0	0	1,901
45 – 49	92	687	853	507	316	104	4	0	0	0	2,563
50 – 54	116	792	1,128	774	621	379	89	2	0	0	3,901
55 – 59	104	630	1,060	841	653	387	111	18	0	0	3,804
60 – 64	59	398	572	405	339	187	93	25	6	6	2,084
65 – 69	22	123	157	122	89	54	28	12	9	9	616
70 – 74	4	24	51	27	19	11	11	6	4	4	157
75+	2	7	8	7	2	5	1	1	1	1	34
Total	702	4,402	5,414	3,165	2,104	1,131	337	64	20	20	17,339

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

## Section 5.3 Member Data Reconciliation

### Total PERS

	Active Members	Inactive Members					Total
		Due a Refund	With Deferred Benefits	Retired Members	Disabled Members	Beneficiaries	
<b>As of June 30, 2013</b>	<b>20,955</b>	<b>13,162</b>	<b>6,230</b>	<b>26,555*</b>	<b>250</b>	<b>3,071</b>	<b>70,223</b>
Vested Terminations	(667)	(6)	678	(2)	(3)	0	0
Non-vested Terminations	(148)	166	(18)	0	(23)	0	0
Cash-outs	(101)	(340)	(76)	0	0	0	(517)
Disability Retirements	(15)	(1)	(9)	(2)	27	0	0
Age Retirements	(1,123)	(27)	(418)	1,601	(33)	N/A	0
Deaths With Beneficiary	(16)	0	(2)	(193)	(6)	0	(217)
Deaths Without Beneficiary	(24)	(31)	(15)	(314)	(4)	(96)	(484)
Expired Benefits	0	0	0	0	(1)	(5)	(6)
Data Corrections	0	(4)	0	0	0	(2)	(6)
Transfers Out	(16)	(6)	(8)	(2)	0	0	(32)
Rehires	421	(202)	(196)	(23)	0	0	0
Pick Ups	31	2	1	1	0	293	328
<b>Net Change</b>	<b>(1,658)</b>	<b>(449)</b>	<b>(63)</b>	<b>1,066</b>	<b>(20)</b>	<b>190</b>	<b>(934)</b>
<b>As of June 30, 2014</b>	<b>19,297</b>	<b>12,713</b>	<b>6,167</b>	<b>27,621**</b>	<b>230</b>	<b>3,261</b>	<b>69,289</b>

\* Includes 11 medical only retirees

\*\* Includes 13 medical only retirees

## Section 5.4 Schedule of Active Member 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, 2014	1,958	\$ 193,737	\$ 98,946	3.4%	159
June 30, 2013	2,065	197,534	95,658	4.8%	159
June 30, 2012	2,164	197,544	91,286	4.1%	160
June 30, 2011	2,275	199,537	87,709	8.6%	160
June 30, 2010	2,388	192,895	80,777	2.8%	160
June 30, 2009	2,476	194,519	78,562	5.0%	159
June 30, 2008	2,549	190,729	74,825	4.9%	160
June 30, 2007	2,687	191,674	71,334	9.3%	160
June 30, 2006	2,785	181,830	65,289	2.5%	160
June 30, 2005	2,733	174,155	63,723	3.0%	160

## Schedule of Active Member Data

### Others

Valuation Date	Number	Annual Earnings (000's) <sup>1</sup>	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2014	17,339	\$ 1,188,918	\$ 68,569	3.4%	158
June 30, 2013	18,890	1,252,786	66,320	4.5%	159
June 30, 2012	20,566	1,305,337	63,471	4.6%	160
June 30, 2011	22,118	1,342,122	60,680	4.7%	160
June 30, 2010	24,054	1,393,803	57,945	4.5%	160
June 30, 2009	25,089	1,390,971	55,441	5.1%	159
June 30, 2008	26,301	1,387,117	52,740	6.9%	160
June 30, 2007	28,675	1,414,145	49,316	9.5%	160
June 30, 2006	31,286	1,408,863	45,032	4.2%	160
June 30, 2005	30,997	1,338,962	43,197	2.3%	160

## Section 5.5 Summary of New Pension Benefit Recipients

### Peace Officer/Firefighter

During the Year Ending June 30	2010	2011	2012	2013	2014
<b>Service</b>					
1. Number	86	83	78	85	74
2. Average Age at Commencement	56.91	56.41	56.73	56.66	57.16
3. Average Monthly Pension Benefit	\$ 2,865	\$ 3,229	\$ 3,042	\$ 3,400	\$ 3,765
<b>Survivor (including surviving spouse and QDROs)</b>					
1. Number	28	29	25	23	30
2. Average Age at Commencement	57.70	57.19	62.97	61.25	59.60
3. Average Monthly Pension Benefit	\$ 1,521	\$ 1,438	\$ 1,541	\$ 1,868	\$ 2,076
<b>Disability Retirements</b>					
1. Number	4	2	4	5	5
2. Average Age at Commencement	50.61	50.53	48.14	45.41	43.62
3. Average Monthly Pension Benefit	\$ 2,631	\$ 2,354	\$ 3,923	\$ 3,000	\$ 2,992
<b>Total</b>					
1. Number	118	114	107	113	109
2. Average Age at Commencement	56.88	56.51	57.87	57.10	57.21
3. Average Monthly Pension Benefit	\$ 2,538	\$ 2,758	\$ 2,724	\$ 3,070	\$ 3,265

## Summary of New Pension Benefit Recipients

### Average Pension Benefit Payments – Peace Officer/Firefighter

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/13 - 6/30/14:							
Average Monthly Pension Benefit	\$ 290	\$ 1,423	\$ 2,002	\$ 2,902	\$ 4,014	\$ 5,464	\$ 6,299
Number of Recipients	1	9	10	14	22	16	7
Period 7/1/12 - 6/30/13:							
Average Monthly Pension Benefit	\$ 0	\$ 865	\$ 1,779	\$ 2,762	\$ 3,793	\$ 4,983	\$ 4,911
Number of Recipients	0	9	8	19	31	18	4
Period 7/1/11 - 6/30/12:							
Average Monthly Pension Benefit	\$ 0	\$ 1,159	\$ 1,161	\$ 3,142	\$ 3,504	\$ 4,673	\$ 5,079
Number of Recipients	0	13	13	12	20	17	7
Period 7/1/10 - 6/30/11:							
Average Monthly Pension Benefit	\$ 525	\$ 880	\$ 1,469	\$ 2,666	\$ 3,743	\$ 4,806	\$ 5,661
Number of Recipients	1	8	18	10	24	16	8
Period 7/1/09 - 6/30/10:							
Average Monthly Pension Benefit	\$ 1,902	\$ 1,242	\$ 1,459	\$ 2,284	\$ 3,179	\$ 4,527	\$ 4,695
Number of Recipients	4	7	16	14	28	14	7
Period 7/1/08 - 6/30/09:							
Average Monthly Pension Benefit	\$ 489	\$ 820	\$ 979	\$ 2,466	\$ 3,152	\$ 4,213	\$ 4,894
Number of Recipients	2	17	11	18	23	7	5
Period 7/1/07 - 6/30/08:							
Average Monthly Pension Benefit	\$ 1,522	\$ 950	\$ 1,171	\$ 2,378	\$ 3,179	\$ 3,837	\$ 6,014
Number of Recipients	6	13	13	20	32	18	3
Period 7/1/06 - 6/30/07:							
Average Monthly Pension Benefit	\$ 925	\$ 858	\$ 1,304	\$ 2,385	\$ 3,180	\$ 4,198	\$ 4,942
Number of Recipients	4	13	9	26	40	12	4
Period 7/1/January 0, 1900 - 6/30/06:							
Average Monthly Pension Benefit	\$ 1,556	\$ 748	\$ 1,280	\$ 2,236	\$ 2,931	\$ 3,595	\$ 4,190
Number of Recipients	5	11	9	26	29	13	3

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

## Summary of New Pension Benefit Recipients – Others

During the Year Ending June 30	2010	2011	2012	2013	2014
<b>Service</b>					
1. Number	1,409	1,379	1,413	1,547	1,495
2. Average Age at Commencement	58.74	59.19	59.68	59.94	60.41
3. Average Monthly Pension Benefit	\$ 1,879	\$ 2,061	\$ 2,031	\$ 2,141	\$ 2,290
<b>Survivor (including surviving spouse and QDROs)</b>					
1. Number	225	191	238	231	263
2. Average Age at Commencement	65.35	66.04	65.26	66.07	67.55
3. Average Monthly Pension Benefit	\$ 986	\$ 1,103	\$ 1,005	\$ 1,025	\$ 1,064
<b>Disability Retirements</b>					
1. Number	33	25	25	30	20
2. Average Age at Commencement	52.43	51.10	53.32	52.43	49.66
3. Average Monthly Pension Benefit	\$ 1,662	\$ 1,550	\$ 1,553	\$ 1,809	\$ 1,391
<b>Total</b>					
1. Number	1,667	1,595	1,676	1,808	1,778
2. Average Age at Commencement	59.51	59.88	60.38	60.60	61.35
3. Average Monthly Pension Benefit	\$ 1,754	\$ 1,938	\$ 1,878	\$ 1,993	\$ 2,101

## Summary of New Pension Benefit Recipients

### Average Pension Benefit Payments – Others

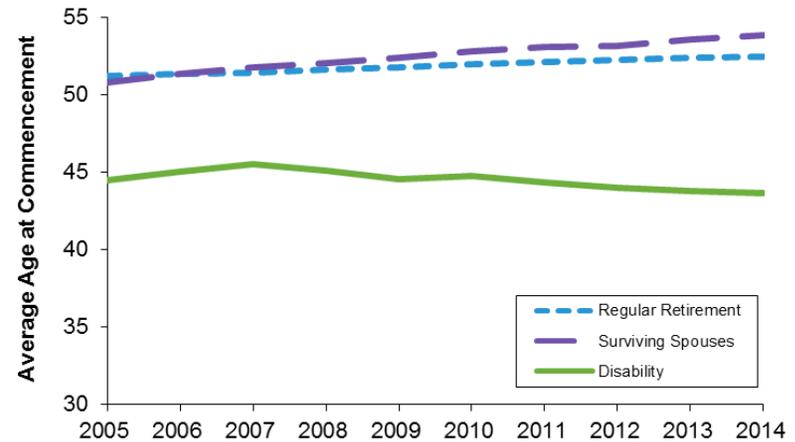
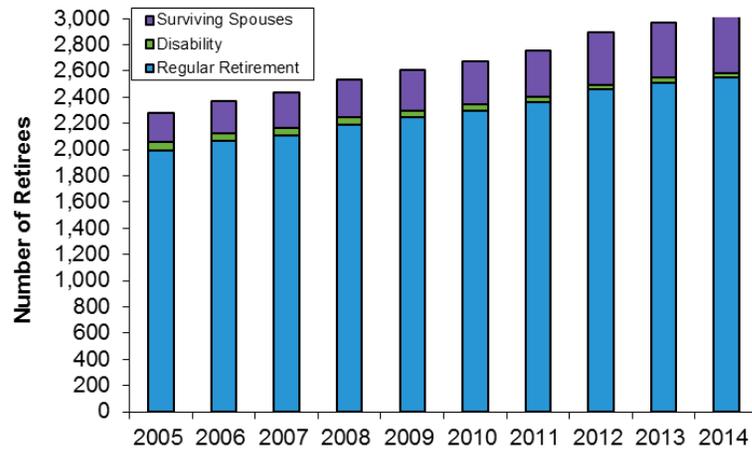
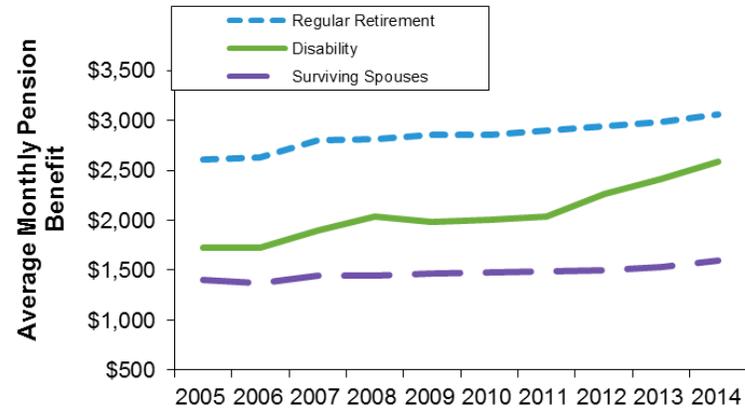
	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/13 - 6/30/14:							
Number of Recipients	\$ 503	\$ 700	\$ 1,189	\$ 2,065	\$ 3,021	\$ 4,439	\$ 5,490
Average Monthly Pension Benefit	48	347	319	241	214	224	121
Period 7/1/12 - 6/30/13:							
Average Monthly Pension Benefit	\$ 414	\$ 650	\$ 1,179	\$ 1,925	\$ 2,879	\$ 4,356	\$ 5,208
Number of Recipients	59	349	365	257	206	209	132
Period 7/1/11 - 6/30/12:							
Average Monthly Pension Benefit	\$ 407	\$ 610	\$ 1,147	\$ 1,931	\$ 2,805	\$ 4,214	\$ 5,076
Number of Recipients	67	351	314	204	208	188	106
Period 7/1/10 - 6/30/11:							
Average Monthly Pension Benefit	\$ 409	\$ 633	\$ 1,150	\$ 1,876	\$ 2,690	\$ 4,294	\$ 5,226
Number of Recipients	73	352	270	227	172	205	105
Period 7/1/09 - 6/30/10:							
Average Monthly Pension Benefit	\$ 485	\$ 579	\$ 1,116	\$ 1,763	\$ 2,674	\$ 4,008	\$ 5,039
Number of Recipients	93	367	273	217	218	200	74
Period 7/1/08 - 6/30/09:							
Average Monthly Pension Benefit	\$ 534	\$ 554	\$ 988	\$ 1,708	\$ 2,693	\$ 3,718	\$ 4,723
Number of Recipients	71	341	216	171	154	159	47
Period 7/1/07 - 6/30/08:							
Average Monthly Pension Benefit	\$ 586	\$ 548	\$ 1,044	\$ 1,655	\$ 2,668	\$ 3,642	\$ 4,561
Number of Recipients	69	315	249	222	172	170	56
Period 7/1/06 - 6/30/07:							
Average Monthly Pension Benefit	\$ 1,026	\$ 564	\$ 1,084	\$ 1,773	\$ 2,509	\$ 3,699	\$ 4,132
Number of Recipients	97	320	263	207	190	183	44
Period 7/1 January 0, 1900 - 6/30/06:							
Average Monthly Pension Benefit	\$ 519	\$ 536	\$ 950	\$ 1,464	\$ 2,212	\$ 3,247	\$ 3,837
Number of Recipients	72	319	271	246	197	184	50

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

## Section 5.6 Summary of All Pension Benefit Recipients

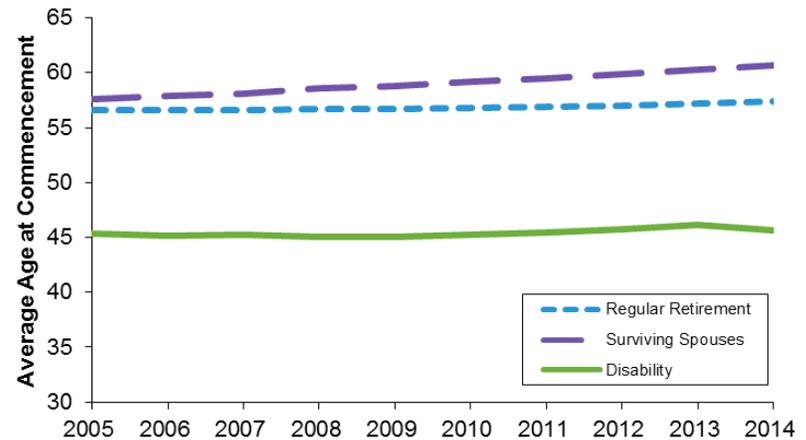
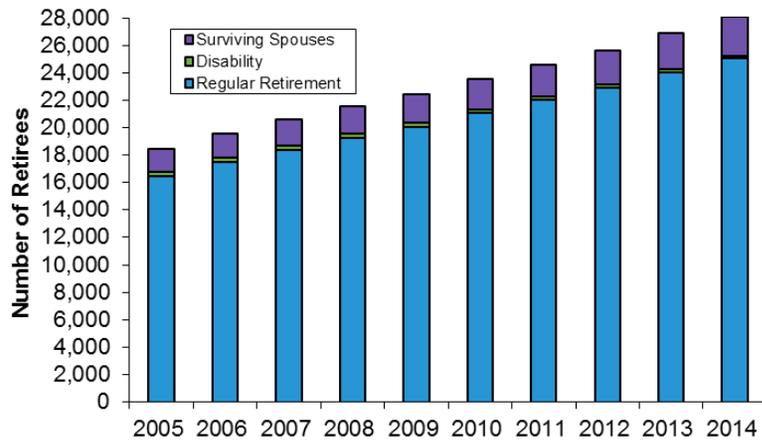
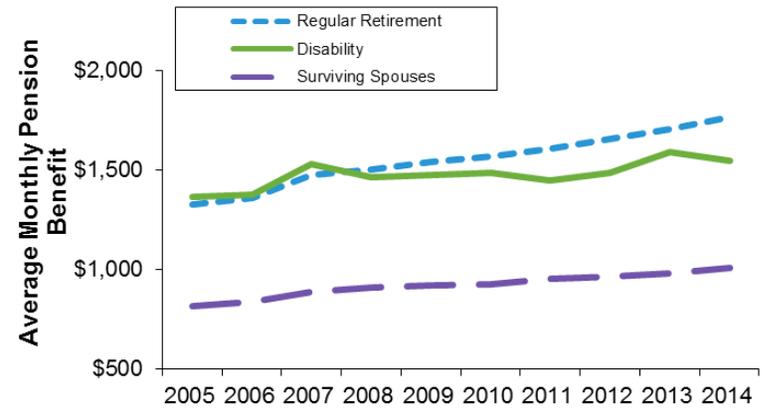
	Peace Officer/ Firefighter	Others
<b>Service Retirements</b>		
1. Number, June 30, 2013	2,512	24,032
2. Net Change During FY14	38	1,026
3. Number, June 30, 2014	2,550	25,058
4. Average Age At Commencement	52.50	57.35
5. Average Current Age	65.88	68.36
6. Average Monthly Pension Benefit	\$ 3,063	\$ 1,767
<b>Survivors (including surviving spouses and QDROs)</b>		
1. Number, June 30, 2013	419	2,652
2. Net Change During FY14	21	169
3. Number, June 30, 2014	440	2,821
4. Average Age At Commencement	53.86	60.69
5. Average Current Age	64.60	70.15
6. Average Monthly Pension Benefit	\$ 1,592	\$ 1,009
<b>Disability Retirements</b>		
1. Number, June 30, 2013	36	214
2. Net Change During FY14	0	(20)
3. Number, June 30, 2014	36	194
4. Average Age At Commencement	43.65	45.62
5. Average Current Age	50.07	53.66
6. Average Monthly Pension Benefit	\$ 2,583	\$ 1,546
<b>Total</b>		
1. Number, June 30, 2013	2,967	26,898
2. Net Change During FY14	59	1,175
3. Number, June 30, 2014	3,026	28,073
4. Average Age At Commencement	52.59	57.61
5. Average Current Age	65.51	68.44
6. Average Monthly Pension Benefit	\$ 2,843	\$ 1,688

## Summary of All Pension Benefit Recipients Peace Officer/Firefighter



# Summary of All Pension Benefit Recipients

## Others



## Summary of All Pension Benefit Recipients – Peace Officer/Firefighter

**Annual Pension Benefit by Age**

Age	Number	Total Annual Benefit	Average Annual Benefit
0 – 19	0	\$ 0	\$ 0
20 – 24	0	0	0
25 – 29	0	0	0
30 – 34	1	42,664	42,664
35 – 39	2	61,460	30,730
40 – 44	18	635,875	35,326
45 – 49	57	1,908,891	33,489
50 – 54	176	6,527,482	37,088
55 – 59	477	16,925,205	35,483
60 – 64	761	25,502,718	33,512
65 – 69	700	23,939,977	34,200
70 – 74	477	15,554,119	32,608
75+	357	12,164,479	34,074

Total 3,026 \$ 103,262,870 \$ 34,125

**Annual Pension Benefit by Years Since Commencement**

Years Since Commencement	Number	Total Annual Benefit	Average Annual Benefit
0	103	\$ 4,139,314	\$ 40,188
1	114	4,186,917	36,727
2	109	3,457,359	31,719
3	113	3,753,031	33,213
4	115	3,680,514	32,004
0 – 4	554	19,217,135	34,688
5 – 9	637	18,643,778	29,268
10 – 14	693	22,867,718	32,998
15 – 19	597	21,361,751	35,782
20 – 24	263	9,167,558	34,858
25 – 29	195	8,871,157	45,493
30 – 34	58	2,274,295	39,212
35 – 39	26	810,474	31,172
40+	3	49,004	16,335

Total 3,026 \$ 103,262,870 \$ 34,125

**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	0	0	0	0	0	0	0	0	1
35 – 39	0	2	0	0	0	0	0	0	0	2
40 – 44	13	3	1	1	0	0	0	0	0	18
45 – 49	44	9	3	1	0	0	0	0	0	57
50 – 54	76	68	28	2	2	0	0	0	0	176
55 – 59	141	149	155	28	2	1	1	0	0	477
60 – 64	173	202	239	126	17	2	1	1	0	761
65 – 69	69	148	172	203	68	32	3	5	0	700
70 – 74	21	39	73	183	100	54	5	1	1	477
75+	16	17	22	53	74	106	48	19	2	357
Total	554	637	693	597	263	195	58	26	3	3,026

## Summary of All Benefit Recipients – Others

### Annual Pension Benefit by Age

Age	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0 – 19	0	\$ 0	\$ 0
20 – 24	1	34,134	34,134
25 – 29	1	6,191	6,191
30 – 34	2	23,661	11,831
35 – 39	6	71,197	11,866
40 – 44	22	329,081	14,958
45 – 49	64	740,429	11,569
50 – 54	528	13,768,178	26,076
55 – 59	3,200	80,442,115	25,138
60 – 64	7,078	153,608,624	21,702
65 – 69	6,706	133,751,373	19,945
70 – 74	4,631	85,453,630	18,453
75+	5,834	100,723,683	17,265

Total 28,073 \$ 568,952,296 \$ 20,267

### Annual Pension Benefit by Years Since Commencement

Years Since Commencement	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0	1,714	\$ 43,410,430	\$ 25,327
1	1,761	41,673,929	23,665
2	1,634	37,298,008	22,826
3	1,544	36,281,943	23,499
4	1,507	32,848,235	21,797
0 – 4	8,160	191,512,546	23,470
5 – 9	6,722	136,382,133	20,289
10 – 14	5,239	98,003,396	18,707
15 – 19	3,870	74,436,875	19,234
20 – 24	2,099	34,044,811	16,220
25 – 29	1,355	24,972,673	18,430
30 – 34	458	7,061,404	15,418
35 – 39	159	2,329,739	14,652
40+	11	208,720	18,975

Total 28,073 \$ 568,952,296 \$ 20,267

### Years Since Benefit Commencement by Age

Age	Years Since Commencement									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	0	1	0	0	0	0	0	0	0	1
25 – 29	1	0	0	0	0	0	0	0	0	1
30 – 34	2	0	0	0	0	0	0	0	0	2
35 – 39	4	2	0	0	0	0	0	0	0	6
40 – 44	9	9	4	0	0	0	0	0	0	22
45 – 49	28	19	12	4	1	0	0	0	0	64
50 – 54	409	67	31	13	6	2	0	0	0	528
55 – 59	2,357	738	67	23	10	4	1	0	0	3,200
60 – 64	3,158	2,817	984	95	12	9	2	1	0	7,078
65 – 69	1,379	1,947	2,386	954	24	11	4	1	0	6,706
70 – 74	448	775	1,139	1,569	618	64	11	6	1	4,631
75+	365	347	616	1,212	1,428	1,265	440	151	10	5,834
Total	8,160	6,722	5,239	3,870	2,099	1,355	458	159	11	28,073

## Section 5.7 Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Elected

### Peace Officer/Firefighter

Amount of Monthly Pension Benefit	Number of Recipients	Type of Pension Benefit			Option Selected				
		1	2	3	1	2	3	4	5
\$ 1 – \$ 300	52	26	26	0	31	9	1	2	9
301 – 600	162	104	57	1	78	38	25	9	12
601 – 900	166	99	66	1	93	41	9	13	10
901 – 1,200	159	108	50	1	83	38	18	12	8
1,201 – 1,500	167	121	46	0	89	38	22	7	11
1,501 – 1,800	141	110	28	3	64	39	19	13	6
1,801 – 2,100	170	129	37	4	67	50	35	11	7
2,101 – 2,400	197	143	45	9	86	66	22	15	8
2,401 – 2,700	217	193	20	4	71	85	35	17	9
2,701 – 3,000	237	218	18	1	66	108	38	17	8
3,001 – 3,300	234	216	14	4	62	108	32	14	18
3,301 – 3,600	204	188	13	3	59	97	32	11	5
3,601 – 3,900	206	197	6	3	63	92	27	16	8
3,901 – 4,200	140	138	2	0	36	72	16	14	2
Over \$4,200	574	560	12	2	122	312	69	52	19
Totals	3,026	2,550	440	36	1,070	1,193	400	223	140

#### 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

## Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Elected

### Others

Amount of Monthly Pension Benefit	Number of Recipients	Type of Pension Benefit			Option Selected				
		1	2	3	1	2	3	4	5
\$ 1 – \$ 300	1,970	1,530	438	2	847	389	280	63	391
301 – 600	4,794	4,118	655	21	2,371	1,186	782	259	196
601 – 900	3,898	3,360	513	25	1,941	965	605	215	172
901 – 1,200	3,073	2,688	361	24	1,428	798	554	166	127
1,201 – 1,500	2,608	2,302	277	29	1,197	741	419	140	111
1,501 – 1,800	1,963	1,768	166	29	825	584	362	111	81
1,801 – 2,100	1,658	1,511	126	21	684	487	307	104	76
2,101 – 2,400	1,426	1,331	78	17	570	425	270	95	66
2,401 – 2,700	1,158	1,079	67	12	461	383	221	47	46
2,701 – 3,000	980	934	42	4	369	322	191	59	39
3,001 – 3,300	808	773	31	4	289	314	142	30	33
3,301 – 3,600	668	648	18	2	219	253	130	44	22
3,601 – 3,900	564	547	17	0	206	209	90	39	20
3,901 – 4,200	490	478	11	1	156	184	116	22	12
Over \$4,200	2,015	1,992	20	3	608	820	415	116	56
Totals	28,073	25,059	2,820	194	12,171	8,060	4,884	1,510	1,448

#### Type of Pension Benefit

4. Regular retirement
5. Survivor payment
6. Disability

#### Option Selected

6. Whole Life Annuity
7. 75% Joint and Contingent Annuity
8. 50% Joint and Contingent Annuity
9. 66 2/3% Joint and Survivor Annuity
10. Level Income Option

## Section 5.8 Pension Benefit Recipients Added to and Removed from Rolls

### Peace Officer/Firefighter

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		Percent Increase in Annual Pension Benefits	Average Annual Pension Benefit
	No. <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, 2014	109	\$ 4,270,620	50	\$ (145,769)	3,026	\$ 103,262,870	4.5%	\$ 34,125
June 30, 2013	113	4,162,920	42	240,775	2,967	98,846,479	4.1%	33,315
June 30, 2012	179	5,246,271	41	(177,568)	2,896	94,924,334	6.1%	32,778
June 30, 2011	114	3,772,720	33	116,090	2,758	89,500,495	4.3%	32,451
June 30, 2010	118	3,593,724	46	1,413,071	2,677	85,843,865	2.6%	32,067
June 30, 2009	108	2,759,299	39	(518,134)	2,605	83,663,212	4.1%	32,116
June 30, 2008	125	3,556,519	28	191,073	2,536	80,385,779	4.4%	31,698
June 30, 2007	138	3,930,564	67	(2,546,491)	2,439	77,020,333	9.2%	31,579
June 30, 2006	118	3,289,370	30	209,287	2,368	70,543,278	8.9%	29,790
June 30, 2005	145	3,904,737	5	3,332,357	2,280	67,463,195	7.2%	29,589

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

## 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, 2014	1,778	\$ 44,823,611	603	\$ 3,011,383	28,073	\$ 568,952,296	7.9%	\$ 20,267
June 30, 2013	1,808	43,247,667	554	4,861,626	26,898	527,140,068	7.9%	19,598
June 30, 2012	1,679	37,855,250	636	5,344,239	25,644	488,754,027	7.1%	19,059
June 30, 2011	1,595	37,100,217	554	6,897,899	24,601	456,243,016	7.1%	18,546
June 30, 2010	1,667	35,089,579	517	8,712,630	23,560	426,040,698	6.6%	18,083
June 30, 2009	1,340	25,402,811	476	28,773	22,410	399,663,749	6.8%	17,834
June 30, 2008	1,454	28,498,471	466	5,349,935	21,546	374,289,711	6.6%	17,372
June 30, 2007	1,479	28,985,748	454	(14,280,390)	20,558	351,141,175	14.1%	17,081
June 30, 2006	1,494	26,193,750	384	2,265,651	19,533	307,875,037	8.4%	15,762
June 30, 2005	1,287	22,966,842	296	17,019,851	18,423	283,946,938	2.1%	15,413

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

# Section 6 Basis of the Actuarial Valuation

## Section 6.1 Summary of Plan Provisions and Changes in Plan Provisions

### 1. **Effective Date**

January 1, 1961, with amendments through June 30, 2008. Chapter 82, 1986 Session Laws of Alaska, created a two tier retirement system. Members who were first hired under the PERS before July 1, 1986 (Tier 1) are eligible for different benefits than members hired after June 30, 1986 (Tier 2). Chapter 4, 1996 Session Laws of Alaska created a third tier for members who were first hired after June 30, 1996 (Tier 3). Chapter 9, 2005 Session Laws of Alaska, closed the plan to new members hired after June 30, 2006.

### 2. **Administration of Plan**

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

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

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

### 3. **Employers Included**

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

### 4. **Membership**

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

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

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

## **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.

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

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

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

## 6. Employer Contributions

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

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

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

Employer rates cannot be less than the normal cost rate.

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

## 7. Additional State Contributions

Pursuant to AS 39.35.280 effective July 1, 2008, the State shall contribute an amount (in addition to the State contribution as an employer) that when combined with the employer contribution (22%) will be sufficient to pay the total contribution rate adopted by The Alaska Retirement Management Board.

## 8. Member Contributions

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

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

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

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

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

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

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

## 9. Retirement Benefits

### Eligibility:

- a. Members, including deferred vested members, are eligible for normal retirement at age 55 or early retirement at age 50 if they were hired before July 1, 1986 (Tier 1), and 60 or early retirement at age 55 if they were hired after July 1, 1986 (Tiers 2 & 3). Additionally, they must have at least:
  - (i) five years of paid up PERS service;
  - (ii) 60 days of paid up PERS service as employees of the legislature during each of five legislative sessions and they were first hired by the legislature before May 30, 1987;
  - (ii) 80 days of paid up PERS service as employees of the legislature during each of five legislative sessions and they were first hired by the legislature after May 29, 1987;
  - (iii) two years of paid up PERS service and they are vested in the Teachers' Retirement System; or
  - (iv) two years of paid-up PERS service and a minimum three years of TRS service to qualify for a public service benefit.
- b. Members may retire at any age when they have:
  - (i) 20 paid up years of PERS Peace Officer/Firefighter service; or
  - (ii) 30 paid up years of PERS "all other" or "elected official" service.

**Benefit Type:** Lifetime benefits are paid to members. Eligible members may receive normal, unreduced benefits when they (1) reach normal retirement age and complete the service required; or (2) satisfy the minimum service requirements under the "20 and out" or "30 and out" provisions. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

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

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

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

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

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

## **10. Reemployment of Retired Members**

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

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

- a. forfeit the three years of incentive credits that they received;
- b. owe the PERS 150% of the benefits that they received for state and political subdivision members, and 110% for school district employees, under the 1996-2000 RIP, which may include costs for health insurance, excluding amounts that they paid to participate for the 1986 and 1989 RIPs. Under prior RIPs, the penalty is 110% of the benefits received; and
- c. be charged 7% interest from the date that they are reemployed until their indebtedness is paid in full or they retire again. If the indebtedness is not completely paid, future benefits will be actuarially reduced for life.

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

## **11. Postemployment Healthcare Benefits**

Major medical benefits are provided to retirees and their surviving spouses by the PERS for all employees hired before July 1, 1986 (Tier 1) and disabled retirees. Employees hired after June 30, 1986 (Tier 2) and their surviving spouses with five years of credited service (or ten years of credited service for those first hired after June 30, 1996 (Tier 3)) must pay the full monthly premium if they are

under age sixty and will receive benefits paid by the PERS if they are over age sixty. Tier 3 Members with between five and ten years of credited service must pay the full monthly premium regardless of their age. Tier 2 and Tier 3 Members with less than five years of credited service are not eligible for postemployment healthcare benefits. Tier 2 Members who are receiving a conditional benefit and are age eligible are eligible for postemployment healthcare benefits. In addition, Peace Officers and their surviving spouses with twenty-five years of Peace Officer membership service and Other employees and their surviving spouses with thirty years of membership service receive benefits paid by the PERS, regardless of their age or date of hire. Peace Officers / Firefighters who are disabled between 20 and 25 years must pay the full monthly premium.

## 12. Disability Benefits

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

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

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

## 13. Death Benefits

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

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

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

**Nonoccupational Death:** When a vested member dies from nonoccupational causes, the surviving spouse may elect to receive a monthly 50% joint and survivor benefit or a lump sum benefit. The monthly benefit is calculated on the member's average monthly compensation and PERS service at the time of termination or death.

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

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

#### **14. Postretirement Pension Adjustments**

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

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

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who first entered the PERS before July 1, 1986 (Tier 1) if the CPI increases and the funding ratio is at least 105%.

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

#### **15. Alaska Cost of Living Allowance**

Eligible benefit recipients who reside in Alaska receive an Alaska cost of living allowance (COLA) equal to 10% of their base benefits or \$50, whichever is more. The following benefit recipients are eligible:

- a. members who first entered the PERS before July 1, 1986 (Tier 1) and their survivors;
- b. members who first entered the PERS after June 30, 1986 (Tiers 2 & 3) and their survivors if they are at least age 65; and
- c. all disabled members.

#### **Changes in Benefit Provisions Since the Prior Valuation**

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

## Section 6.2

# Description of Actuarial Methods and Valuation Procedures

The funding method used in this valuation was adopted by the Board in October 2006. The asset smoothing method used to determine valuation assets was changed effective June 30, 2014.

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

### a. **Actuarial Method** – Entry Age Actuarial Cost

Liabilities and contributions shown in the report are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 25 years as a level percentage of payroll amount. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined.

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.

## **b. Valuation of Assets**

The actuarial asset value was reinitialized to equal Fair Value of Assets as of June 30, 2014. Beginning in 2015, the asset value method will recognize 20% of the gain or loss each year, for a period of up to 5 years. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP.

## **c. Changes in Methods Since the Prior Valuation**

In accordance with Senate Bill 119, signed into law May 28, 2014, and HB 385, signed into law June 23, 2014, the following changes are effective for this June 30, 2014 actuarial valuation:

- The amortization method used for funding changed from the level dollar amount method to the level percentage of payroll method, and the amortization period was re-initialized to a closed 25-year period as of June 30, 2014.
- The additional state contribution for fiscal year ending June 30, 2015 is exactly \$1,000,000,000.
- The two-year rate setting time lag is intended to be eliminated. The two-year lag in the setting of contribution rates is replaced by a two-year roll forward of liabilities and projected normal costs and a one-year roll forward of June 30, 2015 assets.
- The Actuarial Value of Assets is reset to the Fair Value of Assets as of June 30, 2014. The five-year smoothing method with grow-in will be implemented over the next five years.
- The 20% corridor over/under the Fair Value of Assets is eliminated in the calculation of the Actuarial Value of Assets.

## **d. Valuation of Medical Benefits**

This section outlines the detailed methodology used to develop the initial per capita claims cost rates for the State of Alaska Public Employees' Retirement System postemployment healthcare plan. Note that methodology reflects the results of our annual experience rate update for the period July 1, 2014 to June 30, 2015.

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

We analyzed HealthSmart management level reporting for fiscal 2011 through 2014 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 historic management level reporting from HealthSmart 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. Historical claim level reporting and estimated impacts of Medicare coordination and plan design were used to augment cost data by Medicare status. Aetna does provide separate experience by Medicare status and will be incorporated into per capita rate development as credible experience emerges.
3. Alaska retirees who do not have 40 quarters of Medicare-covered compensation do not qualify for Medicare Part A coverage free of charge. This is a relatively small and closed group. Medicare was applied to State employment for all employees hired after March 31, 1986. For these “no-Part A” individuals, the State is the primary payer for hospital bills and other Part A services. Thus, claims costs are higher for the no-Part A group. To date, claim experience is not available separately for participants with both Medicare Parts A and B and those with Part B only. Therefore, higher no-Part A claims are spread across the entire retired population and have been applied to future claims of current active employees projected to retire in the future. To the extent that no-Part A claims can be isolated and applied strictly to the appropriate closed group, actuarial accrued liability will be more accurate and will be lower. The smaller the no-Part A population, the more accrued liabilities will decrease.

Based on census data received from Aetna, 0.33% of the current retiree (including dependents) population was identified as having coverage only under Medicare Part B. For future retirees, we assume their Part A eligible status based on a combination of date of hire and/or re-hire, date of birth, tier, etc.

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

4. The steps above result in separate incurred claims cost rates for medical and prescription benefits for non-Medicare, Medicare Part B only and Medicare Part A&B members for the past four fiscal years. Medical claims cost rates reflect differing average ages and levels of Medicare coordination for each group. Prescription claims cost rates reflect differing average ages. We deemed incurred claim data from HealthSmart management reports to be complete for fiscal 2011, 2012 and 2013. Fiscal 2014 medical claim data was completed using a factor of 0.81; fiscal 2014 prescription claim data was completed using a factor of 0.92 – these factors were derived from historic completion patterns for AlaskaCare retiree claims. Incurred claim cost rates are projected forward to the valuation year using a blend of Alaska plan-specific trend and national trend rates over the same period, with Alaska experience receiving 75% weight, national trend 25%. These weighted trend factors for this purpose for the current valuation are as follows:

Alaska-Specific and National Average Weighted Trend from Experience Period to Valuation Year			
Experience Period	Medical	Prescription	Weighting Factors
FY2010 to FY2011	8.1%	4.5%	10%
FY2011 to FY2012	8.3%	5.1%	20%
FY2012 to FY2013	8.9%	7.1%	40%
FY2013 to FY2014	7.7%	6.5%	30%

5. For per capital claim cost development, medical claims were trended on a composite basis for pre-Medicare vs. Medicare due to limited reporting as noted in #2 above. Trend assumptions used for rate development are assessed annually and as additional/improved reporting becomes available, we will incorporate into rate development as appropriate.
6. Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact of the following provisions; however, none of the impacts other than noted fees have been included in the valuation results.

Because the State plan is retiree-only, and was in effect at the time the legislation was enacted, not all provisions are required. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions. We reviewed the impact of including these provisions, but there was no decision made to adopt them, and no requirement to do so.

The Plan will be subject to the high cost plan excise tax (Cadillac tax). Based upon guidance available at the time of disclosure, Buck estimated the impact to be immaterial to the accrued liability based on a blend of pre-Medicare and Medicare retirees and the projected impact to future healthcare cost trends due to the estimated tax.

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

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

## Description of Actuarial Methods and Valuation Procedure

### June 30, 2014 Valuation – FY 2015 Claims Cost Rates

	Medical			Prescription Drugs			Total
	Pre-Medicare	Medicare A&B	Medicare B Only	Pre-Medicare	Medicare A&B	Medicare B Only	
<b>Fiscal 2011 Incurred Claims</b>	<b>\$ 232,724,861</b>	<b>\$ 55,613,464</b>	<b>\$ 849,158</b>	<b>\$ 48,405,895</b>	<b>\$ 85,637,669</b>	<b>\$ 393,968</b>	<b>\$ 423,625,015</b>
Membership	31,362	29,997	138	31,362	29,997	138	61,497
Paid Claims Cost Rate	\$ 7,421	\$ 1,854	\$ 6,153	\$ 1,543	\$ 2,855	\$ 2,855	\$ 6,889
Trend to FY2015	1.372	1.372	1.372	1.253	1.253	1.253	
FY 2015 Paid Cost Rate	\$ 10,182	\$ 2,544	\$ 8,443	\$ 1,934	\$ 3,576	\$ 3,576	\$ 9,191
Paid to Incurred Factor	0.970	0.993	0.993	0.967	0.967	0.967	
<b>FY 2015 Incurred Cost Rate</b>	<b>\$ 9,876</b>	<b>\$ 2,526</b>	<b>\$ 8,384</b>	<b>\$ 1,870</b>	<b>\$ 3,458</b>	<b>\$ 3,458</b>	<b>\$ 8,936</b>
<b>Fiscal 2012 Incurred Claims</b>	<b>\$ 233,755,671</b>	<b>\$ 71,481,207</b>	<b>\$ 1,587,051</b>	<b>\$ 50,508,869</b>	<b>\$ 95,412,095</b>	<b>\$ 590,097</b>	<b>\$ 453,334,990</b>
Membership	29,500	33,631	208	29,500	33,631	208	63,339
Paid Claims Cost Rate	\$ 7,924	\$ 2,125	\$ 7,630	\$ 1,712	\$ 2,837	\$ 2,837	\$ 7,157
Trend to FY2015	1.269	1.269	1.269	1.199	1.199	1.199	
FY 2015 Paid Cost Rate	\$ 10,058	\$ 2,698	\$ 9,685	\$ 2,053	\$ 3,401	\$ 3,401	\$ 8,922
Paid to Incurred Factor	0.970	0.970	0.970	0.967	0.967	0.967	
<b>FY 2015 Incurred Cost Rate</b>	<b>\$ 9,757</b>	<b>\$ 2,617</b>	<b>\$ 9,395</b>	<b>\$ 1,985</b>	<b>\$ 3,289</b>	<b>\$ 3,289</b>	<b>\$ 8,646</b>
<b>Fiscal 2013 Incurred Claims</b>	<b>\$ 240,038,962</b>	<b>\$ 73,485,175</b>	<b>\$ 1,901,568</b>	<b>\$ 52,633,265</b>	<b>\$ 99,470,696</b>	<b>\$ 569,334</b>	<b>\$ 468,099,000</b>
Membership	27,037	37,913	217	27,037	37,913	217	65,167
Paid Claims Cost Rate	\$ 8,878	\$ 1,938	\$ 8,763	\$ 1,947	\$ 2,624	\$ 2,624	\$ 7,183
Trend to FY2015	1.172	1.172	1.172	1.140	1.140	1.140	
FY 2015 Paid Cost Rate	\$ 10,407	\$ 2,272	\$ 10,272	\$ 2,220	\$ 2,992	\$ 2,992	\$ 8,345
Paid to Incurred Factor	0.970	0.970	0.970	0.967	0.967	0.967	
<b>FY 2015 Incurred Cost Rate</b>	<b>\$ 10,094</b>	<b>\$ 2,204</b>	<b>\$ 9,963</b>	<b>\$ 2,147</b>	<b>\$ 2,893</b>	<b>\$ 2,893</b>	<b>\$ 8,087</b>
<b>Fiscal 2014 Incurred Claims</b>	<b>\$ 264,308,816</b>	<b>\$ 81,160,409</b>	<b>\$ 2,901,430</b>	<b>\$ 45,236,118</b>	<b>\$ 131,470,349</b>	<b>\$ 692,910</b>	<b>\$ 525,770,032</b>
Membership	24,486	42,311	223	24,486	42,311	223	67,020
Paid Claims Cost Rate	\$ 10,794	\$ 1,918	\$ 13,011	\$ 1,847	\$ 3,107	\$ 3,107	\$ 7,845
Trend to FY2015	1.076	1.076	1.076	1.065	1.065	1.065	
FY 2015 Paid Cost Rate	\$ 11,613	\$ 2,064	\$ 13,998	\$ 1,967	\$ 3,308	\$ 3,308	\$ 8,411
Paid to Incurred Factor	0.985	0.985	0.985	0.984	0.984	0.984	
<b>FY 2015 Incurred Cost Rate</b>	<b>\$ 11,439</b>	<b>\$ 2,033</b>	<b>\$ 13,788</b>	<b>\$ 1,935</b>	<b>\$ 3,254</b>	<b>\$ 3,254</b>	<b>\$ 8,280</b>
Weighted Average 7/1/2014-6/30/2015 Incurred Claims Cost Rates:							
At average age	\$ 10,408	\$ 2,267	\$ 10,839	\$ 2,023	\$ 3,137	\$ 3,137	\$ 8,342
At age 65	\$ 12,362	\$ 1,657	\$ 7,920	\$ 2,624	\$ 2,624	\$ 2,624	\$ 8,132

## Description of Actuarial Methods and Valuation Procedures

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

Below are the results of this analysis:

**Distribution of Per Capita Claims Cost by Age  
for the Period July 1, 2014 through June 30, 2015**

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug	Medicare Retiree Drug Subsidy
45	\$ 6,846	\$ 6,846	\$ 1,384	\$ -
50	7,746	7,746	1,644	-
55	8,764	8,764	1,953	-
60	10,408	10,408	2,263	-
65	1,657	7,920	2,624	507
70	2,016	9,636	2,827	546
75	2,394	11,442	3,015	583
80	2,579	12,326	3,091	597

## Section 6.3 Summary of Actuarial Assumptions and Changes in Assumptions

The demographic and economic assumptions used in the June 30, 2014 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board in December 2014. These assumptions were the result of an experience study performed as of June 30, 2013.

Investment Return / Discount Rate	8.00% per year (geometric), compounded annually, net of expenses.
Salary Scale	Inflation – 3.12% per year. Productivity – 0.50% per year. See Table 1 for salary scale rates
Payroll Growth	3.62% per year. (Inflation + Productivity)
Total Inflation	Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.12% annually.
Mortality (Pre-termination)*	Based upon 2010-2013 actual mortality experience (see Table 2) 60% of male rates and 65% of female rates of post-termination mortality rates. Deaths are assumed to be occupational 70% of the time for Peace Officer/Firefighters, 50% of the time for Others.
Mortality (Post-termination)*	96% of all rates of the RP-2000 table, 2000 Base Year projected to 2018 with Projection Scale BB.
Total Turnover	Based upon the 2010-2013 actual withdrawal experience. (See Table 5.)
Disability	Incidence rates based on 2010-2013 actual experience, in accordance with Table 6. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table, 2000 Base Year projected to 2018 with Projection Scale BB. Disabilities are assumed to be occupational 70% of the time for Peace Officer/Firefighters, 50% of the time for Others.
Retirement	Retirement rates based upon the 2010-2013 actual experience in accordance with Tables 7 and 8. Deferred vested members are assumed to retire at their earliest unreduced retirement date for Others. For Peace Officer/Firefighter, Tier 1 deferred vested members are assumed to retire at age 55 and Tiers 2 and 3 deferred vested members are assumed to retire at age 60.
Marriage and Age Difference	Wives are assumed to be three years younger than husbands. For Others, 75% of male members and 70% female members are assumed to be married. For Peace Officer/Firefighters, 85% of male members and 60% female members are assumed to be married.

\*The mortality assumptions include an allowance for expected future mortality improvement. The mortality table used was set in 2014 with an Actual Deaths to Expected Deaths ratio of 109%.

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	For others, 10% of terminating members with vested benefits are assumed to have their contributions refunded. For Peace Officers/Firefighters, 15% of terminating members with vested benefits are assumed to have their contributions refunded 100% of those with non-vested benefits are assumed to have their contributions refunded.															
COLA	Of those benefit recipients who are eligible for the COLA, 70% of Others and 65% of Peace Officers/Firefighters are assumed to remain in Alaska and receive the COLA.															
Post-Retirement Pension Adjustment	50% and 75% of assumed inflation, or 1.56% and 2.34% respectively, is valued for the annual automatic Post-Retirement Pension Adjustment (PRPA) as specified in the statute.															
Expenses	All pension related expenses are net of the investment return assumption.															
Part-Time Status	Part-time employees are assumed to earn 1.00 years of credited service per year for Peace Officer/Firefighter and 0.65 years of credited service per year for Other members.															
Final Average Earnings	Final Average Earnings is provided on the data for active members. This amount is used as a minimum in the calculation of the average earnings in the future.															
Per Capita Claims Cost	Sample claims cost rates adjusted to age 65 for FY15 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>Pre-Medicare</td> <td>\$ 12,362</td> <td>\$ 2,624</td> </tr> <tr> <td>Medicare Parts A &amp; B</td> <td>\$ 1,657</td> <td>\$ 2,624</td> </tr> <tr> <td>Medicare Part B Only</td> <td>\$ 7,920</td> <td>\$ 2,624</td> </tr> <tr> <td>Medicare Part D</td> <td>N/A</td> <td>\$ 507</td> </tr> </tbody> </table>		Medical	Prescription Drugs	Pre-Medicare	\$ 12,362	\$ 2,624	Medicare Parts A & B	\$ 1,657	\$ 2,624	Medicare Part B Only	\$ 7,920	\$ 2,624	Medicare Part D	N/A	\$ 507
	Medical	Prescription Drugs														
Pre-Medicare	\$ 12,362	\$ 2,624														
Medicare Parts A & B	\$ 1,657	\$ 2,624														
Medicare Part B Only	\$ 7,920	\$ 2,624														
Medicare Part D	N/A	\$ 507														
Third Party Administrator Fees	\$193.98 per person per year; assumed trend rate of 5% per year.															
Medicare Part B Only	For actives and retirees not yet Medicare-eligible, participation is set based on whether the employee/retiree will have 40 quarters of employment after March 31, 1986, depending upon date of hire and/or re-hire.															

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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, 10.0% is applied to the FY15 pre-Medicare medical claims cost to get the FY16 medical claims cost.

	<b>Medical Pre-65</b>	<b>Medical Post-65</b>	<b>Prescription Drugs</b>
FY15	10.0%	6.0%	6.00%
FY16	9.4%	5.9%	5.70%
FY17	8.8%	5.8%	5.40%
FY18	8.2%	5.7%	5.10%
FY19	7.6%	5.6%	4.80%
FY20	7.0%	5.6%	4.60%
FY21	6.5%	5.6%	4.40%
FY25	5.6%	5.6%	4.20%
FY50	4.4%	4.0%	4.00%
FY100	4.4%	4.0%	4.00%

For the June 30, 2014 valuations and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model effectively begins estimating trend amounts beginning in 2014, and projects out to 2090. This model has been adopted by the Society of Actuaries, and has been populated with assumptions that are specific to the State of Alaska.

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Aging Factors

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

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 FY15 contributions based on monthly rates shown below for calendar 2014 and 2015 are assumed based on the coverage category for current retirees. The composite rate shown is used for current active and inactive members in tier 2 or 3 who are assumed to retire prior to age 60 with less than 30 years of service and who are not disabled.

Coverage Category	Calendar 2015 Annual Contribution	Calendar 2015 Monthly Contribution	Calendar 2014 Monthly Contribution
Retiree Only	\$ 9,876	\$ 823	\$ 823
Retiree and Spouse	\$ 19,764	\$ 1,647	\$ 1,647
Retiree and Child(ren)	\$ 13,956	\$ 1,163	\$ 1,163
Retiree and Family	\$ 23,844	\$ 1,987	\$ 1,987
Composite	\$ 14,676	\$ 1,223	\$ 1,223

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, 7.0% is applied to the FY15 retired member medical contributions to get the FY16 retired member medical contributions.

FY14 Trend Assumptions	
FY15	7.0%
FY16	6.6%
FY17	6.2%
FY18	5.8%
FY19	5.4%
FY20	5.0%
FY25	4.1%
FY50	4.0%
FY100	4.0%

Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2014 valuation. Note that actual FY15 retired member medical contributions are reflected in the valuation.

Healthcare Participation

100% system paid of members and their spouses are assumed to elect the healthcare benefits as soon as they are eligible.  
 10% of non-system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.

**Table 1  
Alaska PERS  
Salary Scale**

**Peace Officer/Firefighter:**

Years of Service	% Increase
0	9.66%
1	8.66%
2	7.16%
3	7.03%
4	6.91%
5	6.41%
6	5.66%
7	4.92%
8	4.92%
9	4.92%
10	4.92%
11	4.92%
12	4.92%
13	4.92%
14	4.92%
15	4.92%
16	4.92%
17	4.92%
18	4.92%
19	4.92%
20+	4.92%

**Others:**

Years of Service	% Increase
0	8.55
1	7.36
2	6.35
3	6.11
4	5.71
5+	Age based

Age	% Increase	Age	% Increase
20	7.91%	45	5.44%
21	7.83%	46	5.40%
22	7.75%	47	5.36%
23	7.51%	48	5.31%
24	7.27%	49	5.27%
25	7.03%	50	5.22%
26	6.79%	51	5.18%
27	6.55%	52	5.13%
28	6.52%	53	5.09%
29	6.49%	54	5.05%
30	6.47%	55	5.01%
31	6.44%	56	4.97%
32	6.41%	57	4.93%
33	6.33%	58	4.85%
34	6.24%	59	4.77%
35	6.16%	60	4.69%
36	6.07%	61	4.60%
37	5.99%	62	4.52%
38	5.90%	63	4.46%
39	5.82%	64	4.40%
40	5.73%	65+	4.34%
41	5.64%		
42	5.55%		
43	5.52%		
44	5.48%		

**Table 2**  
**Alaska PERS**  
**Mortality Table (Pre-termination)**

Age	Male	Female	Age	Male	Female
20	0.000188	0.000113	55	0.001978	0.001549
21	0.000195	0.000114	56	0.002292	0.001730
22	0.000200	0.000115	57	0.002515	0.001912
23	0.000204	0.000116	58	0.002775	0.002118
24	0.000205	0.000119	59	0.003073	0.002355
25	0.000205	0.000122	60	0.003425	0.002632
26	0.000206	0.000127	61	0.003826	0.002973
27	0.000208	0.000132	62	0.004287	0.003343
28	0.000214	0.000139	63	0.004813	0.003840
29	0.000225	0.000147	64	0.005324	0.004328
30	0.000242	0.000156	65	0.005904	0.004874
31	0.000272	0.000181	66	0.006558	0.005500
32	0.000307	0.000207	67	0.007184	0.006107
33	0.000344	0.000233	68	0.007842	0.006751
34	0.000383	0.000257	69	0.008689	0.007462
35	0.000422	0.000281	70	0.009744	0.008407
36	0.000459	0.000304	71	0.010782	0.009329
37	0.000493	0.000327	72	0.011971	0.010376
38	0.000526	0.000354	73	0.013334	0.011534
39	0.000557	0.000383	74	0.014876	0.012783
40	0.000589	0.000417	75	0.016602	0.014113
41	0.000623	0.000458	76	0.018504	0.015549
42	0.000663	0.000504	77	0.020583	0.017125
43	0.000709	0.000554	78	0.022872	0.018877
44	0.000762	0.000608	79	0.025419	0.020841
45	0.000823	0.000664	80	0.028245	0.023037
46	0.000882	0.000723	81	0.031612	0.025498
47	0.000946	0.000784	82	0.035318	0.028266
48	0.001015	0.000848	83	0.039369	0.031386
49	0.001089	0.000916	84	0.043784	0.034906
50	0.001167	0.000991	85	0.048601	0.038887
51	0.001336	0.001095	86	0.053884	0.043371
52	0.001455	0.001193	87	0.060797	0.048373
53	0.001591	0.001305	88	0.068537	0.053879
54	0.001744	0.001407	89	0.077135	0.059830
			90	0.086571	0.067336

**Table 3**  
**Alaska PERS**  
**Mortality Table (Post-termination)**

Age	Male	Female	Age	Male	Female
50	0.001944	0.001524	85	0.081002	0.059827
51	0.002227	0.001684	86	0.089807	0.066725
52	0.002426	0.001835	87	0.101329	0.074420
53	0.002652	0.002007	88	0.114229	0.082891
54	0.002907	0.002165	89	0.128559	0.092046
55	0.003296	0.002383	90	0.144286	0.103593
56	0.003820	0.002662	91	0.160042	0.115847
57	0.004192	0.002942	92	0.176712	0.128589
58	0.004625	0.003259	93	0.194120	0.141591
59	0.005121	0.003623	94	0.212080	0.154643
60	0.005708	0.004050	95	0.230428	0.167558
61	0.006377	0.004574	96	0.249035	0.180154
62	0.007144	0.005143	97	0.267822	0.192248
63	0.008021	0.005908	98	0.281616	0.200025
64	0.008874	0.006658	99	0.300310	0.210437
65	0.009839	0.007498	100	0.313360	0.215967
66	0.010930	0.008462	101	0.332097	0.226721
67	0.011973	0.009396	102	0.344188	0.235671
68	0.013070	0.010386	103	0.361155	0.250844
69	0.014482	0.011479	104	0.369606	0.263111
70	0.016240	0.012933	105	0.381971	0.281391
71	0.017969	0.014352	106	0.384000	0.295499
72	0.019952	0.015964	107	0.384000	0.309816
73	0.022223	0.017744	108	0.384000	0.323943
74	0.024793	0.019666	109	0.384000	0.337482
75	0.027670	0.021712	110	0.384000	0.350032
76	0.030840	0.023921	111	0.384000	0.361196
77	0.034305	0.026346	112	0.384000	0.370574
78	0.038120	0.029042	113	0.384000	0.377767
79	0.042365	0.032063	114	0.384000	0.382376
80	0.047075	0.035441	115	0.384000	0.384000
81	0.052687	0.039227	116	0.384000	0.384000
82	0.058863	0.043487	117	0.384000	0.384000
83	0.065615	0.048286	118	0.384000	0.384000
84	0.072973	0.053702	119	1.000000	1.000000

**Table 4**  
**Alaska PERS**  
**Total Turnover Assumptions**

**Peace Officer/Firefighter:**

Years of Service	Female (rounded)	Male (rounded)
0	0.15	0.15
1	0.08	0.12
2	0.06	0.07
3	0.06	0.06
4	0.07	0.06

**Members with 5 or more years of service**

Age	Female	Male	Age	Female	Male
20	0.080000	0.040894	45	0.033802	0.019012
21	0.080000	0.040894	46	0.033527	0.019506
22	0.080000	0.040894	47	0.033251	0.020000
23	0.080000	0.038801	48	0.032862	0.023333
24	0.080000	0.036708	49	0.032474	0.026667
25	0.080000	0.034616	50	0.032085	0.030000
26	0.080000	0.032523	51	0.031581	0.040000
27	0.080000	0.030430	52	0.030941	0.040000
28	0.078000	0.028877	53	0.030201	0.040000
29	0.076000	0.027324	54+	0.060402	0.040000
30	0.074000	0.025771			
31	0.072000	0.024218			
32	0.070000	0.022665			
33	0.063077	0.021722			
34	0.056154	0.020779			
35	0.049231	0.019836			
36	0.042308	0.018893			
37	0.035385	0.017950			
38	0.035234	0.017866			
39	0.035082	0.017782			
40	0.034930	0.017699			
41	0.034779	0.017615			
42	0.034627	0.017531			
43	0.034352	0.018025			
44	0.034077	0.018519			

**Table 5**  
**Alaska PERS**  
**Total Turnover Assumptions**

Others:

Service	Hire Age < 35		Hire Age > 35	
	Male (rounded)	Female (rounded)	Male	Female
0	0.29	0.29	0.20	0.20
1	0.16	0.20	0.12	0.15
2	0.13	0.16	0.10	0.13
3	0.10	0.13	0.09	0.10
4	0.08	0.10	0.09	0.09

Members with 5 or more years of service

Age	Female	Male	Age	Female	Male
20	0.136735	0.095000	45	0.045685	0.039880
21	0.136735	0.095000	46	0.043828	0.039357
22	0.136735	0.095000	47	0.041972	0.038834
23	0.128522	0.090250	48	0.041891	0.038701
24	0.120309	0.085500	49	0.041809	0.038568
25	0.112096	0.080750	50	0.041566	0.038170
26	0.103883	0.076000	51	0.041365	0.037844
27	0.095670	0.071250	52	0.041121	0.037460
28	0.091756	0.069160	53	0.040844	0.037023
29	0.087842	0.067060	54+	0.057924	0.043859
30	0.083927	0.064960			
31	0.080013	0.062870			
32	0.076099	0.060770			
33	0.072399	0.058280			
34	0.068699	0.055780			
35	0.064999	0.053290			
36	0.061299	0.050790			
37	0.057599	0.048300			
38	0.056330	0.046930			
39	0.055061	0.045560			
40	0.053792	0.044190			
41	0.052523	0.042820			
42	0.051254	0.041450			
43	0.049398	0.040930			
44	0.047541	0.040400			

**Table 6**  
**Alaska PERS**  
**Disability Table**

Age	Peace Officer/ Firefighter Rate	Other Member Rate	
		Male	Female
20	0.000224	0.000218	0.000188
21	0.000224	0.000218	0.000188
22	0.000224	0.000218	0.000188
23	0.000305	0.000240	0.000200
24	0.000387	0.000261	0.000212
25	0.000468	0.000283	0.000224
26	0.000550	0.000304	0.000236
27	0.000631	0.000326	0.000248
28	0.000658	0.000334	0.000255
29	0.000685	0.000342	0.000262
30	0.000712	0.000349	0.000269
31	0.000739	0.000357	0.000277
32	0.000765	0.000365	0.000284
33	0.000793	0.000377	0.000293
34	0.000821	0.000389	0.000303
35	0.000849	0.000401	0.000312
36	0.000877	0.000413	0.000322
37	0.000905	0.000425	0.000331
38	0.000946	0.000446	0.000348
39	0.000986	0.000467	0.000364
40	0.001027	0.000489	0.000381
41	0.001068	0.000510	0.000397
42	0.001108	0.000531	0.000413
43	0.001221	0.000586	0.000454
44	0.001333	0.000641	0.000495
45	0.001446	0.000695	0.000536
46	0.001559	0.000750	0.000577
47	0.001671	0.000805	0.000618
48	0.001828	0.000886	0.000680
49	0.001985	0.000967	0.000742
50	0.002142	0.001048	0.000804
51	0.002299	0.001129	0.000867
52	0.002456	0.001210	0.000929
53	0.002868	0.001421	0.001084
54	0.003280	0.001633	0.001239

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

Age at Retirement	Reduced	Unreduced	
	Unisex Rates	Female	Male
<47	N/A	0.060000	0.080000
47	N/A	0.150000	0.080000
48	N/A	0.150000	0.130000
49	N/A	0.150000	0.130000
50	0.087041	0.150000	0.150000
51	0.085580	0.150000	0.150000
52	0.072383	0.150000	0.185000
53	0.076688	0.150000	0.185000
54	0.075561	0.250000	0.185000
55	0.077429	0.200000	0.250000
56	0.077106	0.150000	0.250000
57	0.076730	0.150000	0.250000
58	0.076820	0.150000	0.250000
59	0.200000	0.150000	0.250000
60	N/A	0.250000	0.300000
61	N/A	0.200000	0.250000
62	N/A	0.300000	0.250000
63	N/A	0.500000	0.250000
64	N/A	0.500000	0.200000
65	N/A	0.500000	0.200000
66	N/A	0.500000	0.250000
67	N/A	0.500000	0.500000
68	N/A	0.500000	0.500000
69	N/A	0.500000	0.500000
70	N/A	1.000000	1.000000
71	N/A	1.000000	1.000000
72	N/A	1.000000	1.000000
73	N/A	1.000000	1.000000
74	N/A	1.000000	1.000000
75	N/A	1.000000	1.000000

**Table 8**  
**Alaska PERS Others**  
**Retirement Table**

Age at Retirement	Reduced		Unreduced	
	Female	Male	Female	Male
<50	N/A	N/A	0.10	0.10
50	0.06	0.04	0.35	0.30
51	0.06	0.04	0.35	0.33
52	0.08	0.06	0.35	0.33
53	0.08	0.06	0.35	0.33
54	0.14	0.14	0.35	0.35
55	0.06	0.05	0.30	0.30
56	0.06	0.05	0.20	0.20
57	0.06	0.05	0.18	0.20
58	0.06	0.05	0.18	0.20
59	0.16	0.14	0.18	0.20
60	N/A	N/A	0.21	0.20
61	N/A	N/A	0.20	0.20
62	N/A	N/A	0.20	0.20
63	N/A	N/A	0.20	0.20
64	N/A	N/A	0.20	0.20
65	N/A	N/A	0.26	0.23
66	N/A	N/A	0.26	0.25
67	N/A	N/A	0.22	0.20
68	N/A	N/A	0.22	0.23
69	N/A	N/A	0.22	0.25
70	N/A	N/A	0.22	0.25
71	N/A	N/A	0.22	0.25
72	N/A	N/A	0.25	0.25
73	N/A	N/A	0.25	0.25
74	N/A	N/A	0.35	0.25
75 – 89	N/A	N/A	0.50	0.50
90+	N/A	N/A	1.00	1.00

**Table 9**  
**Alaska PERS**  
**Disabled Mortality Rates**

Age	Female	Male	Age	Female	Male
≤45	0.0071	0.0214	80	0.0582	0.0833
46	0.0078	0.0226	81	0.0621	0.0880
47	0.0085	0.0238	82	0.0662	0.0928
48	0.0093	0.0250	83	0.0707	0.0978
49	0.0101	0.0262	84	0.0755	0.1028
50	0.0109	0.0275	85	0.0806	0.1079
51	0.0118	0.0287	86	0.0862	0.1130
52	0.0127	0.0299	87	0.0921	0.1204
53	0.0137	0.0311	88	0.0985	0.1282
54	0.0144	0.0324	89	0.1054	0.1362
55	0.0151	0.0336	90	0.1148	0.1503
56	0.0158	0.0348	91	0.1249	0.1667
57	0.0164	0.0354	92	0.1359	0.1841
58	0.0171	0.0359	93	0.1475	0.2022
59	0.0176	0.0365	94	0.1611	0.2209
60	0.0182	0.0370	95	0.1745	0.2400
61	0.0188	0.0376	96	0.1877	0.2594
62	0.0194	0.0382	97	0.2003	0.2790
63	0.0204	0.0389	98	0.2084	0.2934
64	0.0214	0.0396	99	0.2192	0.3128
65	0.0226	0.0404	100	0.2250	0.3264
66	0.0238	0.0413	101	0.2362	0.3459
67	0.0252	0.0422	102	0.2455	0.3585
68	0.0267	0.0434	103	0.2613	0.3762
69	0.0284	0.0454	104	0.2741	0.3850
70	0.0303	0.0477	105	0.2931	0.3979
71	0.0323	0.0502	106	0.3078	0.4000
72	0.0345	0.0529	107	0.3227	0.4000
73	0.0368	0.0558	108	0.3374	0.4000
74	0.0393	0.0591	109	0.3515	0.4000
75	0.0420	0.0625	110	0.3646	0.4000
76	0.0449	0.0662	111	0.3762	0.4000
77	0.0479	0.0702	112	0.3860	0.4000
78	0.0511	0.0744	113	0.3935	0.4000
79	0.0546	0.0788	114	0.3983	0.4000
			115+	0.4000	0.4000

## Changes in Actuarial Assumptions Since the Prior Valuation

	June 30, 2013	June 30, 2014
Salary Scale	Based on actual experience from 2005 to 2009.	Based on actual experience from 2010 – 2013. Increased most rates.
Pre-termination Mortality	Peace Officer/Firefighter: 1994 GAM Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 80% of the male table for males and 60% of the female table for females.  Others: 1994 GAM Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 75% of the male table for males and 55% of the female table for females.	Based upon 2010-2013 actual mortality experience.  60% of male rates and 65% of female rates of the post-termination mortality rates.
Post-termination Mortality	1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year set-forward for females.	96% of all rates of the RP-2000 table, 2000 Base Year projected to 2018 with Projection Scale BB.
Disability Mortality	RP-2000 Disabled Retiree Mortality Table.	RP-2000 Disabled Retiree Table, 2000 Base Year projected to 2018 with Projection Scale BB
Turnover	Rates adjusted based on actual experience from 2005 to 2009.	Based upon the 2010-2013 actual withdrawal experience.
Disability	Peace Officer/Firefighter: No change except to stop rates at earliest retirement age.  Others: Male/Female rates decreased based on actual experience from 2005 to 2009 and stop rates at earliest retirement age.	Incidence rates based on 2010-2013 actual experience.  Peace Officer/Firefighter: Decreased rates by 5% Others: Decreased rates by 30%
Retirement	Rates were adjusted based on actual experience from 2005 to 2009.	Retirement rates based upon the 2010-2013 actual experience .
Deferred Vested Commencement Date	Peace Officer/Firefighter: Tier 1 – age 53 Tiers 2 and 3 – age 57  Others: Earliest unreduced age	Peace Officer/Firefighter: Tier 1 – age 55 Tier 2 and Tier 3 – age 60  Others: Earliest reduced age
COLA	Of those benefit recipients who are eligible for the COLA, 70% are assumed to remain in Alaska and receive the COLA.	Of those benefit recipients who are eligible for the COLA, 70% of Others and 65% of Peace Officers/Firefighters are assumed to remain in Alaska and receive the COLA.
Occupational Death and Disability	Others: 55% Peace Officer/Firefighter: 75%	Peace Officer/Firefighter: 70% Others: 50%

June 30, 2013

June 30, 2014

Health Cost Trend

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

	Medical Pre-65	Medical Post-65	Prescription Drugs
FY15	10.0%	6.0%	6.00%
FY16	9.4%	5.9%	5.70%
FY17	8.8%	5.8%	5.40%
FY18	8.2%	5.7%	5.10%
FY19	7.6%	5.6%	4.80%
FY20	7.0%	5.6%	4.60%
FY21	6.5%	5.6%	4.40%
FY25	5.6%	5.6%	4.20%
FY50	4.4%	4.0%	4.00%
FY100	4.4%	4.0%	4.00%

Trend Rate for Retired Member Medical Contribution

FY13 Trend Assumption	
FY14	8.2%
FY15	8.0%
FY16	7.6%
FY17	7.2%
FY18	6.7%
FY19	6.4%
FY25	5.9%
FY50	5.0%
FY100	4.5%

FY14 Trend Assumption	
FY15	7.0%
FY16	6.6%
FY17	6.2%
FY18	5.8%
FY19	5.4%
FY20	5.0%
FY25	4.1%
FY50	4.0%
FY100	4.0%

# Glossary of Terms

Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension plan for a group of plan members to the years of service that give rise to that cost.
Actuarial Present Value of Projected Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual Required Contribution	Disclosure measure of annual pension cost.
GASB 25 and 27	Governmental Accounting Standards Board Statement Number 25 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 27 which specifies Employer reporting of Pension Cost. These statements have been amended by GASB 67 and 68, respectively.
GASB 43 and 45	Governmental Accounting Standards Board Statement Number 43 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 45 which specifies Employer reporting of Other Post-Employment Benefit (OPEB) Cost.
GASB 67 and 68	<p>Governmental Accounting Standards Board Statement Number 67 amends Number 25 effective for the fiscal year beginning after June 15, 2013, and defines new financial reporting requirements for public pension plans.</p> <p>Governmental Accounting Standards Board Statement Number 68 amends Number 27 effective for fiscal years beginning after June 15, 2014 and defines new accounting and financial reporting requirements for employers sponsoring public pension plans.</p>
Liquidity Factor	Is calculated as the average annual Fair Value of Assets divided by the total annual benefit payments. This measures the approximate number of years that assets will cover benefit payments without contributions or investment return. Trend shows solvency risk.
Maturity Ratio	The ratio of the actuarial accrued liability for members who are no longer active to the total actuarial accrued liability. A ratio of over 50% indicates a mature plan. The higher the maturity ratio, the more volatile the contribution rate will be from year to year given actuarial gains and losses.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the plan as a whole.
Unfunded Actuarial Accrued Liability (UAAL)	The portion of the actuarial accrued liability not offset by plan assets.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.