

ACTUARIAL SECTION



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buckconsultants

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October 4, 2011

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

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

Actuarial Certification

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

- (1) a presentation of the valuation results of the System as of June 30, 2010;
- (2) a review of experience under the System for the year ended June 30, 2010;
- (3) a determination of the appropriate contribution rate for all employers in the System, including additional State contributions pursuant to SB 125, which will be applied for the fiscal year ending June 30, 2013; and
- (4) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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

- (1) Summary of actuarial assumptions and methods
- (2) Schedule of active member valuation data
- (3) Schedule of benefit recipients added to and removed from rolls
- (4) Solvency test
- (5) Analysis of financial experience
- (6) Schedule of Funding Progress, Schedule of Employer Contributions and trend data schedules.

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Actuarial Section

The Alaska Retirement Management Board, The Department of Revenue, and The Department of Administration October 4, 2011

Page 2

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the Division of Retirement and Benefits and financial information provided in the financial statements audited by KPMG LLP, to determine a sound value for the System liability. The employee data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data. The actuarial assumptions are based on the results of an experience study presented to The Alaska Retirement Management Board (Board) in September 2010 and adopted by the Board in December 2010. Actuarial methods, medical cost trend, and assumed blended medical premiums were also reviewed during the experience study.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY11 and a fixed 25-year amortization as a level percentage of payroll of the initial unfunded accrued liability and subsequent gains/losses and other changes. The payroll used to determine the contribution rates is the total payroll of all active members in the System, including those hired after July 1, 2006 who are in the Defined Contribution Retirement (DCR) Plan. The amortization period is set by the Board. Contribution rates are recommended by the Actuary and adopted by the Board each year. The ratio of valuation assets to liabilities decreased from 61.8% to 61.5% during the year. This report provides an analysis of the factors that led to the decrease. This report also provides a history of the funding ratio of the System.

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

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

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

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



Actuarial Section

The Alaska Retirement Management Board, The Department of Revenue, and The Department of Administration October 4, 2011
Page 3

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

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

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

Sincerely,

David H. Slishinsky, FCA, ASA, EA, MAAA

David H. Slashinsky

Principal, Consulting Actuary

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

Melissa Bissett, FSA, MAAA

Senior Consultant, Health & Productivity



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

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

Valuation of Liabilities

A. Actuarial Method - Entry Age Actuarial Cost

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

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

Changes in Methods from the Prior Valuation

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

B. Valuation of Assets

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

C. Valuation of Medical Benefits

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

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

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

- 1. Based on analysis described in our Experience Study, dental, vision and audio claims (DVA) are excluded from data analyzed for this valuation.
- 2. Available management level reporting does not show claims or enrollment separately for Medicare and non-Medicare plan participants, but does include overall statistics as to the percentage of claims and enrollment attributable to both groups. Claim level reporting was used to augment cost data by Medicare status.
- 3. Alaska retirees who do not have 40 quarters of Medicare-covered compensation do not qualify for Medicare Part A coverage free of charge. This is a relatively small and closed group. Medicare was applied to State employment for all employees hired after March 31, 1986. For these "no-Part A" individuals, the State is the primary payer for hospital bills and other Part A services. Thus, claims costs are higher for the no-Part A group. To date, claim experience is not available separately for participants with both Medicare Parts A and B and those with Part B only. Therefore, higher no-Part A claims are spread across the entire retired population and have been applied to future claims of current active employees projected to retire in the future. To the extent that no-Part A claims can be isolated and applied strictly to the appropriate closed group, actuarial accrued liability will be more accurate and will be lower. The smaller the no-Part A population, the more accrued liabilities will decrease.



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

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

- 4. The steps above result in separate paid claims cost rates for medical and prescription benefits for non-Medicare, Medicare Part B only and Medicare Part A&B members for the past four fiscal years. Medical claims cost rates reflect differing average ages and levels of Medicare coordination for each group. Prescription claims cost rates reflect differing average ages. We converted paid claim data to incurred cost rates projected from each historical data period to the valuation year using a weighted average of national and Alaska-specific trend factors and developed weighted average incurred claims cost rates. The assumed lag between medical claim incurred and paid dates is approximately 2.4 months for medical claims and 0.15 months for prescription claims.
- 5. Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact of the following provisions; however, none of the impacts have been included in the valuation results.

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

The Plan will be subject to the high cost plan excise tax (Cadillac tax). Based upon guidance available at the time of disclosure, Buck estimated the year in which the tax would potentially affect Alaska to be 2047, and with a minimal impact. Buck determined the impact to be immaterial based on a blend of pre-Medicare and Medicare retirees.

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

*

June 30, 2010 Valuation - FY 2011 Claims Cost Rates

		Medical	
		Medicare	Medicare B
	Pre-Medicare	A&B	Only
Fiscal 2007 Paid Claims	\$129,762,975	\$22,677,328	\$3,524,812
Membership	33,446	20,315	1,069
Paid Claims Cost Rate	\$3,880	\$1,116	\$3,297
Trend to FY2011	1.512	1.512	1.512
FY 2011 Paid Cost Rate	\$5,866	\$1,688	\$4,984
Paid to Incurred Factor**	1.022	1.022	1.022
FY 2011 Incurred Cost Rate	\$5,995	\$1,725	\$5,094
Fiscal 2008 Paid Claims	\$169,598,064	\$28,657,490	\$6,079,463
Membership	33,630	21,434	893
Paid Claims Cost Rate	\$5,043	\$1,337	\$6,807
Trend to FY2011	1.358	1.358	1.358
FY 2011 Paid Cost Rate	\$6,847	\$1,815	\$9,243
Paid to Incurred Factor**	1.022	1.022	1.022
FY 2011 Incurred Cost Rate	\$6,998	\$1,855	\$9,446
Fiscal 2009 Paid Claims	\$185,275,626	\$39,286,392	\$3,949,927
Membership	32,943	24,624	539
Paid Claims Cost Rate	\$5,624	\$1,595	\$7,327
Trend to FY2011	1.221	1.221	1.221
FY 2011 Paid Cost Rate	\$6,866	\$1,948	\$8,944
Paid to Incurred Factor**	1.022	1.022	1.022
FY 2011 Incurred Cost Rate	\$7,017	\$1,991	\$9,141
Fiscal 2010 Paid Claims	\$199,739,865	\$51,373,725	\$1,215,832
Membership	32,026	27,915	156
Paid Claims Cost Rate	\$6,237	\$1,840	\$7,794
Trend to FY2011	1.130	1.130	1.130
FY 2011 Paid Cost Rate	\$7,050	\$2,080	\$8,810
Paid to Incurred Factor**	1.022	1.022	1.022
FY 2011 Incurred Cost Rate	\$7,205	\$2,126	\$9,003
Weighted Average 7/1/2010 – 6/30/20	11 Incurred Claims Co	ost Rates:	
At average age	\$6,967	\$1,978	\$8,756
At age 65*	\$8,606	\$1,563	\$6,654

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

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

June 30, 2010 Valuation – FY 2011 Claims Cost Rates (cont.)

Prescription Drugs Medicare B Pre-Medicare Medicare A&B Only **Total** Fiscal 2007 Paid Claims \$46,176,199 \$42,348,638 \$2,391,089 \$246,881,041 Membership 33,446 1,069 54,830 20,315 Paid Claims Cost Rate \$1,381 \$2,085 \$2,236 \$4,503 Trend to FY2011 1.467 1.467 1.467 FY 2011 Paid Cost Rate \$2,026 \$3,059 \$3,282 \$6,734 Paid to Incurred Factor** 1.001 1.001 1.001 FY 2011 Incurred Cost Rate \$2,028 \$3,062 \$3,285 \$6,830 \$312,717,425 Fiscal 2008 Paid Claims \$53,506,123 \$52,529,773 \$2,346,512 Membership 33,630 21,434 55,957 893 Paid Claims Cost Rate \$1,591 \$2,451 \$2,627 \$5,589 Trend to FY2011 1.316 1.316 1.316 FY 2011 Paid Cost Rate \$2,094 \$3,226 \$3,459 \$7,508 Paid to Incurred Factor** 1.001 1.001 1.001 FY 2011 Incurred Cost Rate \$2,096 \$3,229 \$3,462 \$7,618 Fiscal 2009 Paid Claims \$61,062,842 \$60,195,838 \$1,412,907 \$351,183,532 Membership 32,943 24,624 539 58,106 Paid Claims Cost Rate \$1,854 \$2,445 \$2,621 \$6,044 Trend to FY2011 1.184 1.184 1.184 FY 2011 Paid Cost Rate \$2,194 \$2,893 \$3,102 \$7,300 Paid to Incurred Factor** 1.001 1.001 1.001 \$3,105 FY 2011 Incurred Cost Rate \$2,196 \$2,896 \$7,407 Fiscal 2010 Paid Claims \$62,310,224 \$73,005,066 \$414,101 \$388,058,813 Membership 32,026 27,915 156 60,097 Paid Claims Cost Rate \$1,946 \$2,615 \$2,654 \$6,457 Trend to FY2011 1.096 1.096 1.096 FY 2011 Paid Cost Rate \$2,132 \$2,866 \$2,909 \$7,221 Paid to Incurred Factor** 1.001 1.001 1.001 FY 2011 Incurred Cost Rate \$2,134 \$2,912 \$2,869 \$7,327 Weighted Average 7/1/2010 - 6/30/2011 Incurred Claims Cost Rates: At average age \$2,141 \$2,971 \$3,136 \$7,427 At age 65* \$2,600 \$2,600 \$7,924 \$2,600

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

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

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, 2010 through June 30, 2011

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

D. Actuarial Assumptions

1.	Investment Return/ Discount Rate	8.00% per year (geometric), compounded annually, net of expenses.
2.	Salary Scale	Inflation - 3.12% per year Productivity - 0.5% per year See Table 1 for salary scale rates
3.	Payroll Growth	3.62% per year (Inflation + Productivity)
4.	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.
5.	Mortality (Pre-termination)*	Peace Officers/Firefighter: Based upon the 2005-2009 actual mortality experience (see Table 2). 1994 Group Annuity Mortality (GAM) Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 80% of the male table for males and 60% of the female table for females.

Others:

Based upon the 2005-2009 actual mortality experience (see Table 3). 1994 GAM Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 75% of the male table for males and 55% of the female table for females.

Deaths are assumed to be occupational 75% of the time for Peace Officer/Fire-fighter, 55% of the time for Others.

6. Mortality (Post-Termination)* 1994 GAM Table, sex-distinct, 199

1994 GAM Table, sex-distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year set-forward for females. (See Table 4.)

7. Total Turnover Based upon the 2005-2009 actual withdrawal experience. (See Table 5).

8. Disability

Incidence rates based upon the 2005-2009 actual experience, in accordance with Table 6. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table. Disabilities are assumed to be occupational 75% of the time for

Peace Officer/Firefighter, 55% of the time for Others.

9. Retirement Retirement rates based upon the 2005-2009 actual experience in accordance with

Tables 7 and 8. Deferred vested members are assumed to retire at their earliest unreduced retirement date for Others. For Peace Officer/Firefighter, Tier 1 deferred vested members are assumed to retire at age 53 and Tiers 2 and 3 deferred vested

members are assumed to retire at age 57.

10. Marriage and Age Wives are assumed to be three years younger than husbands. 80% of male

Difference members and 70% of female members are assumed to be married.

11. 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.

12. Contribution Refunds 15% of terminating members with vested benefits are assumed to have their

contributions refunded. 100% of those with non-vested benefits are assumed to

have their contributions refunded.

13. COLA Of those benefit recipients who are eligible for the COLA, 70% are assumed to

remain in Alaska and receive the COLA.

14. Postretirement 50% and 75% of assumed inflation, or 1.56% and 2.34% respectively, is valued

for the annual automatic Postretirement Pension Adjustment (PRPA) as specified

in the statute.

15. Expenses All expenses are net of the investment return assumption.

Pension Adjustment

^{*}Mortality assumptions were conservatively set compared to actual experience to allow for expected future mortality improvement.

16. Part-Time Status

Part-time employees are assumed to earn 1.00 years of credited service per year for Peace Officer/Firefighters and 0.65 years of credited service per year for Other members.

17. 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.

18. Per Capita Claims Cost Sample claims cost rates adjusted to age 65 for FY11 medical and prescription are shown below:

		Prescription	
	<u>Medical</u>	<u>Drugs</u>	
Pre-Medicare	\$8,606	\$2,600	
Medicare Parts A & B	1,563	2,600	
Medicare Part B Only	6,654	2,600	
Medicare Part D	N/A	515	

19. Third Party
Administrator Fees

\$153.33 per person per year; assumed trend rate of 5% per year.

20. Health Cost Trend

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

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

For the June 30, 2008 valuation and later, the Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model effectively begins estimating trend amounts beginning in 2012 and projects out to 2100. This model has been adopted by the Society of Actuaries, and has been populated with assumptions that are specific to the State of Alaska.

21. Aging Factors

		Prescriptions
<u>Age</u>	Medical	<u>Drugs</u>
00-44	2.0%	4.5%
45-54	2.5	3.5
55-64	3.5	3.0
65-74	4.0	1.5
75-84	1.5	0.5
85-94	0.5	0.0
95+	0.0	0.0

22. 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 FY11 contributions based on monthly rates shown below for calendar 2010 and 2011 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.

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

23. 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, 6.7% is applied to the FY11 retired member medical contributions to get the FY12 retired member medical contributions.

FY11	6.7%
FY12	6.3
FY13	6.0
FY14	5.7
FY15	5.3
FY16	5.0
FY17	5.0
FY18	5.0
FY 19 and later	5.0

Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2005 valuation. Note that actual FY10 retired member medical contributions are reflected in the valuation so trend on such contribution during FY10 is not applicable.

24. Healthcare Participation

100% of system paid 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:

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

Others:

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

Rates vary slightly by age after 5 years of employement.

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

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

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

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

Wortanty Table (110-termination)				
<u>Age</u>	<u>Male</u>	<u>Female</u>		
20	.0284%	.0123%		
21	.0303	.0122		
22	.0324	.0123		
23	.0356	.0127		
24	.0392	.0129		
25	.0441	.0132		
26	.0501	.0138		
27	.0533	.0142		
28	.0553	.0148		
29	.0571	.0156		
30	.0588	.0171		
31	.0602	.0189		
32	.0615	.0202		
33	.0622	.0210		
34	.0623	.0219		
35	.0624	.0229		
36	.0632	.0240		
37	.0653	.0254		
38	.0676	.0271		
39	.0706	.0289		
40	.0742	.0315		
41	.0785	.0341		
42	.0834	.0366		
43	.0884	.0389		
44	.0935	.0409		
45	.0993	.0423		
46	.1063	.0441		
47	.1149	.0466		
48	.1248	.0505		
49	.1354	.0548		
50	.1473	.0610		
51	.1609	.0683		
52	.1765	.0784		
53	.1969	.0897		
54	.2186	.1018		
55	.2479	.1164		
56	.2827	.1352		
57	.3249	.1570		
58	.3739	.1806		
59	.4208	.2077		
60	.4734	.2387		

Table 4
Alaska PERS
Mortality Table (Post-termination)

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

Table 5 Alaska PERS Total Turnover Assumptions

Peace Officer/Firefighter:

Select Rates of Turnover During the First 5 Years of Employment

Year of Employment	Unisex Rates
1	15.00%
2	10.00
3	8.00
4	7.00
5	6.00

Ultimate Rates of Turnover After the First 5 Years of Employment

Age	<u>Male</u>	<u>Female</u>
20	4.11%	5.19%
25	4.08	5.17
30	4.04	5.14
35	4.02	5.09
40	3.95	5.00
45	3.78	4.85
50	3.49	4.58
55	2.91	4.06
60	1.57	2.64
65+	4.32	5.40

Table 5 Alaska PERS Total Turnover Assumptions

Others:

Select Rates of Turnover During the First 5 Years of Employment

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

Ultimate Rates of Turnover After the First 5 Years of Employment

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

Table 6 Alaska PERS Disability Table

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

Table 7 Alaska PERS Peace Officer/Firefighter Retirement Table

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

Table 8 Alaska PERS Others Retirement Table

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

Changes in Actuarial	Assumptions	Since the	Prior	Valuation

	June 30, 2009	June 30, 2010
Investment Return	8.25% per year (geometric), compounded annually, net of expenses	8.00% per year (geometric), compounded annually, net of expenses
Salary Scale	Based on actual experience from 2001 to 2005.	Others: Based on actual experience from 2005 to 2009. Increased most rates. Peace Officer/Firefighter: Rates are increased for the first 4 years. Decreased at year 5. Based on actual experience 2005 to 2009.
Payroll Growth	4.00% per year	3.62% per year
Inflation	3.50%	3.12%
Pre-termination Mortality	Peace Officer/Firefighter: 1994 GAM Table, 1994 Base Year. Others: 42% of 1994 GAM Table, 1994 Base Year.	Peace Officer/Firefighter: Based upon the 2005-2009 actual mortality experience. 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: Based upon the 2005-2009 actual mortality experience. 1994 GAM Table, sex distinct, 1994 Base Year without margin projected to 2013 using Projection Scale AA, 75% of the male table for females.
Post-termination Mortality	1994 GAM Table, 1994 Base Year.	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.
Disability Mortality	1979 PBGC Disability Mortality Table for those receiving Social Security disability benefits.	RP-2000 Disabled Retiree Mortality Table.
Turnover	Based on actual experience from 2001 to 2005.	Rates adjusted based on actual experience from 2005 to 2009.



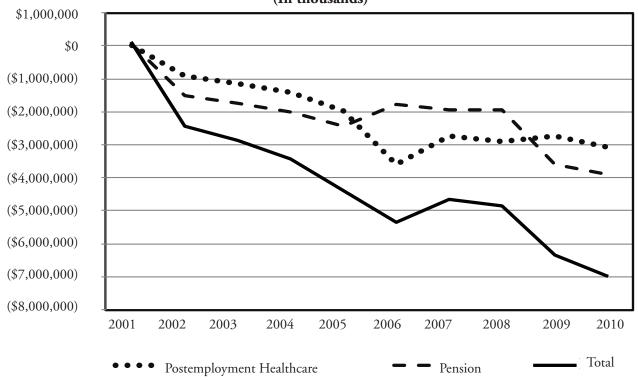
Changes in Actuarial Assumptions Since the Prior Valuation (cont.)

	June 30, 2009	June 30, 2010
Disability	Based on actual experience from 2001 to 2005.	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.
Retirement	Based on actual experience from 2001 to 2005.	Rates were adjusted based on actual experience from 2005 to 2009.
Deferred Vested Commencement Date	Earliest reduced age.	Peace Officer/Firefighter: Tier 1 – age 53. Tiers 2 and 3 – age 57. Others: Earliest unreduced age.
COLA	Of those benefit recipients who are eligible for the COLA, 60% are assumed to remain in Alaska and receive the COLA.	Of those benefit recipients who are eligible for the COLA, 70% are assumed to remain in Alaska and receive the COLA.
Occupational Death and Disability	Others: 50% Peace Officer/Firefighter: 75%	Others: 55% Peace Officer/Firefighter: 75%
Healthcare Participation	100% of members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.	100% of system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible. 10% of non-system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.

Public Employees' Retirement System Funding Excess/(Unfunded Liability) (In thousands)

Actuarial Valuation Year Ended June 30	Postemployment Healthcare	Pension	Total Funding Excess/ (Unfunded Liability)	Funded Ratio
2001	\$ 21,768	\$ 51,414	\$ 73,182	100.9%
2002	(924,746)	(1,522,012)	(2,446,758)	75.2
2003	(1,151,504)	(1,722,868)	(2,874,372)	72.8
2004	(1,411,587)	(2,001,915)	(3,413,502)	70.2
2005	(1,973,144)	(2,428,778)	(4,401,922)	65.7
2006	(3,584,527)	(1,762,978)	(5,347,505)	62.8
2007	(2,746,653)	(1,923,320)	(4,669,973)	68.0
2008	(2,904,525)	(1,943,510)	(4,848,035)	69.5
2009	(2,742,835)	(3,593,558)	(6,336,393)	61.8
2010	(3,073,188)	(3,901,840)	(6,975,028)	61.5

10-YEAR TREND OF UNFUNDED LIABILITY (In thousands)



Public Employees' Retirement System Employer Contribution Rates							
Year Ended June 30	Valuation Year Ended June 30	nr Ended Normal Past An		Total Annual Required	Adopted		
2004	2001	5.42%	1.35%	6.77%	6.77%		
2005	2002	13.31	11.60	24.91	11.77		
2006	2003	13.24	12.39	25.63	16.77		
2007	2004	13.32	14.87	28.19	21.77		
2008	2005	14.48	18.03	32.51	39.76^{2}		
2009	2006	13.72	21.50	35.22	35.22		

18.19

18.63

22.48

24.16

27.65

27.96

30.76

32.83

27.65 27.96

33.49

35.84

2010

2011

2012

2013

9.46

9.33

8.28

8.67

Effective June 30, 2008 the Defined Benefits Plan became a defined benefit, cost sharing, multiple employer plan. Prior to 2008 rates were calculated by employer and only the average employer contribution rate is reflected on this schedule for 2007 and earlier.

Valuations are used to set contribution rates in future years.

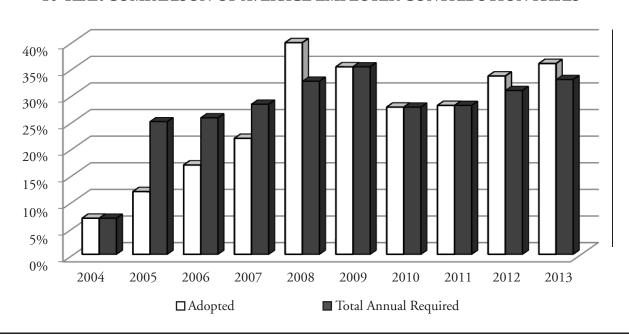
2007

2008

2009

2010

10-YEAR COMPARISON OF AVERAGE EMPLOYER CONTRIBUTION RATES



¹ Also referred to as the consolidated rate.

² The ARMB recognized the fact that the Plan becomes a closed Plan on July 1, 2006, and set a rate reflecting no payroll growth.

Actuarial Section

Public Employees' Retirement System Schedule of Active Member Valuation Data								
Valuation Date	Number	Annual Earnings (In thousands) ¹	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers			
All Others								
June 30, 2010	24,054	\$1,393,803	\$57,945	4.5%	160			
June 30, 2009	25,089	1,390,971	55,441	5.1	160			
June 30, 2008	26,301	1,387,117	52,740	6.9	159			
June 30, 2007	28,675	1,414,145	49,316	9.5	160			
June 30, 2006	31,286	1,408,863	45,032	4.2	160			
June 30, 2005	30,997	1,338,962	43,197	2.3	160			
June 30, 2004	30,907	1,305,670	42,245	1.8	161			
June 30, 2003	31,338	1,300,041	41,484	1.8	160			
June 30, 2002	30,547	1,245,055	40,759	0.3	161			
June 30, 2001	29,758	1,208,700	40,618	5.4	158			
		Peace Officer	/ Firefighter					
June 30, 2010	2,388	\$192,895	\$80,777	2.8%	160			
June 30, 2009	2,476	194,519	78,562	5.0	160			
June 30, 2008	2,549	190,729	74,825	4.9	159			
June 30, 2007	2,687	191,674	71,334	9.3	160			
June 30, 2006	2,785	181,830	65,289	2.5	160			
June 30, 2005	2,733	174,155	63,723	3.0	160			
June 30, 2004	2,705	167,317	61,855	4.9	161			
June 30, 2003	2,727	160,743	58,945	0.8	160			
June 30, 2002	2,695	157,632	58,490	3.4	161			
June 30, 2001	2,683	151,701	56,542	3.9	158			
¹ Prior to June 30, 20	006, unannualize	d earnings were used. Sta	arting June 30, 2006,	annualized earnings ar	e used.			

Alaska Public Employees' Retirement System • FY 2011 CAFR

Actuarial Section

Public Employees' Retirement System Schedule of Benefit Recipients Added to and Removed from Rolls									
	Add	Added to Rolls		Removed from Rolls		Rolls - End of Year			
Year Ended	No.1	Annual Pension Benefits ¹	No. ¹	Annual Pension Benefits ¹	No.	Annual Pension Benefits	Increase in Annual Pension Benefits	Average Annual Pension Benefits	
All Others									
June 30, 2010	1,667	\$35,089,579	517	\$ 8,712,630	23,560	\$426,040,698	6.6%	\$18,083	
June 30, 2009	1,340	25,402,811	476	28,773	22,410	399,663,749	6.8	17,834	
June 30, 2008	1,454	28,498,471	466	5,349,935	21,546	374,289,711	6.6	17,372	
June 30, 2007	1,479	28,985,748	454	(14,280,390)	20,558	351,141,175	14.1	17,081	
June 30, 2006	1,494	26,193,750	384	2,265,651	19,533	307,875,037	8.4	15,762	
June 30, 2005	1,287	22,966,842	296	17,019,851	18,423	283,946,938	2.1	15,413	
June 30, 2004	1,346	27,617,383	354	6,823,010	17,432	277,999,947	8.1	15,948	
June 30, 2003	1,445	27,802,265	351	6,507,821	16,440	257,205,574	9.0	15,645	
June 30, 2002	1,135	27,484,388	332	8,039,486	15,346	235,911,130	9.0	15,373	
June 30, 2001	2,342	46,880,694	506	10,128,792	14,543	216,466,228	20.5	14,885	
			Pe	eace Officer/Fi	refighter	•			
June 30, 2010	118	\$3,593,724	46	\$1,413,071	2,677	\$85,843,865	2.6%	\$32,067	
June 30, 2009	108	2,759,299	39	(518,134)	2,605	83,663,212	4.1	32,116	
June 30, 2008	125	3,556,519	28	191,073	2,536	80,385,779	4.4	31,698	
June 30, 2007	138	3,930,564	67	(2,546,491)	2,439	77,020,333	9.2	31,579	
June 30, 2006	118	3,289,370	30	209,287	2,368	70,543,278	4.6	29,790	
June 30, 2005	145	3,904,737	5	3,332,357	2,280	67,463,195	0.9	29,589	
June 30, 2004	174	6,388,270	25	904,310	2,140	66,890,815	8.9	31,257	
June 30, 2003	143	4,923,581	21	802,499	1,991	61,406,855	7.2	30,842	
June 30, 2002	157	6,155,365	19	744,917	1,869	57,285,773	10.4	30,650	
June 30, 2001	328	12,637,854	75	2,889,753	1,731	51,875,325	23.1	29,968	
¹ Numbers are estimated, and include other internal transfers.									

Public Employees' Retirement System • FY 2011 CAFR

Public Employees' Retirement System **Solvency Test Portion of Accrued Aggregate Accrued Liability For:** Liabilities Covered (3) by Assets **Active Members** (1) Active (2) (Employer-Member Inactive Financed Valuation Valuation Contributions Members Portion) Assets (In thousands) (In thousands) (In thousands) Date (In thousands) (1) (2) (3) June 30, 2010⁽²⁾ \$5,894,196 \$1,388,029 \$10,850,267 \$11,157,464 100.0% 0.0% 90.0% June 30, 2009 1,315,924 10,147,353 5,116,094 10,242,978 100.0 88.0 0.0 June 30, 2008⁽²⁾ 100.0 1,242,288 9,772,672 4,873,181 11,040,106 100.0 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⁽²⁾⁽³⁾ 100.0 8,923,811 4,306,847 9,040,908 1,157,755 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(2) 1,070,268 7,650,156 2,723,492 8,030,414 100.0 91.0 0.0 June 30, 2003 1,026,730 6,860,834 2,674,089 7,687,281 100.0 97.1 0.0 June 30, 2002(1)(2)(3) 967,045 6,301,095 2,591,451 7,412,833 100.0 100.0 5.6 100.0 100.0 June 30, 2001 920,702 5,059,386 1,888,486 7,941,756 100.0

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

⁽¹⁾ Change in Asset Valuation Method. (2) Change of Assumptions. (3) Change in Methods.

Actuarial Section

Public Employees' Retirement System Analysis of Financial Experience

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

Type of	Change in Employer/State Contribution Rate During Fiscal Year					
(Gain) or Loss	2010	2009	2008	2007	2006	
Health Experience	0.24%	(2.21)%	(0.97)%	(5.64)%	(4.06)%	
Salary Experience	0.06	0.23	0.54	0.23	0.02	
Investment Experience	0.28	5.31	(0.59)	(1.03)	(0.29)	
Demographic Experience	(0.30)	(0.29)	(0.60)	(0.17)	1.05	
Contribution Shortfall	(0.67)	(0.24)	<u>(0.11</u>)	<u>0.94</u>	<u>1.01</u>	
(Gain) or Loss During Year From Experience	(0.39)	2.80	(1.73)	(5.67)	(2.27)	
Non-recurring changes						
Asset Valuation Method	-	-	-	-	-	
Past Service Amortization Change	-	-	-	-	-	
Assumption and Method Changes	2.46	-	2.04	(1.90)*	4.98	
System Benefit Changes						
Composite (Gain) Loss During Year	2.07	2.80	0.31	(7.57)	2.71	
Beginning Employer/State Contribution Rate	<u>30.76</u>	<u>27.96</u>	<u>27.65</u>	<u>35.22</u>	<u>32.51</u>	
Ending Employer/State Contribution Rate	<u>32.83%</u>	<u>30.76%</u>	<u>27.96%</u>	<u>27.65%</u>	<u>35.22%</u>	
Fiscal Year Above Rate is Applied	FY13	FY12	FY11	FY10	FY09	

^{*}Includes change in rate by using total payroll.

Public Employees' Retirement System Analysis of Financial Experience

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

	Change in Employer/State Contribution Rate During Fiscal Year					
		Pension		Healthcare		
Type of (Gain) or Loss	2010	2009	2008	2010	2009	2008
Health Experience	N/A	N/A	N/A	0.24%	(2.21)%	(0.97)%
Salary Experience	0.06%	0.23%	0.54%	N/A	N/A	N/A
Investment Experience	(0.19)	4.72	(0.35)	0.47	0.59	(0.24)
Demographic Experience	(0.30)	(0.29)	(0.60)	N/A	N/A	N/A
Contribution Shortfall	_0.36	_0.01	0.14	<u>(1.03</u>)	<u>(0.25</u>)	(0.25)
(Gain) or Loss During Year From Experience	(0.07)	4.67	(0.27)	(0.32)	(1.87)	(1.46)
Non-recurring changes						
Asset Valuation Method	-	-	-	-	-	-
Past Service Amortization Change	-	-	-	-	-	-
Assumption and Method Changes	0.87	-	-	1.59	-	2.04
System Benefit Changes	-					
Composite (Gain) Loss During Year	_0.80	_4.67	(0.27)	1.27	(1.87)	_0.58
Beginning Employer/State Contribution Rate	<u>14.65</u>	9.98	10.25	<u>16.11</u>	17.98	<u>17.40</u>
Ending Employer/State Contribution Rate	15.45% ====	<u>14.65</u> %	9.98%	<u>17.38</u>	16.11%	<u>17.98</u> %
Fiscal Year Above Rate is Applied	FY13	FY12	FY11	FY13	FY12	FY11
*Includes change in rate by using total payro	11					

Includes change in rate by using total payroll.

123

STATE OF ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Summary of 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 160 employers participating in the PERS, including the State of Alaska and 159 political subdivisions and public organizations.

(4) Membership

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

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

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

STATE OF ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Summary of Plan Provisions

(5) Credited Service

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

Members may claim other types of service, including:

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

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

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.

STATE OF ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Summary of Plan Provisions

(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.

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

<u>Voluntary Contributions</u>: 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.

<u>Refund of Contributions</u>: 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.

Summary of Plan Provisions

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

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

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

Members may elect an early retirement or a joint and survivor option. Members who entered the PERS prior to July 1, 1986 may also select a 66-2/3 last survivor option and a level income option. Under these options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

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

Summary of Plan Provisions

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%.

<u>Indebtedness</u>: 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

Summary of Plan Provisions

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. 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.

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

Summary of Plan Provisions

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.

<u>Lump Sum Nonoccupational Death Benefit</u>: 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.

<u>Death After Retirement</u>: 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.

buckconsultants

A Xerox Company

September 23, 2011

State of Alaska

The Alaska Retirement Management Board

The Department of Revenue, Treasury Division

The Department of Administration, Division of Retirement and Benefits

P.O. Box 110203

Juneau, AK 99811-0203

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

Actuarial Certification

The annual actuarial valuation required for the State of Alaska Public Employees' Retirement System Defined Contribution Retirement (DCR) Plan has been prepared as of June 30, 2010 by Buck Consultants. The purposes of the report include:

- (1) a presentation of the valuation results of the Plan as of June 30, 2010;
- (2) a review of experience under the Plan for the year ended June 30, 2010;
- (3) a determination of the appropriate contribution rate which will be applied for the fiscal year ending June 30, 2013; and
- (4) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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

- (1) Summary of actuarial assumptions and methods
- (2) Schedule of active member valuation data
- (3) Solvency test
- (4) Schedule of Funding Progress, Schedule of Employer Contributions and trend data schedules

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the Division of Retirement and Benefits and financial information provided in the financial statements audited by KPMG LLP, to determine a sound value for the Plan liability. The employee data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data. The actuarial assumptions are based on the results of an experience study presented to The Alaska Retirement Management Board (Board) in September 2010 and adopted by the Board in December 2010. Actuarial methods, medical cost trend, and assumed blended medical premiums were also reviewed during the experience study.

Tabor Center, 1200 17th Street, Suite 1200 • Denver, CO 80202 720.359.7700 • 720.359.7701 (fax)

The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration September 23, 2011
Page 2

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY11 and a fixed 25-year amortization as a level percentage of payroll of the initial unfunded accrued liability and subsequent gains/losses. The amortization period is set by the Board. Contribution levels are recommended by the Actuary and adopted by the Board each year. The ratio of valuation assets to liabilities decreased from 199.6% to 168.8% during the year. This report provides an analysis of the factors that led to the decrease.

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

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

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

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

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

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



The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration September 23, 2011
Page 3

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

Sincerely,

David H. Slishinsky, ASA, EA, MAAA

Herid H. Slashersky

Principal, Consulting Actuary

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

Melissa Bissett, FSA, MAAA

Senior Consultant, Health & Productivity

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Actuarial Assumptions, Methods and Procedures

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

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

Valuation of Liabilities

A. Actuarial Method - Entry Age Actuarial Cost

Liabilities and contributions shown in the report are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 25 years as a level percentage of expected payroll. Payroll is assumed to increase by the payroll growth assumption per year for this purpose. However, in keeping with GASB requirements, the net amortization period will not exceed 30 years.

Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for death & disability benefits (constant dollar amount for retiree medical benefits), from the assumed entry age to the last age with a future benefit 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 DCR Plan 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 beneficiaries and disability members currently receiving benefits (if any) 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.

Defined Contribution Retirement
Occupational Death and Disability and Retiree Medical Plan
Summary of Actuarial Assumptions, Methods and Procedures

B. Valuation of Assets

Effective June 30, 2006, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method will be phased in over five years. Market Value of Assets were \$0 as of June 30, 2006. All assets are valued at market value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP. Valuation assets are constrained to a range of 80% to 120% of the market value of assets.

C. Valuation of Retiree Medical Benefits

The methodology used for the valuation of the retiree medical benefits is described in Section 2.3(c) of the State of Alaska Public Employees' Retirement System Defined Benefit Plan Actuarial Valuation Report as of June 30, 2010.

Due to the lack of experience for the DCR Plan only, base claims costs are based on those described in the actuarial valuation as of June 30, 2010 for PERS with some adjustments. The claims costs were adjusted to reflect the differences between the DCR medical plan and the DB medical plan. These differences include different coverage levels and an indexing of the retiree out-of-pocket dollar amounts. To account for higher initial copays, deductibles and out-of-pocket limits, FY10 claims costs were reduced 5.9% for medical and 0.7% for prescription drugs. Retiree out-of-pocket amounts were indexed 4.8% each year to reflect the effect of the deductible leveraging on trend, putting the annual projected trend closer to the ultimate trend rate.

No implicit subsidies are assumed. Employees projected to retire with 30 years of service prior to Medicare (25 years for PERS peace officer/firefighter) are valued with commencement deferred to Medicare eligibility, as such participants will be required to pay the full plan premium. Explicit subsidies for disabled and normal retirement are determined using the plan-defined percentages of total projected plan costs, again with no implicit subsidy assumed.

Healthcare Reform

Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact of the following provisions; however, none of the impacts have been included in the valuation results.

- Because the State plan is retiree-only, and was in effect at the time the legislation was enacted, not all provisions are required. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions.
 We reviewed the impact of including these provisions, but there was no decision made to adopt them, and no requirement to do so.
- The Plan will be subject to the high cost plan excise tax (Cadillac tax). Based upon guidance available at the
 time of disclosures, Buck estimated the year in which the tax would potentially affect Alaska to be 2047, and
 with a minimal impact. Buck determined the impact to be immaterial based on a blend of pre-Medicare and
 Medicare retirees.

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan

Summary of Actuarial Assumptions, Methods and Procedures

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.

Changes in Methods From the Prior Valuation

There were no changes in methods from the prior valuation.

D. Actuarial Assumptions

 Investment Return/ 8.00% per year (geometric), compounded annually, net of expenses. Discount Rate

2. Salary Scale Inflation - 3.12% per year
Productivity – 0.5% per year.
See Table 1 for salary scale rates.

3. Payroll Growth 3.62% per year. (Inflation + Productivity)

4. 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.

5. Mortality (Pre-termination) <u>Peace Officer/Firefighter:</u>

Based upon the 2005-2009 actual mortality experience of the PERS DB Plan (see Table 2). 80% of the 1994 Group Annuity Mortality (GAM) Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and 60% for females.

Others:

Based upon the 2005-2009 actual mortality experience of the PERS DB Plan (see Table 3). 75% of the 1994 GAM Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and 55% for females. Deaths are assumed to be occupational 75% of the time for Peace Officer/

Firefighter, 55% of the time for Others.

6. Mortality (Post-termination) 1994 GAM Table, 1994 Base Year without margin projected to 2013 using

Projection Scale AA for males and with one-year set-forward for females. (See

Table 4.)

7. Turnover Select rates were estimated and ultimate rates were set to the PERS DB Plan's

rates loaded by 10%. (See Table 5.)

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Actuarial Assumptions, Methods and Procedures

Disability Incidence rates based upon the 2005-2009 actual experience of the PERS DB

> Plan, in accordance with Table 6. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table. Disabilities are assumed to be occupational 75% of the time for Peace Officer/Firefighter, 55% of the time for

Others.

Retirement Retirement rates were estimated in accordance with Table 7.

10. Marriage and Age Wives are assumed to be three years younger than husbands. 80% of male Difference

members and 70% of female members are assumed to be married.

11. 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.

12. Expenses All expenses are net of the investment return assumption.

13. Per Capita Claims Cost Sample claims cost rates adjusted to age 65 for FY11 medical benefits are shown

below:

		Prescription
	Medical	Drugs
Pre-Medicare	\$8,606	\$2,600
Medicare Parts A & B	1,563	2,600
Medicare Part B Only	6,654	2,600
Medicare Part D	N/A	515

14. Third Party Administrator Fees \$153.33 per person per year; assumed trend rate of 5% per year.

15. Base Claims Cost Adjustments

Due to higher initial copays, deductibles, out-of-pocket limits and member cost sharing compared to the DB medical plan, the following adjustments were made:

- 0.941 for the medical plan.
- 0.993 for the prescription drug plan.
- 0.952 for the annual indexing for member cost sharing.

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Actuarial Assumptions, Methods and Procedures

16. Health Cost Trend

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

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

For the June 30, 2008 valuation and later, the Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model effectively begins estimating trend amounts beginning in 2012 and projects out to 2100. The model has been populated with assumptions that are specific to the State of Alaska.

17. Aging Factors

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

18. Retiree Medical Participation

Years of Service	Percent Participation
10-14	75%
15-19	80
20-24	85
25-29	95
30+	100

*

Defined Contribution Retirement
Occupational Death and Disability and Retiree Medical Plan
Summary of Actuarial Assumptions, Methods and Procedures

Table 1 Alaska PERS DCR Plan Salary Scale

Peace Officer/Firefighter:

Percent Increase
6.36%
6.11
5.61
4.12

Others:

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

Rates vary slightly by age after 6 years of employment.

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

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

	iviorenity rubic (110 termination)	•
Age	<u>Male</u>	<u>Female</u>
20	.0303%	.0135%
21	.0323	.0133
22	.0345	.0135
23	.0380	.0138
24	.0419	.0141
25	.0470	.0144
26	.0534	.0151
27	.0569	.0155
28	.0590	.0161
29	.0609	.0170
30	.0627	.0187
31	.0642	.0207
32	.0656	.0220
33	.0663	.0229
34	.0664	.0239
35	.0666	.0250
36	.0674	.0262
37	.0697	.0277
38	.0721	.0295
39	.0753	.0316
40	.0792	.0344
41	.0837	.0372
42	.0890	.0400
43	.0943	.0425
44	.0997	.0447
45	.1059	.0462
46	.1133	.0481
47	.1226	.0508
48	.1331	.0551
49	.1445	.0598
50	.1571	.0665
51	.1716	.0745
52	.1883	.0856
53	.2100	.0978
54	.2331	.1111
55	.2644	.1270
56	.3015	.1474
57	.3466	.1712
58	.3989	.1970
59	.4489	.2266
60	.5050	.2604

Table 3 Alaska PERS Others DCR Plan Mortality Table (Pre-termination)

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

Table 4
Alaska PERS DCR Plan
Mortality Table (Post-termination)

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

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Actuarial Assumptions, Methods and Procedures

Table 5 Alaska PERS DCR Plan Total Turnover Assumptions

Peace Officer/Firefighter:

Select Rates of Turnover During the First 5 Years of Employment

Year of Employment	Rate
1	15%
2	12
3	10
4	9
5	8

Ultimate Rates of Turnover After the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
20	4.5263%	5.7054%	45	4.1616%	5.3309%
21	4.5208	5.7028	46	4.1102	5.2844
22	4.5147	5.7002	47	4.0500	5.2300
23	4.5076	5.6979	48	3.9838	5.1703
24	4.4983	5.6939	49	3.9139	5.1088
25	4.4904	5.6920	50	3.8376	5.0419
26	4.4829	5.6893	51	3.7480	4.9627
27	4.4729	5.6818	52	3.6377	4.8621
28	4.4651	5.6751	53	3.5111	4.7458
29	4.4561	5.6656	54	3.3711	4.6171
30	4.4492	5.6574	55	3.2063	4.4617
31	4.4410	5.6467	56	2.9998	4.2580
32	4.4349	5.6376	57	2.7433	3.9959
33	4.4286	5.6264	58	2.4705	3.7140
34	4.4237	5.6148	59	2.1189	3.3355
35	4.4169	5.6007	60	1.7240	2.9081
36	4.4088	5.5856	61	1.2905	2.4421
37	4.3959	5.5672	62	0.7855	1.9006
38	4.3798	5.5474	63	0.2146	1.2892
39	4.3615	5.5260	64	4.7520	0.6289
40	4.3413	5.5039	65+	4.7520	5.9400
41	4.3175	5.4794			
42	4.2869	5.4494			
43	4.2525	5.4167			
44	4.2106	5.3772			

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Actuarial Assumptions, Methods and Procedures

Table 5 Alaska PERS DCR Plan Turnover Assumptions

Others:

Select Rates of Turnover During the First 5 Years of Employment

Year of Employment	Rate
1	29%
2	25
3	20
4	16
5	15

Ultimate Rates of Turnover After the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
20	10.4500%	15.0446%	45	5.7664%	6.6418%
21	10.4500	15.0442	46	5.7411	6.6260
22	10.4500	15.0424	47	5.7110	6.6061
23	10.4500	15.0421	48	5.6759	6.5825
24	10.4500	15.0407	49	5.6397	6.5591
25	10.4500	15.0407	50	5.5982	6.5318
26	10.4500	15.0403	51	5.5505	6.5002
27	10.4500	15.0379	52	5.4941	6.4620
28	10.4500	15.0346	53	5.4300	6.4184
29	10.4500	15.0307	54	5.3605	6.3716
30	10.4500	13.8600	55	5.2807	6.3160
31	9.9000	13.0900	56	5.1834	6.2432
32	9.2400	12.2100	57	5.0650	6.1491
33	8.5030	11.5500	58	4.9352	6.0429
34	8.0850	10.8900	59	4.7792	5.9079
35	7.7000	10.2300	60	4.6045	5.7553
36	7.3700	9.5700	61	4.4089	5.5858
37	7.0950	9.1300	62	4.1829	5.3912
38	6.8750	8.6900	63	3.9259	5.1701
39	6.7100	8.3600	64	3.6453	4.9289
40	6.4900	8.0818	65+	6.0500	6.8750
41	6.3030	8.0705			
42	6.1050	8.0578			
43	5.9290	8.0461			
44	5.7966	8.0325			

Table 6 Alaska PERS DCR Plan Disability Table

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

STATE OF ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Table 7 Alaska PERS DCR Plan Retirement Table

Age	Rate
< 55	2%
55-59	3
60	5
61	5
62	10
63	5
64	5
65	25
66	25
67	25
68	20
69	20
70	100

Changes in Actuarial	Assumptions Since the Prior Valuation June 30, 2009	June 30, 2010
Investment Return	8.25% per year (geometric), compounded annually, net of expenses	8.00% per year (geometric), compounded annually, net of expenses
Salary Scale	Based on actual experience from 2001 to 2005.	Based on actual experience 2005 to 2009. Peace Officer/Firefighter: Rates are increased for the first 4 years. Decreased at year 5. Others: Based on actual experience from 2005 to 2009. Increased most rates.
Payroll Growth	4.00% per year	3.62% per year
Inflation	3.50%	3.12%
Pre-termination Mortality	Peace Officer/Firefighter: 1994 GAM Table, 1994 Base Year. Others: 42% of 1994 GAM Table, 1994 Base Year.	Peace Officer/Firefighter: 80% of the male and 60% of the female rates of the 1994 GAM Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA. Others: 75% of the male and 55% of the female rates of the 1994 GAM Table, 1994 Base Year without margin projected to 2013 with Projection Scale AA.
Post-termination Mortality	1994 GAM Table, 1994 Base Year.	1994 GAM Table, 1994 Base Year without margin projected to 2013 using Projection Scale AA for males and with a 1-year setforward for females.
Disability Mortality	1979 PBGC Disability Mortality Table for those receiving Social Security disability benefits.	RP-2000 Disabled Retiree Mortality Table.
Turnover	Based on actual PERS DB Plan experience from 2001 to 2005. Ultimate rates are equal to DB Plan rates loaded by 10%.	Rates adjusted based on actual PERS DB Plan experience from 2005 to 2009. Ultimate rates are equal to DB Plan rates loaded by 10%.

STATE OF ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Actuarial Assumptions, Methods and Procedures

Changes in Actuarial Assumptions Since the Prior Valuation (cont.)

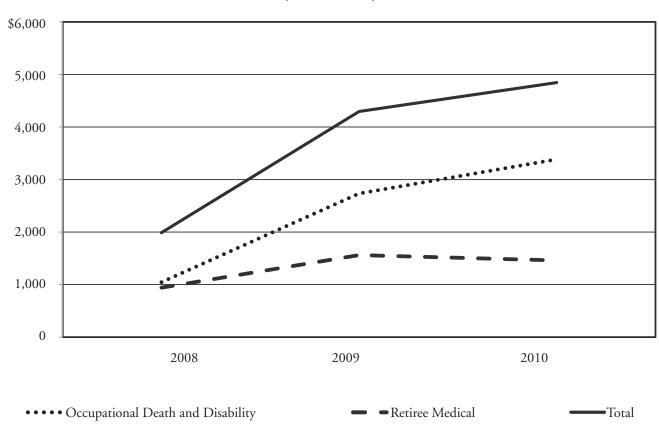
	June 30, 2009	June 30, 2010	
Disability			ghter: No change. le rates decreased based on an experience from 2005 to
Occupational Death and Disability	Others: 50% Peace Officer/Firefighter: 75%	Others: 55% Peace Officer/Firefi	ghter: 75%
Healthcare Participation	100% of members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.	Years of Service 10-14 15-19 20-24 25-29 30+	<u>Participation</u> 75% 80 85 95

Public Employees' Retirement System
Defined Contribution Retirement Plan
For Occupational Death and Disability
And Retiree Medical Benefits
Funding Excess/(Unfunded liability)
(In Thousands)

Actuarial Valuation Year Ended June 30	Occupational Death and Disability	Death and Retiree		Funded Ratio
2008	\$ 1,046	\$ 943	\$ 1,989	198.6 %
2009	2,735	1,562	4,297	199.6
2010	3,386	1,460	4,846	171.1

3-YEAR TREND OF FUNDING EXCESS

(in thousands)



Public Employees' Retirement System Defined Contribution Retirement Plan For Occupational Death and Disability And Retiree Medical Benefits Employer Contribution Rates

	Actuarially Determined							
	Actuarial Valuation	Occupational Death and disability			Total Annual Required		Adopted	
Fiscal Year	Year Ended June 30	Peace Officer/ Firefighter	Others	Retiree Medical	Peace Officer/ Firefighter	Others	Peace Officer/ Firefighter	Others
2007	N/A	0.40%	0.30%	1.75%	2.15%	2.05%	2.15%	2.05%
2008	N/A	1.33	0.58	0.99	2.32	1.57	2.32	1.57
2009	N/A	1.33	0.58	0.99	2.32	1.57	2.32	1.57
2010	2007	1.33	0.30	0.83	2.16	1.13	2.16	1.13
2011	2008	1.18	0.31	0.55	1.73	0.86	1.73	0.86
2012	2009	0.97	0.11	0.51	1.48	0.62	1.48	0.62
2013	2010	0.99	0.14	0.48	1.47	0.62	1.47	0.62

Valuations are used to set contribution rates in future years.

Public Employees' Retirement System Defined Contribution Retirement Plan For Occupational Death and Disability And Retiree Medical Benefits Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Earnings (In thousands) ¹	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2010	9,232	\$421,187	\$45,622	5.4%	160
June 30, 2009	7,256	314,118	43,291	7.2	160
June 30, 2008	5,052	203,955	40,371	8.1	159
June 30, 2007	2,827	105,611	37,358	-	160
June 30, 2006	-	-	-	-	-

¹ Annual earnings are the annualized earnings for the fiscal year ending on the valuation date.

Public Employees' Retirement System Defined Contribution Retirement Plan For Occupational Death and Disability And Retiree Medical Benefits Solvency Test

	Aggregate Accrued Liability For:					tion of Acc bilities Cov	vered
Valuation Date	(1) Active Member Contributions (In thousands)	(2) Inactive Members (In thousands)	(3) Active Members (Employer- Financed Portion) (In thousands)	Valuation Assets (In thousands)	(1)	by Assets	(3)
June 30, 2010 ¹	\$ -	\$ -	\$8,038	\$13,568	100%	100%	100%
June 30, 2009 ¹	-	-	4,316	8,613	100	100	100
June 30, 2008 ¹	-	-	2,018	4,007	100	100	100
June 30, 2007	-	-	759	1,255	100	100	100
June 30, 2006	-	-	-	-	N/A	N/A	N/A
Retiree medical liabilities are calculated using the funding assumptions (i.e. funding investment return and net of Medicare Part D Subsidy).							

¹ Change in Assumptions.

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Plan Provisions

(1) Effective Date

July 1, 2006, with amendments through June 30, 2010.

(2) Administration of Plan

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

The Alaska Retirement Management Board prescribes policies, adopts regulations, invests the funds, and performs other activities necessary to carry out the provisions of the Plan.

(3) Employers Included

Currently there are 160 employers participating in the PERS DCR Plan, including the State of Alaska, and 159 political subdivisions and public organizations.

(4) Membership

An employee of a participating employer who first enters service on or after July 1, 2006, or a member of the defined benefit plan who works for an employer who began participation on or after July 1, 2006, and meets the following criteria is a participant in the Plan:

- Permanent full-time or part-time employees of the State of Alaska, participating political subdivisions or public organizations. An employee must be regularly scheduled to work 30 or more hours per week to be considered full-time by the PERS. An employee must be regularly scheduled to work 15 or more hours per week but less than 30 hours to be considered a part-time employee for PERS purposes.
- Elected state officials.
- Elected municipal officials who are compensated and receive at least \$2,001.00 per month.

Members can convert to the DCR Plan if they are an eligible nonvested member of the PERS defined benefit plan whose employer consents to transfers to the defined contribution plan and they elect to transfer his or her account balance to the PERS DCR Plan.

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan Summary of Plan Provisions

(5) Member Contributions

There are no member contributions for the occupational death & disability and retiree medical benefits.

(6) Retiree Medical

- Member must retire directly from the plan to be eligible for retiree medical coverage. Normal retirement eligibility is the earlier of a) 30 years of service for Others members and 25 years of service for Peace Officer/Firefighter members, or b) Medicare eligible and 10 years of service.
- No retiree medical benefits are provided until normal retirement eligibility. The member's premium is 100% until they are Medicare eligible.
- Coverage cannot be denied except for failure to pay premium.
- Members who are receiving disability benefits or survivors who are receiving monthly survivor benefits
 are not eligible until the member meets, or would have met if he/she had lived, the normal retirement
 eligibility requirements.
- The plan's coverage is supplemental to Medicare.
- The Medicare-eligible premium will be based on the member's years of service. The percentage of premium paid by the member is as follows:

Years of Service	by Member_
Less than 15 years	30%
15 – 19	25
20 - 24	20
25 - 29	15
30 years or more	10

Defined Contribution Retirement Occupational Death and Disability and Retiree Medical Plan **Summary of Plan Provisions**

(7) Occupational Disability Benefits

- Benefit is 40% of salary at date of disability.
- There is no increase in the benefit after commencement.
- Member earns service while on occupational disability.
- Benefits cease when the member becomes eligible for normal retirement at Medicare-eligible age and 10 years of service, or at any age with 30 years of service for Others members of 25 years of service for Peace Officer/ Firefighter members.
- Peace Officer/Firefighter members may select the defined contribution account or the monthly benefit payable as if they were retiring under Tier 3 (service continues during disability, final average salary is as of date of disability).
- No retiree medical benefits are provided until normal retirement eligibility. The member's premium is 100% until they are Medicare eligible. Medicare-eligible premiums follow the service-based schedule above.

(8) Occupational Death Benefits

- Benefit is 40% of salary for Others members and 50% of salary for Peace Officer/Firefighter members.
- There is no increase in the benefit after commencement.
- Benefits cease when the member would have become eligible for normal retirement.
- The period during which the survivor is receiving benefits is counted as service credit toward retiree medical benefits.
- No retiree medical benefits are provided until the member would have been eligible for normal retirement. The surviving spouse's premium is 100% until the member would have been Medicare eligible. Medicare-eligible premiums follow the service-based schedule above.

Changes Since the Prior Valuation

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



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